SITE INVESTIGATION SUMMARY REPORT

Former Allied Engineering & Production Corporation

Prepared for
2421 Blanding LLC
1137 57th Avenue
Oakland, CA 94621

Prepared by
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August 3, 2015

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CONTENTS

LIST OF FIGURES ..... **iv**

LIST OF TABLES ..... **v**

ACRONYMS AND ABBREVIATIONS ..... **vi**

1 INTRODUCTION **1-1**

1.1 REPORT ORGANIZATION 1-1

2 SITE BACKGROUND **2-1**

2.1 OPERATIONAL HISTORY 2-1
2.2 SITE SETTING 2-1
2.3 GEOLOGIC SETTING 2-1
2.3.1 Regional Geologic Setting 2-1
2.3.2 Site-Specific Geology 2-2
2.4 HYDROGEOLOGY 2-3
2.5 CURRENT AND FUTURE LAND USE 2-3
2.6 PREVIOUS INVESTIGATIONS 2-4

3 DATA GAPS AND CONSTRUCTION-RELATED SAMPLING **3-1**

3.1 PERMITS AND UNDERGROUND UTILITY LOCATION 3-1
3.2 FIELD METHODS 3-1
3.2.1 Data Gaps Sampling 3-1
3.2.2 Construction-Related Sampling 3-4
3.3 GROUNDWATER MONITORING WELLS 3-5
3.3.1 Installation 3-5
3.3.2 Development 3-6
3.3.3 Surveying 3-6
3.3.4 Repair 3-6
3.4 ANALYTICAL METHODS 3-7
3.4.1 Data Gaps Soil Sampling 3-7
3.4.2 Data Gaps Groundwater Sampling 3-7
3.4.3 Existing Monitoring Well Sampling 3-8
3.4.4 Product Sampling 3-8
3.4.5 Archived Samples 3-8
3.4.6 Construction-Related Soil Sampling 3-9
3.5 EQUIPMENT DECONTAMINATION 3-10

3.6 FIELD OBSERVATIONS 3-10
3.6.1 Subgrade Metal Layer 3-10
3.7 INVESTIGATION-DERIVED WASTE 3-10
3.8 DATA QUALITY REVIEW 3-11
4 SCREENING VALUES 4-1
4.1 EXPOSURE ANALYSIS 4-1
4.1.1 Chemicals of Interest 4-1
4.1.2 Exposure Pathways 4-1
4.2 SOIL SCREENING LEVELS 4-5
4.3 GROUNDWATER SCREENING LEVELS 4-6
5 DATA SUMMARY 5-1
5.1 BUILDING AREA 5-1
5.2 YARD AREA 5-2
5.3 SHORELINE AREA 5-2
5.4 OFFSHORE SEDIMENTS 5-3
6 REFERENCES 6-1

Appendix A. Soil Boring Logs
Appendix B. Alameda County Public Works Department Well Construction and Boring Permits
Appendix C. Standard Operating Procedures
Appendix D. Monitoring Well Groundwater Sample Collection Forms
Appendix E. State of California Well Completion Reports, Recently Installed Wells MW-4A, MW-4B, MW-5A, MW-5B, MW-6A, and MW-6B.
Appendix F. Well Survey Report
Appendix G. Laboratory Analytical Reports for Soil and Groundwater, Existing Monitoring Well Sampling, and Product Sampling, Data Gaps Related Sampling
Appendix H. Laboratory Analytical Reports for Archived Samples
Appendix I. Laboratory Analytical Reports for Soil, Construction Related Sampling
Appendix J. Data Validation Reports

LIST OF FIGURES

Figure 1. Site Vicinity Map

Figure 2. Site Plan

Figure 3. Groundwater Surface Elevations, Upper Zone, High Tide

Figure 4. Groundwater Surface Elevations, Upper Zone, Low Tide

Figure 5. Groundwater Surface Elevations, Lower Zone, High Tide

Figure 6. Groundwater Surface Elevations, Lower Zone, Low Tide

Figure 7. Metal Concentrations in Soil, Historical and Data Gaps Related Sampling

Figure 8. Volatile Organic Compound Concentrations in Soil, Historical and Data Gaps Related Sampling

Figure 9. Semi-Volatile Organic Compound Concentrations in Soil, Historical and Data Gaps Related Sampling

Figure 10. Total Petroleum Hydrocarbon Concentrations in Soil, Historical and Data Gaps Related Sampling

Figure 11. Metal Concentrations in Groundwater, Historical and Data Gaps Related Sampling

Figure 12a. Volatile Organic Compound Concentrations in Groundwater, Historical and Data Gaps Related Sampling

Figure 12b. Volatile Organic Compound Concentrations in Groundwater, Historical and Data Gaps Related Sampling

Figure 13. Total Petroleum Hydrocarbon Concentrations in Groundwater, Historical and Data Gaps Related Sampling

Figure 14. Metal Concentrations in Soil, Construction Related Sampling

Figure 15a. Semi-Volatile Organic Compound Concentrations in Soil, Construction Related Sampling

Figure 15b. Semi-Volatile Organic Compound Concentrations in Soil, Construction Related Sampling

Figure 16. Total Petroleum Hydrocarbon Concentrations in Soil, Construction Related Sampling

Figure 17. Receptor-Exposure Model

LIST OF TABLES

Table 1. High Tide Well Gauging on March 30, 2015
Table 2. Low Tide Well Gauging on March 30, 2015
Table 3. Other Well Gauging
Table 4. Monitoring Well Construction Details
Table 5. Preliminary Screening Levels for Analytes in Soil and Groundwater
Table 6. Soil Sample Analytical Results—Total Petroleum Hydrocarbons
Table 7. Soil Sample Analytical Results—Polychlorinated Biphenyls
Table 8. Soil Sample Analytical Results—Semivolatile Organic Compounds
Table 9. Soil Sample Analytical Results—Metals
Table 10. Soil Sample Analytical Results—Volatile Organic Compounds
Table 11. Groundwater Sample Analytical Results—Total Petroleum Hydrocarbons
Table 12. Groundwater Sample Analytical Results—Polychlorinated Biphenyls
Table 13. Groundwater Sample Analytical Results—Semivolatile Organic Compounds
Table 14. Groundwater Sample Analytical Results—Metals
Table 15. Groundwater Sample Analytical Results—Volatile Organic Compounds
Table 16. Surface Sediment Sample Analytical Results—Total Petroleum Hydrocarbons
Table 17. Surface Sediment Sampling Analytical Results – Priority Pollutant Metals

ACRONYMS AND ABBREVIATIONS

AEI	AEI Consultants, Environmental & Engineering Services
bgs	below ground surface
COI	chemical of interest
COPC	chemical of potential concern
DRO	diesel range organics
EPA	U.S. Environmental Protection Agency
ESL	environmental screening level
GRO	gasoline range organics
Integral	Integral Consulting Inc.
NAPL	nonaqueous-phase liquid
NTR	National Toxics Rule
National	National Exploration Pumps & Wells
ORO	oil-range organics (
PCB	polychlorinated biphenyl
PID	photoionization detector
ppmv	parts per million by volume
PVC	polyvinyl chloride
SFRWQCB	California Regional Water Quality Control Board, San Francisco Bay Region
SFEI	San Francisco Estuary Institute
site	former Allied Engineering & Production Corporation, 2421 Blanding Avenue, Alameda, California
SVOC	semivolatile organic compounds
TCLP	toxicity characteristic leaching procedure
TPH-P	total petroleum hydrocarbons–purgeable
TPH-E	total petroleum hydrocarbons–extractable
TSCA	Toxic Substances Control Act
UST	underground storage tank

VOC	volatile organic compound
WET	waste extraction test

1 INTRODUCTION

Integral Consulting Inc. (Integral) has prepared this report to summarize data collected to date (both on behalf of Allied Engineering, the property owner and Concreteworks Cladding Company, the site lessee) for the Former Allied Engineering & Production Corporation site located at 2421 Blanding Avenue in Alameda, California (the site; Figure 1). Site data were collected in early 2015 as part of redevelopment activities. Analysis of the data presented herein necessarily reveals the need for additional data to fill gaps relative to characterization of the nature and extent of chemical contamination in various media. Per discussions with the San Francisco Bay Regional Water Quality Control Board (Water Board), this report will serve as the basis for a technical meeting to be held with the Water Board relative to identifying and addressing such data gaps. Thereafter, the comprehensive set of data for the site will be used to define nature and extent, assess risks to human health and the environment, and develop a remedial approach for the site.

1.1 REPORT ORGANIZATION

The report is organized as follows: Site Background (Section 2), which includes a discussion of the operational history, site setting, geology and hydrogeology, current and future land use, and previous investigations; Data Gaps and Construction-Related Sampling (Section 3); Screening Values (Section 4); Data Summary (Section 5); and References (Section 6).

2 SITE BACKGROUND

The following sections describe the operational history, site setting, geology and hydrogeology, current and future land use, and previous investigations at the site.

2.1 OPERATIONAL HISTORY

The site is a 2.92-acre facility including a 83,500 ft^2 building used for metal machining and fabrication for more than 60 years. The property was reportedly developed with private residences as early as 1897. In 1941, the property was redeveloped and a smaller version of the current building was erected for a steel fabrication and metal machining business. Since 1951, Allied Engineering's services ranged from simple machining operations to the design and manufacture of complex, precision hardware for aerospace use. Site configuration has changed over the years, but operations have included specialized, heavy duty, precision machining equipment involving the use and storage of hazardous materials, including petroleum hydrocarbons (hydraulic oils/lubricants/greases, fuels, etc.), coolants, solvents/degreasers (naphtha, acetone, isopropanol, etc.), various metals, compressed gases, and other materials. Figure 2 shows a site plan.

2.2 SITE SETTING

The property is situated in a commercial/industrial area in the northeast portion of Alameda immediately adjacent to the Oakland Inner Harbor, also known as the Oakland Estuary, with an auto body shop located just to the south and adjoining a portion of the facility. To the immediate west is a nursing home. The remaining surrounding properties are classified as commercial/industrial.

2.3 GEOLOGIC SETTING

The following sections discuss the regional geologic setting and site-specific geology.

2.3.1 Regional Geologic Setting

As discussed in the U.S. Geological Services publications, *Preliminary Geologic Map and Engineering Geologic Information, Oakland and Vicinity, California* (Radbruch 1967) and *Areal and Engineering Geology of the Oakland East Quadrangle, California* (Radbruch 1969), Alameda Island occupies a topographic mound predominantly composed of Merritt Sand. Artificial Fill was placed around the perimeter of the island. Bay Mud is seen to the west-northwest and east-southeast of the site and is overlain by Artificial Fill in the locations of former mud flats around the perimeter of the island. Bay Mud represents the younger, estuarine deposits that overlap

Merritt Sand in shoreline areas, becoming thicker toward the center of the estuary channel. Locally, the origin of Artificial Fill is likely dredged material from the modern-day tidal channel and deepening of Oakland Harbor (disturbed Bay Mud).

A description of the principal geological units seen at Alameda Island, chronologically, from youngest to oldest (top to bottom stratigraphically) follows:

- **Artificial Fill** (Holocene) consists primarily of Bay Mud and/or Merritt Sand (Radbruch 1969) dredged from the Oakland Inner Harbor and the Tidal Canal. It can contain concrete, bricks, and other miscellaneous refuse.
- **Bay Mud** (Holocene) consists of olive-gray, clayey silt to sandy silt, and includes small sand lenses; it contains shells and organic material, which in some places forms thin peaty layers (Radbruch 1969).
- **Merritt Sand** (Pleistocene) consists of yellowish-brown to dark yellowish-orange, fine-grained sand and clayey sand with lenses of sandy clay and clay. It contains small amount of organic material. Merritt Sand is slightly coherent, with increased consolidation at depth (Radburch 1969).

2.3.2 Site-Specific Geology

A generalized geologic description of the subsurface is based on borings advanced at the property by Integral in February 2015. Detailed boring logs are included as Appendix A.

A generalized stratigraphic section is presented below:

- 0 to 5 ft Silt to sandy silt
- 5 to 10 ft Clay and silt lenses
- 10 to 23 ft Clayey sand to poorly-graded sand
- 23 to 30 ft Sandy Clay
- 30 to 50 ft Well-graded sand with layers of clay (50 ft maximum explored depth).

Geologic units likely underlying the site include:

- Artificial Fill (Qaf)
- Bay Mud (Qbm)
- Merritt Sand (Qm).

Locally, in 1902, dredging of marshland in support of expanded shipping in the region commenced. Dredged Bay Mud was used as fill along the historical shoreline of Alameda Island (Radbruch 1967). The site was constructed atop this artificial fill.

2.4 HYDROGEOLOGY

Two principal water-bearing zones have been identified from 0 to 50 ft below the site, the maximum explored depth. These are referred to hereafter as the upper and lower zones. In the upper zone, groundwater elevations range from 3.4 to 8.0 ft below ground surface (bgs) and are tidally influenced. In the lower zone, groundwater elevations range from 3.31 to 8.36 ft bgs and are tidally influenced. A formal tidal influence study has not been conducted, but high tide, low tide, other well gauging data and field conductivity measurements suggest that the upper and lower zones are hydraulically connected to the tidal channel, which is typical for similar areas of Alameda. It is likely that the net movement of groundwater is towards the tidal channel in both the upper and lower zones. The extent of connection between upland site groundwater and the estuary has not been fully evaluated. As the site is adjacent to the Alameda tidal canal, groundwater is not expected to be a potable water source.

A simplified, hydrogeological model would look like the following (depths are approximate and vary with location):

- 0 to 23 ft Upper zone
- 23 to 30 ft Aquitard
- 30 to 50 ft Lower zone.

These observations and conclusions are supported by exploration and monitoring well data from the site.

Three wells were installed on April 19, 2010, by Geo-Logic, of Crockett, California to monitor the former UST area (Geo-Logic 2010). These wells are screened across the upper zone. More recently, in February 2015, Integral oversaw the installation of six new groundwater monitoring wells by National Exploration Pumps & Wells (National) of Richmond, California, at the site. Three of these wells were screened across the upper zone and three co-located wells were screened across the lower zone. A discussion of the February 2015 well installations is presented in Section 3.3.

Figures 3 through 6 present groundwater elevations during high tide and low tide for wells screened in the upper and lower zones. Tables 1 through 3 present high- and low-tide well gauging on March 30, 2015, and other well gauging data.

2.5 CURRENT AND FUTURE LAND USE

The site is currently zoned M-2, General Industrial; the current and future use will be consistent with this zoning. Currently, the site has been leased by Concreteworks Cladding Company, since April 2015. Concreteworks designs and fabricates finished architectural concrete products

for interior and exterior applications. Concreteworks industrial processes consist of casting concrete in custom designed molds, and then polishing and sealing the concrete for shipping. Concreteworks, processes do not include metals, petroleum hydrocarbons, or VOCs and do not use constituents among the chemicals of concern discussed in this report.

Four site areas have been identified for discussion purposes (Figure 2):

- Building Area: Includes the footprint of the existing building, which is expected to remain in place. The building slab, which ranges from 6 to 18 in. thick, will be maintained and covers underlying soils. The former UST was located within the Building Area.
- Yard Area: Former storage area east of the building, which includes paved and unpaved areas. The paved driveway area is expected to be maintained; a large portion of the Yard Area may be paved in the future. A structure may be built in the Yard Area.
- Shoreline Area: An unpaved area along the northern portion of the site, a portion of which is owned by the U.S. Army Corps of Engineers. No changes are anticipated in this area.
- Offshore Sediments: The submerged sediments offshore of the site also owned by the U.S. Army Corps of Engineers that are part of the Alameda channel.

Concreteworks operations and facility boundary are currently limited to the Building Area, the paved driveway portion of the Yard Area immediately to the east of the building and temporary field trailers placed in the southern portion of the Yard Area. Concreteworks would like to utilize the other portions of the Yard Area for their operations. Temporary paving of the area may be placed initially and a final plan developed in the future; the final plan will likely include paving some or all of the Yard Area.

2.6 PREVIOUS INVESTIGATIONS

Multiple subsurface environmental investigations have been performed at the site to assess the nature and extent of petroleum hydrocarbons identified during the removal of a fuel underground storage tank (UST) in January 2004 (Geo-Logic 2004, 2010) as part of the UST case overseen by Alameda County; this work was completed on behalf of Allied Engineering. A Phase II investigation was conducted in July 2014 to investigate targeted areas around the site where potential releases of hazardous materials may have occurred (Geologica 2014), also on behalf of Allied Engineering. An additional assessment and characterization was completed in January 2015 to delineate volatile organic compounds (VOCs) in soil and groundwater and metals concentrations in surface soils (AEI 2015). A limited investigation of offshore sediments was also completed in January 2015 (Integral 2015). All work in 2015 was conducted on behalf of Concreteworks Cladding Company as due diligence investigations prior to entering into a lease.

Section 3 provides the methods used for the 2015 investigations; the reports cited above provide the methods and results for previous investigations; all site data are discussed in Section 5.

3 DATA GAPS AND CONSTRUCTION-RELATED SAMPLING

From January through March 2015, Integral completed data gaps (soil boring and groundwater monitoring well installation) and construction-related sampling (test pit, table, and trench sampling) on behalf of Concreteworks Cladding Company. The following sections present the field and laboratory methods for the sampling.

Data gaps sampling was performed to characterize soil and groundwater conditions beneath 10 sub-grade machinery pits and elsewhere at the site. Data gaps sampling included grab soil sampling from relatively shallow depths, grab groundwater sampling from the upper zone, logging of one relatively deep exploratory boring (SB-21), groundwater sampling from both the upper and lower zones of six newly installed monitoring wells (MW-4A, MW-4B, MW-5A, MW-5B, MW-6A, MW-6B), and further groundwater sampling from the upper zone at pre-existing monitoring wells (MW-1, MW-2, MW-3).

Construction-related sampling occurred within excavations where redevelopment-related construction activities occurred. Sampling was performed to further document shallow soil conditions in these areas. Construction-related sampling included sampling from test pits, trenches, and tables excavated as part of redevelopment-related construction activities.

3.1 PERMITS AND UNDERGROUND UTILITY LOCATION

Before conducting the fieldwork, Integral marked the proposed boring locations with white paint and contacted Underground Service Alert of Northern California. Boring locations were cleared by Cruz Brothers of Santa Cruz, California, on February 9, 2015. Permits for soil borings and monitoring well installations were obtained from the Alameda County Public Works Agency (Appendix B).

3.2 FIELD METHODS

The following subsections present the field methods for data gaps and construction-related sampling. Integral standard operating procedures (Appendix C) were followed except where deviations are noted below.

3.2.1 Data Gaps Sampling

3.2.1.1 Soil Sampling

From February 11 to 13 and 18 to 19, 2015, 14 soil borings (SB-11 through SB-24) were advanced by National, under supervision of Integral field personnel. Boring locations were pre-cored by

a specialty contractor to penetrate the thick concrete slab encountered at most locations. Figures 7 through 10 provide the sampling locations.

Thirteen of 14 soil borings were advanced (SB-11 through SB-23) using a direct-push drilling rig. A continuous soil core was collected from these borings for lithological logging and soil sampling. Soil samples were collected from direct-push borings using a dual-tube sampling device with acetate liner. Drilling was abandoned at one location, SB-18-GW (groundwater was collected here as discussed below), as pea gravel was encountered just beneath the concrete floor of the subgrade machinery pit, rendering hand augering impossible (this location was inaccessible to the direct-push rig). SB-18 was then moved 10 ft to the north (downgradient) to complete soil sampling.

Soil samples for chemical analysis were not collected from SB-23 (grab groundwater sample location only).

At location SB-24, the boring was advanced using a hand auger (location was inaccessible to the direct-push rig). Soil samples for chemical analysis were collected at this location by laying soil on clean plastic sheeting and transferring soil to sample containers as outlined below.

Soil samples collected from soil borings were biased towards intervals where visual evidence of impacts were noted, photoionization detector (PID) readings exceeded 5 ppmv, and/or targeted just below the concrete surface in subgrade machinery pits (where applicable). Samples were also collected from just above the saturated zone. Soil samples were collected with clean, stainless-steel spoons, laboratory-provided samplers (Terracore or Encore), and/or newly nitrile-gloved hands and transferred to the appropriate laboratory glassware, with preservation depending on analysis.

From February 11 to 18, 2015, drilling commenced for the installation of six groundwater monitoring wells. National also advanced several borings to 50 ft bgs using a direct-push rig, allowing for the collection of continuous cores for lithological logging and sampling at three locations (MW-4A, MW-5B, MW-6B). Soil samples were collected from direct-push borings at these locations using a Macro-Core® sampling device with acetate liner. Soil samples were collected from two of three monitoring wellbores (MW-4 and MW-6), where visual evidence of impacts were noted.

Lithology encountered in all the soil borings were described by Integral staff, under the supervision of an Integral California Professional Geologist, and in accordance with the visual-manual procedures of ASTM International Standard D2488-09a (ASTM 2009).

The recovered soil from soil borings was screened for the presence of VOCs at approximately 2-ft intervals using a PID by placing soil in a resealable bag, agitating the soil, and, after several minutes elapsed, introducing the PID probe into the bag headspace . PID readings were recorded on the lithological log for each boring.

In addition, the soil boring logs contain sample IDs and depths, specific sampling device, water sampling method for grab samples, and key observations. Soil boring logs are presented as Appendix A.

3.2.1.2 Groundwater Sampling

Grab Sampling

From February 13 to 19, 2015, grab groundwater samples were collected from 13 boring locations using a Hydropunch™ (SB-11, SB-14, SB-15, SB-20, SB-22, and SB-23), temporary PVC well (SB-12, SB-13, SB-16, SB-17, SB-19, and SB-24) or directly from the borehole (SB-18-GW) using low flow sampling methods. Groundwater was not collected from SB-21. Figures 11 through 13 provide the sampling locations.

Grab groundwater was collected from the upper zone from the middle of the screened interval and purged until turbidity decreased. Temporary grab groundwater monitoring wells constructed of PVC were used in several locations where Hydropunch™ sampling was not practical. In one location (SB-18-GW), groundwater was directly sampled from beneath the concrete subgrade machine pit due to inaccessibility by other methods and the presence of subgrade gravel. When used, temporary wells were constructed of PVC well casings with 0.01-in. slotted screen and filter fabric.

Following completion of soil and groundwater sampling borings were backfilled with neat cement grout by the tremie method.

Further sampling details are provided in the notes section of the boring logs found in Appendix A.

Groundwater Monitoring Well Sampling

Integral personnel collected groundwater samples from existing monitoring wells MW-1 through MW-3 on February 24, 2015; and from monitoring wells MW-6A and MW-6B on February 25, 2015; and monitoring wells MW-4A, MW-4B, MW-5A, and MW-5B on March 19, 2015.

Groundwater samples were collected into laboratory-provided sample containers using low-flow sampling methods with a peristaltic pump and new polyethylene tubing from the middle of the screened interval. Prior to sample collection, water levels were measured, and wells were purged until pH, temperature, and electrical conductivity stabilized using a water quality meter with flow through cell. The final measured water quality parameters prior to sampling were documented on groundwater sample collection forms (Appendix D).

Sampling was conducted in accordance with the applicable SOPs (Appendix C). Additional details are provided in Appendices A and E.

3.2.1.3 NAPL Sampling

Two product samples were collected on February 13, 2015, from borings where nonaqueous-phase liquid (NAPL) was measured on the water surface. Locations SB-19 and SB-22 both contained NAPL with measured thicknesses of 0.7 and 0.09 ft, respectively. NAPL was measured with an oil-water interface probe that was decontaminated between boreholes. Sampling was conducted with a peristaltic pump at the top of the water column.

Nonaqueous-Phase Liquid observations:

- Residual NAPL was noted in soil boring SB-16 from 3.0 to 3.2 ft bgs.
- 0.7 ft of NAPL was measured floating on the surface of groundwater at SB-19. Residual NAPL was noted in the soil boring from 5.5 to 6.5 ft bgs.
- 0.09 ft of NAPL was measured floating on the surface of groundwater at SB-22.

Additional details are provided in Appendices A and E.

3.2.2 Construction-Related Sampling

The following subsections describe construction-related sampling field methods.

Construction-related sampling was conducted at locations where soil was excavated to allow installation of facility machinery. Construction-related soil samples were collected with the assistance of an excavator or stainless-steel shovel (care was taken not to sample material that had come into direct contact with either device) and transferred to laboratory glassware using a clean stainless-steel trowel and/or newly gloved hand. Figures 14 through 16 provide the sampling locations.

3.2.2.1 Test Pits

On January 30, 2015, four test pits were excavated in the Building Area (TP-1 through TP-4) to explore the integrity of load-bearing structural members. Soil was explored to a total depth of 4 ft bgs at each location.

Integral personnel collected a total of six samples from these test pits. Soil was collected from shallow soil, biased towards visual indications of impacts, or where PID readings were greater than 5 ppmv. The recovered soil was screened for the presence of VOCs at approximately 1-ft intervals using a PID. The PID readings were recorded on the test pit log for each location. Integral personnel recorded general descriptions of lithology encountered.

3.2.2.2 Table and Trench Construction Support

During the period from February 26 to March 27, 2015, excavation activities were completed by Magnus Pacific as part of redevelopment activities. Integral personnel conducted sampling within four areas (Tables 1 and 2, Trenches 1 and 2). Excavations up to 4.5 ft bgs were performed to provide foundations for site machinery in support of site redevelopment activities.

Shallow soil sampling was biased towards visual indications of impacts, or where PID readings were greater than 5 ppmv. Generally, samples were evenly spaced along sidewalls and bottom areas. At least one sidewall sample was collected from every 25 linear feet at a depth halfway down the sidewall, or when sidewalls were relatively close together, only one sidewall was sampled (see Trench 2 excavation, Figures 14 to 16). Bottom samples were collected at a frequency of at least one sample per representative depth (excavations had several depths and were sloped in some areas), with at least two bottom samples per excavation. Samples were biased towards visual indications of impacts, or soil where PID readings were over 5 ppmv. One exception was that samples were not collected from the subgrade metal layer that was observed just beneath the concrete slab in several excavations (Section 3.6.1).

Integral personnel recorded general descriptions of the excavation lithology. The soil was screened for the presence of VOCs at approximately 1- to 2-ft intervals using a PID, by placing soil in a resealable bag, agitating the soil, and, after several minutes elapsed, introducing the PID probe into the headspace area of the bag. The PID readings were recorded on field sheets prior to the collection of samples for laboratory analysis.

3.3 GROUNDWATER MONITORING WELLS

This section describes the general procedures for groundwater monitoring well installation, development, repair, and surveying.

Locations of monitoring wells are found on Figures 3 through 6, well construction details are found on Table 4, and well completion reports (newly installed wells only) are found in Appendix E.

3.3.1 Installation

Integral installed six new monitoring wells. Three monitoring wells were screened across the upper zone at MW-4A, MW-5A, and MW-6A. Three co-located monitoring wells were screened across the lower zone at MW-4B, MW-5B, and MW-6B. Wells MW-6A and MW-6B were placed in an area where previous grab groundwater sampling had indicated VOC impacts. Wells MW-4A and MW-4B, and MW-5A and MW-5B, were installed to assess groundwater conditions in the vicinity of the estuary.

Wells were constructed of 2-in.-diameter, Schedule 40 PVC blank casing and 2-in.-diameter, 0.010-in. slot size, Schedule 40 PVC slotted casing (well screen). A #2/16 sand filter pack was installed from the bottom of the borehole to approximately 1 ft above the top of the well screen, followed by 12 in. of hydrated bentonite, and then followed by cement grout to approximately 1 ft below grade. Each well was completed with an 8-in.-diameter, traffic-rated, flush-mounted well box set in a concrete apron. A locking, watertight plug was placed in the top of each well casing.

The well screening interval and other installation details were created in consultation with Integral Professional Geologists. Wells were constructed in accordance with the California Department of Toxic Substances Control guidance manual, *Well Design and Construction for Monitoring Groundwater at Contaminated Sites*, June 2014 (DTSC 2014), in addition to ASTM's *Standard Practice for Design and Installation of Groundwater Monitoring Wells* (ASTM 2010).

Well construction details are included in Table 4 and Appendix A contains boring logs. Following well installation, well completion reports were prepared, signed by the well driller, and submitted to the California Department of Water Resources (Appendix E).

3.3.2 Development

At least 72 hours after installation, the wells were developed using a combination of surging, bailing, and pumping by National under the supervision of Integral. Groundwater was purged until relatively clear and water quality parameters stabilized, resulting in at least 10 casing volumes of water purged from each well. The measured water quality parameters were documented by National on monitoring well development forms.

Water generated from the wells during development was managed in accordance with procedures outlined in Section 3.7.

3.3.3 Surveying

The newly installed monitoring wells were surveyed by Kier and Wright, of Livermore California, a professional land surveyor licensed in the state of California. The top of casing elevation (north side), rim of the well, and the adjacent ground surface (1 ft to the north) were surveyed in accordance with State Water Resources Control Board monitoring well survey guidelines. Appendix F contains a signed and sealed well survey report.

3.3.4 Repair

The well box and cover of monitoring well MW-6A were damaged during site construction activities and subsequently repaired by National on March 20, 2015.

3.4 ANALYTICAL METHODS

The following sections describe the analytical methods for sampling.

3.4.1 Data Gaps Soil Sampling

Collected soil samples were analyzed by Curtis & Tompkins of Berkeley, CA, a California-certified laboratory, for the following:

- Title 22 metals by Environmental Protection Agency (EPA) Method 6010/7470
- Mercury by EPA Method 7470
- Hexavalent chromium by EPA Method 3060/7196
- VOCs by EPA Method 8260
- Semivolatile organic compounds (SVOCs) by EPA Method 8270
- Total petroleum hydrocarbons–purgeable (TPH-P) as gasoline range organics (GRO) by EPA Method 8015
- Total petroleum hydrocarbons–extractable (TPH-E) as diesel range organics (DRO) by EPA Method 8015
- TPH-E as oil-range organics (ORO) by EPA Method 8015
- Polychlorinated biphenyls (PCBs) by EPA Method 8082.

Copies of the laboratory analytical reports and sample chain-of-custody records for the data gaps soil sampling are included in Appendix G.

3.4.2 Data Gaps Groundwater Sampling

Groundwater samples collected from MW-4A, MW-4B, MW-5A, MW-5B, MW-6A, and MW-6B were analyzed by Curtis & Tompkins for the following:

- Dissolved Title 22 metals by EPA Method SW6010/7470
- Dissolved hexavalent chromium by EPA Method 7196
- VOCs by EPA Method 8260
- SVOCs by EPA Method 8270
- TPH-P (GRO) by EPA Method 8015
- TPH-E DRO/ORO by EPA Method 8015
- PCBs by EPA Method 8082.

Copies of the laboratory analytical reports and sample chain-of-custody records for the data gaps groundwater sampling are included in Appendix G.

3.4.3 Existing Monitoring Well Sampling

Groundwater samples collected from MW-1, MW-2, and MW-3 were analyzed by Curtis & Tompkins for the following:

- Dissolved Title 22 metals by EPA Method SW6010/7470
- Dissolved hexavalent chromium by EPA Method 7196
- VOCs by EPA Method 8260
- SVOCs by EPA Method 8270
- TPH-P (GRO) by EPA Method 8015
- TPH-E DRO/ORO by EPA Method 8015
- PCBs by EPA Method 8082.

Copies of the laboratory analytical report and sample chain-of-custody record for the pre-existing monitoring well sampling are included in Appendix G.

3.4.4 Product Sampling

Product samples collected at locations SB-19 and SB-22 were analyzed by Curtis & Tompkins for the following:

- TPH-E by Gas Chromatography for Fingerprinting Analysis
- SVOCs by EPA Method 8270
- PCBs by EPA Method 8082.

The samples were compared to a motor oil standard, and a brief analysis is presented in the case narrative section of the laboratory report. Copies of the laboratory analytical report and chain-of-custody records for the product samples are included in Appendix G.

3.4.5 Archived Samples

To fill data gaps, Integral retrieved samples collected by AEI Consultants of San Jose, California (AEI) on January 12, 2015 from the archive at McCampbell Analytical of Pittsburg, California (McCampbell), and had them analyzed them for the following:

- Hexavalent chromium by EPA Method 3060/7196

- PCBs by EPA Method 8082
- Waste extraction test (WET) metals by California EPA Soluble Threshold Limit Concentration procedure and EPA Method 6010B/6020.
- Toxicity characteristic leaching procedure (TCLP) metals by EPA Methods 1311 and 6010B/6020

In addition, to fill additional data gaps, sediment samples collected by Integral on January 12, 2015 were retrieved from the McCampbell archive and analyzed for the following:

- Hexavalent chromium by EPA Method 3060/7196
- PCBs by EPA Method 8082
- WET metals by California EPA Soluble Threshold Limit Concentration procedure and EPA Method 6010B/6020.
- TCLP metals by EPA Methods 1311 and 6010B/6020

Copies of the laboratory analytical reports and sample chain-of-custody record for the archived samples are included in Appendix H.

3.4.6 Construction-Related Soil Sampling

The construction-related soil samples were analyzed by Curtis & Tompkins (Table and Trench samples) and McCampbell (Test Pit samples) for the following:

- Title 22 metals by EPA Method 6010/7470
- Mercury by EPA Method 7470
- Hexavalent chromium by EPA Method 3060/7196
- VOCs by EPA Method 8260.
- SVOCs by EPA Method 8270
- TPH-P (GRO) by EPA Method 8015
- TPH-E DRO/ORO by EPA Method 8015
- PCBs by EPA Method 8082.

Copies of the laboratory analytical report and sample chain-of-custody record for the construction-related samples are included in Appendix I.

3.5 EQUIPMENT DECONTAMINATION

Drilling equipment, soil sampling equipment, and non-disposable groundwater sampling equipment was washed prior to and after use. The wash consisted of a preliminary rinse with tap water to remove visible soil (if necessary), an Alconox™ and tap water solution wash, and a final rinse with distilled or deionized water. Drilling equipment was cleaned using a steam pressure washer and Alconox™ solution. All decontamination fluids were managed in accordance with procedures outlined in Section 3.7.

3.6 FIELD OBSERVATIONS

Key field observations are presented in the following subsections. Additional details regarding PID readings, sample depths, and other observations can be found on the boring logs (Appendix A).

3.6.1 Subgrade Metal Layer

A subgrade metal layer was observed at the Table 1, Trench 1, Table 2, and Trench 2 locations. The metal layer was generally 1–2 cm thick and was found just beneath the concrete slab in several areas. The thickness of overlying concrete varied between 6 and 18 in. The underlying metallic layer ranged in color from a rusted red loosely arranged layer to a shiny blue-gray consolidated layer.

Observations of the Metal Layer from South to North:

- Trench 2 Area: Metal layer was fairly continuous across most of the excavation area with the exception of the vicinity of samples TRENCH2-5SW-1.2 and TRENCH2-5B-4.0, where no metal was observed.
- Table 2 Area: Metal layer was observed across the eastern third of the excavation area on sidewalls adjacent to samples TBL2-2SW-0.9, TBL2-1SW-0.9, and TBL2-3SW-0.9.
- Trench 1 Area: Metal layer was observed on sidewalls adjacent to samples TRENCH1-5SW-1.2, TRENCH1-4SW-1.2, and TRENCH1-2SW-1.2.
- Table 1 Area: Metal layer was observed on one sidewall adjacent to sample TBL1-10-SW-2.3.

3.7 INVESTIGATION-DERIVED WASTE

Decontamination water from drilling and sampling activities, well development water, and purge water from groundwater sampling activities were transferred to a large holding tank and sampled and characterized/profiled by Bradley Tanks Inc. (BTI), a subcontractor to Magnus

Pacific. Magnus contracted BTI to properly transport and dispose of the decontamination water offsite.

Soil cuttings from drilling activities are currently stored at the site in 55-gallon drums. Soil cuttings are to be added to a stockpile that will be generated during future excavation activities. After soil stockpiling, the drums will be triple-rinsed, crushed, and recycled offsite; and the soil stockpile will be sampled and disposed of according to applicable regulations. Data from soil borings indicate that the soils are not California or RCRA hazardous waste.

Solid wastes generated during the investigation (e.g., paper towels, personal protective equipment, disposable sampling equipment) were cleansed of any gross soil, placed in garbage bags and disposed as municipal waste.

3.8 DATA QUALITY REVIEW

A data quality review was performed by conducting a Stage 2A data validation based on criteria described in EPA's Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA 2008) and Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (USEPA 2010), the referenced analytical methods, and laboratory-established quality control acceptance limits. The Stage 2A validation consisted of a completeness check, a compliance check of sample receipt conditions, and an evaluation of sample-related quality control results.

The validation results indicated that almost all data were accepted and completeness was near 100 percent. The non-detected GRO results in SDG 264606 Sample SB-21-1.0-2.0 and the non-detected SVOC base neutral results in SDG 264756 Sample SB-24-GW were rejected because of very low surrogate recoveries. All other results, as qualified, are usable for their intended purpose. The results of the data validation are included in Appendix J.

4 SCREENING VALUES

Soil and groundwater screening levels were selected for use in this report to conduct a preliminary screen of analytical results for soil and groundwater samples collected from the site. Selected screening levels are presented in Table 5 and described below. Note that screening levels provided below are preliminary, are not intended to represent cleanup levels, and may be refined as additional data are collected, the conceptual site model for the site is developed, and future land use plans are finalized.

4.1 EXPOSURE ANALYSIS

A preliminary exposure analysis, which is preliminary and limited to an evaluation of the exposure pathways from chemical sources to potential receptors, is provided in Figure 17. The exposure analysis describes the possible exposure routes for potential receptors, including complete and potentially complete and significant exposure pathways, incorporating findings from site investigation activities to date.

4.1.1 Chemicals of Interest

Chemicals of interest (COIs) are identified based upon historical activities, visible cues present at a site, and findings during the progression of investigations. Those COIs with the potential to contribute to site risk are identified as COPCs. The potential sources of COPCs at the site include former machine operations, machine residual handling, and fuel and hazardous materials storage. As discussed in Section 5, COPCs identified for the site include metals, VOCs, semivolatile constituents, petroleum hydrocarbons, and PCBs. Ambient sources of chemicals also exist, including ambient/background sources of metals in soils related to site-specific lithologies.

4.1.2 Exposure Pathways

An exposure pathway is a mechanism by which receptors may come into contact with site-related chemicals. USEPA (1989) describes a complete exposure pathway in terms of four components:

- A potential or suspected source and mechanism of chemical release (e.g., leaks/spills from operations)
- A retention or transport medium (e.g., soil and groundwater)
- A point of potential contact (e.g., future commercial/industrial receptors)
- An exposure route at the contact point (e.g., incidental ingestion).

Consistent with USEPA (1989) guidance, each of these elements must be present for an exposure pathway to be complete or potentially complete. In the absence of a complete exposure pathway, it can be assumed that there would be no exposure, and consequently no health risk associated with site-related chemical constituents. Some pathways, although potentially complete, may be considered insignificant if they are likely to contribute only a small fraction of the total exposure (e.g., due to a lack of or low detected concentrations or other mitigating factors). Future site use and anticipated future site conditions also affect the exposure pathway analysis.

As illustrated in Figure 17, the primary potential release mechanisms for COPCs include direct releases (i.e., spills, leaks, disposal, and runoff) to surface and subsurface soil, leaching to groundwater, volatilization, and wind-blown transport of particulates (i.e., fugitive dust). Volatile chemicals can migrate from soil and groundwater to indoor or ambient air/trench air. Semivolatile and nonvolatile compounds can be resuspended with soil particulates and be present in ambient air/trench air. COPCs in surface soil can migrate to surface water and sediment by dissolving in or adhering to particulates in runoff. Lastly, COPCs in groundwater can migrate and discharge to surface water in San Francisco Bay. These release mechanisms can result in COPCs potentially being present in the following retention or transport media: surface and subsurface soil, sediment, indoor air, ambient air, surface water, and groundwater.

Based on the site investigation results showing detections of COPCs, complete and potentially complete and significant exposure pathways are limited to those identified below, based on an assumption of commercial/industrial use of the site by area. Construction and maintenance (e.g., landscapers, utility workers) could also be exposed to site media currently and in the future.

Groundwater is not a source of drinking water at the site and is unlikely to be one in the future; therefore, the ingestion of groundwater exposure pathway is considered incomplete for all receptors onsite.

4.1.2.1 Building Area

The future land use for the Building Area will remain the same as the current scenario (see Section 2.5). COPCs identified for this area include metals, VOCs, semivolatile constituents, petroleum hydrocarbons, and PCBs. The complete and significant exposure pathways for both scenarios for the primary receptors are:

- Current and future commercial/industrial workers
  - Inhalation of volatiles in indoor air from soil and groundwater. This pathway is considered complete but based on current data, which show relatively low levels of VOCs in subsurface soil and groundwater, the significance of this exposure pathway is uncertain, and may be insignificant.

- Current and future construction workers and maintenance workers (under a scenario of excavation or other penetration of the building slab)
  - Incidental ingestion of surface and shallow soil for both receptors and subsurface soil for the construction worker.
  - Dermal contact with surface and shallow soil for both receptors and subsurface soil for the construction worker.
  - Inhalation of volatiles in indoor air from soil and groundwater for both receptors. This pathway is considered complete but, as discussed above, the significance of this exposure pathway is uncertain.

Inhalation of particulates and volatiles in ambient air and trench air, and dermal contact with groundwater, which is shallow in this area, are considered complete exposure pathways for the construction worker and the maintenance worker. However, exposures via these pathways are considered insignificant because receptors will have protective gear during construction/maintenance activities that will limit exposure to such media.

For the commercial/industrial worker, incidental ingestion and dermal contact with soil and inhalation of ambient air exposure pathways are considered incomplete because there is no uncovered/unpaved soil in this area and the slab is expected to remain in place and be maintained.

4.1.2.2 Yard Area

Currently, there is no building in the Yard Area and the land use is commercial/industrial. COPCs identified for the site include metals and PCBs. Much of the area is unpaved. As described in Section 2.5, the area may be paved and a building maybe constructed in this area in the future but the land use will remain commercial/industrial. The complete and significant exposure pathways for both scenarios for the primary receptors are:

- Current and future commercial/industrial workers
  - Incidental ingestion of surface and shallow soil for the current scenario only
  - Dermal contact with surface and shallow soil for the current scenario only.
  - Inhalation of particulates in ambient air for the current scenario only.

For the future scenario, all of the exposure pathways may be considered incomplete as there will be no direct exposure to soil (incidental ingestion and dermal) or via inhalation as all soils may be covered/paved.

- Current and future construction workers and maintenance workers
  - Incidental ingestion of surface and shallow soil for both receptors and subsurface soil for the construction worker

  - Dermal contact with surface and shallow soil for both receptors and subsurface soil for the construction worker
  - Inhalation of particulates in ambient air for both receptors.

Dermal contact with groundwater, which is shallow in this area, is considered a complete exposure pathway for the construction worker and the maintenance worker. No data are available yet for groundwater within the yard; therefore, the significance of this pathway is uncertain. However, these receptors will have protective gear during construction/maintenance activities, which will limit exposure to such media.

Inhalation of volatiles in ambient air for the current scenario and indoor air for the future scenario are considered incomplete for all receptors as volatiles have not been detected in this area and no source of volatiles has been identified.

4.1.2.3 Shoreline Area

The future land use for the Shoreline Area will remain the same as the current scenario (see Section 2.5). There are no buildings in this area and none are planned for the future. The complete and significant exposure pathways for both scenarios for the primary receptors are:

- Current and future construction workers and maintenance workers:
  - Incidental ingestion of surface and shallow soil for both receptors
  - Dermal contact with surface and shallow soil for both receptors
  - Inhalation of volatiles and particulates in ambient air for both receptors.

Commercial/industrial workers are likely to be only occasionally visit in this area for short periods of time (e.g., lunch break or stroll) and, therefore, direct exposures to soil (incidental ingestion and dermal) or via inhalation of ambient air are considered complete but insignificant.

Dermal contact with groundwater, which is shallow in this area, is considered a complete exposure pathway for the construction worker and the maintenance worker. However, exposures via these pathways are considered insignificant because receptors will have protective gear during construction/maintenance activities, which will limit exposure to such media.

Inhalation of volatiles in indoor air for the future scenario is considered incomplete for all receptors as no buildings are present or will be present in this area.

4.1.2.4 Offshore Sediment Area

For the Offshore Sediment Area, the primary transport pathway is via groundwater discharging to the bay. In addition, metal debris is present in the offshore sediments from past practices. Therefore, potentially complete and significant exposure pathways are those identified below,

based on an assumption of current and future recreational (fishing/boating) use and for ecological receptors:

- Direct contact/ingestion of surface water and sediment by ecological receptors
- Ingestion of fish by recreational fishers.

Dermal exposure pathways to surface water in the bay for the recreator are considered potentially complete, but exposures are likely to be insignificant as receptors would be in a boat (i.e., no wading); thus, any exposure to surface water will be minimal.

Exposure to humans and higher trophic ecological receptors via ingestion of fish from the bay is considered a complete pathway but insignificant as bioaccumulative chemicals (e.g., PCBs) have not been detected in groundwater from the site or in offshore sediments.

4.2 SOIL SCREENING LEVELS

The soil screening levels selected for this site were based on the lowest (of carcinogenic and non-carcinogenic) direct contact health-based environmental screening levels (ESLs) for commercial/industrial land use from the Regional Water Quality Control Board, San Francisco Bay Region (Table K-2; SFRWQCB 2013). The screening levels from these sources are reported in dry weight. For arsenic, the regional background value of 11 mg/kg, as recommended by the SFRWQCB, was selected as the screening level (Duvergé 2011).

In Table 5, soil screening levels were reported only for analytes that were detected in greater than 5 percent of the samples, unless the analyte is classified as a carcinogen. Soil screening levels were not reported for analytes that were not detected in any of the samples.

It should be noted that the current ESLs are undergoing review and are likely to be updated in the near future (personal communications with Ross Steenson of the SFRWQCB in June 2015). In addition, the use of screening levels for soil assumes that exposure pathways are complete for all site areas. As discussed in Section 6, slabs or pavement currently limit exposure in many site areas and additional areas may be paved or otherwise covered in the future such that exposure to workers would be further limited. Under these conditions, construction or maintenance workers may be the only receptors exposed to soils; screening levels are unavailable for construction or maintenance workers, but would be expected to be higher than those for commercial/industrial workers.

4.3 GROUNDWATER SCREENING LEVELS

Groundwater at the site is neither currently nor in the future intended for use as drinking water. Furthermore, elevated conductivity in nearshore site groundwater indicates site groundwater is unsuitable for potable uses (see further discussion in Section 6) and appear in communication with the estuary. Therefore, the screening levels selected to evaluate groundwater results were based on protection of marine aquatic life goal ESLs (Table F-4a; SFRWQB 2013), with a few exceptions:

- The copper screening level of 6 µg/L is based on the San Francisco Bay site-specific objective for copper (SFRWQCB 2007).
- The selenium screening level of 5 µg/L is based on the freshwater selenium criteria, which is promulgated for all San Francisco Bay/Delta waters in the National Toxics Rule (NTR). The NTR criteria specifically apply to San Francisco Bay upstream to and including Suisun Bay and Sacramento-San Joaquin Delta (USEPA 2000).
- An ESL for bis-(2-ethylhexyl)phthalate was not available. An acute toxicity value of 480 µg/L based on a daphnia study reported in the San Francisco Estuary Institute (SFEI) report was used here (Oros and David 2002).

The ESLs for the protection of estuary aquatic life include both freshwater and marine values; however, the ESLs based on the protection of marine aquatic life were selected for this site because salinity levels in the bay adjacent to the site are most similar to marine conditions and therefore, more applicable. The ESL tables list ESLs based on drinking water goals or freshwater criteria where marine values are unavailable; these values were not utilized for these constituents detected at the site (instead ESLs were listed as not available).

5 DATA SUMMARY

Tables 6 through 15 summarize soil and groundwater data collected to date at the site. The data are organized in the tables according to investigation:

- UST Removal by Geo-Logic (2004)
- Soil and Groundwater Investigation by Geo-Logic (2007)
- Limited Phase II Investigation Allied Engineering Property by Geologica (2014)
- Historical Groundwater Monitoring by Geo-Logic (various dates)
- Subsurface Investigation by AEI (2015)
- Excavation Sampling by Integral (2015)
- Soil and Groundwater Investigation Integral (2015)

Tables 16 and 17 provide the sediment sampling data (Integral 2015). Figures 7 through 16 depict analytical results for constituents detected in soil and groundwater that exceeded screening levels or were otherwise identified as chemicals of potential concern (COPCs). These data are briefly summarized below by site area.

5.1 BUILDING AREA

Based on the data collected to date, the following summarizes known Building Area environmental conditions based on exceedances of screening levels (Table 5).

- Shallow soils under the building slab contain metals (primarily lead and some arsenic), TPH, PAHs, hexavalent chromium (Cr 6+) and PCBs above screening levels. PCBs were encountered but under the 1 ppm Toxic Substances Control Act (TSCA) regulatory threshold (i.e., for high occupancy use).
- Soils beneath former machine pits (deeper soils) contain: limited metals (slightly elevated Cr6+), SVOCs, chlorinated VOCs (CVOCs), and total petroleum hydrocarbons (TPH in the DRO and ORO range). In some areas, the TPH data are indicative of petroleum products in the range associated with machine cutting oil.
- The most recent data indicate that CVOCs in groundwater in nearshore wells are at concentrations below screening levels for aquatic life. Within the building footprint, groundwater contains chlorinated VOCs at concentrations above screening levels.

There is a potential for an offsite/upgradient source to be influencing groundwater conditions at the site.

- Groundwater is also impacted with TPH, and some fuel-related constituents remain in groundwater near the former UST, but at concentrations below screening levels for aquatic life in nearshore wells. The UST case should be considered for closure based on these findings.
- A significant portion of the building area (possibly all of the area pending further evaluation) is tidally influenced. Two water-bearing zones underlie the Building Area (and likely the site) above the confining Young Bay Mud.
- Groundwater impacts are almost entirely limited to the shallower of the two water-bearing zones with some TPH and CVOCs detected in wells in the deeper water-bearing zone below screening levels.

5.2 YARD AREA

Based on the data collected to date, the following summarizes known Yard Area environmental conditions based on exceedances of screening levels (Table 5).

- Visible metal debris is present in soils and concentrations of metals (primarily lead and Cr6+) and PCBs in soil exceed screening levels.
- Soils include RCRA and California hazardous wastes based on total and/or soluble concentrations of metals, primarily lead; some soils contain PCBs above the 1 ppm TSCA regulatory threshold but below the hazardous or TSCA waste thresholds.
- Groundwater has not been investigated.

5.3 SHORELINE AREA

Based on the data collected to date, the following summarizes known Shoreline Area environmental conditions based on exceedances of screening levels (Table 5) and other relevant data.

- Visible metal debris is present in soils and concentrations of metals (primarily lead as well as Cr6+) in soil exceed screening levels. PCBs were detected but concentrations were below the TSCA regulatory threshold of 1 ppm.
- Soils include California hazardous wastes based on total and/or soluble concentrations of metals, primarily lead.

- Groundwater in nearshore wells shows select metals (mercury, nickel, selenium and silver) at concentrations above aquatic life screening levels.
- Measured conductivity values in nearshore wells ranged from 550 to 18,000 μS/cm. The adjacent tidal channel was measured at 41,307 μS/cm.

5.4 OFFSHORE SEDIMENTS

A summary of the sediment results was provided in Integral (2015). That report indicated that the following metals are of potential concern: arsenic, chromium, copper, lead, nickel and zinc. Some samples had concentrations of chromium, copper, lead and nickel above both the low and high screening levels and onshore soil samples show elevated concentrations of these same metals. Metal debris is present in offshore sediments.

The Integral (2015) report indicated that there was a potential for hexavalent chromium to be present. However, based on the analyses of archived samples (see Appendix H), hexavalent chromium was not detected and therefore is not a COPC in offshore sediments. PCBs were also not detected in offshore sediments and the sediments did not exceed California or federal hazardous waste thresholds.

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FIGURES

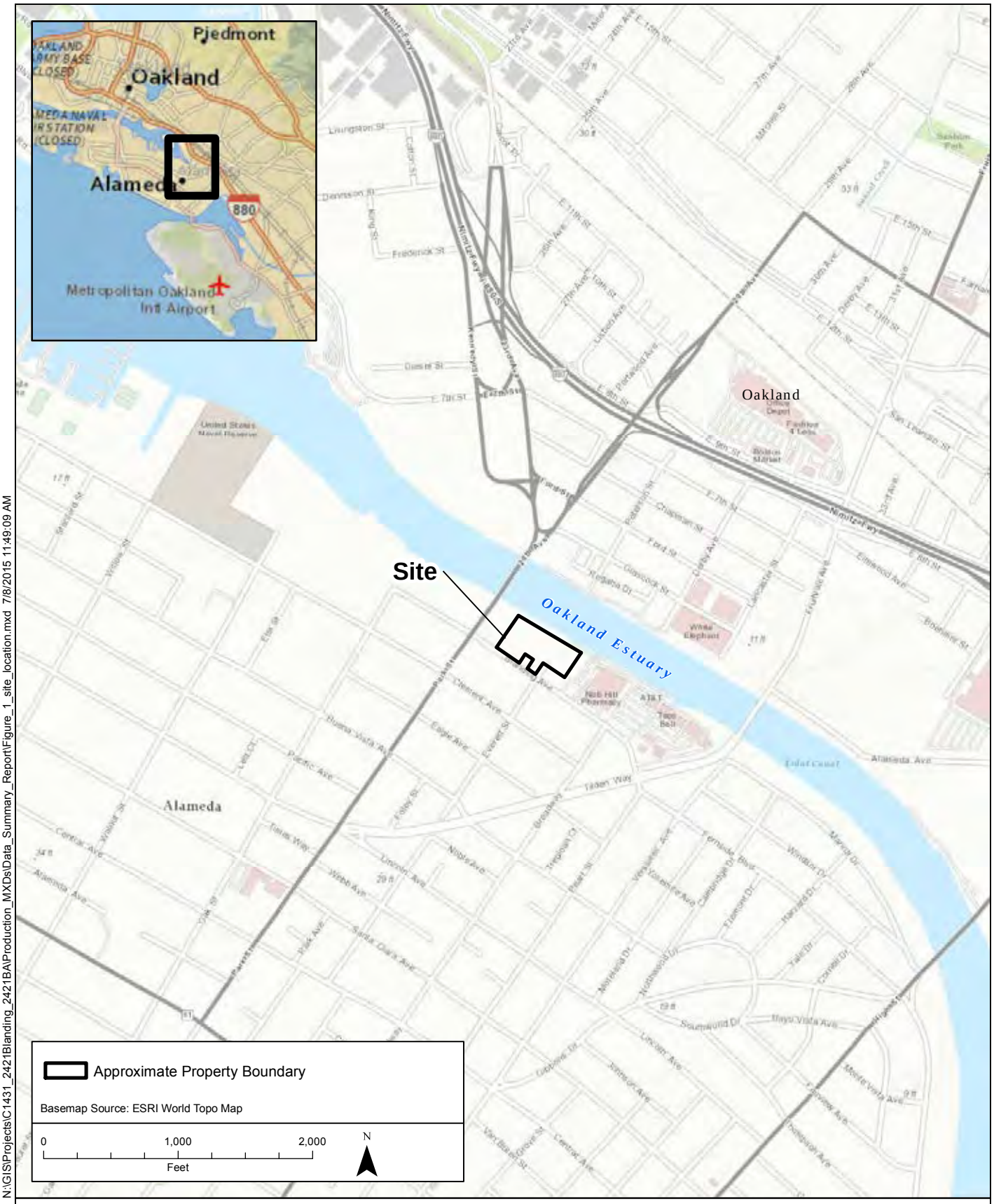

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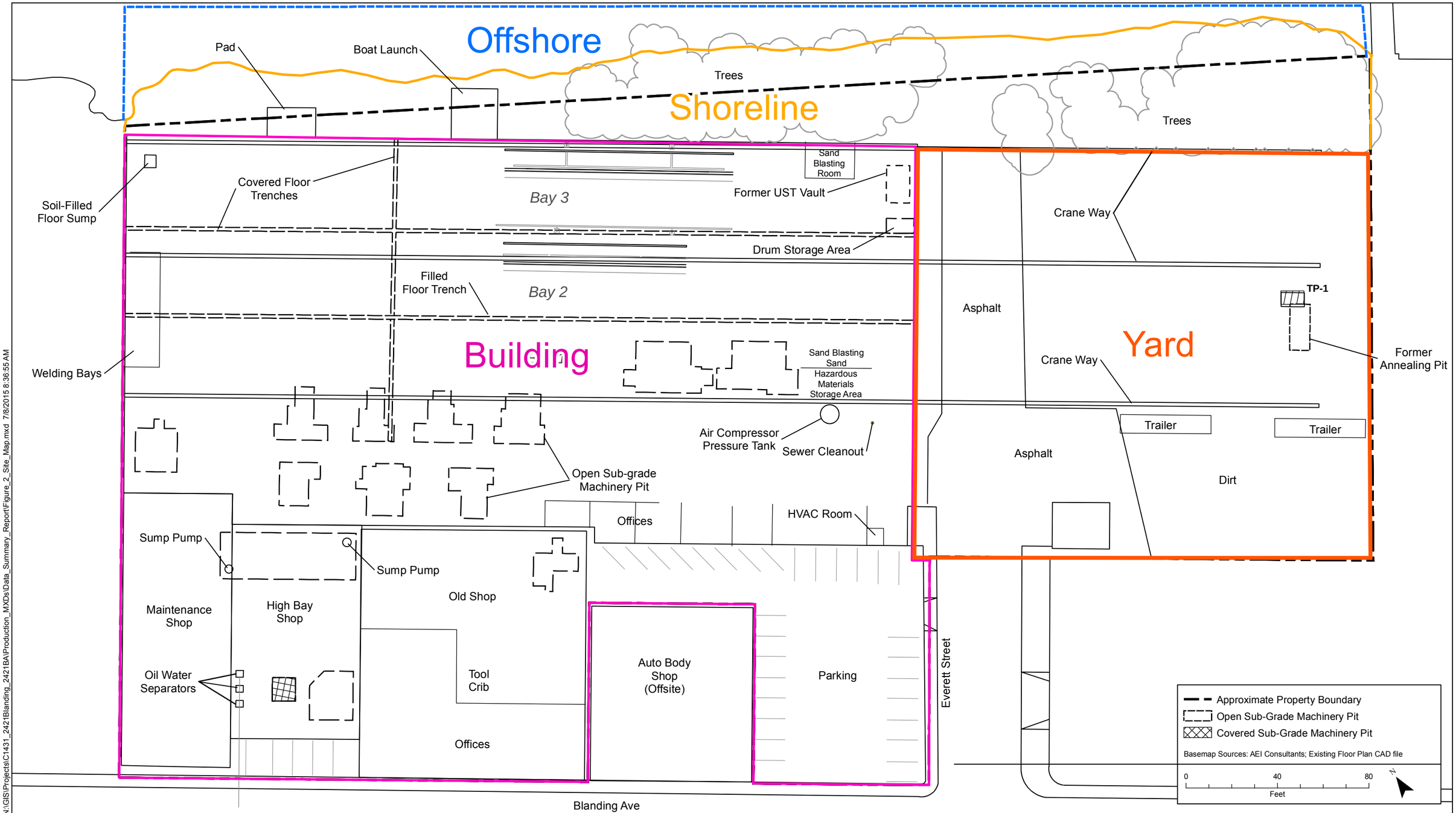
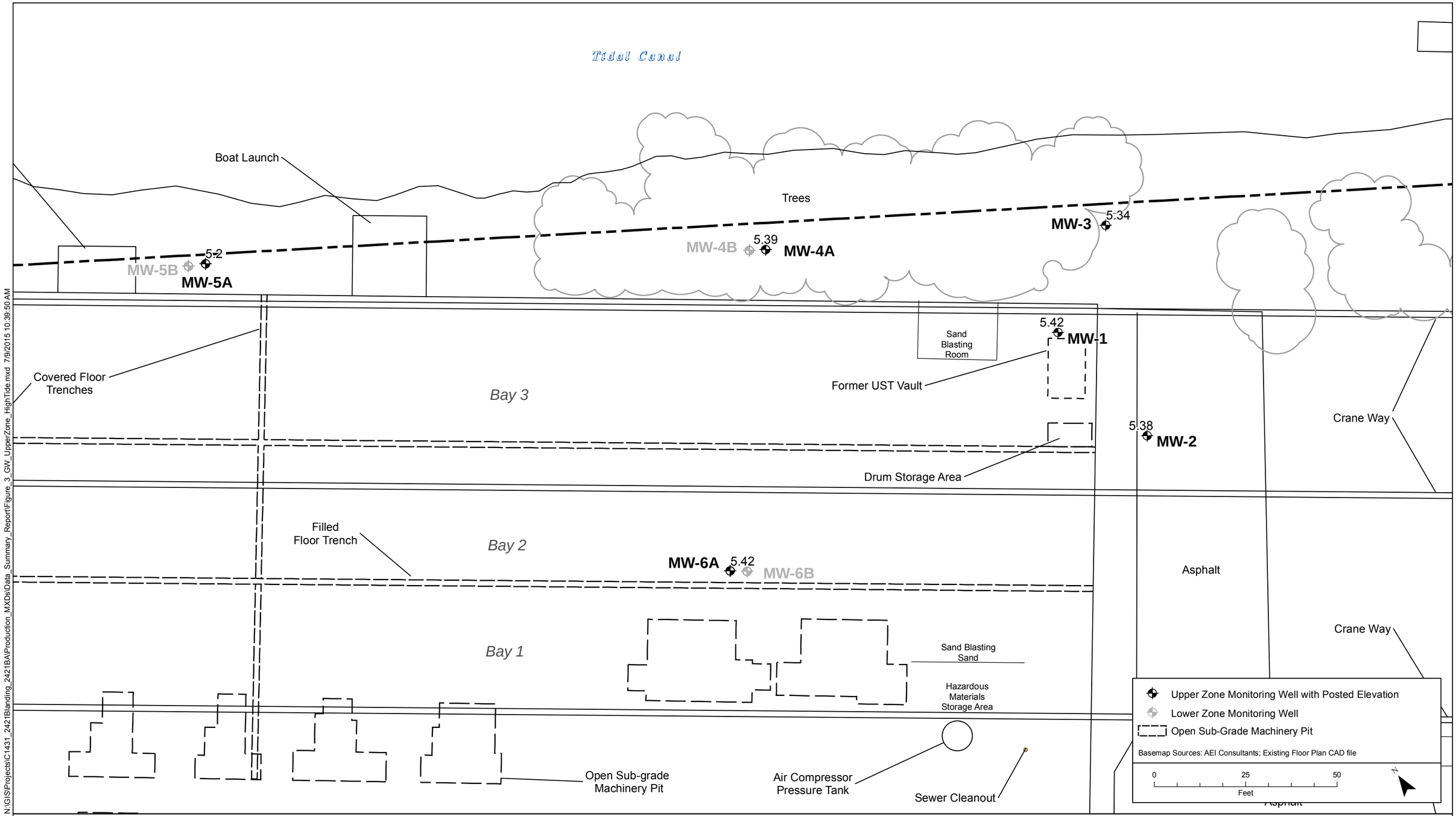
Figure 1.
Site Vicinity Map
Former Allied Engineering & Production Corporation
2421 Blanding Avenue, Alameda, CA



Note:
Sub-grade machinery pits have been filled.

Figure 2.
Site Plan
Former Allied Engineering & Production Corporation
2421 Blanding Avenue, Alameda, California



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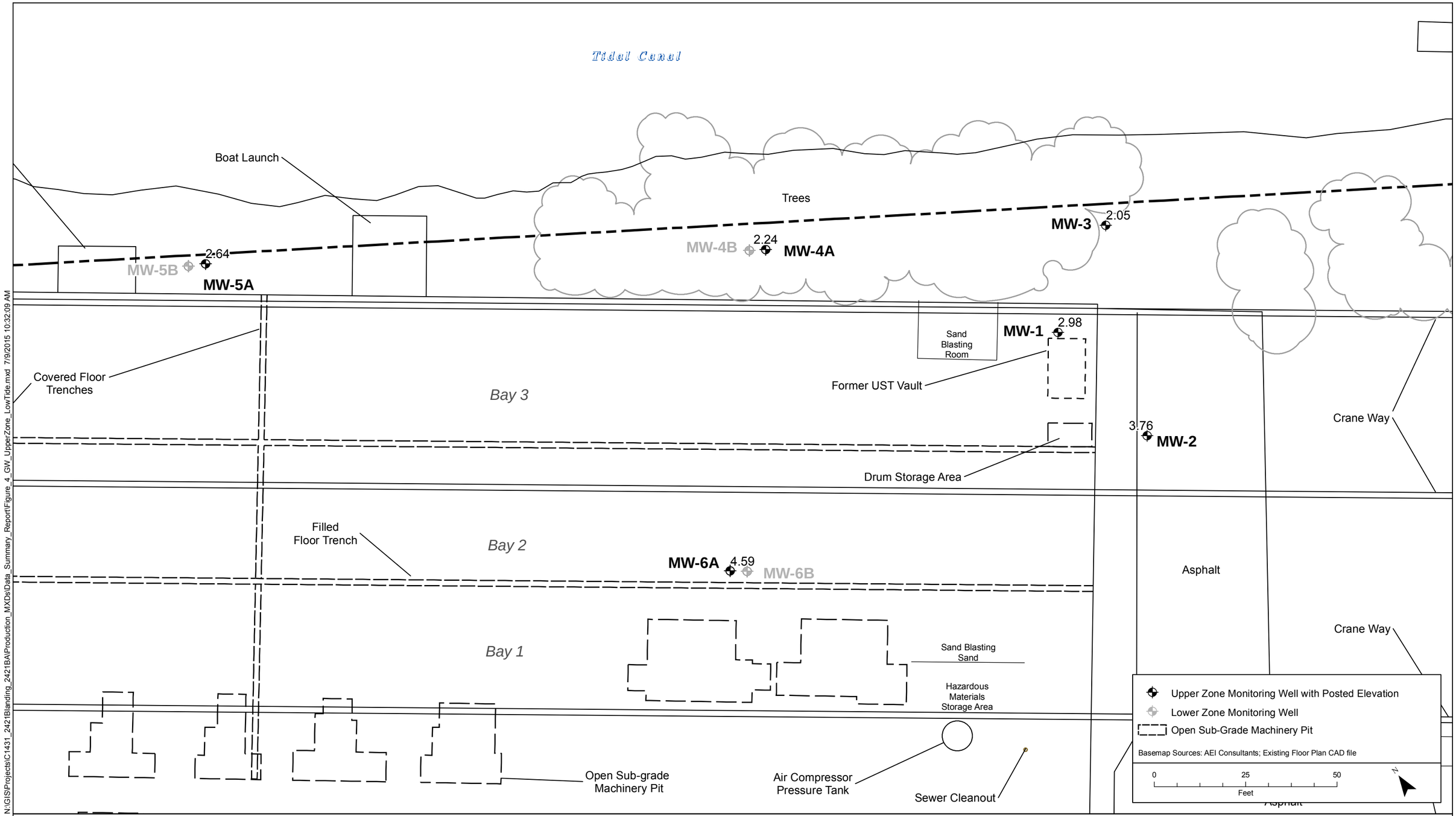
integral consulting inc.

Note:
Sub-grade machinery pits have been filled.

March 30, 2015 AM (High Tide)

Figure 3.
Groundwater Surface Elevations, Upper Zone, High Tide
Former Allied Engineering & Production Corporation
2421 Blanding Avenue
Alameda, California



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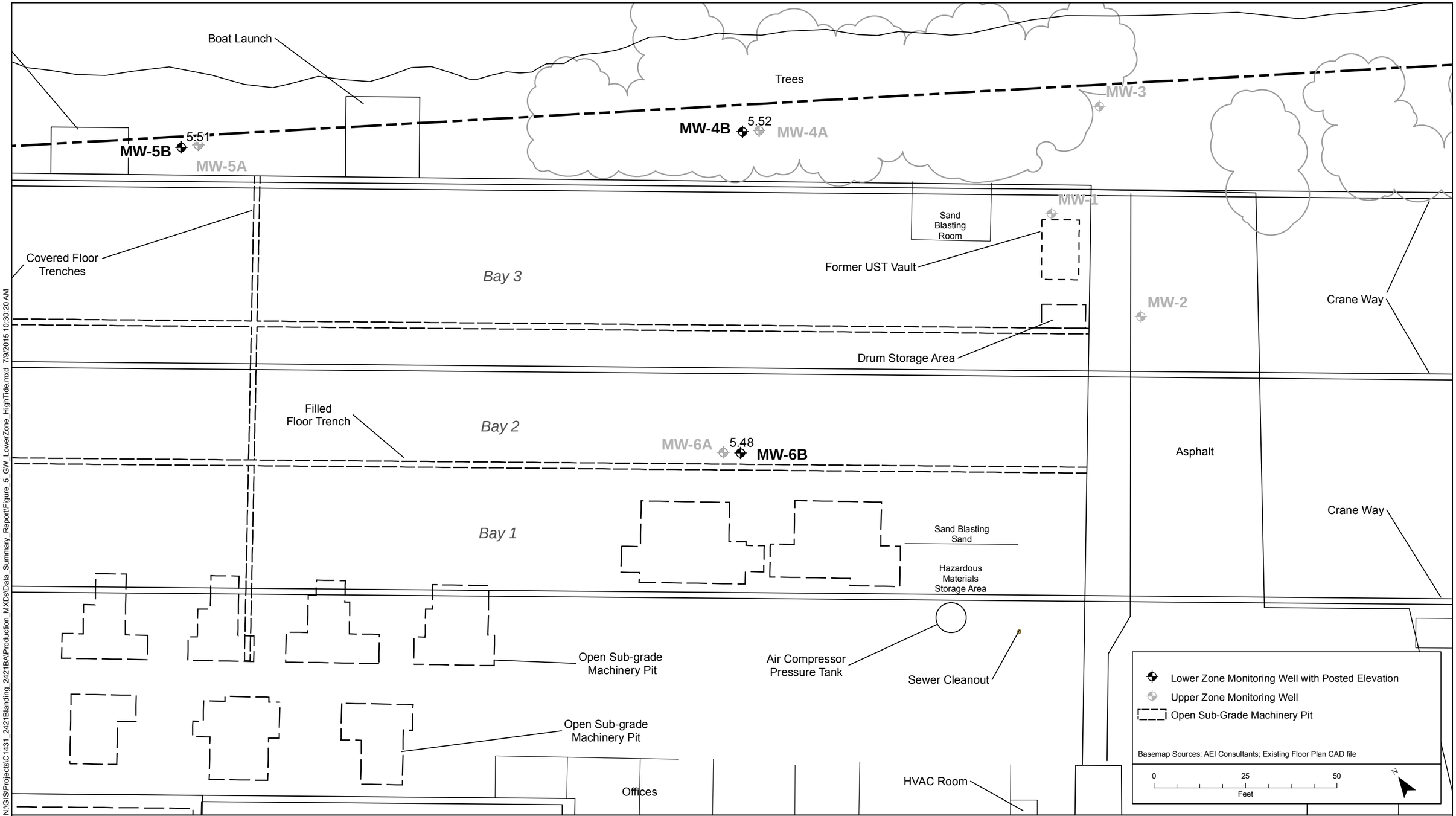
integral consulting inc.

Note:
Sub-grade machinery pits have been filled.

March 30, 2015 PM (Low Tide)

Figure 4.
Groundwater Surface Elevations, Upper Zone, Low Tide
Former Allied Engineering & Production Corporation
2421 Blanding Avenue
Alameda, California



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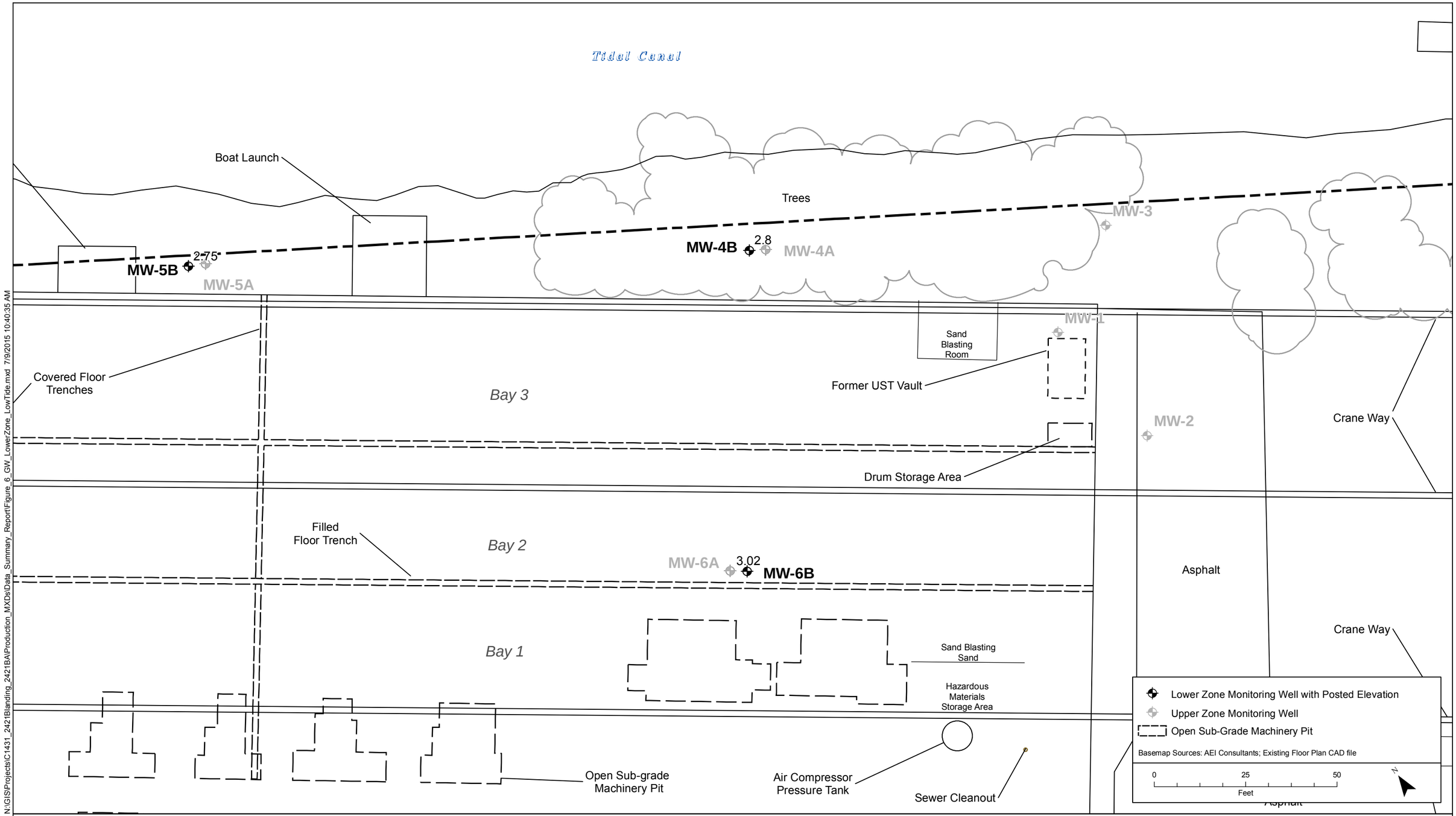
integral consulting inc.

Note:
Sub-grade machinery pits have been filled.

March 30, 2015 AM (High Tide)

Figure 5.
Groundwater Surface Elevations, Lower Zone, High Tide
Former Allied Engineering & Production Corporation
2421 Blanding Avenue
Alameda, California



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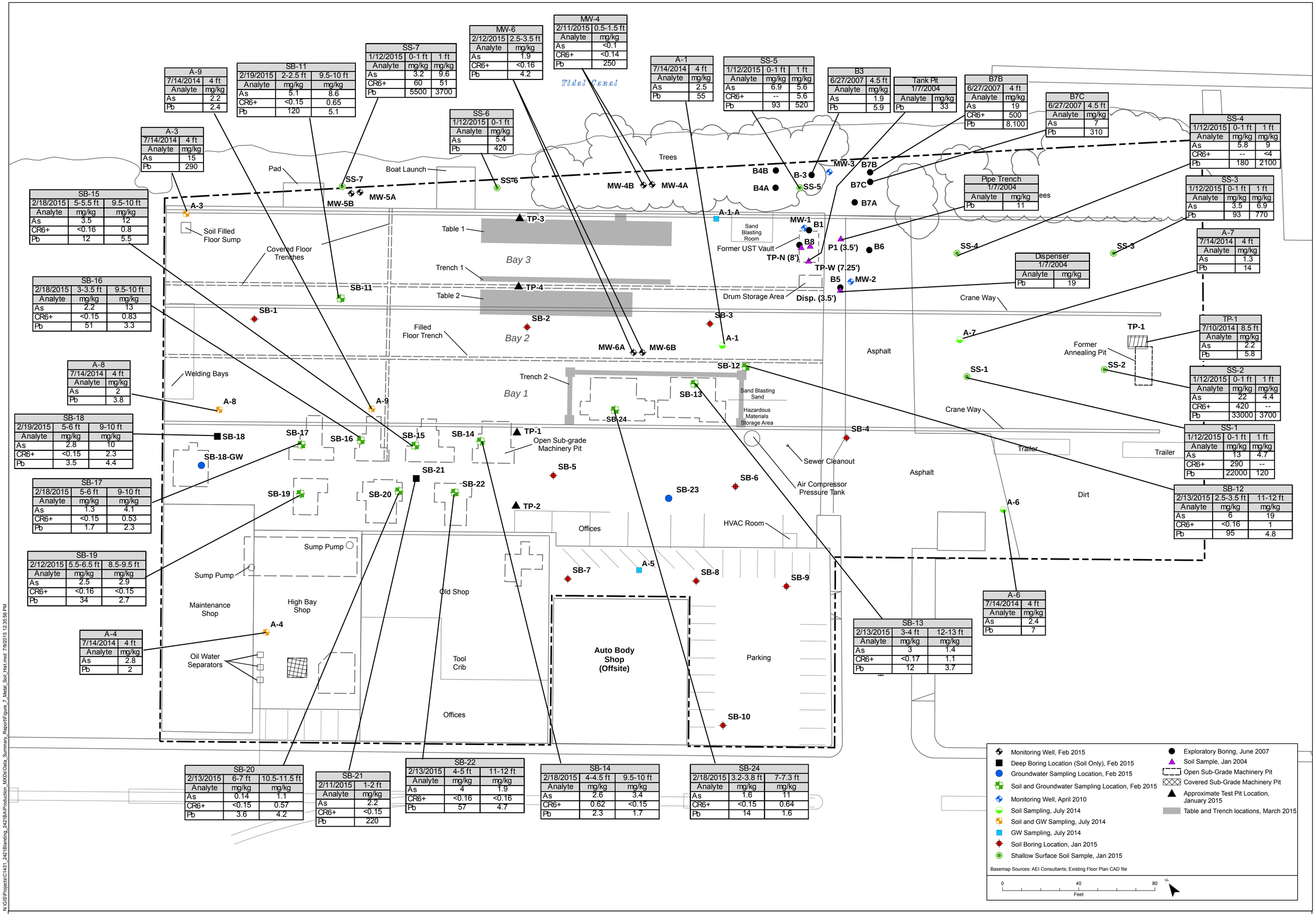
integral consulting inc.

Note:
Sub-grade machinery pits have been filled.

March 30, 2015 PM (Low Tide)

Figure 6.
Groundwater Surface Elevations, Lower Zone, LowTide
Former Allied Engineering & Production Corporation
2421 Blanding Avenue
Alameda, California



A-9	
7/14/2014	4 ft
Analyte	mg/kg
As	2.2
Pb	2.4

SB-11		
2/19/2015	2-2.5 ft	9.5-10 ft
Analyte	mg/kg	mg/kg
As	5.1	8.6
CR6+	<0.15	0.65
Pb	120	5.1

SS-7		
1/12/2015	0-1 ft	1 ft
Analyte	mg/kg	mg/kg
As	3.2	9.6
CR6+	60	51
Pb	5500	3700

MW-6	
2/12/2015	2.5-3.5 ft
Analyte	mg/kg
As	1.9
CR6+	<0.16
Pb	4.2

MW-4	
2/11/2015	0.5-1.5 ft
Analyte	mg/kg
As	<0.1
CR6+	<0.14
Pb	250

A-1	
7/14/2014	4 ft
Analyte	mg/kg
As	2.5
Pb	55

SS-5		
1/12/2015	0-1 ft	1 ft
Analyte	mg/kg	mg/kg
As	6.9	5.6
CR6+	--	5.6
Pb	93	520

B3	
6/27/2007	4.5 ft
Analyte	mg/kg
As	1.9
Pb	5.9

Tank Pit	
1/7/2004	
Analyte	mg/kg
Pb	33

B7B	
6/27/2007	4 ft
Analyte	mg/kg
As	19
CR6+	500
Pb	8,100

B7C	
6/27/2007	4.5 ft
Analyte	mg/kg
As	7
Pb	310

SS-4		
1/12/2015	0-1 ft	1 ft
Analyte	mg/kg	mg/kg
As	5.8	9
CR6+	--	<4
Pb	180	2100

SS-6	
1/12/2015	0-1 ft
Analyte	mg/kg
As	5.4
Pb	420

A-3	
7/14/2014	4 ft
Analyte	mg/kg
As	15
Pb	290

SB-15		
2/18/2015	5-5.5 ft	9.5-10 ft
Analyte	mg/kg	mg/kg
As	3.5	12
CR6+	<0.16	0.8
Pb	12	5.5

Pipe Trench	
1/7/2004	
Analyte	mg/kg
Pb	11

SS-3		
1/12/2015	0-1 ft	1 ft
Analyte	mg/kg	mg/kg
As	3.5	6.9
Pb	93	770

A-7	
7/14/2014	4 ft
Analyte	mg/kg
As	1.3
Pb	14

Dispenser	
1/7/2004	
Analyte	mg/kg
Pb	19

SB-16		
2/18/2015	3-3.5 ft	9.5-10 ft
Analyte	mg/kg	mg/kg
As	2.2	13
CR6+	<0.15	0.83
Pb	51	3.3

TP-1	
7/10/2014	8.5 ft
Analyte	mg/kg
As	2.2
Pb	5.8

A-8	
7/14/2014	4 ft
Analyte	mg/kg
As	2
Pb	3.8

SS-2		
1/12/2015	0-1 ft	1 ft
Analyte	mg/kg	mg/kg
As	22	4.4
CR6+	420	--
Pb	33000	3700

SB-18		
2/19/2015	5-6 ft	9-10 ft
Analyte	mg/kg	mg/kg
As	2.8	10
CR6+	<0.15	2.3
Pb	3.5	4.4

SS-1		
1/12/2015	0-1 ft	1 ft
Analyte	mg/kg	mg/kg
As	13	4.7
CR6+	290	--
Pb	22000	120

SB-17		
2/18/2015	5-6 ft	9-10 ft
Analyte	mg/kg	mg/kg
As	1.3	4.1
CR6+	<0.15	0.53
Pb	1.7	2.3

SB-12		
2/13/2015	2.5-3.5 ft	11-12 ft
Analyte	mg/kg	mg/kg
As	6	19
CR6+	<0.16	1
Pb	95	4.8

SB-19		
2/12/2015	5.5-6.5 ft	8.5-9.5 ft
Analyte	mg/kg	mg/kg
As	2.5	2.9
CR6+	<0.16	<0.15
Pb	34	2.7

A-6	
7/14/2014	4 ft
Analyte	mg/kg
As	2.4
Pb	7

A-4	
7/14/2014	4 ft
Analyte	mg/kg
As	2.8
Pb	2

SB-13		
2/13/2015	3-4 ft	12-13 ft
Analyte	mg/kg	mg/kg
As	3	1.4
CR6+	<0.17	1.1
Pb	12	3.7

SB-20		
2/13/2015	6-7 ft	10.5-11.5 ft
Analyte	mg/kg	mg/kg
As	0.14	1.1
CR6+	<0.15	0.57
Pb	3.6	4.2

SB-21	
2/11/2015	1-2 ft
Analyte	mg/kg
As	2.2
CR6+	<0.15
Pb	220

SB-22		
2/13/2015	4-5 ft	11-12 ft
Analyte	mg/kg	mg/kg
As	4	1.9
CR6+	<0.16	<0.16
Pb	57	4.7

SB-14		
2/18/2015	4-4.5 ft	9.5-10 ft
Analyte	mg/kg	mg/kg
As	2.6	3.4
CR6+	0.62	<0.15
Pb	2.3	1.7

SB-24		
2/18/2015	3.2-3.8 ft	7-7.3 ft
Analyte	mg/kg	mg/kg
As	1.6	11
CR6+	<0.15	0.64
Pb	14	1.6

Note:
- Table 1, Table 2, Trench 1 and Trench 2 results are shown on other figures.
- Sub-grade machinery pits have been filled.
- Exceedances of screening levels are presented in the applicable tables

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Figure 7.
Metal Concentrations in Soil, Historical and Data Gaps Related Sampling
Former Allied Engineering & Production Corporation
2421 Blanding Avenue
Alameda, California

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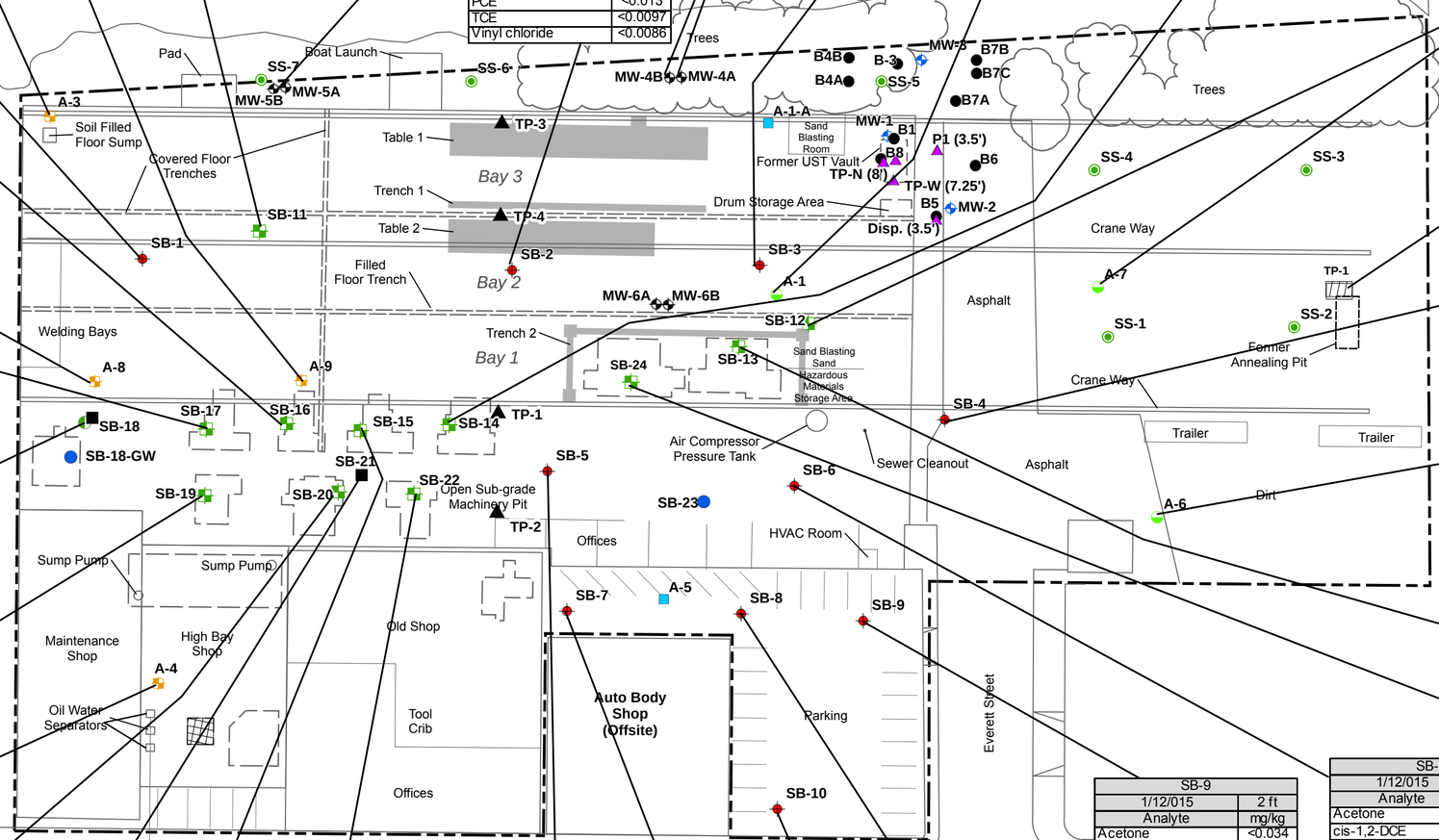

SB-1	
1/12/2015	3.5 ft
Analyte	mg/kg
Acetone	<0.064
cis-1,2-DCE	<0.0024
trans-1,2-DCE	<0.0026
4-Methyl-2-pentanone	<0.0013
PCE	<0.0037
TCE	<0.0028
Vinyl chloride	<0.0024

A-3	
7/14/2014	4 ft
Analyte	mg/kg
Acetone	0.096
cis-1,2-DCE	<0.00078
trans-1,2-DCE	<0.00086
4-Methyl-2-pentanone	<0.011
PCE	<0.00077
TCE	<0.00072
Vinyl chloride	<0.00084

A-9	
7/14/2014	4 ft
Analyte	mg/kg
Acetone	<0.026
cis-1,2-DCE	<0.00075
trans-1,2-DCE	<0.00082
4-Methyl-2-pentanone	<0.011
PCE	<0.00073
TCE	<0.00069
Vinyl chloride	<0.0008

MW-6	
2/12/2015	2.5-3.5 ft
Analyte	mg/kg
Acetone	<0.0019
cis-1,2-DCE	<0.00088
trans-1,2-DCE	<0.00085
4-Methyl-2-pentanone	<0.001
PCE	0.0035
TCE	0.0036
Vinyl chloride	<0.00095

MW-4	
2/11/2015	0.5-1.5 ft
Analyte	mg/kg
Acetone	0.5
cis-1,2-DCE	<0.0065
trans-1,2-DCE	<0.0039
4-Methyl-2-pentanone	<0.008
PCE	<0.0039
TCE	<0.0039
Vinyl chloride	<0.014

A-1	
7/14/2014	4 ft
Analyte	mg/kg
Acetone	<0.026
cis-1,2-DCE	<0.00074
trans-1,2-DCE	<0.00082
4-Methyl-2-pentanone	<0.011
PCE	<0.00073
TCE	<0.00069
Vinyl chloride	<0.0008

SB-12		
2/13/2015	2.5-3.5 ft	11-12 ft
Analyte	mg/kg	mg/kg
Acetone	<0.16	<0.0015
cis-1,2-DCE	<0.023	<0.00068
trans-1,2-DCE	<0.022	<0.00066
4-Methyl-2-pentanone	<0.044	<0.0008
PCE	<0.02	<0.00041
TCE	<0.024	<0.00066
Vinyl chloride	<0.039	<0.00073

SB-11		
2/19/2015	2-2.5 ft	9.5-10 ft
Analyte	mg/kg	mg/kg
Acetone	<0.0032	<0.0031
cis-1,2-DCE	<0.00055	0.0026
trans-1,2-DCE	<0.00066	<0.00065
4-Methyl-2-pentanone	<0.00057	<0.00057
PCE	<0.00062	<0.00061
TCE	0.0047	0.03
Vinyl chloride	<0.0004	<0.00039

SB-2	
1/12/2015	3.5 ft
Analyte	mg/kg
Acetone	<0.22
cis-1,2-DCE	<0.0086
trans-1,2-DCE	<0.0091
4-Methyl-2-pentanone	<0.0046
PCE	<0.013
TCE	<0.0097
Vinyl chloride	<0.0086

SB-3	
1/12/2015	2 ft
Analyte	mg/kg
Acetone	<0.09
cis-1,2-DCE	<0.0035
trans-1,2-DCE	<0.0037
4-Methyl-2-pentanone	<0.0018
PCE	<0.0053
TCE	<0.0039
Vinyl chloride	<0.0035

SB-14		
2/18/2015	4-4.5 ft	9.5-10 ft
Analyte	mg/kg	mg/kg
Acetone	<0.0035	<0.0036
cis-1,2-DCE	<0.0006	<0.00063
trans-1,2-DCE	<0.00072	<0.00075
4-Methyl-2-pentanone	<0.00063	<0.00066
PCE	<0.00067	<0.00071
TCE	<0.00076	<0.0008
Vinyl chloride	<0.00043	<0.00045

A-7	
7/14/2014	4 ft
Analyte	mg/kg
Acetone	<0.03
cis-1,2-DCE	<0.00086
trans-1,2-DCE	<0.00095
4-Methyl-2-pentanone	<0.013
PCE	<0.00085
TCE	<0.0008
Vinyl chloride	<0.00092

SB-16		
2/18/2015	3-3.5 ft	9.5-10 ft
Analyte	mg/kg	mg/kg
Acetone	0.092	<0.0029
cis-1,2-DCE	0.00083	0.013
trans-1,2-DCE	<0.00056	0.0019
4-Methyl-2-pentanone	0.002	<0.00042
PCE	<0.00022	<0.00021
TCE	0.0011	0.14
Vinyl chloride	<0.00042	<0.00041

TP-1	
7/10/2014	8.5 ft
Analyte	mg/kg
Acetone	<0.027
cis-1,2-DCE	<0.00076
trans-1,2-DCE	<0.00084
4-Methyl-2-pentanone	<0.011
PCE	<0.00075
TCE	<0.0007
Vinyl chloride	<0.00081

A-8	
7/14/2014	4 ft
Analyte	mg/kg
Acetone	<0.028
cis-1,2-DCE	<0.00081
trans-1,2-DCE	<0.00089
4-Methyl-2-pentanone	<0.012
PCE	<0.0008
TCE	<0.00075
Vinyl chloride	<0.00087

SB-4	
1/12/2015	5 ft
Analyte	mg/kg
Acetone	<0.031
cis-1,2-DCE	<0.0012
trans-1,2-DCE	<0.0013
4-Methyl-2-pentanone	<0.00064
PCE	<0.0018
TCE	<0.0014
Vinyl chloride	<0.0012

SB-17		
2/18/2015	5-6 ft	9-10 ft
Analyte	mg/kg	mg/kg
Acetone	<0.15	<0.0029
cis-1,2-DCE	0.04	0.039
trans-1,2-DCE	0.017	0.0054
4-Methyl-2-pentanone	<0.00043	<0.00043
PCE	0.046	0.001
TCE	0.01	0.073
Vinyl chloride	0.098	0.019

A-6	
7/14/2014	4 ft
Analyte	mg/kg
Acetone	<0.025
cis-1,2-DCE	<0.00072
trans-1,2-DCE	<0.00079
4-Methyl-2-pentanone	<0.011
PCE	<0.00071
TCE	<0.00067
Vinyl chloride	<0.00077

SB-18		
2/19/2015	5-6 ft	9-10 ft
Analyte	mg/kg	mg/kg
Acetone	0.0065	<0.0028
cis-1,2-DCE	0.0008	0.0068
trans-1,2-DCE	<0.00059	0.003
4-Methyl-2-pentanone	<0.00051	<0.0005
PCE	0.0054	<0.00054
TCE	0.0077	0.0031
Vinyl chloride	<0.00036	<0.00035

SB-13		
2/13/2015	3-4 ft	12-13 ft
Analyte	mg/kg	mg/kg
Acetone	4.2	<0.17
cis-1,2-DCE	<0.066	<0.025
trans-1,2-DCE	<0.063	<0.024
4-Methyl-2-pentanone	<0.13	<0.048
PCE	<0.057	<0.021
TCE	<0.068	<0.025
Vinyl chloride	<0.11	<0.042

SB-19		
2/12/2015	5.5-6.5 ft	8.5-9.5 ft
Analyte	mg/kg	mg/kg
Acetone	<0.14	<0.0027
cis-1,2-DCE	0.08	0.0015
trans-1,2-DCE	0.026	0.00094
4-Methyl-2-pentanone	<0.0085	<0.00048
PCE	0.5	0.004
TCE	0.11	<0.00059
Vinyl chloride	0.05	0.0099

SB-24		
2/18/2015	3.2-3.8 ft	7-7.3 ft
Analyte	mg/kg	mg/kg
Acetone	<0.85	<0.21
cis-1,2-DCE	<0.015	<0.007
trans-1,2-DCE	<0.0091	<0.0042
4-Methyl-2-pentanone	0.7	<0.0086
PCE	<0.0091	0.028
TCE	<0.0091	0.025
Vinyl chloride	<0.032	<0.015

A-4	
7/14/2014	4 ft
Analyte	mg/kg
Acetone	<0.027
cis-1,2-DCE	<0.00076
trans-1,2-DCE	<0.00084
4-Methyl-2-pentanone	<0.011
PCE	<0.00075
TCE	<0.00071
Vinyl chloride	<0.00082

SB-9	
1/12/015	2 ft
Analyte	mg/kg
Acetone	<0.034
cis-1,2-DCE	<0.0013
trans-1,2-DCE	<0.0014
4-Methyl-2-pentanone	<0.00071
PCE	<0.002
TCE	<0.0015
Vinyl chloride	<0.0013

SB-6	
1/12/015	2 ft
Analyte	mg/kg
Acetone	<0.033
cis-1,2-DCE	<0.0013
trans-1,2-DCE	<0.0014
4-Methyl-2-pentanone	<0.00069
PCE	<0.002
TCE	0.022
Vinyl chloride	<0.0013

SB-22		
2/13/2015	4-5 ft	11-12 ft
Analyte	mg/kg	mg/kg
Acetone	1	0.034
cis-1,2-DCE	<0.024	<0.00028
trans-1,2-DCE	<0.023	<0.00058
4-Methyl-2-pentanone	3.7	0.029
PCE	0.068	0.0035
TCE	<0.025	<0.00039
Vinyl chloride	<0.041	<0.00043

SB-7	
1/12/015	2 ft
Analyte	mg/kg
Acetone	<0.039
cis-1,2-DCE	<0.0015
trans-1,2-DCE	<0.0016
4-Methyl-2-pentanone	<0.0008
PCE	<0.0023
TCE	<0.0017
Vinyl chloride	<0.0015

SB-8	
1/12/015	2 ft
Analyte	mg/kg
Acetone	<0.033
cis-1,2-DCE	<0.0013
trans-1,2-DCE	<0.0013
4-Methyl-2-pentanone	<0.00067
PCE	<0.0019
TCE	<0.0014
Vinyl chloride	<0.0013

SB-20		
2/13/2015	6-7 ft	10.5-11.5 ft
Analyte	mg/kg	mg/kg
Acetone	1.5	<0.0035
cis-1,2-DCE	<0.02	0.00085
trans-1,2-DCE	<0.019	<0.0006
4-Methyl-2-pentanone	1.5	<0.00046
PCE	<0.017	<0.00023
TCE	<0.02	0.0014
Vinyl chloride	<0.034	<0.00045

SB-21	
2/11/2015	1-2 ft
Analyte	mg/kg
Acetone	0.004
cis-1,2-DCE	<0.00066
trans-1,2-DCE	<0.00079
4-Methyl-2-pentanone	<0.00069
PCE	0.0012
TCE	0.00086
Vinyl chloride	<0.00048

SB-15		
2/18/2015	5-5.5 ft	9.5-10 ft
Analyte	mg/kg	mg/kg
Acetone	0.54	0.02
cis-1,2-DCE	<0.0097	<0.00047
trans-1,2-DCE	<0.0058	<0.00057
4-Methyl-2-pentanone	29	0.048
PCE	<0.0058	<0.00053
TCE	<0.0058	<0.00061
Vinyl chloride	<0.021	<0.00034

SB-5	
1/12/2015	5 ft
Analyte	mg/kg
Acetone	<0.031
cis-1,2-DCE	<0.0012
trans-1,2-DCE	<0.0013
4-Methyl-2-pentanone	<0.00063
PCE	<0.0018
TCE	<0.0013
Vinyl chloride	<0.0012

SB-10	
1/12/2015	2 ft
Analyte	mg/kg
Acetone	<0.032
cis-1,2-DCE	<0.0012
trans-1,2-DCE	<0.0013
4-Methyl-2-pentanone	<0.00067
PCE	<0.0019
TCE	<0.0014
Vinyl chloride	<0.0012

- Monitoring Well, Feb 2015
- Deep Boring Location (Soil Only), Feb 2015
- Groundwater Sampling Location, Feb 2015
- Soil Sampling Location, Feb 2015
- Soil and Groundwater Sampling Location, Feb 2015
- Monitoring Well, April 2010
- Soil Sampling, July 2014
- Soil and GW Sampling, July 2014
- GW Sampling, July 2014
- Soil Boring Location, Jan 2015
- Shallow Surface Soil Sample, Jan 2015
- Exploratory Boring, June 2007
- Soil Sample, Jan 2004
- Open Sub-Grade Machinery Pit
- Covered Sub-Grade Machinery Pit
- Approximate Test Pit Location, January 2015
- Table and Trench locations, March 2015

Basemap Sources: AEI Consultants; Existing Floor Plan CAD file

0 40 80 Feet

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Note:
- Table 1, Table 2, Trench 1 and Trench 2 results are shown on other figures.
- Sub-grade machinery pits have been filled.
- Exceedances of screening levels are presented in the applicable tables

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Figure 8.
Volatile Organic Compound Concentrations in Soil, Historical and Data Gaps Related Sampling
Former Allied Engineering & Production Corporation
2421 Blanding Avenue
Alameda, California

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SB-16		
2/18/2015	3-3.5 ft	9.5-10 ft
Analyte	mg/kg	mg/kg
Benzo(a)anthracene	0.065	<0.012
Benzo(a)pyrene	<0.031	<0.01
Benzo(b)fluoranthene	0.055	<0.011
Benzo(g,h,i)perylene	<0.035	<0.012
Benzo(k)fluoranthene	<0.033	<0.011
bis-(2-Ethylhexyl)phthalate	0.52	<0.015
4-Chloro-3-methylphenol	<0.029	<0.0098
Chrysene	0.06	<0.013
Di-n-butyl phthalate	0.05	<0.014
Fluoranthene	0.12	<0.012
Indeno(1,2,3-cd)pyrene	<0.031	<0.01
PCB-1248 (Aroclor 1248)	<0.0045	<0.0044
PCB-1254 (Aroclor 1254)	<0.0036	<0.0036
PCB-1260 (Aroclor 1260)	<0.0023	<0.0023
Phenanthrene	0.062	<0.012
Pyrene	0.085	<0.013
Total PCBs	---	---

SB-15		
2/18/2015	5-5.5 ft	9.5-10 ft
Analyte	mg/kg	mg/kg
Benzo(a)anthracene	<0.12	<0.012
Benzo(a)pyrene	<0.11	<0.01
Benzo(b)fluoranthene	<0.11	<0.011
Benzo(g,h,i)perylene	<0.12	<0.012
Benzo(k)fluoranthene	<0.11	<0.011
bis-(2-Ethylhexyl)phthalate	0.83	<0.016
4-Chloro-3-methylphenol	0.41	0.046
Chrysene	<0.14	<0.013
Di-n-butyl phthalate	0.15	<0.014
Fluoranthene	<0.12	<0.012
Indeno(1,2,3-cd)pyrene	<0.11	<0.011
PCB-1248 (Aroclor 1248)	<0.0045	<0.0046
PCB-1254 (Aroclor 1254)	<0.0036	<0.0036
PCB-1260 (Aroclor 1260)	<0.0023	<0.0023
Phenanthrene	<0.13	<0.013
Pyrene	<0.13	<0.013
Total PCBs	---	---

SB-11		
2/19/2015	2-2.5 ft	9.5-10 ft
Analyte	mg/kg	mg/kg
Benzo(a)anthracene	<0.061	<0.0077
Benzo(a)pyrene	<0.052	<0.0068
Benzo(b)fluoranthene	<0.054	<0.0067
Benzo(g,h,i)perylene	<0.06	<0.0095
Benzo(k)fluoranthene	<0.057	<0.0069
bis-(2-Ethylhexyl)phthalate	<0.078	<0.0099
4-Chloro-3-methylphenol	<0.05	<0.01
Chrysene	<0.067	<0.0094
Di-n-butyl phthalate	<0.072	<0.011
Fluoranthene	<0.062	<0.011
Indeno(1,2,3-cd)pyrene	<0.053	<0.0088
PCB-1248 (Aroclor 1248)	<0.0036	<0.0035
PCB-1254 (Aroclor 1254)	<0.0029	<0.0028
PCB-1260 (Aroclor 1260)	0.0029	<0.0018
Phenanthrene	<0.063	<0.0094
Pyrene	<0.065	<0.0084
Total PCBs	---	---

SS-7		
1/12/2015	0-1 ft	1 ft
Analyte	mg/kg	mg/kg
Benzo(a)anthracene	---	---
Benzo(a)pyrene	---	---
Benzo(b)fluoranthene	---	---
Benzo(g,h,i)perylene	---	---
Benzo(k)fluoranthene	---	---
bis-(2-Ethylhexyl)phthalate	---	---
4-Chloro-3-methylphenol	---	---
Chrysene	---	---
Di-n-butyl phthalate	---	---
Fluoranthene	---	---
Indeno(1,2,3-cd)pyrene	---	---
PCB-1248 (Aroclor 1248)	<0.0072	<0.0036
PCB-1254 (Aroclor 1254)	<0.0044	<0.0022
PCB-1260 (Aroclor 1260)	0.27	0.19
Phenanthrene	---	---
Pyrene	---	---
Total PCBs	0.27	0.19

MW-4	
2/11/2015	0.5-1.5 ft
Analyte	mg/kg
Benzo(a)anthracene	<0.0074
Benzo(a)pyrene	<0.0065
Benzo(b)fluoranthene	<0.0064
Benzo(g,h,i)perylene	<0.0091
Benzo(k)fluoranthene	<0.0066
bis-(2-Ethylhexyl)phthalate	0.077
4-Chloro-3-methylphenol	<0.0096
Chrysene	<0.009
Di-n-butyl phthalate	<0.011
Fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.0084
PCB-1248 (Aroclor 1248)	0.094
PCB-1254 (Aroclor 1254)	<0.0027
PCB-1260 (Aroclor 1260)	0.014
Phenanthrene	<0.009
Pyrene	<0.0081
Total PCBs	---

SB-14		
2/18/2015	4-4.5 ft	9.5-10 ft
Analyte	mg/kg	mg/kg
Benzo(a)anthracene	<0.024	<0.012
Benzo(a)pyrene	<0.02	<0.01
Benzo(b)fluoranthene	<0.021	<0.01
Benzo(g,h,i)perylene	<0.024	<0.012
Benzo(k)fluoranthene	<0.022	<0.011
bis-(2-Ethylhexyl)phthalate	0.3	<0.015
4-Chloro-3-methylphenol	0.28	<0.0095
Chrysene	<0.026	<0.013
Di-n-butyl phthalate	0.072	<0.014
Fluoranthene	<0.024	<0.012
Indeno(1,2,3-cd)pyrene	<0.02	<0.01
PCB-1248 (Aroclor 1248)	<0.0044	<0.0043
PCB-1254 (Aroclor 1254)	<0.0035	<0.0034
PCB-1260 (Aroclor 1260)	<0.0022	<0.0022
Phenanthrene	<0.024	<0.012
Pyrene	<0.025	<0.012
Total PCBs	---	---

SB-12		
2/13/2015	2.5-3.5 ft	11-12 ft
Analyte	mg/kg	mg/kg
Benzo(a)anthracene	0.019	<0.0076
Benzo(a)pyrene	0.021	<0.0067
Benzo(b)fluoranthene	0.034	<0.0066
Benzo(g,h,i)perylene	0.027	<0.0094
Benzo(k)fluoranthene	<0.015	<0.0068
bis-(2-Ethylhexyl)phthalate	<0.021	<0.0097
4-Chloro-3-methylphenol	<0.021	<0.0099
Chrysene	0.031	<0.0093
Di-n-butyl phthalate	<0.023	<0.011
Fluoranthene	0.036	<0.011
Indeno(1,2,3-cd)pyrene	0.02	<0.0087
PCB-1248 (Aroclor 1248)	<0.0046	<0.0043
PCB-1254 (Aroclor 1254)	<0.0037	<0.0035
PCB-1260 (Aroclor 1260)	<0.0023	<0.0022
Phenanthrene	0.028	<0.0092
Pyrene	0.037	<0.0083
Total PCBs	---	---

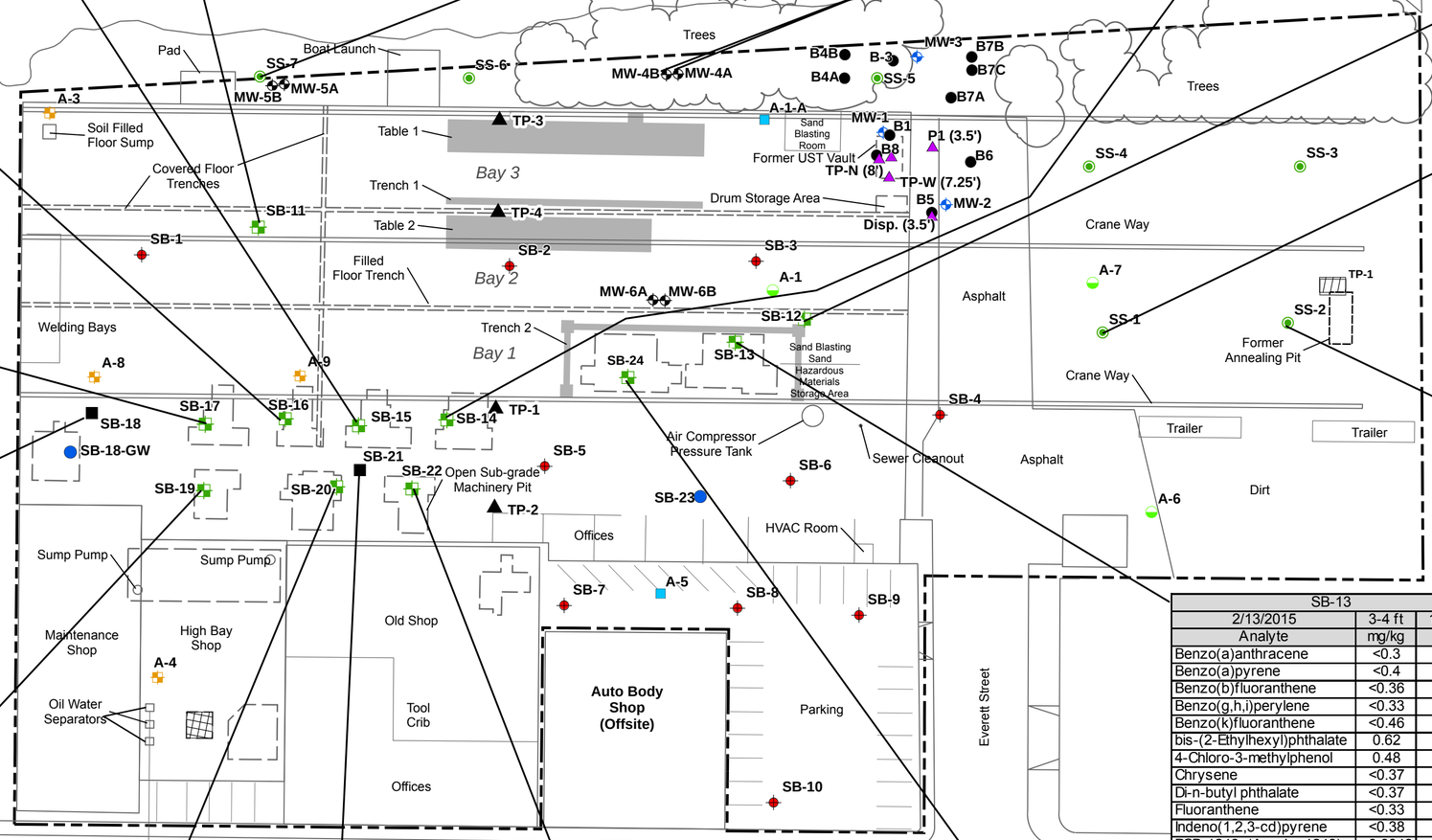
SS-1	
1/12/2015	0-1 ft
Analyte	mg/kg
Benzo(a)anthracene	---
Benzo(a)pyrene	---
Benzo(b)fluoranthene	---
Benzo(g,h,i)perylene	---
Benzo(k)fluoranthene	---
bis-(2-Ethylhexyl)phthalate	---
4-Chloro-3-methylphenol	---
Chrysene	---
Di-n-butyl phthalate	---
Fluoranthene	---
Indeno(1,2,3-cd)pyrene	---
PCB-1248 (Aroclor 1248)	<0.018
PCB-1254 (Aroclor 1254)	1.4
PCB-1260 (Aroclor 1260)	0.52
Phenanthrene	---
Pyrene	---
Total PCBs	1.9

SS-2	
1/12/2015	0-1 ft
Analyte	mg/kg
Benzo(a)anthracene	---
Benzo(a)pyrene	---
Benzo(b)fluoranthene	---
Benzo(g,h,i)perylene	---
Benzo(k)fluoranthene	---
bis-(2-Ethylhexyl)phthalate	---
4-Chloro-3-methylphenol	---
Chrysene	---
Di-n-butyl phthalate	---
Fluoranthene	---
Indeno(1,2,3-cd)pyrene	---
PCB-1248 (Aroclor 1248)	<0.018
PCB-1254 (Aroclor 1254)	1.8
PCB-1260 (Aroclor 1260)	0.63
Phenanthrene	---
Pyrene	---
Total PCBs	2.4

SB-17		
2/18/2015	5-6 ft	9-10 ft
Analyte	mg/kg	mg/kg
Benzo(a)anthracene	<0.12	<0.012
Benzo(a)pyrene	<0.1	<0.01
Benzo(b)fluoranthene	<0.1	<0.01
Benzo(g,h,i)perylene	<0.12	<0.012
Benzo(k)fluoranthene	<0.11	<0.011
bis-(2-Ethylhexyl)phthalate	0.37	<0.015
4-Chloro-3-methylphenol	<0.096	<0.0097
Chrysene	<0.13	<0.013
Di-n-butyl phthalate	<0.14	<0.014
Fluoranthene	<0.12	<0.012
Indeno(1,2,3-cd)pyrene	<0.1	<0.01
PCB-1248 (Aroclor 1248)	<0.014	<0.0045
PCB-1254 (Aroclor 1254)	<0.014	<0.0036
PCB-1260 (Aroclor 1260)	<0.014	<0.0023
Phenanthrene	<0.12	<0.012
Pyrene	<0.13	<0.013
Total PCBs	---	---

SB-18		
2/19/2015	5-6 ft	9-10 ft
Analyte	mg/kg	mg/kg
Benzo(a)anthracene	<0.0079	<0.0079
Benzo(a)pyrene	<0.0069	<0.0069
Benzo(b)fluoranthene	<0.0068	<0.0068
Benzo(g,h,i)perylene	<0.0097	<0.0097
Benzo(k)fluoranthene	<0.007	<0.007
bis-(2-Ethylhexyl)phthalate	<0.01	0.014
4-Chloro-3-methylphenol	<0.01	<0.01
Chrysene	<0.0096	<0.0096
Di-n-butyl phthalate	<0.011	<0.011
Fluoranthene	<0.011	<0.011
Indeno(1,2,3-cd)pyrene	<0.009	<0.009
PCB-1248 (Aroclor 1248)	<0.0035	<0.0036
PCB-1254 (Aroclor 1254)	<0.0028	<0.0029
PCB-1260 (Aroclor 1260)	0.0033	0.0065
Phenanthrene	<0.0095	<0.0095
Pyrene	<0.0086	<0.0086
Total PCBs	---	---

SB-13		
2/13/2015	3-4 ft	12-13 ft
Analyte	mg/kg	mg/kg
Benzo(a)anthracene	<0.3	<0.24
Benzo(a)pyrene	<0.4	<0.2
Benzo(b)fluoranthene	<0.36	<0.21
Benzo(g,h,i)perylene	<0.33	<0.23
Benzo(k)fluoranthene	<0.46	<0.22
bis-(2-Ethylhexyl)phthalate	0.62	0.52
4-Chloro-3-methylphenol	0.48	0.93
Chrysene	<0.37	<0.26
Di-n-butyl phthalate	<0.37	0.45
Fluoranthene	<0.33	<0.24
Indeno(1,2,3-cd)pyrene	<0.38	<0.2
PCB-1248 (Aroclor 1248)	<0.0049	<0.0044
PCB-1254 (Aroclor 1254)	<0.004	<0.0035
PCB-1260 (Aroclor 1260)	<0.0025	<0.0022
Phenanthrene	<0.38	<0.24
Pyrene	<0.3	<0.25
Total PCBs	---	---



SB-19		
2/12/2015	5.5-6.5 ft	8.5-9.5 ft
Analyte	mg/kg	mg/kg
Benzo(a)anthracene	<0.24	<0.24
Benzo(a)pyrene	<0.21	<0.2
Benzo(b)fluoranthene	<0.21	<0.21
Benzo(g,h,i)perylene	<0.24	<0.24
Benzo(k)fluoranthene	<0.23	<0.22
bis-(2-Ethylhexyl)phthalate	0.34	<0.3
4-Chloro-3-methylphenol	<0.2	<0.19
Chrysene	<0.27	<0.26
Di-n-butyl phthalate	<0.29	<0.28
Fluoranthene	<0.25	<0.24
Indeno(1,2,3-cd)pyrene	<0.21	<0.21
PCB-1248 (Aroclor 1248)	<0.0037	<0.0036
PCB-1254 (Aroclor 1254)	<0.0029	<0.0029
PCB-1260 (Aroclor 1260)	<0.0019	<0.0018
Phenanthrene	<0.25	<0.25
Pyrene	<0.26	<0.25
Total PCBs	---	---

SB-20		
2/13/2015	6-7 ft	10.5-11.5 ft
Analyte	mg/kg	mg/kg
Benzo(a)anthracene	<0.052	<0.01
Benzo(a)pyrene	<0.052	<0.01
Benzo(b)fluoranthene	<0.05	<0.0096
Benzo(g,h,i)perylene	<0.052	<0.01
Benzo(k)fluoranthene	<0.052	<0.01
bis-(2-Ethylhexyl)phthalate	0.41	<0.01
4-Chloro-3-methylphenol	0.42	<0.017
Chrysene	<0.041	<0.0079
Di-n-butyl phthalate	0.67	<0.0097
Fluoranthene	<0.052	<0.01
Indeno(1,2,3-cd)pyrene	<0.049	<0.0094
PCB-1248 (Aroclor 1248)	<0.0045	<0.0044
PCB-1254 (Aroclor 1254)	<0.0036	<0.0035
PCB-1260 (Aroclor 1260)	<0.0023	<0.0022
Phenanthrene	<0.058	<0.011
Pyrene	<0.056	<0.011
Total PCBs	---	---

SB-21	
2/11/2015	1-2 ft
Analyte	mg/kg
Benzo(a)anthracene	0.015
Benzo(a)pyrene	0.019
Benzo(b)fluoranthene	0.029
Benzo(g,h,i)perylene	0.036
Benzo(k)fluoranthene	0.0096
bis-(2-Ethylhexyl)phthalate	0.012
4-Chloro-3-methylphenol	<0.01
Chrysene	0.022
Di-n-butyl phthalate	<0.011
Fluoranthene	0.029
Indeno(1,2,3-cd)pyrene	0.025
PCB-1248 (Aroclor 1248)	<0.0036
PCB-1254 (Aroclor 1254)	<0.0029
PCB-1260 (Aroclor 1260)	0.0067
Phenanthrene	0.014
Pyrene	0.032
Total PCBs	---

SB-22		
2/13/2015	4-5 ft	11-12 ft
Analyte	mg/kg	mg/kg
Benzo(a)anthracene	<0.41	<0.25
Benzo(a)pyrene	<0.36	<0.21
Benzo(b)fluoranthene	<0.35	<0.22
Benzo(g,h,i)perylene	<0.5	<0.25
Benzo(k)fluoranthene	<0.36	<0.23
bis-(2-Ethylhexyl)phthalate	2.3	<0.32
4-Chloro-3-methylphenol	1.1	<0.2
Chrysene	<0.5	<0.27
Di-n-butyl phthalate	<0.58	<0.29
Fluoranthene	<0.57	<0.25
Indeno(1,2,3-cd)pyrene	<0.47	<0.21
PCB-1248 (Aroclor 1248)	<0.0047	<0.0046
PCB-1254 (Aroclor 1254)	<0.0038	<0.0037
PCB-1260 (Aroclor 1260)	<0.0024	<0.0024
Phenanthrene	<0.49	<0.26
Pyrene	<0.45	<0.26
Total PCBs	---	---

SB-24		
2/18/2015	3.2-3.8 ft	7-7.3 ft
Analyte	mg/kg	mg/kg
Benzo(a)anthracene	<1.8	<0.012
Benzo(a)pyrene	<1.6	<0.01
Benzo(b)fluoranthene	<1.6	<0.011
Benzo(g,h,i)perylene	<1.8	<0.012
Benzo(k)fluoranthene	<1.7	<0.011
bis-(2-Ethylhexyl)phthalate	6.1	<0.015
4-Chloro-3-methylphenol	26	<0.0099
Chrysene	<2	<0.013
Di-n-butyl phthalate	<2.1	<0.014
Fluoranthene	<1.8	<0.012
Indeno(1,2,3-cd)pyrene	<1.6	<0.01
PCB-1248 (Aroclor 1248)	<0.018	<0.0036
PCB-1254 (Aroclor 1254)	<0.014	<0.0029
PCB-1260 (Aroclor 1260)	<0.009	<0.0018
Phenanthrene	<1.9	<0.012
Pyrene	<1.9	<0.013
Total PCBs	---	---

- Monitoring Well, Feb 2015
- Deep Boring Location (Soil Only), Feb 2015
- Groundwater Sampling Location, Feb 2015
- Soil and Groundwater Sampling Location, Feb 2015
- Monitoring Well, April 2010
- Soil Sampling, July 2014
- Soil and GW Sampling, July 2014
- GW Sampling, July 2014
- Soil Boring Location, Jan 2015
- Shallow Surface Soil Sample, Jan 2015
- Exploratory Boring, June 2007
- Soil Sample, Jan 2004
- Open Sub-Grade Machinery Pit
- Covered Sub-Grade Machinery Pit
- Approximate Test Pit Location, January 2015
- Table and Trench locations, March 2015

Basemap Sources: AEI Consultants; Existing Floor Plan CAD file

0 40 80 Feet

N

Note:
- Table 1, Table 2, Trench 1 and Trench 2 results are shown on other figures.
- Sub-grade machinery pits have been filled.
- Exceedances of screening levels are presented in the applicable tables

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Figure 9.
Semi-Volatile Organic Compound Concentrations in Soil, Historical and Data Gaps Related Sampling
Former Allied Engineering & Production Corporation
2421 Blanding Avenue
Alameda, California

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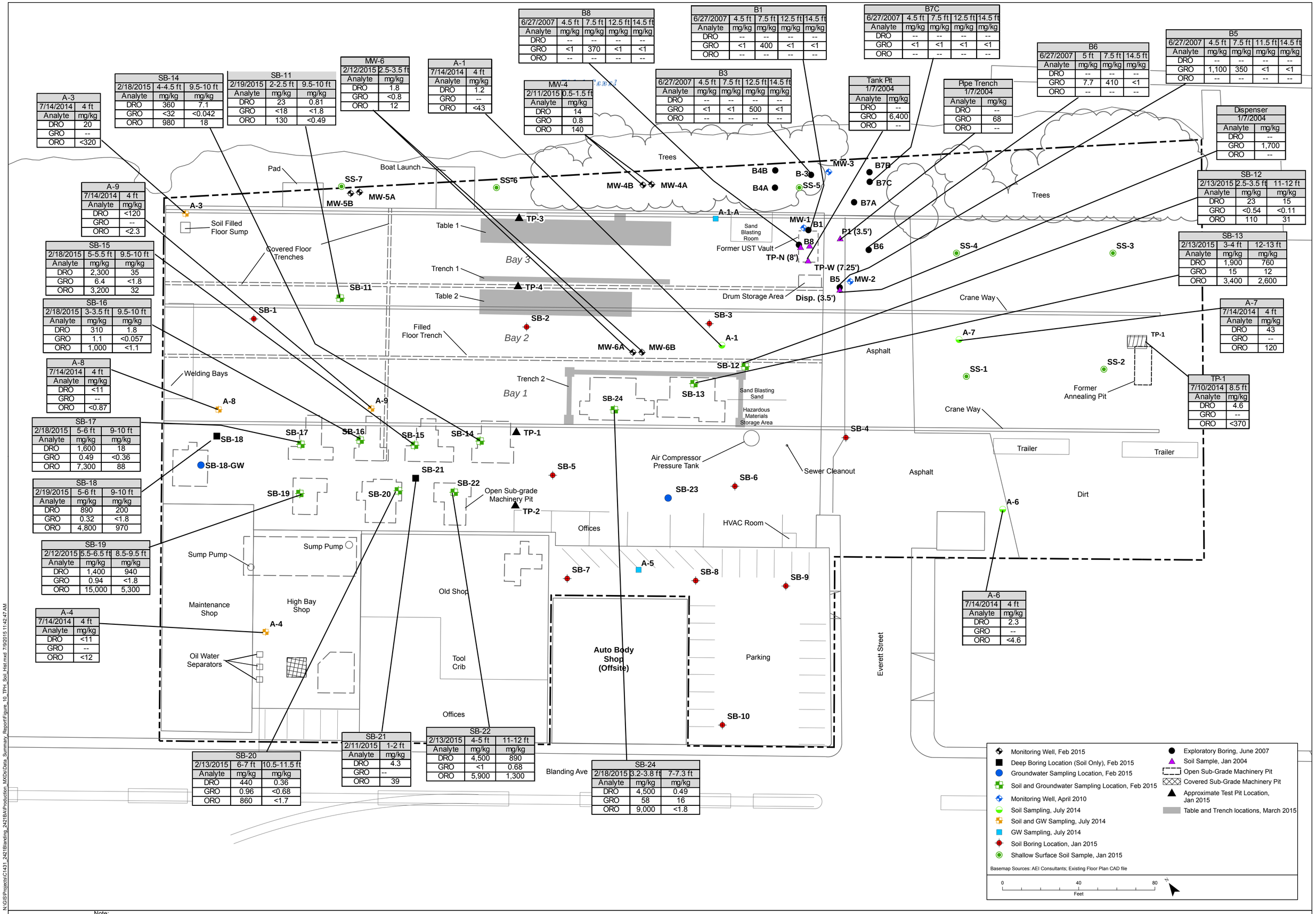

A-3	
7/14/2014	4 ft
Analyte	mg/kg
DRO	20
GRO	--
ORO	<320

SB-14		
2/18/2015	4-4.5 ft	9.5-10 ft
Analyte	mg/kg	mg/kg
DRO	360	7.1
GRO	<32	<0.042
ORO	980	18

SB-11		
2/19/2015	2-2.5 ft	9.5-10 ft
Analyte	mg/kg	mg/kg
DRO	23	0.81
GRO	<18	<1.8
ORO	130	<0.49

MW-6	
2/12/2015	2.5-3.5 ft
Analyte	mg/kg
DRO	1.8
GRO	<0.8
ORO	12

A-1	
7/14/2014	4 ft
Analyte	mg/kg
DRO	1.2
GRO	--
ORO	<43

MW-4	
2/11/2015	0.5-1.5 ft
Analyte	mg/kg
DRO	14
GRO	0.8
ORO	140

B8				
6/27/2007	4.5 ft	7.5 ft	12.5 ft	14.5 ft
Analyte	mg/kg	mg/kg	mg/kg	mg/kg
DRO	--	--	--	--
GRO	<1	370	<1	<1
ORO	--	--	--	--

B1				
6/27/2007	4.5 ft	7.5 ft	12.5 ft	14.5 ft
Analyte	mg/kg	mg/kg	mg/kg	mg/kg
DRO	--	--	--	--
GRO	<1	400	<1	<1
ORO	--	--	--	--

B3				
6/27/2007	4.5 ft	7.5 ft	12.5 ft	14.5 ft
Analyte	mg/kg	mg/kg	mg/kg	mg/kg
DRO	--	--	--	--
GRO	<1	<1	500	<1
ORO	--	--	--	--

B7C				
6/27/2007	4.5 ft	7.5 ft	12.5 ft	14.5 ft
Analyte	mg/kg	mg/kg	mg/kg	mg/kg
DRO	--	--	--	--
GRO	<1	<1	<1	<1
ORO	--	--	--	--

Tank Pit	
1/7/2004	
Analyte	mg/kg
DRO	--
GRO	6,400
ORO	--

Pipe Trench	
1/7/2004	
Analyte	mg/kg
DRO	--
GRO	68
ORO	--

B6			
6/27/2007	5 ft	7.5 ft	14.5 ft
Analyte	mg/kg	mg/kg	mg/kg
DRO	--	--	--
GRO	7.7	410	<1
ORO	--	--	--

B5				
6/27/2007	4.5 ft	7.5 ft	11.5 ft	14.5 ft
Analyte	mg/kg	mg/kg	mg/kg	mg/kg
DRO	--	--	--	--
GRO	1,100	350	<1	<1
ORO	--	--	--	--

Dispenser	
1/7/2004	
Analyte	mg/kg
DRO	--
GRO	1,700
ORO	--

SB-12		
2/13/2015	2.5-3.5 ft	11-12 ft
Analyte	mg/kg	mg/kg
DRO	23	15
GRO	<0.54	<0.11
ORO	110	31

SB-13		
2/13/2015	3-4 ft	12-13 ft
Analyte	mg/kg	mg/kg
DRO	1,900	760
GRO	15	12
ORO	3,400	2,600

A-7	
7/14/2014	4 ft
Analyte	mg/kg
DRO	43
GRO	--
ORO	120

TP-1	
7/10/2014	8.5 ft
Analyte	mg/kg
DRO	4.6
GRO	--
ORO	<370

A-9	
7/14/2014	4 ft
Analyte	mg/kg
DRO	<120
GRO	--
ORO	<2.3

SB-15		
2/18/2015	5-5.5 ft	9.5-10 ft
Analyte	mg/kg	mg/kg
DRO	2,300	35
GRO	6.4	<1.8
ORO	3,200	32

SB-16		
2/18/2015	3-3.5 ft	9.5-10 ft
Analyte	mg/kg	mg/kg
DRO	310	1.8
GRO	1.1	<0.057
ORO	1,000	<1.1

A-8	
7/14/2014	4 ft
Analyte	mg/kg
DRO	<11
GRO	--
ORO	<0.87

SB-17		
2/18/2015	5-6 ft	9-10 ft
Analyte	mg/kg	mg/kg
DRO	1,600	18
GRO	0.49	<0.36
ORO	7,300	88

SB-18		
2/19/2015	5-6 ft	9-10 ft
Analyte	mg/kg	mg/kg
DRO	890	200
GRO	0.32	<1.8
ORO	4,800	970

SB-19		
2/12/2015	5.5-6.5 ft	8.5-9.5 ft
Analyte	mg/kg	mg/kg
DRO	1,400	940
GRO	0.94	<1.8
ORO	15,000	5,300

A-4	
7/14/2014	4 ft
Analyte	mg/kg
DRO	<11
GRO	--
ORO	<12

A-6	
7/14/2014	4 ft
Analyte	mg/kg
DRO	2.3
GRO	--
ORO	<4.6

SB-20		
2/13/2015	6-7 ft	10.5-11.5 ft
Analyte	mg/kg	mg/kg
DRO	440	0.36
GRO	0.96	<0.68
ORO	860	<1.7

SB-21	
2/11/2015	1-2 ft
Analyte	mg/kg
DRO	4.3
GRO	--
ORO	39

SB-22		
2/13/2015	4-5 ft	11-12 ft
Analyte	mg/kg	mg/kg
DRO	4,500	890
GRO	<1	0.68
ORO	5,900	1,300

SB-24		
2/18/2015	3.2-3.8 ft	7-7.3 ft
Analyte	mg/kg	mg/kg
DRO	4,500	0.49
GRO	58	16
ORO	9,000	<1.8

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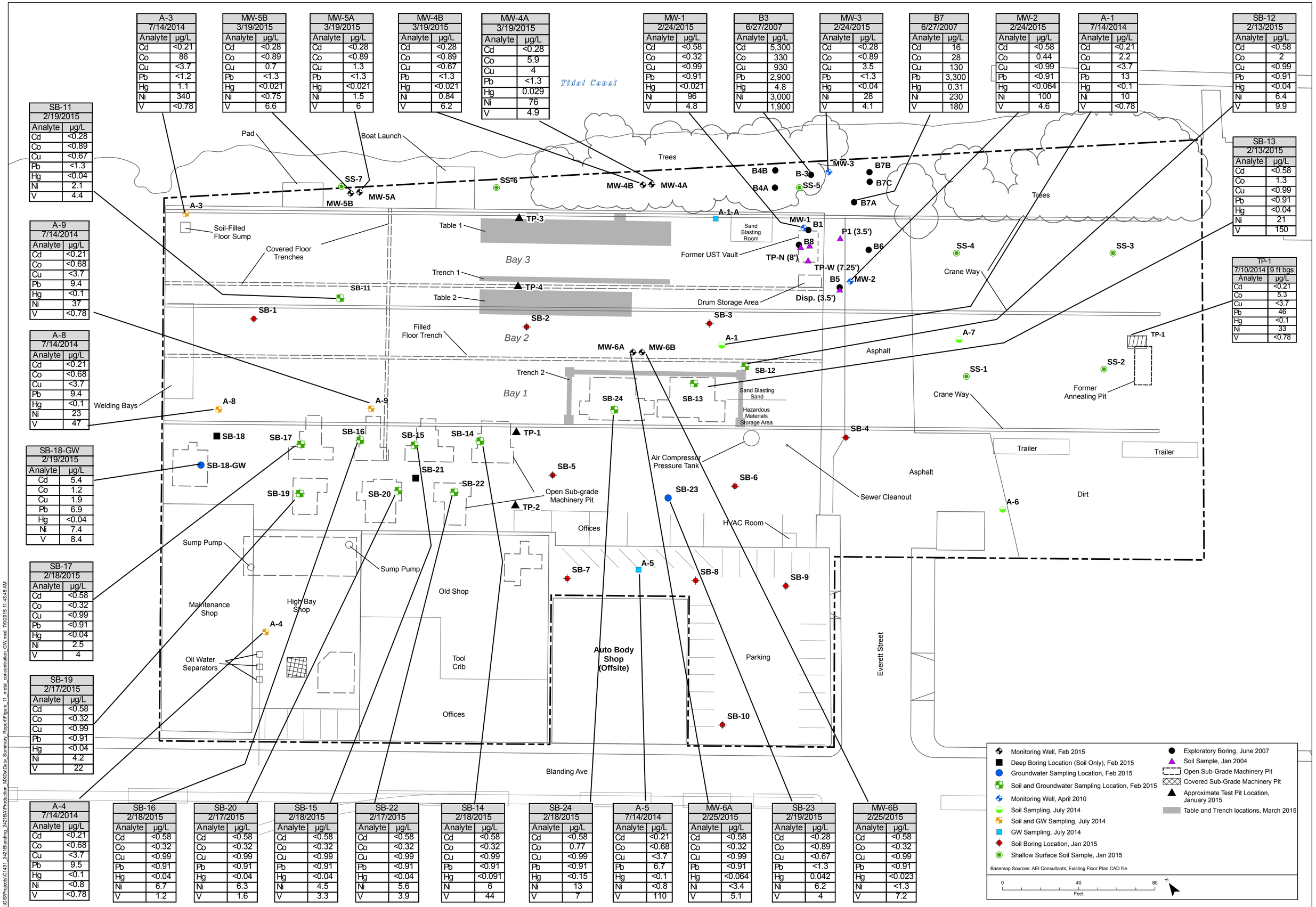
Note:
- Table 1, Table 2, Trench 1 and Trench 2 results are shown on other figures.
- Sub-grade machinery pits have been filled.
- Exceedances of screening levels are presented in the applicable tables

Figure 10.
Total Petroleum Hydrocarbon Concentrations in Soil, Historical and Data Gaps Related Sampling
Former Allied Engineering & Production Corporation
2421 Blanding Avenue
Alameda, California



A-3	
7/14/2014	
Analyte	µg/L
Cd	<0.21
Co	86
Cu	<3.7
Pb	<1.2
Hg	1.1
Ni	340
V	<0.78

MW-5B	
3/19/2015	
Analyte	µg/L
Cd	<0.28
Co	<0.89
Cu	0.7
Pb	<1.3
Hg	<0.021
Ni	<0.75
V	6.6

MW-5A	
3/19/2015	
Analyte	µg/L
Cd	<0.28
Co	<0.89
Cu	1.3
Pb	<1.3
Hg	<0.021
Ni	1.5
V	6

MW-4B	
3/19/2015	
Analyte	µg/L
Cd	<0.28
Co	<0.89
Cu	<0.67
Pb	<1.3
Hg	<0.021
Ni	0.84
V	6.2

MW-4A	
3/19/2015	
Analyte	µg/L
Cd	<0.28
Co	5.9
Cu	4
Pb	<1.3
Hg	0.029
Ni	76
V	4.9

MW-1	
2/24/2015	
Analyte	µg/L
Cd	<0.58
Co	<0.32
Cu	<0.99
Pb	<0.91
Hg	<0.021
Ni	96
V	4.8

B3	
6/27/2007	
Analyte	µg/L
Cd	5,300
Co	330
Cu	930
Pb	2,900
Hg	4.8
Ni	3,000
V	1,900

MW-3	
2/24/2015	
Analyte	µg/L
Cd	<0.28
Co	<0.89
Cu	3.5
Pb	<1.3
Hg	<0.04
Ni	28
V	4.1

B7	
6/27/2007	
Analyte	µg/L
Cd	16
Co	28
Cu	130
Pb	3,300
Hg	0.31
Ni	230
V	180

MW-2	
2/24/2015	
Analyte	µg/L
Cd	<0.58
Co	0.44
Cu	<0.99
Pb	<0.91
Hg	<0.064
Ni	100
V	4.6

A-1	
7/14/2014	
Analyte	µg/L
Cd	<0.21
Co	2.2
Cu	<3.7
Pb	13
Hg	<0.1
Ni	10
V	<0.78

SB-12	
2/13/2015	
Analyte	µg/L
Cd	<0.58
Co	2
Cu	<0.99
Pb	<0.91
Hg	<0.04
Ni	6.4
V	9.9

SB-11	
2/19/2015	
Analyte	µg/L
Cd	<0.28
Co	<0.89
Cu	<0.67
Pb	<1.3
Hg	<0.04
Ni	2.1
V	4.4

SB-13	
2/13/2015	
Analyte	µg/L
Cd	<0.58
Co	1.3
Cu	<0.99
Pb	<0.91
Hg	<0.04
Ni	21
V	150

A-9	
7/14/2014	
Analyte	µg/L
Cd	<0.21
Co	<0.68
Cu	<3.7
Pb	9.4
Hg	<0.1
Ni	37
V	<0.78

TP-1	
7/10/2014	9 ft bgs
Analyte	µg/L
Cd	<0.21
Co	5.3
Cu	<3.7
Pb	46
Hg	<0.1
Ni	33
V	<0.78

A-8	
7/14/2014	
Analyte	µg/L
Cd	<0.21
Co	<0.68
Cu	<3.7
Pb	9.4
Hg	<0.1
Ni	23
V	47

SB-18-GW	
2/19/2015	
Analyte	µg/L
Cd	5.4
Co	1.2
Cu	1.9
Pb	6.9
Hg	<0.04
Ni	7.4
V	8.4

SB-17	
2/18/2015	
Analyte	µg/L
Cd	<0.58
Co	<0.32
Cu	<0.99
Pb	<0.91
Hg	<0.04
Ni	2.5
V	4

SB-19	
2/17/2015	
Analyte	µg/L
Cd	<0.58
Co	<0.32
Cu	<0.99
Pb	<0.91
Hg	<0.04
Ni	4.2
V	22

A-4	
7/14/2014	
Analyte	µg/L
Cd	<0.21
Co	<0.68
Cu	<3.7
Pb	9.5
Hg	<0.1
Ni	<0.8
V	<0.78

SB-16	
2/18/2015	
Analyte	µg/L
Cd	<0.58
Co	<0.32
Cu	<0.99
Pb	<0.91
Hg	<0.04
Ni	6.7
V	1.2

SB-20	
2/17/2015	
Analyte	µg/L
Cd	<0.58
Co	<0.32
Cu	<0.99
Pb	<0.91
Hg	<0.04
Ni	6.3
V	1.6

SB-15	
2/18/2015	
Analyte	µg/L
Cd	<0.58
Co	<0.32
Cu	<0.99
Pb	<0.91
Hg	<0.04
Ni	4.5
V	3.3

SB-22	
2/17/2015	
Analyte	µg/L
Cd	<0.58
Co	<0.32
Cu	<0.99
Pb	<0.91
Hg	<0.04
Ni	5.6
V	3.9

SB-14	
2/18/2015	
Analyte	µg/L
Cd	<0.58
Co	<0.32
Cu	<0.99
Pb	<0.91
Hg	<0.091
Ni	6
V	44

SB-24	
2/18/2015	
Analyte	µg/L
Cd	<0.58
Co	0.77
Cu	<0.99
Pb	<0.91
Hg	<0.15
Ni	13
V	7

A-5	
7/14/2014	
Analyte	µg/L
Cd	<0.21
Co	<0.68
Cu	<3.7
Pb	6.7
Hg	<0.1
Ni	<0.8
V	110

MW-6A	
2/25/2015	
Analyte	µg/L
Cd	<0.58
Co	<0.32
Cu	<0.99
Pb	<0.91
Hg	<0.064
Ni	<3.4
V	5.1

SB-23	
2/19/2015	
Analyte	µg/L
Cd	<0.28
Co	<0.89
Cu	<0.67
Pb	<1.3
Hg	0.042
Ni	6.2
V	4

MW-6B	
2/25/2015	
Analyte	µg/L
Cd	<0.58
Co	<0.32
Cu	<0.99
Pb	<0.91
Hg	<0.023
Ni	<1.3
V	7.2

Note:
- Table 1, Table 2, Trench 1 and Trench 2 results are shown on other figures.
- Sub-grade machinery pits have been filled.
- Exceedances of screening levels are presented in the applicable tables

integral consulting inc.

Figure 11.
Metals Concentrations in Groundwater, Historical and Data Gaps Related Sampling
Former Allied Engineering & Production Corporation
2421 Blanding Avenue
Alameda, California

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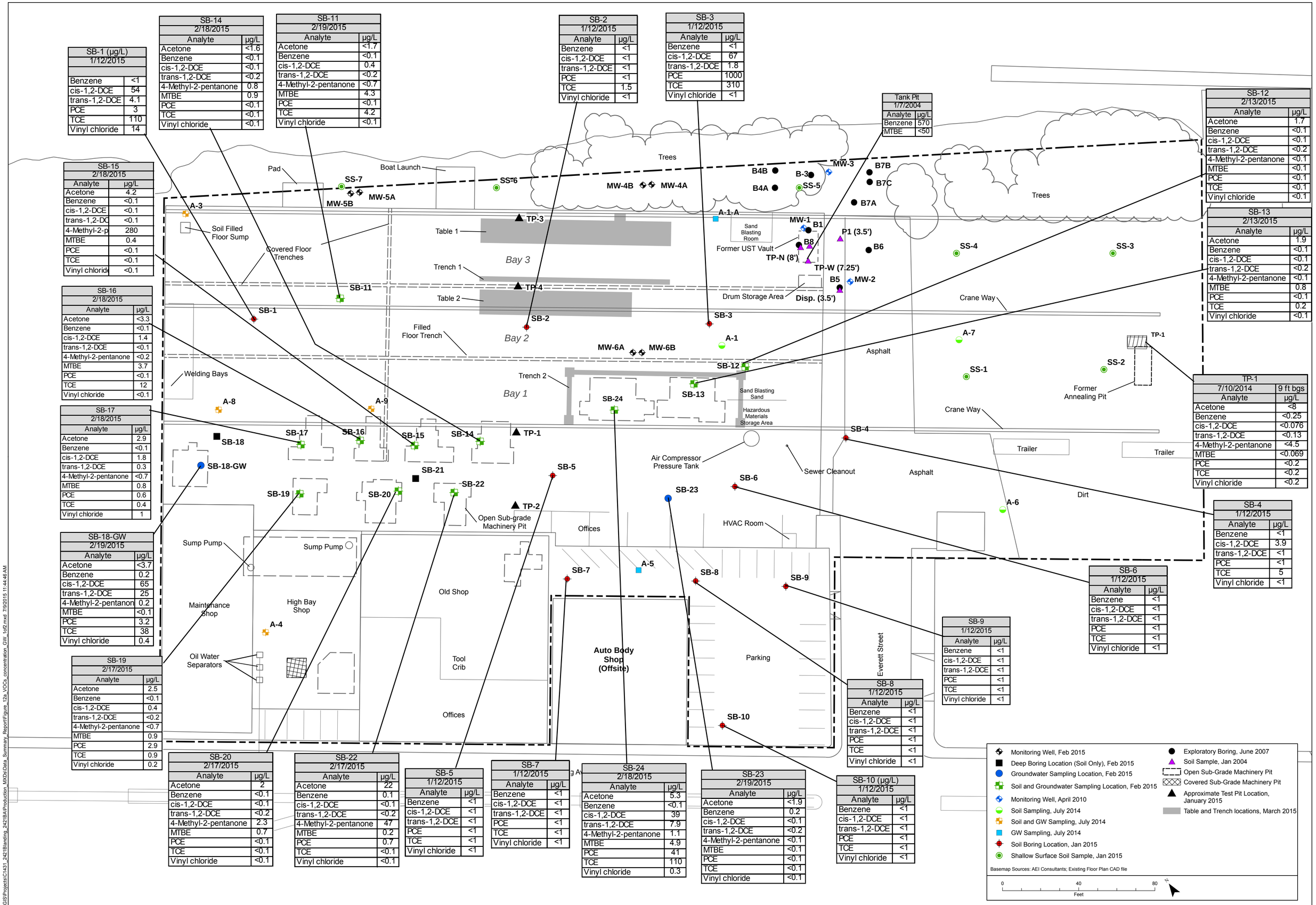

SB-1 (µg/L) 1/12/2015	
Benzene	<1
cis-1,2-DCE	54
trans-1,2-DCE	4.1
PCE	3
TCE	110
Vinyl chloride	14

SB-14 2/18/2015	
Analyte	µg/L
Acetone	<1.6
Benzene	<0.1
cis-1,2-DCE	<0.1
trans-1,2-DCE	<0.2
4-Methyl-2-pentanone	0.8
MTBE	0.9
PCE	<0.1
TCE	<0.1
Vinyl chloride	<0.1

SB-11 2/19/2015	
Analyte	µg/L
Acetone	<1.7
Benzene	<0.1
cis-1,2-DCE	0.4
trans-1,2-DCE	<0.2
4-Methyl-2-pentanone	<0.7
MTBE	4.3
PCE	<0.1
TCE	4.2
Vinyl chloride	<0.1

SB-2 1/12/2015	
Analyte	µg/L
Benzene	<1
cis-1,2-DCE	<1
trans-1,2-DCE	<1
PCE	<1
TCE	1.5
Vinyl chloride	<1

SB-3 1/12/2015	
Benzene	<1
cis-1,2-DCE	67
trans-1,2-DCE	1.8
PCE	1000
TCE	310
Vinyl chloride	<1

Tank Pit 1/7/2004	
Analyte	µg/L
Benzene	570
MTBE	<50

SB-12 2/13/2015	
Analyte	µg/L
Acetone	1.7
Benzene	<0.1
cis-1,2-DCE	<0.1
trans-1,2-DCE	<0.2
4-Methyl-2-pentanone	<0.1
MTBE	<0.1
PCE	<0.1
TCE	<0.1
Vinyl chloride	<0.1

SB-13 2/13/2015	
Analyte	µg/L
Acetone	1.9
Benzene	<0.1
cis-1,2-DCE	<0.1
trans-1,2-DCE	<0.2
4-Methyl-2-pentanone	<0.1
MTBE	0.8
PCE	<0.1
TCE	0.2
Vinyl chloride	<0.1

SB-15 2/18/2015	
Analyte	µg/L
Acetone	4.2
Benzene	<0.1
cis-1,2-DCE	<0.1
trans-1,2-DC	<0.1
4-Methyl-2-p	280
MTBE	0.4
PCE	<0.1
TCE	<0.1
Vinyl chlorid	<0.1

SB-16 2/18/2015	
Analyte	µg/L
Acetone	<3.3
Benzene	<0.1
cis-1,2-DCE	1.4
trans-1,2-DCE	<0.1
4-Methyl-2-pentanone	<0.2
MTBE	3.7
PCE	<0.1
TCE	12
Vinyl chloride	<0.1

SB-17 2/18/2015	
Analyte	µg/L
Acetone	2.9
Benzene	<0.1
cis-1,2-DCE	1.8
trans-1,2-DCE	0.3
4-Methyl-2-pentanone	<0.7
MTBE	0.8
PCE	0.6
TCE	0.4
Vinyl chloride	1

TP-1 7/10/2014	9 ft bgs
Analyte	µg/L
Acetone	<8
Benzene	<0.25
cis-1,2-DCE	<0.076
trans-1,2-DCE	<0.13
4-Methyl-2-pentanone	<4.5
MTBE	<0.069
PCE	<0.2
TCE	<0.2
Vinyl chloride	<0.2

SB-4 1/12/2015	
Analyte	µg/L
Benzene	<1
cis-1,2-DCE	3.9
trans-1,2-DCE	<1
PCE	<1
TCE	5
Vinyl chloride	<1

SB-18-GW 2/19/2015	
Analyte	µg/L
Acetone	<3.7
Benzene	0.2
cis-1,2-DCE	65
trans-1,2-DCE	25
4-Methyl-2-pentanon	0.2
MTBE	<0.1
PCE	3.2
TCE	38
Vinyl chloride	0.4

SB-6 1/12/2015	
Analyte	µg/L
Benzene	<1
cis-1,2-DCE	<1
trans-1,2-DCE	<1
PCE	<1
TCE	<1
Vinyl chloride	<1

SB-9 1/12/2015	
Analyte	µg/L
Benzene	<1
cis-1,2-DCE	<1
trans-1,2-DCE	<1
PCE	<1
TCE	<1
Vinyl chloride	<1

SB-19 2/17/2015	
Analyte	µg/L
Acetone	2.5
Benzene	<0.1
cis-1,2-DCE	0.4
trans-1,2-DCE	<0.2
4-Methyl-2-pentanone	<0.7
MTBE	0.9
PCE	2.9
TCE	0.9
Vinyl chloride	0.2

SB-8 1/12/2015	
Analyte	µg/L
Benzene	<1
cis-1,2-DCE	<1
trans-1,2-DCE	<1
PCE	<1
TCE	<1
Vinyl chloride	<1

SB-20 2/17/2015	
Analyte	µg/L
Acetone	2
Benzene	<0.1
cis-1,2-DCE	<0.1
trans-1,2-DCE	<0.2
4-Methyl-2-pentanone	2.3
MTBE	0.7
PCE	<0.1
TCE	<0.1
Vinyl chloride	<0.1

SB-22 2/17/2015	
Analyte	µg/L
Acetone	22
Benzene	0.1
cis-1,2-DCE	<0.1
trans-1,2-DCE	<0.2
4-Methyl-2-pentanone	47
MTBE	0.2
PCE	0.7
TCE	<0.1
Vinyl chloride	<0.1

SB-5 1/12/2015	
Analyte	µg/L
Benzene	<1
cis-1,2-DCE	<1
trans-1,2-DCE	<1
PCE	<1
TCE	<1
Vinyl chloride	<1

SB-7 1/12/2015	
Analyte	µg/L
Benzene	<1
cis-1,2-DCE	<1
trans-1,2-DCE	<1
PCE	<1
TCE	<1
Vinyl chloride	<1

SB-24 2/18/2015	
Analyte	µg/L
Acetone	5.3
Benzene	<0.1
cis-1,2-DCE	39
trans-1,2-DCE	7.9
4-Methyl-2-pentanone	1.1
MTBE	4.9
PCE	41
TCE	110
Vinyl chloride	0.3

SB-23 2/19/2015	
Analyte	µg/L
Acetone	<1.9
Benzene	0.2
cis-1,2-DCE	<0.1
trans-1,2-DCE	<0.2
4-Methyl-2-pentanone	<0.1
MTBE	<0.1
PCE	<0.1
TCE	<0.1
Vinyl chloride	<0.1

SB-10 (µg/L) 1/12/2015	
Analyte	µg/L
Benzene	<1
cis-1,2-DCE	<1
trans-1,2-DCE	<1
PCE	<1
TCE	<1
Vinyl chloride	<1

Note:
- Table 1, Table 2, Trench 1 and Trench 2 results are shown on other figures.
- Sub-grade machinery pits have been filled.
- Exceedances of screening levels are presented in the applicable tables

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Figure 12a.
Volatile Organic Compound Concentrations in Groundwater, Historical and Data Gaps Related Sampling (1 of 2)
Former Allied Engineering & Production Corporation
2421 Blanding Avenue
Alameda, California

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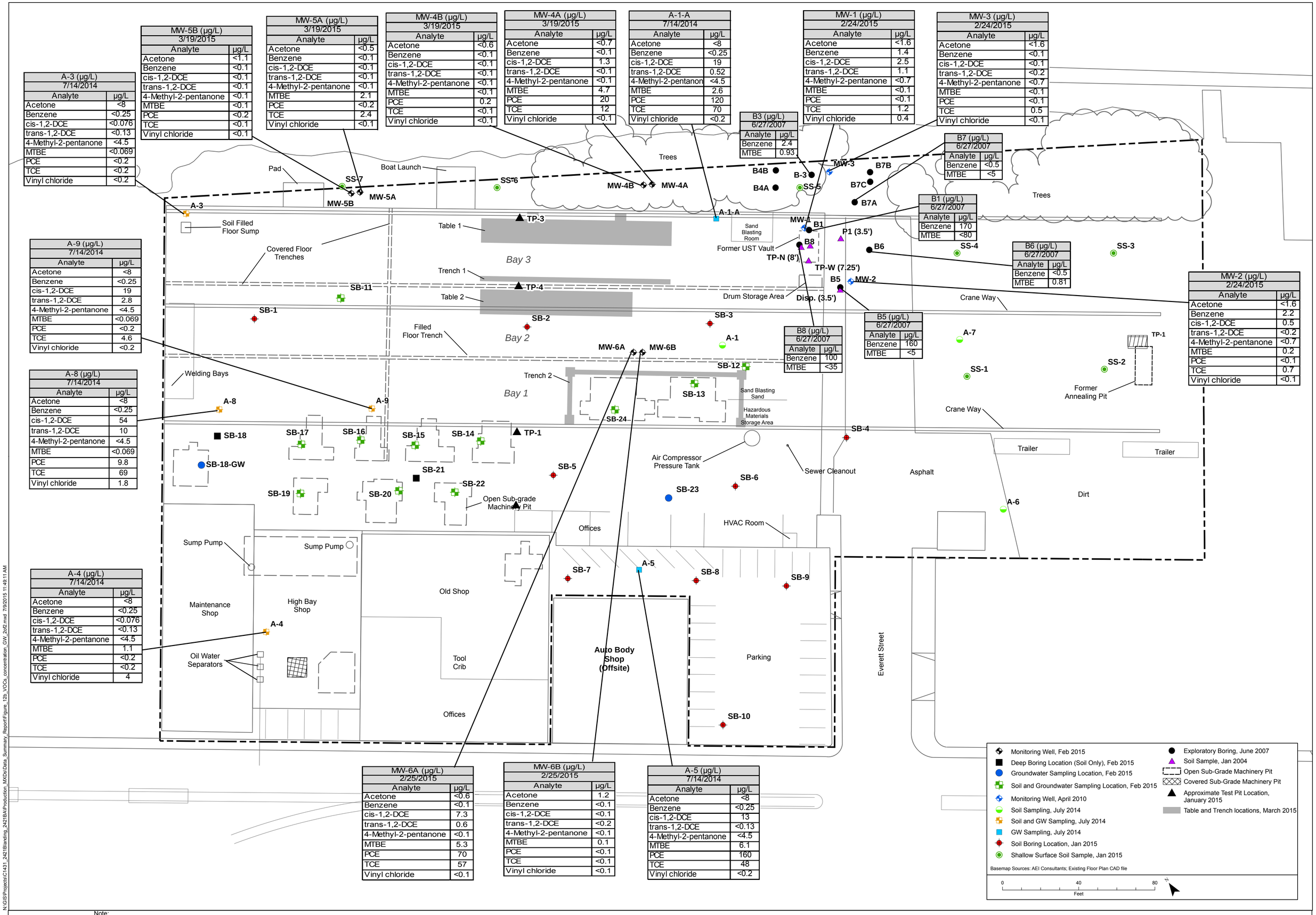

MW-5B (µg/L) 3/19/2015	
Analyte	µg/L
Acetone	<1.1
Benzene	<0.1
cis-1,2-DCE	<0.1
trans-1,2-DCE	<0.1
4-Methyl-2-pentanone	<0.1
MTBE	<0.1
PCE	<0.2
TCE	<0.1
Vinyl chloride	<0.1

MW-5A (µg/L) 3/19/2015	
Analyte	µg/L
Acetone	<0.5
Benzene	<0.1
cis-1,2-DCE	<0.1
trans-1,2-DCE	<0.1
4-Methyl-2-pentanone	<0.1
MTBE	2.1
PCE	<0.2
TCE	2.4
Vinyl chloride	<0.1

MW-4B (µg/L) 3/19/2015	
Analyte	µg/L
Acetone	<0.6
Benzene	<0.1
cis-1,2-DCE	<0.1
trans-1,2-DCE	<0.1
4-Methyl-2-pentanone	<0.1
MTBE	<0.1
PCE	0.2
TCE	<0.1
Vinyl chloride	<0.1

MW-4A (µg/L) 3/19/2015	
Analyte	µg/L
Acetone	<0.7
Benzene	<0.1
cis-1,2-DCE	1.3
trans-1,2-DCE	<0.1
4-Methyl-2-pentanone	<0.1
MTBE	4.7
PCE	20
TCE	12
Vinyl chloride	<0.1

A-1-A 7/14/2014	
Analyte	µg/L
Acetone	<8
Benzene	<0.25
cis-1,2-DCE	19
trans-1,2-DCE	0.52
4-Methyl-2-pentanon	<4.5
MTBE	2.6
PCE	120
TCE	70
Vinyl chloride	<0.2

MW-1 (µg/L) 2/24/2015	
Analyte	µg/L
Acetone	<1.6
Benzene	1.4
cis-1,2-DCE	2.5
trans-1,2-DCE	1.1
4-Methyl-2-pentanone	<0.7
MTBE	<0.1
PCE	<0.1
TCE	1.2
Vinyl chloride	0.4

MW-3 (µg/L) 2/24/2015	
Analyte	µg/L
Acetone	<1.6
Benzene	<0.1
cis-1,2-DCE	<0.1
trans-1,2-DCE	<0.2
4-Methyl-2-pentanone	<0.7
MTBE	<0.1
PCE	<0.1
TCE	0.5
Vinyl chloride	<0.1

B3 (µg/L) 6/27/2007	
Analyte	µg/L
Benzene	2.4
MTBE	0.93

B7 (µg/L) 6/27/2007	
Analyte	µg/L
Benzene	<0.5
MTBE	<5

B1 (µg/L) 6/27/2007	
Analyte	µg/L
Benzene	170
MTBE	<80

B6 (µg/L) 6/27/2007	
Analyte	µg/L
Benzene	<0.5
MTBE	0.81

MW-2 (µg/L) 2/24/2015	
Analyte	µg/L
Acetone	<1.6
Benzene	2.2
cis-1,2-DCE	0.5
trans-1,2-DCE	<0.2
4-Methyl-2-pentanone	<0.7
MTBE	0.2
PCE	<0.1
TCE	0.7
Vinyl chloride	<0.1

B8 (µg/L) 6/27/2007	
Analyte	µg/L
Benzene	100
MTBE	<35

B5 (µg/L) 6/27/2007	
Analyte	µg/L
Benzene	160
MTBE	<5

A-3 (µg/L) 7/14/2014	
Analyte	µg/L
Acetone	<8
Benzene	<0.25
cis-1,2-DCE	<0.076
trans-1,2-DCE	<0.13
4-Methyl-2-pentanone	<4.5
MTBE	<0.069
PCE	<0.2
TCE	<0.2
Vinyl chloride	<0.2

A-9 (µg/L) 7/14/2014	
Analyte	µg/L
Acetone	<8
Benzene	<0.25
cis-1,2-DCE	19
trans-1,2-DCE	2.8
4-Methyl-2-pentanone	<4.5
MTBE	<0.069
PCE	<0.2
TCE	4.6
Vinyl chloride	<0.2

A-8 (µg/L) 7/14/2014	
Analyte	µg/L
Acetone	<8
Benzene	<0.25
cis-1,2-DCE	54
trans-1,2-DCE	10
4-Methyl-2-pentanone	<4.5
MTBE	<0.069
PCE	9.8
TCE	69
Vinyl chloride	1.8

A-4 (µg/L) 7/14/2014	
Analyte	µg/L
Acetone	<8
Benzene	<0.25
cis-1,2-DCE	<0.076
trans-1,2-DCE	<0.13
4-Methyl-2-pentanone	<4.5
MTBE	1.1
PCE	<0.2
TCE	<0.2
Vinyl chloride	4

MW-6A (µg/L) 2/25/2015	
Analyte	µg/L
Acetone	<0.6
Benzene	<0.1
cis-1,2-DCE	7.3
trans-1,2-DCE	0.6
4-Methyl-2-pentanone	<0.1
MTBE	5.3
PCE	70
TCE	57
Vinyl chloride	<0.1

MW-6B (µg/L) 2/25/2015	
Analyte	µg/L
Acetone	1.2
Benzene	<0.1
cis-1,2-DCE	<0.1
trans-1,2-DCE	<0.2
4-Methyl-2-pentanone	<0.1
MTBE	0.1
PCE	<0.1
TCE	<0.1
Vinyl chloride	<0.1

A-5 (µg/L) 7/14/2014	
Analyte	µg/L
Acetone	<8
Benzene	<0.25
cis-1,2-DCE	13
trans-1,2-DCE	<0.13
4-Methyl-2-pentanone	<4.5
MTBE	6.1
PCE	160
TCE	48
Vinyl chloride	<0.2

Note:
- Table 1, Table 2, Trench 1 and Trench 2 results are shown on other figures.
- Sub-grade machinery pits have been filled.
- Exceedances of screening levels are presented in the applicable tables.

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Figure 12b.
Volatile Organic Compound Concentrations in Groundwater, Historical and Data Gaps Related Sampling (2 of 2)
Former Allied Engineering & Production Corporation
2421 Blanding Avenue
Alameda, California

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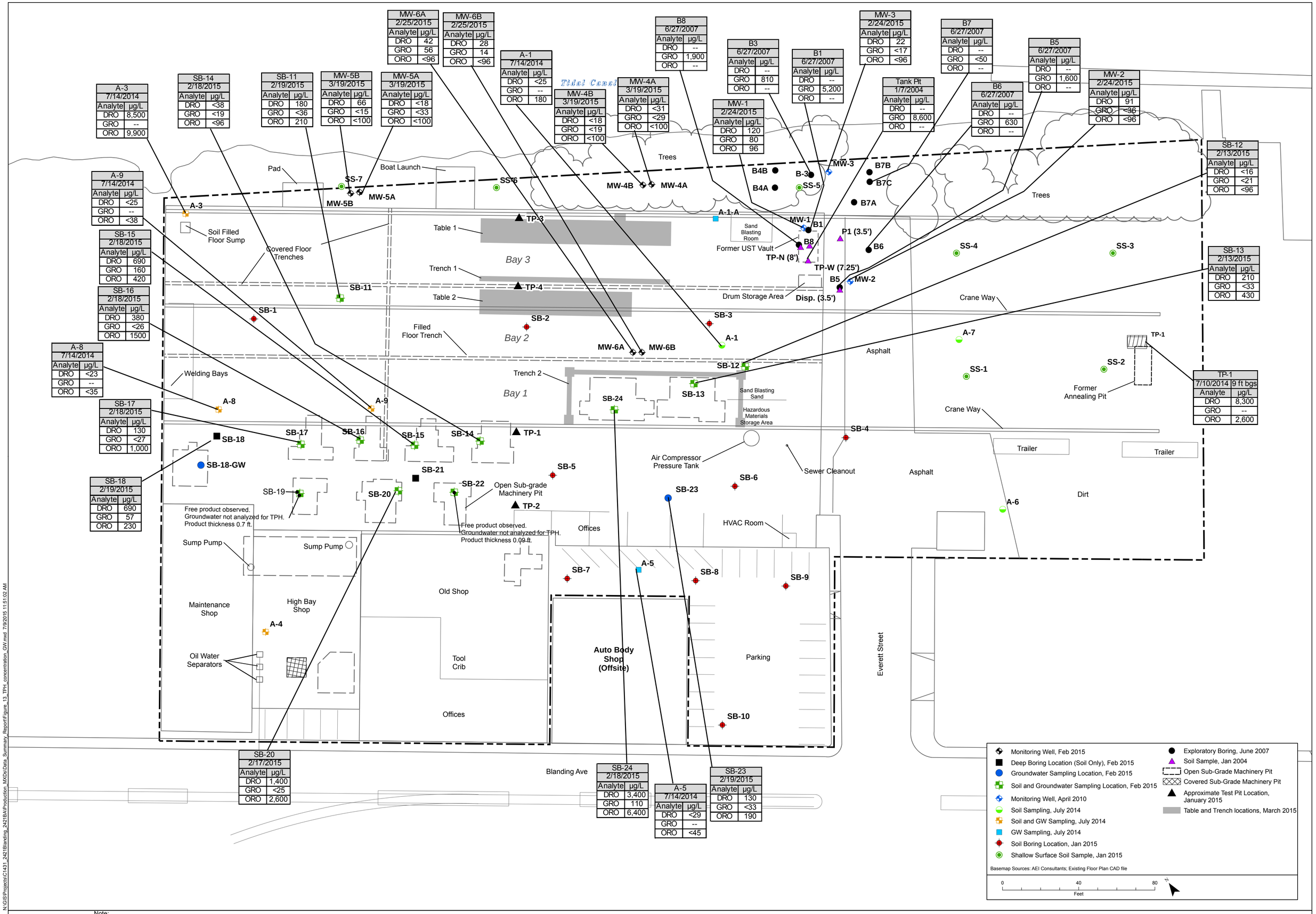

Note:
- Table 1, Table 2, Trench 1 and Trench 2 results are shown on other figures.
- Sub-grade machinery pits have been filled.
- Exceedances of screening levels are presented in the applicable tables.

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Figure 13.
Total Petroleum Hydrocarbon Concentrations in Groundwater, Historical and Data Gaps Related Sampling
Former Allied Engineering & Production Corporation
2421 Blanding Avenue
Alameda, California

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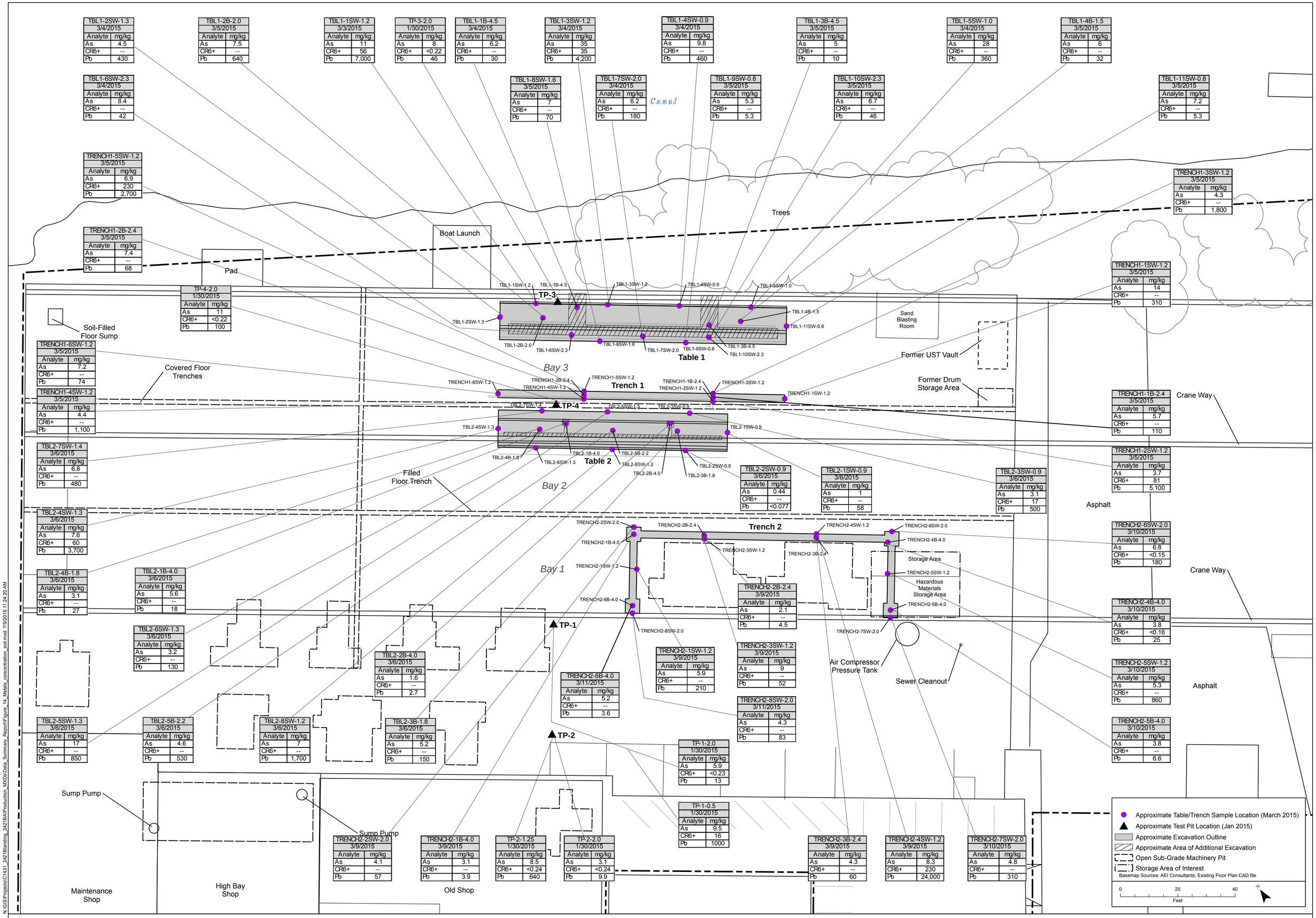

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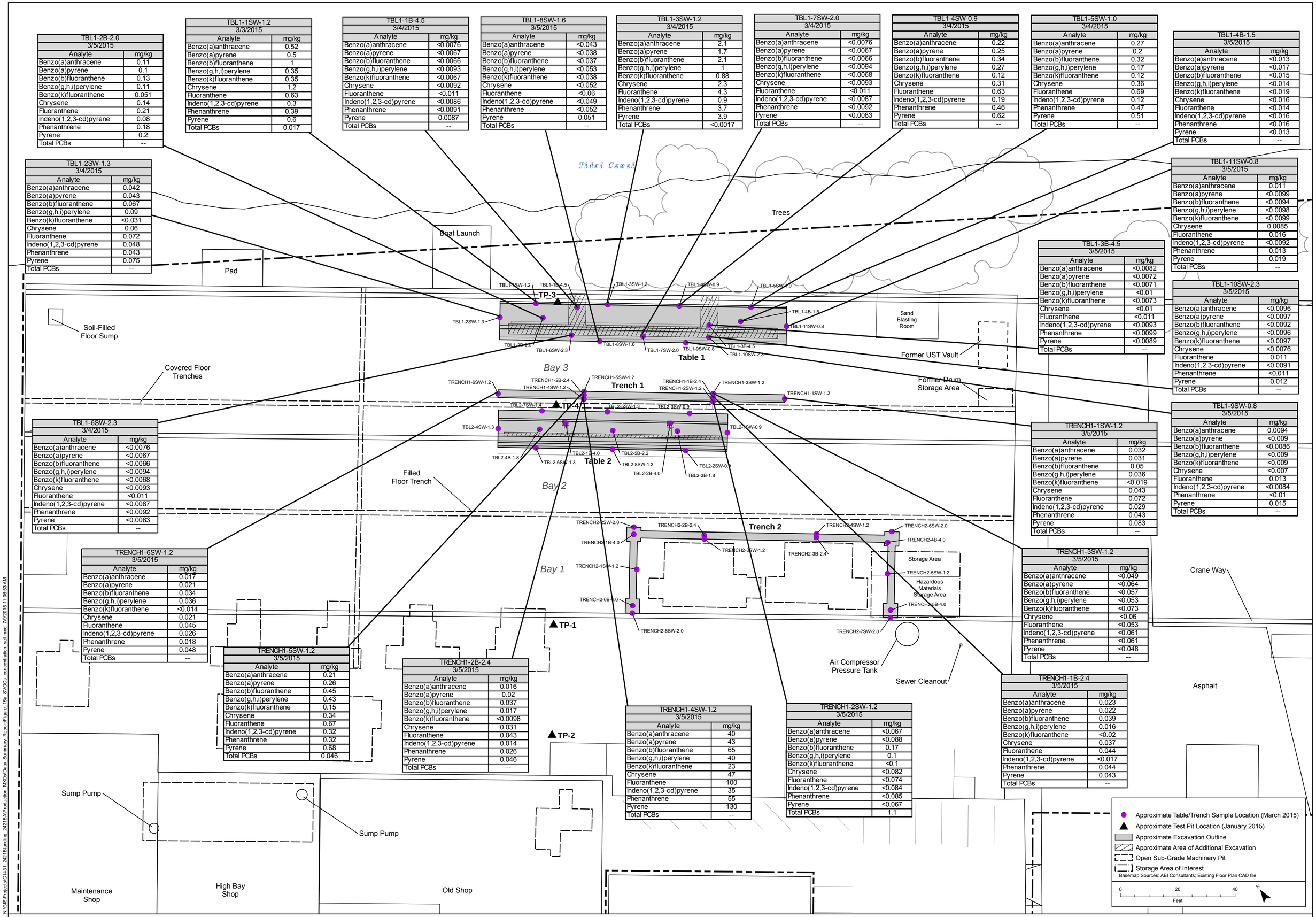
Sample ID: TRENCH 2-2B-2.4
Trench 2 Excavation Area; Bottom Sample Number; Depth in ft bgs

TBL1-8SW-1.6
Table 1 Excavation Area; Sidewall Sample Number; Depth in ft bgs

Notes
- Sub-grade machinery pits have been filled.
- Exceedances of screening levels are presented in the applicable tables.

Figure 14.
Metal Concentrations in Soil, Construction Related Sampling
Former Allied Engineering & Production Corporation
2421 Blanding Avenue
Alameda, California



TBL1-2B-2.0	
3/5/2015	
Analyte	mg/kg
Benzo(a)anthracene	0.11
Benzo(a)pyrene	0.1
Benzo(b)fluoranthene	0.13
Benzo(g,h,i)perylene	0.11
Benzo(k)fluoranthene	0.051
Chrysene	0.14
Fluoranthene	0.21
Indeno(1,2,3-cd)pyrene	0.08
Phenanthrene	0.18
Pyrene	0.2
Total PCBs	--

TBL1-1SW-1.2	
3/3/2015	
Analyte	mg/kg
Benzo(a)anthracene	0.52
Benzo(a)pyrene	0.5
Benzo(b)fluoranthene	1
Benzo(g,h,i)perylene	0.35
Benzo(k)fluoranthene	0.35
Chrysene	1.2
Fluoranthene	0.63
Indeno(1,2,3-cd)pyrene	0.3
Phenanthrene	0.39
Pyrene	0.6
Total PCBs	0.017

TBL1-1B-4.5	
3/4/2015	
Analyte	mg/kg
Benzo(a)anthracene	<0.0076
Benzo(a)pyrene	<0.0067
Benzo(b)fluoranthene	<0.0066
Benzo(g,h,i)perylene	<0.0093
Benzo(k)fluoranthene	<0.0067
Chrysene	<0.0092
Fluoranthene	<0.011
Indeno(1,2,3-cd)pyrene	<0.0086
Phenanthrene	<0.0091
Pyrene	0.0087
Total PCBs	--

TBL1-8SW-1.6	
3/5/2015	
Analyte	mg/kg
Benzo(a)anthracene	<0.043
Benzo(a)pyrene	<0.038
Benzo(b)fluoranthene	<0.037
Benzo(g,h,i)perylene	<0.053
Benzo(k)fluoranthene	<0.038
Chrysene	<0.052
Fluoranthene	<0.06
Indeno(1,2,3-cd)pyrene	<0.049
Phenanthrene	<0.052
Pyrene	0.051
Total PCBs	--

TBL1-3SW-1.2	
3/4/2015	
Analyte	mg/kg
Benzo(a)anthracene	2.1
Benzo(a)pyrene	1.7
Benzo(b)fluoranthene	2.1
Benzo(g,h,i)perylene	1
Benzo(k)fluoranthene	0.88
Chrysene	2.3
Fluoranthene	4.3
Indeno(1,2,3-cd)pyrene	0.9
Phenanthrene	3.7
Pyrene	3.9
Total PCBs	<0.0017

TBL1-7SW-2.0	
3/4/2015	
Analyte	mg/kg
Benzo(a)anthracene	<0.0076
Benzo(a)pyrene	<0.0067
Benzo(b)fluoranthene	<0.0066
Benzo(g,h,i)perylene	<0.0094
Benzo(k)fluoranthene	<0.0068
Chrysene	<0.0093
Fluoranthene	<0.011
Indeno(1,2,3-cd)pyrene	<0.0087
Phenanthrene	<0.0092
Pyrene	<0.0083
Total PCBs	--

TBL1-4SW-0.9	
3/4/2015	
Analyte	mg/kg
Benzo(a)anthracene	0.22
Benzo(a)pyrene	0.25
Benzo(b)fluoranthene	0.34
Benzo(g,h,i)perylene	0.27
Benzo(k)fluoranthene	0.12
Chrysene	0.31
Fluoranthene	0.63
Indeno(1,2,3-cd)pyrene	0.19
Phenanthrene	0.46
Pyrene	0.62
Total PCBs	--

TBL1-5SW-1.0	
3/4/2015	
Analyte	mg/kg
Benzo(a)anthracene	0.27
Benzo(a)pyrene	0.2
Benzo(b)fluoranthene	0.32
Benzo(g,h,i)perylene	0.17
Benzo(k)fluoranthene	0.12
Chrysene	0.36
Fluoranthene	0.69
Indeno(1,2,3-cd)pyrene	0.12
Phenanthrene	0.47
Pyrene	0.51
Total PCBs	--

TBL1-4B-1.5	
3/5/2015	
Analyte	mg/kg
Benzo(a)anthracene	<0.013
Benzo(a)pyrene	<0.017
Benzo(b)fluoranthene	<0.015
Benzo(g,h,i)perylene	<0.014
Benzo(k)fluoranthene	<0.019
Chrysene	<0.016
Fluoranthene	<0.014
Indeno(1,2,3-cd)pyrene	<0.016
Phenanthrene	<0.016
Pyrene	<0.013
Total PCBs	--

TBL1-2SW-1.3	
3/4/2015	
Analyte	mg/kg
Benzo(a)anthracene	0.042
Benzo(a)pyrene	0.043
Benzo(b)fluoranthene	0.067
Benzo(g,h,i)perylene	0.09
Benzo(k)fluoranthene	<0.031
Chrysene	0.06
Fluoranthene	0.072
Indeno(1,2,3-cd)pyrene	0.048
Phenanthrene	0.043
Pyrene	0.075
Total PCBs	--

TBL1-11SW-0.8	
3/5/2015	
Analyte	mg/kg
Benzo(a)anthracene	0.011
Benzo(a)pyrene	<0.0099
Benzo(b)fluoranthene	<0.0094
Benzo(g,h,i)perylene	<0.0098
Benzo(k)fluoranthene	<0.0099
Chrysene	0.0085
Fluoranthene	0.016
Indeno(1,2,3-cd)pyrene	<0.0092
Phenanthrene	0.013
Pyrene	0.019
Total PCBs	--

TBL1-3B-4.5	
3/5/2015	
Analyte	mg/kg
Benzo(a)anthracene	<0.0082
Benzo(a)pyrene	<0.0072
Benzo(b)fluoranthene	<0.0071
Benzo(g,h,i)perylene	<0.01
Benzo(k)fluoranthene	<0.0073
Chrysene	<0.01
Fluoranthene	<0.011
Indeno(1,2,3-cd)pyrene	<0.0093
Phenanthrene	<0.0099
Pyrene	<0.0089
Total PCBs	--

TBL1-10SW-2.3	
3/5/2015	
Analyte	mg/kg
Benzo(a)anthracene	<0.0096
Benzo(a)pyrene	<0.0097
Benzo(b)fluoranthene	<0.0092
Benzo(g,h,i)perylene	<0.0096
Benzo(k)fluoranthene	<0.0097
Chrysene	<0.0076
Fluoranthene	0.011
Indeno(1,2,3-cd)pyrene	<0.0091
Phenanthrene	<0.011
Pyrene	0.012
Total PCBs	--

TBL1-9SW-0.8	
3/5/2015	
Analyte	mg/kg
Benzo(a)anthracene	0.0094
Benzo(a)pyrene	<0.009
Benzo(b)fluoranthene	<0.0086
Benzo(g,h,i)perylene	<0.009
Benzo(k)fluoranthene	<0.009
Chrysene	<0.007
Fluoranthene	0.013
Indeno(1,2,3-cd)pyrene	<0.0084
Phenanthrene	<0.01
Pyrene	0.015
Total PCBs	--

TBL1-6SW-2.3	
3/4/2015	
Analyte	mg/kg
Benzo(a)anthracene	<0.0076
Benzo(a)pyrene	<0.0067
Benzo(b)fluoranthene	<0.0066
Benzo(g,h,i)perylene	<0.0094
Benzo(k)fluoranthene	<0.0068
Chrysene	<0.0093
Fluoranthene	<0.011
Indeno(1,2,3-cd)pyrene	<0.0087
Phenanthrene	<0.0092
Pyrene	<0.0083
Total PCBs	--

TRENCH1-1SW-1.2	
3/5/2015	
Analyte	mg/kg
Benzo(a)anthracene	0.032
Benzo(a)pyrene	0.031
Benzo(b)fluoranthene	0.05
Benzo(g,h,i)perylene	0.036
Benzo(k)fluoranthene	<0.019
Chrysene	0.043
Fluoranthene	0.072
Indeno(1,2,3-cd)pyrene	0.029
Phenanthrene	0.043
Pyrene	0.083
Total PCBs	--

TRENCH1-6SW-1.2	
3/5/2015	
Analyte	mg/kg
Benzo(a)anthracene	0.017
Benzo(a)pyrene	0.021
Benzo(b)fluoranthene	0.034
Benzo(g,h,i)perylene	0.036
Benzo(k)fluoranthene	<0.014
Chrysene	0.021
Fluoranthene	0.045
Indeno(1,2,3-cd)pyrene	0.026
Phenanthrene	0.018
Pyrene	0.048
Total PCBs	--

TRENCH1-3SW-1.2	
3/5/2015	
Analyte	mg/kg
Benzo(a)anthracene	<0.049
Benzo(a)pyrene	<0.064
Benzo(b)fluoranthene	<0.057
Benzo(g,h,i)perylene	<0.053
Benzo(k)fluoranthene	<0.073
Chrysene	<0.06
Fluoranthene	<0.053
Indeno(1,2,3-cd)pyrene	<0.061
Phenanthrene	<0.061
Pyrene	<0.048
Total PCBs	--

TRENCH1-5SW-1.2	
3/5/2015	
Analyte	mg/kg
Benzo(a)anthracene	0.21
Benzo(a)pyrene	0.26
Benzo(b)fluoranthene	0.45
Benzo(g,h,i)perylene	0.43
Benzo(k)fluoranthene	0.15
Chrysene	0.34
Fluoranthene	0.67
Indeno(1,2,3-cd)pyrene	0.32
Phenanthrene	0.32
Pyrene	0.68
Total PCBs	0.046

TRENCH1-2B-2.4	
3/5/2015	
Analyte	mg/kg
Benzo(a)anthracene	0.016
Benzo(a)pyrene	0.02
Benzo(b)fluoranthene	0.037
Benzo(g,h,i)perylene	0.017
Benzo(k)fluoranthene	<0.0098
Chrysene	0.031
Fluoranthene	0.043
Indeno(1,2,3-cd)pyrene	0.014
Phenanthrene	0.026
Pyrene	0.046
Total PCBs	--

TRENCH1-4SW-1.2	
3/5/2015	
Analyte	mg/kg
Benzo(a)anthracene	40
Benzo(a)pyrene	43
Benzo(b)fluoranthene	65
Benzo(g,h,i)perylene	40
Benzo(k)fluoranthene	23
Chrysene	47
Fluoranthene	100
Indeno(1,2,3-cd)pyrene	35
Phenanthrene	55
Pyrene	130
Total PCBs	--

TRENCH1-2SW-1.2	
3/5/2015	
Analyte	mg/kg
Benzo(a)anthracene	<0.067
Benzo(a)pyrene	<0.088
Benzo(b)fluoranthene	0.17
Benzo(g,h,i)perylene	0.1
Benzo(k)fluoranthene	<0.1
Chrysene	<0.082
Fluoranthene	<0.074
Indeno(1,2,3-cd)pyrene	<0.084
Phenanthrene	<0.085
Pyrene	<0.067
Total PCBs	1.1

TRENCH1-1B-2.4	
3/5/2015	
Analyte	mg/kg
Benzo(a)anthracene	0.023
Benzo(a)pyrene	0.022
Benzo(b)fluoranthene	0.039
Benzo(g,h,i)perylene	0.016
Benzo(k)fluoranthene	<0.02
Chrysene	0.037
Fluoranthene	0.044
Indeno(1,2,3-cd)pyrene	<0.017
Phenanthrene	0.044
Pyrene	0.043
Total PCBs	--

integral consulting inc.

Sample ID: TRENCH 2-2B-2.4
Trench 2 Excavation Area; Bottom Sample Number; Depth in ft bgs

TBL1-8SW-1.6
Table 1 Excavation Area; Sidewall Sample Number; Depth in ft bgs

Notes
- Sub-grade machinery pits have been filled.
- Exceedances of screening levels are presented in the applicable tables.

Figure 15a.
Semi-Volatile Organic Compound Concentration in Soil, Construction Related Sampling
Former Allied Engineering & Production Corporation
2421 Blanding Avenue
Alameda, California

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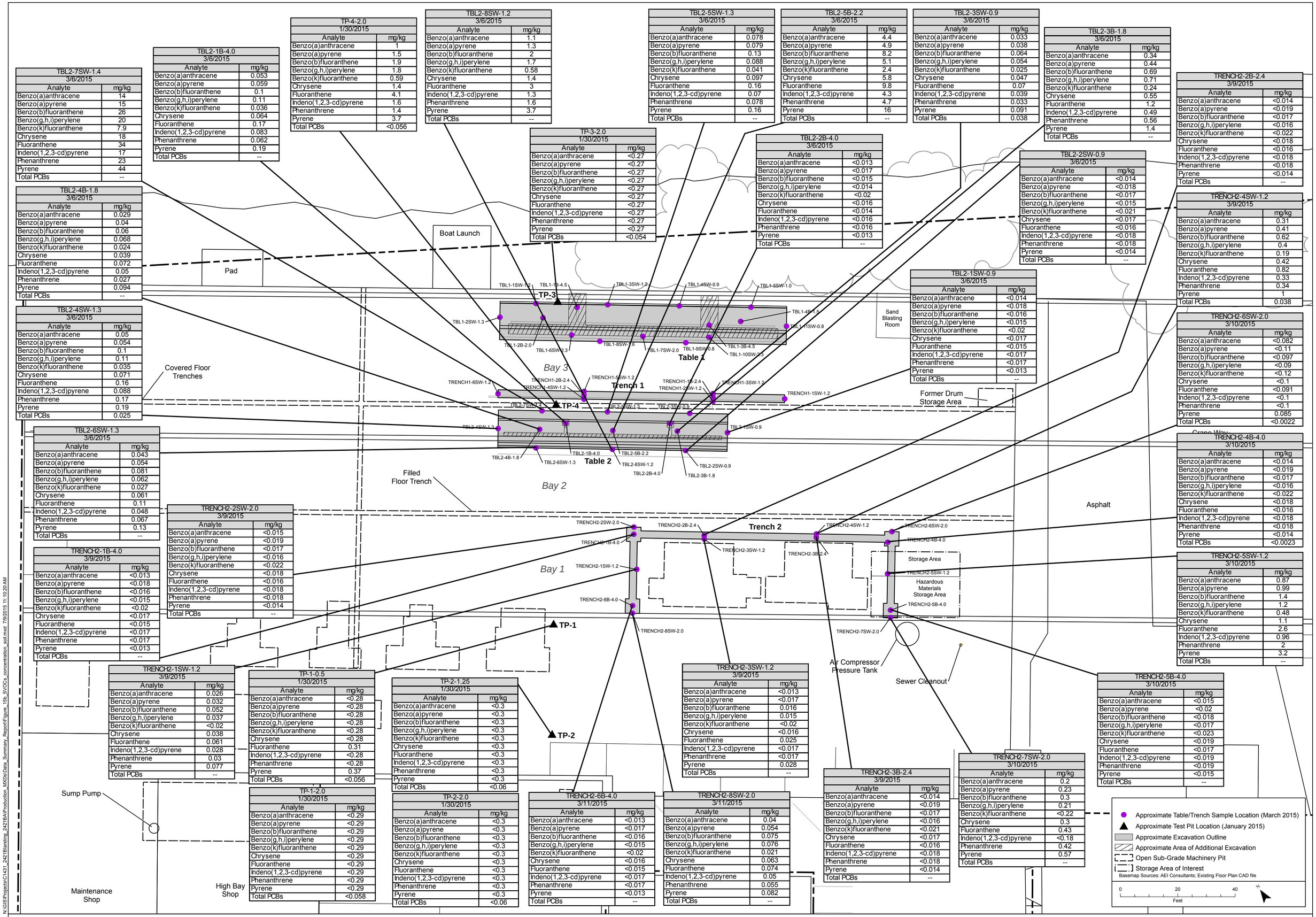

TBL2-7SW-1.4 3/6/2015	
Analyte	mg/kg
Benzo(a)anthracene	14
Benzo(a)pyrene	15
Benzo(b)fluoranthene	26
Benzo(g,h,i)perylene	20
Benzo(k)fluoranthene	7.9
Chrysene	18
Fluoranthene	34
Indeno(1,2,3-cd)pyrene	17
Phenanthrene	23
Pyrene	44
Total PCBs	--

TBL2-1B-4.0 3/6/2015	
Analyte	mg/kg
Benzo(a)anthracene	0.053
Benzo(a)pyrene	0.059
Benzo(b)fluoranthene	0.1
Benzo(g,h,i)perylene	0.11
Benzo(k)fluoranthene	0.036
Chrysene	0.064
Fluoranthene	0.17
Indeno(1,2,3-cd)pyrene	0.083
Phenanthrene	0.062
Pyrene	0.19
Total PCBs	--

TP-4-2.0 1/30/2015	
Analyte	mg/kg
Benzo(a)anthracene	1
Benzo(a)pyrene	1.5
Benzo(b)fluoranthene	1.9
Benzo(g,h,i)perylene	1.8
Benzo(k)fluoranthene	0.59
Chrysene	1.4
Fluoranthene	4.1
Indeno(1,2,3-cd)pyrene	1.6
Phenanthrene	1.4
Pyrene	3.7
Total PCBs	<0.056

TBL2-8SW-1.2 3/6/2015	
Analyte	mg/kg
Benzo(a)anthracene	1.1
Benzo(a)pyrene	1.3
Benzo(b)fluoranthene	2
Benzo(g,h,i)perylene	1.7
Benzo(k)fluoranthene	0.58
Chrysene	1.4
Fluoranthene	3
Indeno(1,2,3-cd)pyrene	1.3
Phenanthrene	1.6
Pyrene	3.7
Total PCBs	--

TBL2-5SW-1.3 3/6/2015	
Analyte	mg/kg
Benzo(a)anthracene	0.078
Benzo(a)pyrene	0.079
Benzo(b)fluoranthene	0.13
Benzo(g,h,i)perylene	0.088
Benzo(k)fluoranthene	0.041
Chrysene	0.097
Fluoranthene	0.16
Indeno(1,2,3-cd)pyrene	0.07
Phenanthrene	0.078
Pyrene	0.16
Total PCBs	--

TBL2-5B-2.2 3/6/2015	
Analyte	mg/kg
Benzo(a)anthracene	4.4
Benzo(a)pyrene	4.9
Benzo(b)fluoranthene	8.2
Benzo(g,h,i)perylene	5.1
Benzo(k)fluoranthene	2.4
Chrysene	5.8
Fluoranthene	9.8
Indeno(1,2,3-cd)pyrene	4.3
Phenanthrene	4.7
Pyrene	16
Total PCBs	--

TBL2-3SW-0.9 3/6/2015	
Analyte	mg/kg
Benzo(a)anthracene	0.033
Benzo(a)pyrene	0.038
Benzo(b)fluoranthene	0.064
Benzo(g,h,i)perylene	0.054
Benzo(k)fluoranthene	0.025
Chrysene	0.047
Fluoranthene	0.07
Indeno(1,2,3-cd)pyrene	0.039
Phenanthrene	0.033
Pyrene	0.091
Total PCBs	0.038

TBL2-3B-1.8 3/6/2015	
Analyte	mg/kg
Benzo(a)anthracene	0.34
Benzo(a)pyrene	0.44
Benzo(b)fluoranthene	0.69
Benzo(g,h,i)perylene	0.71
Benzo(k)fluoranthene	0.24
Chrysene	0.55
Fluoranthene	1.2
Indeno(1,2,3-cd)pyrene	0.49
Phenanthrene	0.56
Pyrene	1.4
Total PCBs	--

TRENCH2-2B-2.4 3/9/2015	
Analyte	mg/kg
Benzo(a)anthracene	<0.014
Benzo(a)pyrene	<0.019
Benzo(b)fluoranthene	<0.017
Benzo(g,h,i)perylene	<0.016
Benzo(k)fluoranthene	<0.022
Chrysene	<0.018
Fluoranthene	<0.016
Indeno(1,2,3-cd)pyrene	<0.018
Phenanthrene	<0.018
Pyrene	<0.014
Total PCBs	--

TBL2-4B-1.8 3/6/2015	
Analyte	mg/kg
Benzo(a)anthracene	0.029
Benzo(a)pyrene	0.04
Benzo(b)fluoranthene	0.06
Benzo(g,h,i)perylene	0.068
Benzo(k)fluoranthene	0.024
Chrysene	0.039
Fluoranthene	0.072
Indeno(1,2,3-cd)pyrene	0.05
Phenanthrene	0.027
Pyrene	0.094
Total PCBs	--

TP-3-2.0 1/30/2015	
Analyte	mg/kg
Benzo(a)anthracene	<0.27
Benzo(a)pyrene	<0.27
Benzo(b)fluoranthene	<0.27
Benzo(g,h,i)perylene	<0.27
Benzo(k)fluoranthene	<0.27
Chrysene	<0.27
Fluoranthene	<0.27
Indeno(1,2,3-cd)pyrene	<0.27
Phenanthrene	<0.27
Pyrene	<0.27
Total PCBs	<0.054

TBL2-2B-4.0 3/6/2015	
Analyte	mg/kg
Benzo(a)anthracene	<0.013
Benzo(a)pyrene	<0.017
Benzo(b)fluoranthene	<0.015
Benzo(g,h,i)perylene	<0.014
Benzo(k)fluoranthene	<0.02
Chrysene	<0.016
Fluoranthene	<0.014
Indeno(1,2,3-cd)pyrene	<0.016
Phenanthrene	<0.016
Pyrene	<0.013
Total PCBs	--

TBL2-2SW-0.9 3/6/2015	
Analyte	mg/kg
Benzo(a)anthracene	<0.014
Benzo(a)pyrene	<0.018
Benzo(b)fluoranthene	<0.017
Benzo(g,h,i)perylene	<0.015
Benzo(k)fluoranthene	<0.021
Chrysene	<0.017
Fluoranthene	<0.016
Indeno(1,2,3-cd)pyrene	<0.018
Phenanthrene	<0.018
Pyrene	<0.014
Total PCBs	--

TRENCH2-4SW-1.2 3/9/2015	
Analyte	mg/kg
Benzo(a)anthracene	0.31
Benzo(a)pyrene	0.41
Benzo(b)fluoranthene	0.62
Benzo(g,h,i)perylene	0.4
Benzo(k)fluoranthene	0.19
Chrysene	0.42
Fluoranthene	0.82
Indeno(1,2,3-cd)pyrene	0.33
Phenanthrene	0.34
Pyrene	1
Total PCBs	0.038

TBL2-1SW-0.9 3/6/2015	
Analyte	mg/kg
Benzo(a)anthracene	<0.014
Benzo(a)pyrene	<0.018
Benzo(b)fluoranthene	<0.016
Benzo(g,h,i)perylene	<0.015
Benzo(k)fluoranthene	<0.02
Chrysene	<0.017
Fluoranthene	<0.015
Indeno(1,2,3-cd)pyrene	<0.017
Phenanthrene	<0.017
Pyrene	<0.013
Total PCBs	--

TRENCH2-6SW-2.0 3/10/2015	
Analyte	mg/kg
Benzo(a)anthracene	<0.082
Benzo(a)pyrene	<0.11
Benzo(b)fluoranthene	<0.097
Benzo(g,h,i)perylene	<0.09
Benzo(k)fluoranthene	<0.12
Chrysene	<0.1
Fluoranthene	<0.091
Indeno(1,2,3-cd)pyrene	<0.1
Phenanthrene	<0.1
Pyrene	0.085
Total PCBs	<0.0022

TBL2-4SW-1.3 3/6/2015	
Analyte	mg/kg
Benzo(a)anthracene	0.05
Benzo(a)pyrene	0.054
Benzo(b)fluoranthene	0.1
Benzo(g,h,i)perylene	0.11
Benzo(k)fluoranthene	0.035
Chrysene	0.071
Fluoranthene	0.16
Indeno(1,2,3-cd)pyrene	0.088
Phenanthrene	0.17
Pyrene	0.19
Total PCBs	0.025

TBL2-6SW-1.3 3/6/2015	
Analyte	mg/kg
Benzo(a)anthracene	0.043
Benzo(a)pyrene	0.054
Benzo(b)fluoranthene	0.081
Benzo(g,h,i)perylene	0.062
Benzo(k)fluoranthene	0.027
Chrysene	0.061
Fluoranthene	0.11
Indeno(1,2,3-cd)pyrene	0.048
Phenanthrene	0.067
Pyrene	0.13
Total PCBs	--

TRENCH2-4B-4.0 3/10/2015	
Analyte	mg/kg
Benzo(a)anthracene	<0.014
Benzo(a)pyrene	<0.019
Benzo(b)fluoranthene	<0.017
Benzo(g,h,i)perylene	<0.016
Benzo(k)fluoranthene	<0.022
Chrysene	<0.018
Fluoranthene	<0.016
Indeno(1,2,3-cd)pyrene	<0.018
Phenanthrene	<0.018
Pyrene	<0.014
Total PCBs	<0.0023

TRENCH2-2SW-2.0 3/9/2015	
Analyte	mg/kg
Benzo(a)anthracene	<0.015
Benzo(a)pyrene	<0.019
Benzo(b)fluoranthene	<0.017
Benzo(g,h,i)perylene	<0.016
Benzo(k)fluoranthene	<0.022
Chrysene	<0.018
Fluoranthene	<0.016
Indeno(1,2,3-cd)pyrene	<0.018
Phenanthrene	<0.018
Pyrene	<0.014
Total PCBs	--

TRENCH2-1B-4.0 3/9/2015	
Analyte	mg/kg
Benzo(a)anthracene	<0.013
Benzo(a)pyrene	<0.018
Benzo(b)fluoranthene	<0.016
Benzo(g,h,i)perylene	<0.015
Benzo(k)fluoranthene	<0.02
Chrysene	<0.017
Fluoranthene	<0.015
Indeno(1,2,3-cd)pyrene	<0.017
Phenanthrene	<0.017
Pyrene	<0.013
Total PCBs	--

TRENCH2-5SW-1.2 3/10/2015	
Analyte	mg/kg
Benzo(a)anthracene	0.87
Benzo(a)pyrene	0.99
Benzo(b)fluoranthene	1.4
Benzo(g,h,i)perylene	1.2
Benzo(k)fluoranthene	0.48
Chrysene	1.1
Fluoranthene	2.6
Indeno(1,2,3-cd)pyrene	0.96
Phenanthrene	2
Pyrene	3.2
Total PCBs	--

TRENCH2-1SW-1.2 3/9/2015	
Analyte	mg/kg
Benzo(a)anthracene	0.026
Benzo(a)pyrene	0.032
Benzo(b)fluoranthene	0.052
Benzo(g,h,i)perylene	0.037
Benzo(k)fluoranthene	<0.02
Chrysene	0.038
Fluoranthene	0.061
Indeno(1,2,3-cd)pyrene	0.028
Phenanthrene	0.03
Pyrene	0.077
Total PCBs	--

TP-1-0.5 1/30/2015	
Analyte	mg/kg
Benzo(a)anthracene	<0.28
Benzo(a)pyrene	<0.28
Benzo(b)fluoranthene	<0.28
Benzo(g,h,i)perylene	<0.28
Benzo(k)fluoranthene	<0.28
Chrysene	<0.28
Fluoranthene	0.31
Indeno(1,2,3-cd)pyrene	<0.28
Phenanthrene	<0.28
Pyrene	0.37
Total PCBs	<0.056

TP-1-2.0 1/30/2015	
Analyte	mg/kg
Benzo(a)anthracene	<0.29
Benzo(a)pyrene	<0.29
Benzo(b)fluoranthene	<0.29
Benzo(g,h,i)perylene	<0.29
Benzo(k)fluoranthene	<0.29
Chrysene	<0.29
Fluoranthene	<0.29
Indeno(1,2,3-cd)pyrene	<0.29
Phenanthrene	<0.29
Pyrene	<0.29
Total PCBs	<0.058

TP-1-2.5 1/30/2015	
Analyte	mg/kg
Benzo(a)anthracene	<0.3
Benzo(a)pyrene	<0.3
Benzo(b)fluoranthene	<0.3
Benzo(g,h,i)perylene	<0.3
Benzo(k)fluoranthene	<0.3
Chrysene	<0.3
Fluoranthene	<0.3
Indeno(1,2,3-cd)pyrene	<0.3
Phenanthrene	<0.3
Pyrene	<0.3
Total PCBs	<0.06

TP-2-2.0 1/30/2015	
Analyte	mg/kg
Benzo(a)anthracene	<0.3
Benzo(a)pyrene	<0.3
Benzo(b)fluoranthene	<0.3
Benzo(g,h,i)perylene	<0.3
Benzo(k)fluoranthene	<0.3
Chrysene	<0.3
Fluoranthene	<0.3
Indeno(1,2,3-cd)pyrene	<0.3
Phenanthrene	<0.3
Pyrene	<0.3
Total PCBs	<0.06

TRENCH2-6B-4.0 3/11/2015	
Analyte	mg/kg
Benzo(a)anthracene	<0.013
Benzo(a)pyrene	<0.017
Benzo(b)fluoranthene	<0.016
Benzo(g,h,i)perylene	<0.015
Benzo(k)fluoranthene	<0.02
Chrysene	<0.016
Fluoranthene	<0.015
Indeno(1,2,3-cd)pyrene	<0.017
Phenanthrene	<0.017
Pyrene	<0.013
Total PCBs	--

TRENCH2-8SW-2.0 3/11/2015	
Analyte	mg/kg
Benzo(a)anthracene	0.04
Benzo(a)pyrene	0.054
Benzo(b)fluoranthene	0.075
Benzo(g,h,i)perylene	0.076
Benzo(k)fluoranthene	0.021
Chrysene	0.063
Fluoranthene	0.074
Indeno(1,2,3-cd)pyrene	0.05
Phenanthrene	0.055
Pyrene	0.082
Total PCBs	--

TRENCH2-3SW-1.2 3/9/2015	
Analyte	mg/kg
Benzo(a)anthracene	<0.013
Benzo(a)pyrene	<0.017
Benzo(b)fluoranthene	0.016
Benzo(g,h,i)perylene	0.015
Benzo(k)fluoranthene	<0.02
Chrysene	<0.016
Fluoranthene	0.025
Indeno(1,2,3-cd)pyrene	<0.017
Phenanthrene	<0.017
Pyrene	0.028
Total PCBs	--

TRENCH2-3B-2.4 3/9/2015	
Analyte	mg/kg
Benzo(a)anthracene	<0.014
Benzo(a)pyrene	<0.019
Benzo(b)fluoranthene	<0.017
Benzo(g,h,i)perylene	<0.016
Benzo(k)fluoranthene	<0.021
Chrysene	<0.017
Fluoranthene	<0.016
Indeno(1,2,3-cd)pyrene	<0.018
Phenanthrene	<0.018
Pyrene	<0.014
Total PCBs	--

TRENCH2-7SW-2.0 3/10/2015	
Analyte	mg/kg
Benzo(a)anthracene	0.2
Benzo(a)pyrene	0.23
Benzo(b)fluoranthene	0.3
Benzo(g,h,i)perylene	0.21
Benzo(k)fluoranthene	<0.22
Chrysene	0.3
Fluoranthene	0.43
Indeno(1,2,3-cd)pyrene	<0.18
Phenanthrene	0.42
Pyrene	0.57
Total PCBs	--

TRENCH2-5B-4.0 3/10/2015	
Analyte	mg/kg
Benzo(a)anthracene	<0.015
Benzo(a)pyrene	<0.02
Benzo(b)fluoranthene	<0.018
Benzo(g,h,i)perylene	<0.017
Benzo(k)fluoranthene	<0.023
Chrysene	<0.019
Fluoranthene	<0.017
Indeno(1,2,3-cd)pyrene	<0.019
Phenanthrene	<0.019
Pyrene	<0.015
Total PCBs	--

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Sample ID: TRENCH 2-2B-2.4
Trench 2 Excavation Area; Bottom Sample Number; Depth in ft bgs

TBL1-8SW-1.6
Table 1 Excavation Area; Sidewall Sample Number; Depth in ft bgs

Notes
- Sub-grade machinery pits have been filled.
- Exceedances of screening levels are presented in the applicable tables.

Figure 15b.
Semi-Volatile Organic Compound Concentrations in Soil, Construction Related Sampling
Former Allied Engineering & Production Corporation
2421 Blanding Avenue
Alameda, California

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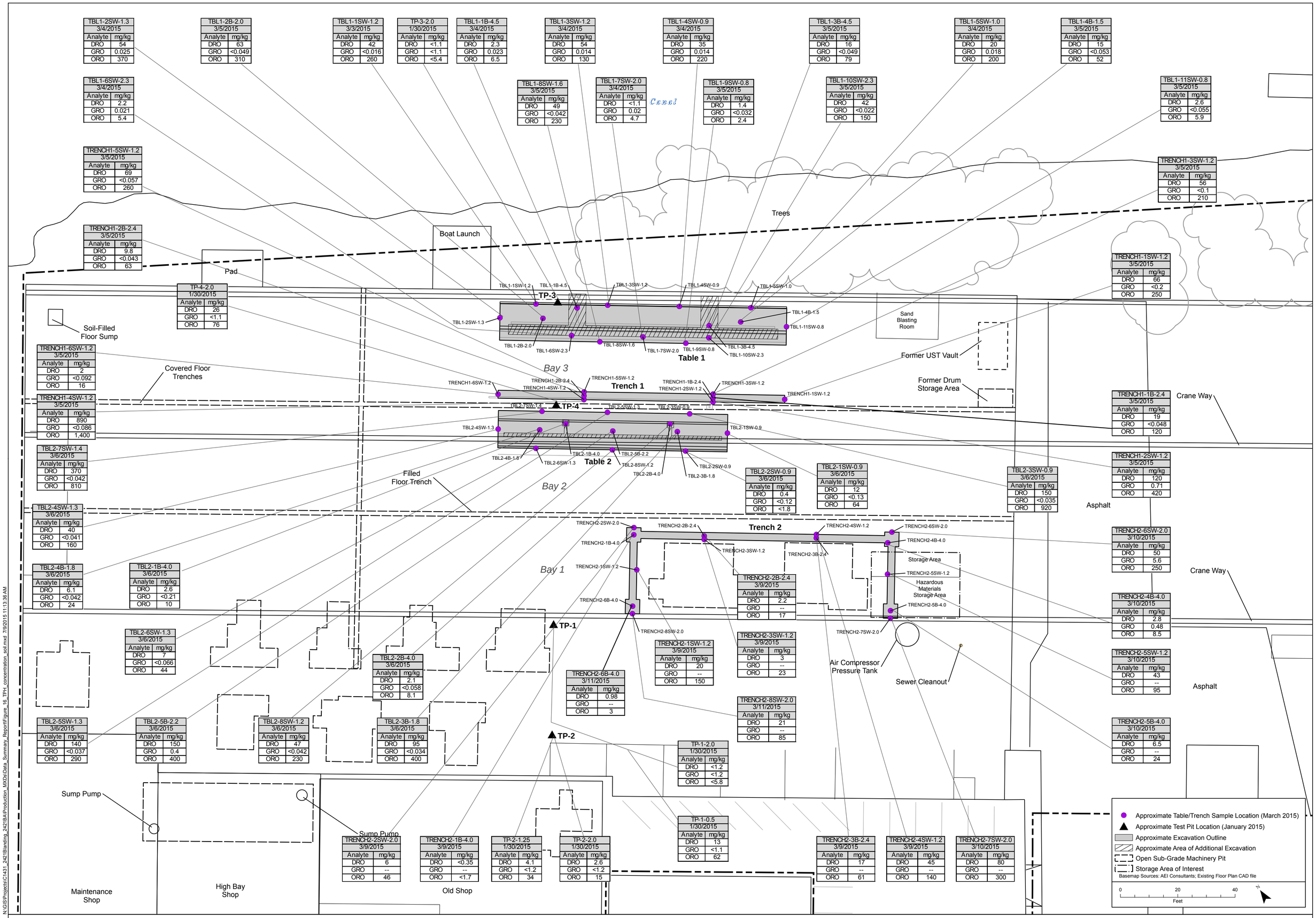

TBL1-2SW-1.3 3/4/2015	
Analyte	mg/kg
DRO	54
GRO	0.025
ORO	370

TBL1-2B-2.0 3/5/2015	
Analyte	mg/kg
DRO	63
GRO	<0.049
ORO	310

TBL1-1SW-1.2 3/3/2015	
Analyte	mg/kg
DRO	42
GRO	<0.016
ORO	260

TP-3-2.0 1/30/2015	
Analyte	mg/kg
DRO	<1.1
GRO	<1.1
ORO	<5.4

TBL1-1B-4.5 3/4/2015	
Analyte	mg/kg
DRO	2.3
GRO	0.023
ORO	6.5

TBL1-3SW-1.2 3/4/2015	
Analyte	mg/kg
DRO	54
GRO	0.014
ORO	130

TBL1-4SW-0.9 3/4/2015	
Analyte	mg/kg
DRO	35
GRO	0.014
ORO	220

TBL1-3B-4.5 3/5/2015	
Analyte	mg/kg
DRO	16
GRO	<0.049
ORO	79

TBL1-5SW-1.0 3/4/2015	
Analyte	mg/kg
DRO	20
GRO	0.018
ORO	200

TBL1-4B-1.5 3/5/2015	
Analyte	mg/kg
DRO	15
GRO	<0.053
ORO	52

TBL1-6SW-2.3 3/4/2015	
Analyte	mg/kg
DRO	2.2
GRO	0.021
ORO	5.4

TBL1-8SW-1.6 3/5/2015	
Analyte	mg/kg
DRO	49
GRO	<0.042
ORO	230

TBL1-7SW-2.0 3/4/2015	
Analyte	mg/kg
DRO	<1.1
GRO	0.02
ORO	4.7

TBL1-9SW-0.8 3/5/2015	
Analyte	mg/kg
DRO	1.4
GRO	<0.032
ORO	2.4

TBL1-10SW-2.3 3/5/2015	
Analyte	mg/kg
DRO	42
GRO	<0.022
ORO	150

TBL1-11SW-0.8 3/5/2015	
Analyte	mg/kg
DRO	2.6
GRO	<0.055
ORO	5.9

TRENCH1-5SW-1.2 3/5/2015	
Analyte	mg/kg
DRO	69
GRO	<0.057
ORO	260

TRENCH1-3SW-1.2 3/5/2015	
Analyte	mg/kg
DRO	56
GRO	<0.1
ORO	210

TRENCH1-2B-2.4 3/5/2015	
Analyte	mg/kg
DRO	9.8
GRO	<0.043
ORO	63

TRENCH1-1SW-1.2 3/5/2015	
Analyte	mg/kg
DRO	66
GRO	<0.2
ORO	250

TP-4-2.0 1/30/2015	
Analyte	mg/kg
DRO	26
GRO	<1.1
ORO	76

TRENCH1-6SW-1.2 3/5/2015	
Analyte	mg/kg
DRO	2
GRO	<0.092
ORO	16

TRENCH1-4SW-1.2 3/5/2015	
Analyte	mg/kg
DRO	890
GRO	<0.086
ORO	1,400

TRENCH1-1B-2.4 3/5/2015	
Analyte	mg/kg
DRO	19
GRO	<0.048
ORO	120

TBL2-7SW-1.4 3/6/2015	
Analyte	mg/kg
DRO	370
GRO	<0.042
ORO	810

TRENCH1-2SW-1.2 3/5/2015	
Analyte	mg/kg
DRO	120
GRO	0.71
ORO	420

TBL2-4SW-1.3 3/6/2015	
Analyte	mg/kg
DRO	40
GRO	<0.041
ORO	160

TBL2-2SW-0.9 3/6/2015	
Analyte	mg/kg
DRO	0.4
GRO	<0.12
ORO	<1.8

TBL2-1SW-0.9 3/6/2015	
Analyte	mg/kg
DRO	12
GRO	<0.13
ORO	64

TBL2-3SW-0.9 3/6/2015	
Analyte	mg/kg
DRO	150
GRO	<0.035
ORO	920

TRENCH2-6SW-2.0 3/10/2015	
Analyte	mg/kg
DRO	50
GRO	5.6
ORO	250

TBL2-4B-1.8 3/6/2015	
Analyte	mg/kg
DRO	6.1
GRO	<0.042
ORO	24

TBL2-1B-4.0 3/6/2015	
Analyte	mg/kg
DRO	2.6
GRO	<0.21
ORO	10

TRENCH2-2B-2.4 3/9/2015	
Analyte	mg/kg
DRO	2.2
GRO	--
ORO	17

TRENCH2-4B-4.0 3/10/2015	
Analyte	mg/kg
DRO	2.8
GRO	0.48
ORO	8.5

TBL2-6SW-1.3 3/6/2015	
Analyte	mg/kg
DRO	7
GRO	<0.066
ORO	44

TRENCH2-1SW-1.2 3/9/2015	
Analyte	mg/kg
DRO	20
GRO	--
ORO	150

TRENCH2-3SW-1.2 3/9/2015	
Analyte	mg/kg
DRO	3
GRO	--
ORO	23

TBL2-2B-4.0 3/6/2015	
Analyte	mg/kg
DRO	2.1
GRO	<0.058
ORO	8.1

TRENCH2-6B-4.0 3/11/2015	
Analyte	mg/kg
DRO	0.98
GRO	--
ORO	3

TRENCH2-5SW-1.2 3/10/2015	
Analyte	mg/kg
DRO	43
GRO	--
ORO	95

TRENCH2-8SW-2.0 3/11/2015	
Analyte	mg/kg
DRO	21
GRO	--
ORO	85

TBL2-5SW-1.3 3/6/2015	
Analyte	mg/kg
DRO	140
GRO	<0.037
ORO	290

TBL2-5B-2.2 3/6/2015	
Analyte	mg/kg
DRO	150
GRO	0.4
ORO	400

TBL2-8SW-1.2 3/6/2015	
Analyte	mg/kg
DRO	47
GRO	<0.042
ORO	230

TBL2-3B-1.8 3/6/2015	
Analyte	mg/kg
DRO	95
GRO	<0.034
ORO	400

TP-1-2.0 1/30/2015	
Analyte	mg/kg
DRO	<1.2
GRO	<1.2
ORO	<5.8

TRENCH2-5B-4.0 3/10/2015	
Analyte	mg/kg
DRO	6.5
GRO	--
ORO	24

TP-1-0.5 1/30/2015	
Analyte	mg/kg
DRO	13
GRO	<1.1
ORO	62

TRENCH2-2SW-2.0 3/9/2015	
Analyte	mg/kg
DRO	6
GRO	--
ORO	46

TRENCH2-1B-4.0 3/9/2015	
Analyte	mg/kg
DRO	<0.35
GRO	--
ORO	<1.7

TP-2-1.25 1/30/2015	
Analyte	mg/kg
DRO	4.1
GRO	<1.2
ORO	34

TP-2-2.0 1/30/2015	
Analyte	mg/kg
DRO	2.6
GRO	<1.2
ORO	15

TRENCH2-3B-2.4 3/9/2015	
Analyte	mg/kg
DRO	17
GRO	--
ORO	61

TRENCH2-4SW-1.2 3/9/2015	
Analyte	mg/kg
DRO	45
GRO	--
ORO	140

TRENCH2-7SW-2.0 3/10/2015	
Analyte	mg/kg
DRO	80
GRO	--
ORO	300

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Sample ID: TRENCH 2-2B-2.4
Trench 2 Excavation Area; Bottom Sample Number; Depth in ft bgs

TBL1-8SW-1.6
Table 1 Excavation Area; Sidewall Sample Number; Depth in ft bgs

Notes
- Sub-grade machinery pits have been filled.
- Exceedances of screening levels are presented in the applicable tables.

Figure 16.
Total Petroleum Hydrocarbon Concentrations in Soil, Construction Related Sampling
Former Allied Engineering & Production Corporation
2421 Blanding Avenue
Alameda, California

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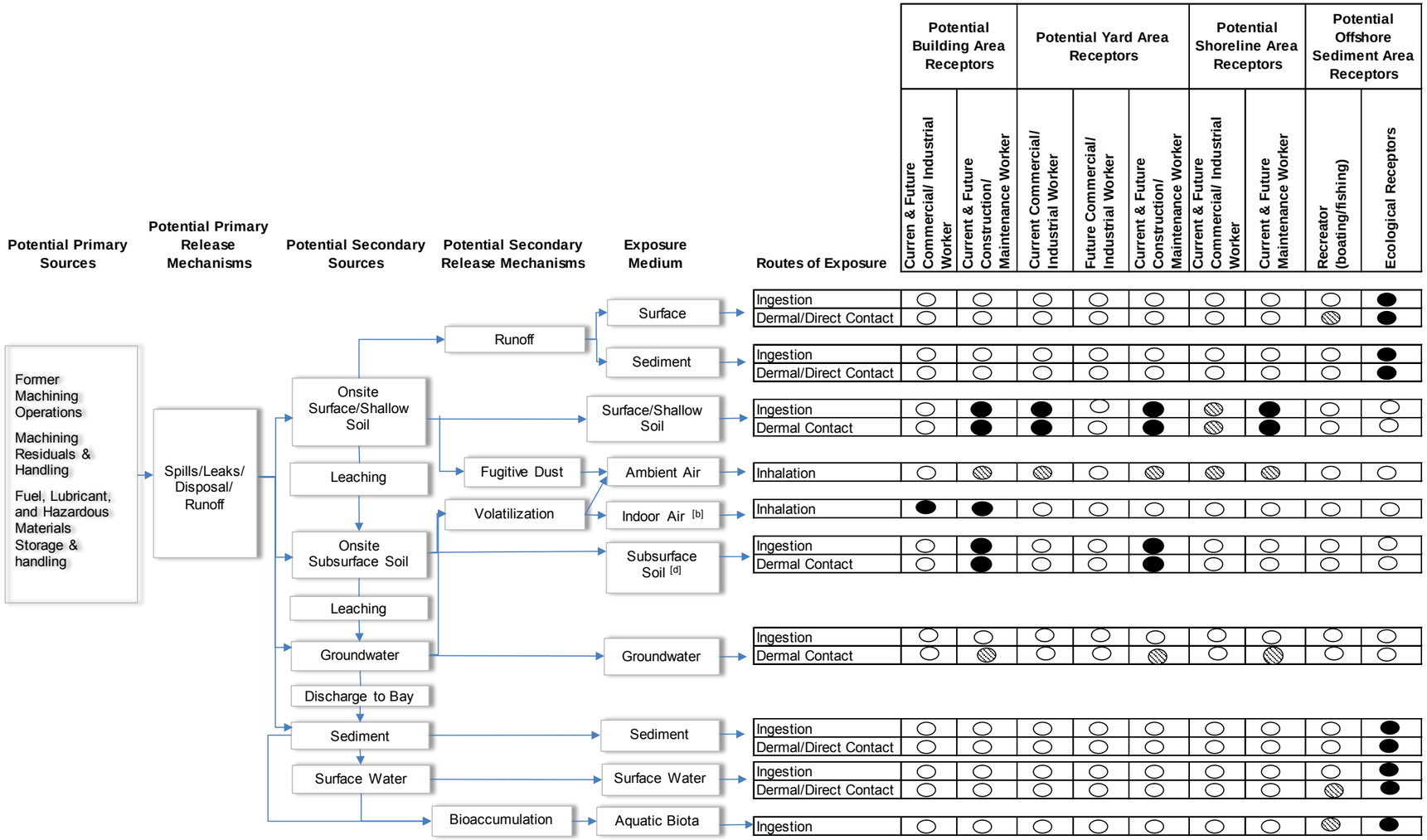

● Exposure pathway potentially complete
◍ Exposure pathway potentially complete, but insignificant
○ Exposure pathway incomplete

[a] Includes trench air for construction/maintenance workers.
[b] Pathway considered complete (i.e., receptors an be exposed to indoor air) but additional data is necessary to evaluate the significance of this pathway.
[c] Pathway considered incomplete; groundwater is not a drinking water source at this site.
[d] For the maintenance worker, exposures to subsurface soils is considered incomplete. These receptors will be exposed to only surface/shallow soils.

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Figure 17.
Preliminary Conceptual Site Model
Former Allied Engineering & Production Corporation
2421 Blanding Avenue, Alameda, California

TABLES

Table 1. High Tide Well Gauging on March 30, 2015

Location ID	Date	Time	Depth to Water (ft bTOC)	Tide Height (ft AMSL)	Time of Tide Height (LST)	Low Tide Height (ft AMSL)	Time of Low Tide (LST)	High Tide Height (ft AMSL)	Time of High Tide (LST)
MW-1	3/30/2015	1014	5.71	1.545	1012	-2.848	1448	2.444	0836
MW-2	3/30/2015	1016	4.83	1.417	1018	-2.848	1448	2.444	0836
MW-3	3/30/2015	1011	6.74	1.545	1012	-2.848	1448	2.444	0836
MW-4A	3/30/2015	1001	3.44	1.742	1000	-2.848	1448	2.444	0836
MW-4B	3/30/2015	1041	3.37	1.104	1042	-2.848	1448	2.444	0836
MW-5A	3/30/2015	957	5.44	1.742	1000	-2.848	1448	2.444	0836
MW-5B	3/30/2015	1038	5.33	1.122	1036	-2.848	1448	2.444	0836
MW-6A	3/30/2015	953	6.05	1.798	0954	-2.848	1448	2.444	0836
MW-6B	3/30/2015	1033	5.90	1.217	1030	-2.848	1448	2.444	0836

Notes:

High tide well gauging occurred on March 30, 2015 as close to the high tide as possible.

Depth to Water measured by Integral Consulting Inc. as feet below top of casing on various dates. See Date and Time column for specifics.

Tide Height, Low Tide Height, and High Tide Height taken from NOAA station ID 9414750, in Alameda, California.

Tide Height is given as feet above mean sea level at the interrval closest to the time depth to water was measured (listed in 6-minute increments).
Time of Tide Height as measured by field personnel in local standard time.
Low Tide Height and High Tide Height are given as the lowest low tide and highest high tide of the day listed, respectively.
For Time of Low Tide and Time of High Tide, observation intervals are every 6 minutes and the closest time interval was used when selecting observations.

Verified values used when available, preliminary values used otherwise.

ft bTOC = feet below top of casing
ft AMSL = feet above mean sea level
LST = local standard time

Table 2. Low Tide Well Gauging on March 30, 2015

Location ID	Date	Time	Depth to Water (ft bTOC)	Tide Height (ft AMSL)	Time of Tide Height (LST)	Low Tide Height (ft AMSL)	Time of Low Tide (LST)	High Tide Height (ft AMSL)	Time of High Tide (LST)
MW-1	3/30/2015	1554	8.15	-2.569	1554	-2.848	1448	2.444	0836
MW-2	3/30/2015	1558	6.45	-2.523	1600	-2.848	1448	2.444	0836
MW-3	3/30/2015	1550	10.03	-2.605	1548	-2.848	1448	2.444	0836
MW-4A	3/30/2015	1547	6.59	-2.605	1548	-2.848	1448	2.444	0836
MW-4B	3/30/2015	1615	6.09	-2.303	1618	-2.848	1448	2.444	0836
MW-5A	3/30/2015	1543	8.00	-2.667	1542	-2.848	1448	2.444	0836
MW-5B	3/30/2015	1610	8.09	-2.369	1612	-2.848	1448	2.444	0836
MW-6A	3/30/2015	1538	6.88	-2.736	1536	-2.848	1448	2.444	0836
MW-6B	3/30/2015	1604	8.36	-2.454	1606	-2.848	1448	2.444	0836

Notes:

Low tide well gauging occurred on March 30, 2015 as close to the low tide as possible.

Depth to Water measured by Integral Consulting Inc. as feet below top of casing on various dates. See Date and Time column for specifics.

Tide Height, Low Tide Height, and High Tide Height taken from NOAA station ID 9414750, in Alameda, California.

Tide Height is given as feet above mean sea level at the interrval closest to the time depth to water was measured (listed in 6-minute increments).

Time of Tide Height as measured by field personnel in local standard time.

Low Tide Height and High Tide Height are given as the lowest low tide and highest high tide of the day listed, respectively.

For Time of Low Tide and Time of High Tide, observation intervals are every 6 minutes and the closest time interval was used when selecting observations.

Verified values used when available, preliminary values used otherwise.

ft bTOC = feet below top of casing
ft AMSL = feet above mean sea level
LST = local standard time

Table 3. Other Well Gauging

Location ID	Date	Time	Depth to Water (ft bTOC)	Tide Height (ft AMSL)	Time of Tide Height (LST)	Low Tide Height (ft AMSL)	Time of Low Tide (LST)	High Tide Height (ft AMSL)	Time of High Tide (LST)
MW-1	1/30/2015	1125	5.90	0.623	1124	-3.435	1530	3.635	0830
MW-2	1/30/2015	1120	4.50	0.774	1118	-3.435	1530	3.635	0830
MW-3	1/30/2015	1130	7.50	0.482	1130	-3.435	1530	3.635	0830
MW-6A	2/23/2015	1330	7.50	0.538	1330	-2.621	0930	3.366	0306
MW-1	2/24/2015	1411	7.50	-0.348	1412	-2.923	1030	3.317	0354
MW-2	2/24/2015	1707	5.11	1.545	1706	-2.923	1030	3.317	0354
MW-3	2/24/2015	1105	10.00	-2.861	1106	-2.923	1030	3.317	0354
MW-5B	2/24/2015	1414	7.25	-0.348	1412	-2.923	1030	3.317	0354
MW-6B	2/24/2015	0842	7.50	-1.893	0842	-2.923	1030	3.317	0354
MW-6A	2/25/2015	1524	6.62	-0.436	1524	-2.949	1154	3.097	0454
MW-6B	2/25/2015	1412	7.98	-1.663	1412	-2.949	1154	3.097	0454
MW-5A	2/27/2015	1254	7.60	-2.697	1254	-0.3087	1400	2.776	0718
MW-5B	2/27/2015	0920	5.45	0.758	0922	-0.3087	1400	2.776	0718
MW-4B	3/17/2015	0940	3.31	3.051	0942	-3.862	1536	3.248	0900
MW-4A	3/18/2015	1023	3.40	3.222	1024	-3.894	1618	3.278	1012
MW-4A	3/19/2015	1549	5.64	-2.979	1548	-3.701	1706	3.343	1106
MW-4B	3/19/2015	1424	3.68	-1.092	1424	-3.701	1706	3.343	1106
MW-5A	3/19/2015	1244	4.92	1.936	1242	-3.701	1706	3.343	1106
MW-5B	3/19/2015	1110	5.22	3.34	1112	-3.701	1706	3.343	1106

Notes:

Miscellaneous well gauging occurred during various events including: well development, pre-investigation data collection, and well sampling events.

Depth to Water measured by Integral Consulting Inc. as feet below top of casing on various dates. See Date and Time column for specifics.

Tide Height, Low Tide Height, and High Tide Height taken from NOAA Station ID 9414750, in Alameda, California.

Tide Height is given as feet above mean sea level at the interrval closest to the time depth to water was measured (listed in 6-minute increments).

Time of Tide Height as measured by field personnel in local standard time.

Low Tide Height and High Tide Height are given as the lowest low tide and highest high tide of the day listed, respectively.

For Time of Low Tide and Time of High Tide, observation intervals are every 6 minutes and the closest time interval was used when selecting observations.

Verified values used when available, preliminary values used otherwise.

ft bTOC = feet below top of casing
ft AMSL = feet above mean sea level
LST = local standard time

Table 4. Monitoring Well Construction Details

Well No.	Date Installed	Total Boring Depth (ft bgs)	Total Well Depth (ft bgs)	Well Diameter (inches)	Latitude	Longitude	Ground Level Elevation	Top of Casing Elevation[b]	Screened Interval (ft bgs)	Screen Slot Size (inches)	Filter Pack Interval (ft bgs)	Bentonite Seal Interval (ft bgs)	Surface Seal Interval[c] (ft bgs)
Upper Zone Wells													
MW1[a]	19-Apr-10	20	20.13	2	37.7704382	-122.2352971	8.68	8.27	5.0 - 20.0	0.01	4.5 - 20.0	4.0 - 4.5	0.0 - 4.5
MW2[a]	19-Apr-10	20	18.90	2	37.7703516	-122.2352854	7.67	7.24	5.0 - 20.0	0.01	4.5 - 20.0	4.0 - 4.5	0.0 - 4.5
MW3[a]	19-Apr-10	20	20.02	2	37.7705006	-122.2352103	9.53	9.33	5.0 - 20.0	0.01	4.5 - 20.0	4.0 - 4.5	0.0 - 4.5
MW-4A[b]	11-Feb-15	50	22.69	2	37.7706206	-122.2354879	9.01	9.27	12.83 - 22.25	0.01	10.0 - 22.69	8.0 - 10.0 22.69 - 50.0	0.0 - 8.0
MW-5A[b]	18-Feb-15	24.4	24.4	2	37.7708405	-122.2359405	10.84	11.17	14.54 - 23.96	0.01	12.5 - 24.4	10.5 - 12.5	0.0 - 10.5
MW-6A[b]	17-Feb-15	50	24.64	2	37.7704324	-122.2356818	11.67	11.69	14.78 - 24.2	0.01	12.5 - 24.64	10.5 - 12.5	0.0 - 10.5
Lower Zone Wells													
MW-4B[b]	13-Feb-15	36.78	36.78	2	37.7706268	-122.2355016	8.93	9.19	26.92 - 36.34	0.01	25.0 - 36.78	23.0 - 25.0	0.0 - 25
MW-5B[b]	17-Feb-15	50	43.29	2	37.7708459	-122.2359553	11.08	11.27	30.55 - 42.85	0.01	29.0 - 43.5	27.0 - 29.0 43.5 - 50.0	0.0 - 27.0
MW-6B[b]	13-Feb-15	50	33.17	2	37.7704253	-122.2356682	11.65	11.68	28.06 - 32.73	0.01	27.0 - 33.3	25.0 - 27.0 33.3 - 45.0	0.0 - 25.0

Notes:
ft bgs = feet below ground surface
NAD 1983 = North American Datum of 1983
NAVD 88 = feet above North American Vertical Datum of 1988

[a] Construction details for wells MW-1, MW-2, and MW-3 were obtained from *Report of Monitoring Well Installation and May 2010 Sampling, Allied Engineeering Co., 2421 Blanding Avenue, Alameda, CA, Fuel Leak Case No. R00002601,* Geo-Logic 2010. These wells were installed under the supervision of Geo-Logic. Latitude, longitude, and elevation data are in NAD 1983 and were collected by Virgil Chavez Land Surveying.

[b] Monitoring wells MW-4A, MW-4B, MW-5A, MW-5B, MW-6A, and MW-6B were installed under the supervision of Integral Consulting Inc. These wells were surveyed by Kier and Wright on February 25, 2015; Latitude, longitude, and elevations were surveyed relative to NAVD 88.

[c] Surface seal interval consists of the concrete surface completion and a neat cement sanitary seal, if applicable.

Table 5. Preliminary Screening Levels for Analytes in Soil and Groundwater

Detected Analyte	Selected Health Based Soil Screening Level (mg/kg)[1]		Groundwater Screening Levels (µg/L)[2]	
Metals				
Antimony	4.1E+02		5.0E+02	
Arsenic	1.1E+01	3	3.6E+01	
Barium	1.9E+05		NA	
Beryllium	2.0E+03		5.3E-01	
Cadmium	1.0E+03	4	9.3E+00	
Chromium	1.5E+06	5	1.0E+03	5
Chromium, Hexavalent	1.1E+02	4	ND	
Cobalt	3.0E+02		NA	
Copper	4.1E+04		6.0E+00	6
Lead	3.2E+02		8.1E+00	
Mercury	8.8E+01		2.5E-02	
Molybdenum	5.1E+03		NA	
Nickel	1.9E+04	4	8.2E+00	
Selenium	5.1E+03		5.0E+00	7
Silver	5.1E+03		1.9E-01	
Thallium	1.0E+01		4.0E+00	
Vanadium	5.1E+03		NA	
Zinc	3.1E+05		8.1E+01	
Total Petroleum Hydrocarbons				
Gasoline Range Organics (GRO)	4.0E+03		3.7E+03	
Diesel Range Organics (DRO)	1.1E+03		6.4E+02	
Oil Range Organics (ORO)	1.0E+05		6.4E+02	
Polychlorinated Biphenyls				
Total PCBs	7.4E-01		ND	
Volatile Organic Compounds				
Acetone	5.9E+05		NA	
Azobenzene	ND		NA	
Benzene	3.7E+00		3.5E+02	
Bromomethane	ND		3.2E+03	
2-Butanone	2.5E+05		NA	
n-Butylbenzene	NA		NA	
sec-Butylbenzene	NA		NA	
Carbon disulfide	NA		NA	
Chloroform	ND		3.2E+03	
2-Chloronaphthalene	ND		NA	
1,2-Dichlorobenzene	ND		6.5E+01	
1,3-Dichlorobenzene	ND		6.5E+01	
1,1-Dichloroethene	<5%FOD		2.2E+04	
1,4-Dichlorobenzene	1.4E+01	c	6.5E+01	
cis-1,2-Dichloroethene	8.4E+01		2.2E+04	
trans-1,2-Dichloroethene	5.9E+02		2.2E+04	
2,4-Dinitrotoluene	ND		1.9E+02	
2,6-Dinitrotoluene	ND		NA	
Ethylbenzene	2.4E+01		4.3E+01	
Isopropylbenzene	NA		NA	
4-Isopropyltoluene	NA		NA	

Table 5. Preliminary Screening Levels for Analytes in Soil and Groundwater

Detected Analyte	**Selected Health Based Soil Screening Level (mg/kg)[1]**		**Groundwater Screening Levels (µg/L)[2]**	
Methylene chloride	4.9E+01		<5%FOD	
4-Methyl-2-pentanone	2.4E+05		NA	
Methyl-tert-butyl ether (MTBE)	ND		8.0E+03	
Nitrobenzene	ND		NA	
n-Propylbenzene	NA		NA	
tert-Butyl alcohol (TBA)	ND		NA	
Tetrachloroethene (PCE)	2.6E+00		2.3E+02	
Toluene	4.9E+03		2.5E+03	
1,2,4-Trichlorobenzene	ND		6.5E+01	
Trichloroethene (TCE)	8.3E+00		2.2E+03	
1,2,4-Trimethylbenzene	NA		NA	
1,3,5-Trimethylbenzene	NA		NA	
Vinyl chloride	1.6E-01		7.8E+02	
Xylenes	2.6E+03		1.0E+02	
Semi-Volatile Organic Compounds				
Acenaphthene	<5%FOD		4.0E+01	
Acenaphthylene	NA		3.0E+01	
Anthracene	1.7E+05		7.3E-01	
Benzo(a)anthracene	1.3E+00		2.7E-02	
Benzo(a)pyrene	1.3E-01		1.4E-02	
Benzo(b)fluoranthene	1.3E+00		5.6E-02	
Benzo(g,h,i)perylene	NA		1.0E-01	
Benzo(k)fluoranthene	1.3E+00		3.7E+00	
Benzyl butyl phthalate	ND		NA	
bis-(2-Chloroethoxy)methane	ND		NA	
bis-(2-Chloroethyl)ether	ND		1.2E+01	
bis(2-Chloroisopropyl)ether	ND		NA	
bis-(2-Ethylhexyl)phthalate	5.7E+02		4.8E+02	8
4-Bromophenyl phenyl ether	ND		NA	
4-Chloroaniline	ND		5.0E+00	
4-Chloro-3-methylphenol	NA		NA	
4-Chlorophenyl phenyl ether	ND		NA	
Chrysene	1.3E+01		3.5E-01	
Dibenzo(a,h)anthracene	3.8E-01		7.5E+00	
Dibenzofuran	<5%FOD		NA	
3,3'-Dichlorobenzidine	ND		2.5E+02	
Diethyl phthalate	ND		1.7E+00	
Dimethyl phthalate	ND		1.7E+00	
Di-n-butyl phthalate	NA		NA	
Fluoranthene	2.2E+04		8.0E+00	
Fluorene	2.2E+04		3.0E+01	
Hexachlorobenzene	ND		6.5E+01	
Hexachlorobutadiene	ND		9.3E-01	
Hexachloroethane	ND		5.4E+01	
Indeno(1,2,3-cd)pyrene	1.3E+00		5.6E-02	
Isophorone	ND		NA	
2-Methylnaphthalene	<5%FOD		3.0E+01	

Table 5. Preliminary Screening Levels for Analytes in Soil and Groundwater

Detected Analyte	**Selected Health Based Soil Screening Level (mg/kg)[1]**		**Groundwater Screening Levels (µg/L)[2]**	
Naphthalene	1.5E+01		6.2E+01	
2-Nitroaniline	ND		NA	
3-Nitroaniline	ND		NA	
4-Nitroaniline	ND		NA	
n-Nitrosodimethylamine	ND		NA	
n-Nitrosodi-n-propylamine	ND		NA	
n-Nitrosodiphenylamine	NA	c	NA	
Phenanthrene	NA		4.6E+00	
Pyrene	3.3E+04		2.0E+00	

Notes:

c = analyte was detected in less than 5 percent of the samples, but is carcnogenic; screening level reported here.

mg/kg = milligrams per kilogram

NA = not available

ND = not detected

µg/L = micrograms per liter

<5%FOD = analyte was detected in less than 5 percent of the samples; screening levels not reported here.

[1] Soil screening levels based on the lower of the cancer and noncancer environmental screening level (ESL) for direct exposures to soil for a commercial/industrial scenario (Table K-2; SFRWQCB 2013).

[2] Groundwater screening levels are based on surface water screening levels for the protection of marine aquatic life (Table F-4a; SFRWQCB 2013), except where noted.

[3] Regional background value for arsenic (Duvergé 2011)

[4] Likely to change when ESLs are updated this year (based on personal communications with Ross Steenson of the SFRWQCB on June 25, 2015)

[5] Based on chromium III.

[6] Based on the San Francisco Bay site-specific objective for copper (SFRWQCB 2007)

[7] The freshwater selenium criteria were promulgated for all San Francisco Bay/Delta waters in the National Toxics Rule (NTR). The NTR criteria specifically apply to San Francisco Bay upstream to and including Suisun Bay and Sacramento-San Joaquin Delta (USEPA 2000)

[8] Based on the acute toxicity value (LC50) from Oros and David (2002).

References:

Oros, D. and N. David. 2002. Identification and Evaluation of Unidentified Organic Contaminants in the San Francisco Estuary. San Francisco Estuary Institute.

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SFRWQCB. 2007. Copper Site-Specific Objectives in San Francisco Bay. Proposed Basin Plan Amendment and Draft Staff Report. California Regional Water Quality Control Board, San Francisco Bay Region. June 6. file:///C:/Projects/Library/RWQCB%20ESLs/Cu%20SSO.pdf

SFRWQCB. 2013. Screening for environmental concerns at sites with contaminated soil and groundwater, Interim Final. Regional Water Board, San Francisco, CA. December.

USEPA. 2000. California Toxic Rule Water Quality Standards. Federal Register. 40 CFR Part 131. Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants of the State of California; Rule. May 18.

Table 6. Soil Sample Analytical Results—Total Petroleum Hydrocarbons

Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	Diesel Range Organics (mg/kg)	Gasoline Range Organics (mg/kg)	Oil Range Organics (mg/kg)
				Screening Level:	1128	3962	104663
UST Removal 2004 Geo-Logic	COMP S1-A-D	--	--	07-Jan-04	--	560	--
	DISP(3.5')	--	--	07-Jan-04	--	1700	--
	P1(3.5')	--	--	07-Jan-04	--	68	--
	TPN(8')	--	--	07-Jan-04	--	320	--
	TWP(7.25)	--	--	07-Jan-04	--	6400	--
Soil and Groundwater Investigation 2007 Geo-Logic	B1d4.5	4.5	4.5	27-Jun-07	--	1 U	--
	B1d7.5	7.5	7.5	27-Jun-07	--	400	--
	B1d12.5	12.5	12.5	27-Jun-07	--	1 U	--
	B1d14.5	14.5	14.5	27-Jun-07	--	1 U	--
	B3d4.5	4.5	4.5	27-Jun-07	--	1 U	--
	B3d7.5	7.5	7.5	27-Jun-07	--	1 U	--
	B3d12.5	12.5	12.5	27-Jun-07	--	500	--
	B3d14.5	14.5	14.5	27-Jun-07	--	1 U	--
	B5d4.5	4.5	4.5	27-Jun-07	--	1100	--
	B5d7.5	7.5	7.5	27-Jun-07	--	350	--
	B5d11.5	11.5	11.5	27-Jun-07	--	1 U	--
	B5d14.5	14.5	14.5	27-Jun-07	--	1 U	--
	B6d5	5.0	5.0	27-Jun-07	--	7.7	--
	B6d7.5	7.5	7.5	27-Jun-07	--	410	--
	B6d14.5	14.5	14.5	27-Jun-07	--	1 U	--
	B7Bd4	4.0	4.0	27-Jun-07	--	--	--
	B7Cd4.5	4.5	4.5	27-Jun-07	--	1 U	--
	B7Cd7.5	7.5	7.5	27-Jun-07	--	1 U	--
	B7Cd12.5	12.5	12.5	27-Jun-07	--	1 U	--
	B7Cd14.5	14.5	14.5	27-Jun-07	--	1 U	--
	B8d4.5	4.5	4.5	27-Jun-07	--	1 U	--
	B8d7.5	7.5	7.5	27-Jun-07	--	370	--
	B8d12.5	12.5	12.5	27-Jun-07	--	1 U	--
	B8d14.5	14.5	14.5	27-Jun-07	--	1 U	--
Limited Phase II Investigation Allied Engineering Property 2014 Geologica	A-1-4'	4.0	4.0	14-Jul-14	1.2	--	12 U
	A-3-4'	4.0	4.0	14-Jul-14	20	--	12 U
	A-4-4'	4.0	4.0	14-Jul-14	0.87 U	--	12 U
	A-6-4'	4.0	4.0	14-Jul-14	2.3	--	11 U
	A-7-4'	4.0	4.0	14-Jul-14	43	--	120
	A-8-4'	4.0	4.0	14-Jul-14	0.92 U	--	12 U
	A-9-4'	4.0	4.0	14-Jul-14	0.84 U	--	11 U
	TP-1-8.5'	8.5	8.5	10-Jul-14	4.6	--	11 U

Table 6. Soil Sample Analytical Results—Total Petroleum Hydrocarbons

Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	Diesel Range Organics (mg/kg)	Gasoline Range Organics (mg/kg)	Oil Range Organics (mg/kg)
Subsurface Investigation 2015 AEI	SS-1-S	0.0	1.0	12-Jan-15	--	--	--
	SS-1-1	1.0	1.0	12-Jan-15	--	--	--
	SS-2-S	0.0	1.0	12-Jan-15	--	--	--
	SS-2-1	1.0	1.0	12-Jan-15	--	--	--
	SS-3-S	0.0	1.0	12-Jan-15	--	--	--
	SS-3-1	1.0	1.0	12-Jan-15	--	--	--
	SS-4-S	0.0	1.0	12-Jan-15	--	--	--
	SS-4-1	1.0	1.0	12-Jan-15	--	--	--
	SS-5-S	0.0	1.0	12-Jan-15	--	--	--
	SS-5-1	1.0	1.0	12-Jan-15	--	--	--
	SS-6-S	0.0	1.0	12-Jan-15	--	--	--
	SS-7-S	0.0	1.0	12-Jan-15	--	--	--
	SS-7-1	1.0	1.0	12-Jan-15	--	--	--
	SB-1-3.5	3.5	3.5	12-Jan-15	--	--	--
	SB-2-3.5	3.5	3.5	12-Jan-15	--	--	--
	SB-3-2	2.0	2.0	12-Jan-15	--	--	--
	SB-4-5'	5.0	5.0	12-Jan-15	--	--	--
	SB-5-5'	5.0	5.0	12-Jan-15	--	--	--
	SB-6-2'	2.0	2.0	12-Jan-15	--	--	--
	SB-7-2'	2.0	2.0	12-Jan-15	--	--	--
	SB-8-2'	2.0	2.0	12-Jan-15	--	--	--
	SB-9-2'	2.0	2.0	12-Jan-15	--	--	--
	SB-10-2'	2.0	2.0	12-Jan-15	--	--	--
Excavation Sampling 2015 Integral	TBL1-1SW-1.2	1.2	1.2	03-Mar-15	42 J	0.016 U	260
	TBL1-1B-4.5	4.5	4.5	04-Mar-15	2.3 J	0.023 J	6.5
	TBL1-2SW-1.3	1.3	1.3	04-Mar-15	54 J	0.025 J	370
	TBL1-2B-2.0	2.0	2.0	05-Mar-15	63 J	0.049 U	310
	TBL1-3SW-1.2	1.2	1.2	04-Mar-15	54 J	0.014 J	130
	TBL1-3B-4.5	4.5	4.5	05-Mar-15	16 J	0.049 U	79
	TBL1-4SW-0.9	0.9	0.9	04-Mar-15	35 J	0.014 J	220
	TBL1-4B-1.5	1.5	1.5	05-Mar-15	15 J	0.053 U	52
	TBL1-5SW-1.0	1.0	1.0	04-Mar-15	20 J	0.018 J	200
	TBL1-6SW-2.3	2.3	2.3	04-Mar-15	2.2 J	0.021 J	5.4 J
	TBL1-7SW-2.0	2.0	2.0	04-Mar-15	1.1 U	0.02 J	4.7 J
	TBL1-8SW-1.6	1.6	1.6	05-Mar-15	49 J	0.042 U	230
	TBL1-9SW-0.8	0.8	0.8	05-Mar-15	1.4 J	0.032 U	2.4 J
	TBL1-10SW-2.3	2.3	2.3	05-Mar-15	42 J	0.022 U	150
	TBL1-11SW-0.8	0.8	0.8	05-Mar-15	2.6 J	0.055 U	5.9

Table 6. Soil Sample Analytical Results—Total Petroleum Hydrocarbons

Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	Diesel Range Organics (mg/kg)		Gasoline Range Organics (mg/kg)		Oil Range Organics (mg/kg)	
	TBL2-1SW-0.9	0.9	0.9	06-Mar-15	12	J	0.13	U	64	
	TBL2-1B-4.0	4.0	4.0	06-Mar-15	2.6	J	0.21	U	10	
	TBL2-2SW-0.9	0.9	0.9	06-Mar-15	0.4	J	0.12	U	1.8	U
	TBL2-2B-4.0	4.0	4.0	06-Mar-15	2.1	J	0.058	U	8.1	
	TBL2-3SW-0.9	0.9	0.9	06-Mar-15	150	J	0.035	U	920	
	TBL2-3B-1.8	1.8	1.8	06-Mar-15	95	J	0.034	U	400	
	TBL2-4SW-1.3	1.3	1.3	06-Mar-15	40		0.041	U	160	
	TBL2-4B-1.8	1.8	1.8	06-Mar-15	6.1	J	0.042	U	24	
	TBL2-5SW-1.3	1.3	1.3	06-Mar-15	140		0.037	U	290	
	TBL2-5B-2.2	2.2	2.2	06-Mar-15	150	J	0.4		400	
	TBL2-6SW-1.3	1.3	1.3	06-Mar-15	7	J	0.066	U	44	
	TBL2-7SW-1.4	1.4	1.4	06-Mar-15	370	J	0.042	U	810	
	TBL2-8SW-1.2	1.2	1.2	06-Mar-15	47	J	0.042	U	230	
	TP-1-0.5	0.5	0.5	30-Jan-15	13		1.1	U	62	
	TP-1-2.0	2.0	2.0	30-Jan-15	1.2	U	1.2	U	5.8	U
	TP-2-1.25	1.3	1.3	30-Jan-15	4.1		1.2	U	34	
	TP-2-2.0	2.0	2.0	30-Jan-15	2.6		1.2	U	15	
	TP-3-2.0	2.0	2.0	30-Jan-15	1.1	U	1.1	U	5.4	U
	TP-4-2.0	2.0	2.0	30-Jan-15	26		1.1	U	76	
	TRENCH1-1SW-1.2	1.2	1.2	05-Mar-15	66	J	0.2	U	250	
	TRENCH1-1B-2.4	2.4	2.4	05-Mar-15	19	J	0.048	U	120	
	TRENCH1-2SW-1.2	1.2	1.2	05-Mar-15	120	J	0.71	J	420	
	TRENCH1-2B-2.4	2.4	2.4	05-Mar-15	9.8	J	0.043	U	63	
	TRENCH1-3SW-1.2	1.2	1.2	05-Mar-15	56	J	0.1	U	210	
	TRENCH1-4SW-1.2	1.2	1.2	05-Mar-15	890	J	0.086	U	1400	
	TRENCH1-5SW-1.2	1.2	1.2	05-Mar-15	69	J	0.057	U	260	
	TRENCH1-6SW-1.2	1.2	1.2	05-Mar-15	2	J	0.092	U	16	
	TRENCH2-1SW-1.2	1.2	1.2	09-Mar-15	20	J	--		150	
	TRENCH2-1B-4.0	4.0	4.0	09-Mar-15	0.35	U	--		1.7	U
	TRENCH2-2SW-2.0	2.0	2.0	09-Mar-15	6	J	--		46	
	TRENCH2-2B-2.4	2.4	2.4	09-Mar-15	2.2	J	--		17	
	TRENCH2-3SW-1.2	1.2	1.2	09-Mar-15	3	J	--		23	
	TRENCH2-3B-2.4	2.4	2.4	09-Mar-15	17		--		61	
	TRENCH2-4SW-1.2	1.2	1.2	09-Mar-15	45		--		140	
	TRENCH2-4B-4.0	4.0	4.0	10-Mar-15	2.8	J	0.48	J	8.5	
	TRENCH2-5SW-1.2	1.2	1.2	10-Mar-15	43	J	--		95	
	TRENCH2-5B-4.0	4.0	4.0	10-Mar-15	6.5	J	--		24	
	TRENCH2-6SW-2.0	2.0	2.0	10-Mar-15	50	J	5.6	J	250	

Table 6. Soil Sample Analytical Results—Total Petroleum Hydrocarbons

Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	Diesel Range Organics (mg/kg)		Gasoline Range Organics (mg/kg)		Oil Range Organics (mg/kg)	
	TRENCH2-6B-4.0	4.0	4.0	11-Mar-15	0.98	J	--		3	J
	TRENCH2-7SW-2.0	2.0	2.0	10-Mar-15	80	J	--		300	
	TRENCH2-8SW-2.0	2.0	2.0	11-Mar-15	21	J	--		85	
	SS-CLEAN RM	--	--	11-Mar-15	7.8	J	0.43	U	38	
Soil and Groundwater Investigation 2015 Integral	MW-4-0.5-1.5	0.5	1.5	11-Feb-15	14	J	0.8	J	140	
	MW-6-2.5-3.5	2.5	3.5	12-Feb-15	1.8	J	0.038	U	12	
	SB-11-2.0-2.5	2.0	2.5	19-Feb-15	23	J	0.016	U	130	
	SB-11-9.5-10.0	9.5	10.0	19-Feb-15	0.81	J	0.033	U	1.8	U
	SB-12-2.5-3.5	2.5	3.5	13-Feb-15	23	J	0.54	U	110	
	SB-12-11.0-12.0	11.0	12.0	13-Feb-15	15	J	0.11	U	31	
	SB-13-3.0-4.0	3.0	4.0	13-Feb-15	1900	J	15	J	3400	
	SB-13-12.0-13.0	12.0	13.0	13-Feb-15	760	J	12	J	2600	
	SB-14-4.0-4.5	4.0	4.5	18-Feb-15	360	J	0.038	U	980	
	SB-14-9.5-10.0	9.5	10.0	18-Feb-15	7.1	J	0.042	U	18	
	SB-15-5.0-5.5	5.0	5.5	18-Feb-15	2300	J	6.4	J	3200	
	SB-15-9.5-10.0	9.5	10.0	18-Feb-15	35	J	0.085	U	32	
	SB-16-3.0-3.5	3.0	3.5	18-Feb-15	310	J	1.1	J	1000	
	SB-16-9.5-10.0	9.5	10.0	18-Feb-15	1.8	J	0.073	U	1.8	U
	SB-17-5.0-6.0	5.0	6.0	18-Feb-15	1600	J	0.49	J	7300	
	SB-17-9.0-10.0	9.0	10.0	18-Feb-15	18	J	0.057	U	88	
	SB-18-5.0-6.0	5.0	6.0	19-Feb-15	890	J	0.32	J	4800	
	SB-18-9.0-10.0	9.0	10.0	19-Feb-15	200	J	0.015	U	970	
	SB-19-5.5-6.5	5.5	6.5	12-Feb-15	1400	J	0.94	J	15000	
	SB-19-8.5-9.5	8.5	9.5	12-Feb-15	940	J	0.045	U	5300	
	SB-20-6.0-7.0	6.0	7.0	13-Feb-15	440	J	0.96	J	860	
	SB-20-10.5-11.5	10.5	11.5	13-Feb-15	0.36	J	0.088	U	1.7	U
	SB-21-1.0-2.0	1.0	2.0	11-Feb-15	4.3	J	--		39	
	SB-22-4.0-5.0	4.0	5.0	13-Feb-15	4500	J	1	U	5900	
	SB-22-11.0-12.0	11.0	12.0	13-Feb-15	890	J	0.68	J	1300	
	SB-24-3.2-3.8	3.2	3.8	18-Feb-15	4500		58	J	9000	
	SB-24-7.0-7.3	7.0	7.3	18-Feb-15	0.49	J	16	J	1.8	U

Notes:

Detected concentrations exceeding screening levels are highlighted in yellow; analytes detected in less than 5 percent of the samples are not screened unless carcinogenic (see Table 5).

Gasoline-range purgeable total petroleum hydrocarbons were analyzed using EPA Methods SW8021F / CATPH.

Diesel-range and oil-range extractable total petroleum hydrocarbons were analyzed using EPA Method SW8015B / CATPH.

Soil screening levels based on the lower of the cancer and noncancer environmental screening level (ESL) for direct exposures to soil for a commercial/industrial scenario (Table K-2; SFRWQCB 2013).

Table 6. Soil Sample Analytical Results—Total Petroleum Hydrocarbons

Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	Diesel Range Organics (mg/kg)	Gasoline Range Organics (mg/kg)	Oil Range Organics (mg/kg)

-- = not applicable (not analyzed or information not provided)
ft bgs = feet below ground surface
mg/kg = milligrams per kilogram
UST = underground storage tank

Qualifiers:

J = Estimated. The analyte was detected and positively identified. The associated numerical value is an estimated value.
U = The analyte was analyzed for, but was not detected.

Table 7. Soil Sample Analytical Results—Polychlorinated Biphenyls

Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	Aroclor 1016 (mg/kg)	Aroclor 1221 (mg/kg)	Aroclor 1232 (mg/kg)	Aroclor 1242 (mg/kg)	Aroclor 1248 (mg/kg)	Aroclor 1254 (mg/kg)	Aroclor 1260 (mg/kg)	Sum of Aroclors [a] (mg/kg)
				Screening Level:	NA	NA	NA	NA	NA	NA	NA	0.744
UST Removal 2004 Geo-Logic	COMP S1-A-D	--	--	07-Jan-04	--	--	--	--	--	--	--	--
	DISP(3.5')	--	--	07-Jan-04	--	--	--	--	--	--	--	--
	P1(3.5')	--	--	07-Jan-04	--	--	--	--	--	--	--	--
	TPN(8')	--	--	07-Jan-04	--	--	--	--	--	--	--	--
	TWP(7.25)	--	--	07-Jan-04	--	--	--	--	--	--	--	--
Soil and Groundwater Investigation 2007 Geo-Logic	B1d4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--	--
	B1d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--
	B1d12.5	12.5	12.5	27-Jun-07	--	--	--	--	--	--	--	--
	B1d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--
	B3d4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--	--
	B3d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--
	B3d12.5	12.5	12.5	27-Jun-07	--	--	--	--	--	--	--	--
	B3d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--
	B5d4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--	--
	B5d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--
	B5d11.5	11.5	11.5	27-Jun-07	--	--	--	--	--	--	--	--
	B5d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--
	B6d5	5.0	5.0	27-Jun-07	--	--	--	--	--	--	--	--
	B6d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--
	B6d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--
	B7Bd4	4.0	4.0	27-Jun-07	--	--	--	--	--	--	--	--
	B7Cd4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--	--
	B7Cd7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--
	B7Cd12.5	12.5	12.5	27-Jun-07	--	--	--	--	--	--	--	--
	B7Cd14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--
	B8d4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--	--
	B8d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--
	B8d12.5	12.5	12.5	27-Jun-07	--	--	--	--	--	--	--	--
	B8d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--
Limited Phase II Investigation Allied Engineering Property 2014 Geologica	A-1-4'	4.0	4.0	14-Jul-14	--	--	--	--	--	--	--	--
	A-3-4'	4.0	4.0	14-Jul-14	--	--	--	--	--	--	--	--
	A-4-4'	4.0	4.0	14-Jul-14	--	--	--	--	--	--	--	--
	A-6-4'	4.0	4.0	14-Jul-14	--	--	--	--	--	--	--	--
	A-7-4'	4.0	4.0	14-Jul-14	--	--	--	--	--	--	--	--
	A-8-4'	4.0	4.0	14-Jul-14	--	--	--	--	--	--	--	--
	A-9-4'	4.0	4.0	14-Jul-14	--	--	--	--	--	--	--	--
	TP-1-8.5'	8.5	8.5	10-Jul-14	--	--	--	--	--	--	--	--
Subsurface Investigation 2015 AEI	SS-1-S	0.0	1.0	12-Jan-15	0.25 UJ	0.25 UJ	0.25 UJ	0.25 UJ	0.25 UJ	1.4 J	0.52 J	1.92 J
	SS-1-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-2-S	0.0	1.0	12-Jan-15	0.25 UJ	0.25 UJ	0.25 UJ	0.25 UJ	0.25 UJ	1.8 J	0.63 J	2.43 J
	SS-2-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-3-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-3-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-4-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-4-1	1.0	1.0	12-Jan-15	0.25 UJ	0.25 UJ	0.25 UJ	0.25 UJ	0.25 UJ	0.25 UJ	0.25 UJ	0.25 UJ
	SS-5-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-5-1	1.0	1.0	12-Jan-15	0.25 UJ	0.25 UJ	0.25 UJ	0.25 UJ	0.25 UJ	0.25 UJ	0.25 UJ	0.25 UJ
	SS-6-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-7-S	0.0	1.0	12-Jan-15	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.27 J	0.27 J
	SS-7-1	1.0	1.0	12-Jan-15	0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ	0.19 J	0.19 J
	SB-1-3.5	3.5	3.5	12-Jan-15	--	--	--	--	--	--	--	--
	SB-2-3.5	3.5	3.5	12-Jan-15	--	--	--	--	--	--	--	--
	SB-3-2	2.0	2.0	12-Jan-15	--	--	--	--	--	--	--	--
	SB-4-5'	5.0	5.0	12-Jan-15	--	--	--	--	--	--	--	--

Table 7. Soil Sample Analytical Results—Polychlorinated Biphenyls

Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	Aroclor 1016 (mg/kg)	Aroclor 1221 (mg/kg)	Aroclor 1232 (mg/kg)	Aroclor 1242 (mg/kg)	Aroclor 1248 (mg/kg)	Aroclor 1254 (mg/kg)	Aroclor 1260 (mg/kg)	Sum of Aroclors [a] (mg/kg)
	SB-5-5'	5.0	5.0	12-Jan-15	--	--	--	--	--	--	--	--
	SB-6-2'	2.0	2.0	12-Jan-15	--	--	--	--	--	--	--	--
	SB-7-2'	2.0	2.0	12-Jan-15	--	--	--	--	--	--	--	--
	SB-8-2'	2.0	2.0	12-Jan-15	--	--	--	--	--	--	--	--
	SB-9-2'	2.0	2.0	12-Jan-15	--	--	--	--	--	--	--	--
	SB-10-2'	2.0	2.0	12-Jan-15	--	--	--	--	--	--	--	--
Excavation Sampling 2015 Integral	TBL1-1SW-1.2	1.2	1.2	03-Mar-15	0.0026 UJ	0.0071 UJ	0.0034 UJ	0.0032 UJ	0.0034 UJ	0.0027 UJ	0.017 J	0.017 J
	TBL1-1B-4.5	4.5	4.5	04-Mar-15	--	--	--	--	--	--	--	--
	TBL1-2SW-1.3	1.3	1.3	04-Mar-15	--	--	--	--	--	--	--	--
	TBL1-2B-2.0	2.0	2.0	05-Mar-15	--	--	--	--	--	--	--	--
	TBL1-3SW-1.2	1.2	1.2	04-Mar-15	0.0026 UJ	0.007 UJ	0.0034 UJ	0.0032 UJ	0.0034 UJ	0.0027 UJ	0.0017 UJ	0.0017 UJ
	TBL1-3B-4.5	4.5	4.5	05-Mar-15	--	--	--	--	--	--	--	--
	TBL1-4SW-0.9	0.9	0.9	04-Mar-15	--	--	--	--	--	--	--	--
	TBL1-4B-1.5	1.5	1.5	05-Mar-15	--	--	--	--	--	--	--	--
	TBL1-5SW-1.0	1.0	1.0	04-Mar-15	--	--	--	--	--	--	--	--
	TBL1-6SW-2.3	2.3	2.3	04-Mar-15	--	--	--	--	--	--	--	--
	TBL1-7SW-2.0	2.0	2.0	04-Mar-15	--	--	--	--	--	--	--	--
	TBL1-8SW-1.6	1.6	1.6	05-Mar-15	--	--	--	--	--	--	--	--
	TBL1-9SW-0.8	0.8	0.8	05-Mar-15	--	--	--	--	--	--	--	--
	TBL1-10SW-2.3	2.3	2.3	05-Mar-15	--	--	--	--	--	--	--	--
	TBL1-11SW-0.8	0.8	0.8	05-Mar-15	--	--	--	--	--	--	--	--
	TBL2-1SW-0.9	0.9	0.9	06-Mar-15	--	--	--	--	--	--	--	--
	TBL2-1B-4.0	4.0	4.0	06-Mar-15	--	--	--	--	--	--	--	--
	TBL2-2SW-0.9	0.9	0.9	06-Mar-15	--	--	--	--	--	--	--	--
	TBL2-2B-4.0	4.0	4.0	06-Mar-15	--	--	--	--	--	--	--	--
	TBL2-3SW-0.9	0.9	0.9	06-Mar-15	0.0025 UJ	0.0067 UJ	0.0033 UJ	0.003 UJ	0.0032 UJ	0.026 J	0.012 J	0.038 J
	TBL2-3B-1.8	1.8	1.8	06-Mar-15	--	--	--	--	--	--	--	--
	TBL2-4SW-1.3	1.3	1.3	06-Mar-15	0.0027 UJ	0.0073 UJ	0.0035 UJ	0.0033 UJ	0.0035 UJ	0.0076 J	0.017 J	0.0246 J
	TBL2-4B-1.8	1.8	1.8	06-Mar-15	--	--	--	--	--	--	--	--
	TBL2-5SW-1.3	1.3	1.3	06-Mar-15	--	--	--	--	--	--	--	--
	TBL2-5B-2.2	2.2	2.2	06-Mar-15	--	--	--	--	--	--	--	--
	TBL2-6SW-1.3	1.3	1.3	06-Mar-15	--	--	--	--	--	--	--	--
	TBL2-7SW-1.4	1.4	1.4	06-Mar-15	--	--	--	--	--	--	--	--
	TBL2-8SW-1.2	1.2	1.2	06-Mar-15	--	--	--	--	--	--	--	--
	TP-1-0.5	0.5	0.5	30-Jan-15	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U
	TP-1-2.0	2.0	2.0	30-Jan-15	0.058 U	0.058 U	0.058 U	0.058 U	0.058 U	0.058 U	0.058 U	0.058 U
	TP-2-1.25	1.3	1.3	30-Jan-15	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U
	TP-2-2.0	2.0	2.0	30-Jan-15	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U
	TP-3-2.0	2.0	2.0	30-Jan-15	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U
	TP-4-2.0	2.0	2.0	30-Jan-15	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U
	TRENCH1-1SW-1.2	1.2	1.2	05-Mar-15	--	--	--	--	--	--	--	--
	TRENCH1-1B-2.4	2.4	2.4	05-Mar-15	--	--	--	--	--	--	--	--
	TRENCH1-2SW-1.2	1.2	1.2	05-Mar-15	0.0027 UJ	0.0073 UJ	0.0036 UJ	0.0033 UJ	0.63 J	0.41 J	0.04 J	1.08 J
	TRENCH1-2B-2.4	2.4	2.4	05-Mar-15	--	--	--	--	--	--	--	--
	TRENCH1-3SW-1.2	1.2	1.2	05-Mar-15	--	--	--	--	--	--	--	--
	TRENCH1-4SW-1.2	1.2	1.2	05-Mar-15	--	--	--	--	--	--	--	--
	TRENCH1-5SW-1.2	1.2	1.2	05-Mar-15	0.0034 UJ	0.0092 UJ	0.0045 UJ	0.0041 UJ	0.0044 UJ	0.027 J	0.019 J	0.046 J
	TRENCH1-6SW-1.2	1.2	1.2	05-Mar-15	--	--	--	--	--	--	--	--
	TRENCH2-1SW-1.2	1.2	1.2	09-Mar-15	--	--	--	--	--	--	--	--
	TRENCH2-1B-4.0	4.0	4.0	09-Mar-15	--	--	--	--	--	--	--	--
	TRENCH2-2SW-2.0	2.0	2.0	09-Mar-15	--	--	--	--	--	--	--	--
	TRENCH2-2B-2.4	2.4	2.4	09-Mar-15	--	--	--	--	--	--	--	--
	TRENCH2-3SW-1.2	1.2	1.2	09-Mar-15	--	--	--	--	--	--	--	--
	TRENCH2-3B-2.4	2.4	2.4	09-Mar-15	--	--	--	--	--	--	--	--
	TRENCH2-4SW-1.2	1.2	1.2	09-Mar-15	0.0026 UJ	0.007 UJ	0.0034 UJ	0.0032 UJ	0.0034 UJ	0.029 J	0.0091 J	0.0381 J

Table 7. Soil Sample Analytical Results—Polychlorinated Biphenyls

Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	Aroclor 1016 (mg/kg)	Aroclor 1221 (mg/kg)	Aroclor 1232 (mg/kg)	Aroclor 1242 (mg/kg)	Aroclor 1248 (mg/kg)	Aroclor 1254 (mg/kg)	Aroclor 1260 (mg/kg)	Sum of Aroclors [a] (mg/kg)
	TRENCH2-4B-4.0	4.0	4.0	10-Mar-15	0.0036 U	0.0097 U	0.0047 U	0.0043 U	0.0046 U	0.0037 U	0.0023 U	0.0023 U
	TRENCH2-5SW-1.2	1.2	1.2	10-Mar-15	--	--	--	--	--	--	--	--
	TRENCH2-5B-4.0	4.0	4.0	10-Mar-15	--	--	--	--	--	--	--	--
	TRENCH2-6SW-2.0	2.0	2.0	10-Mar-15	0.0034 U	0.0092 U	0.0045 U	0.0041 U	0.0044 U	0.0035 U	0.0022 U	0.0022 U
	TRENCH2-6B-4.0	4.0	4.0	11-Mar-15	--	--	--	--	--	--	--	--
	TRENCH2-7SW-2.0	2.0	2.0	10-Mar-15	--	--	--	--	--	--	--	--
	TRENCH2-8SW-2.0	2.0	2.0	11-Mar-15	--	--	--	--	--	--	--	--
Soil and Groundwater Investigation 2015 Integral	MW-4-0.5-1.5	0.5	1.5	11-Feb-15	0.0026 U	0.007 U	0.0034 U	0.0032 U	0.094	0.0027 U	0.014	0.108
	MW-6-2.5-3.5	2.5	3.5	12-Feb-15	0.0028 U	0.0076 U	0.0037 U	0.0034 U	0.0036 U	0.0029 U	0.0018 U	0.0018 U
	SB-11-2.0-2.5	2.0	2.5	19-Feb-15	0.0028 U	0.0075 U	0.0037 U	0.0034 U	0.0036 U	0.0029 U	0.0029 J	0.0029 J
	SB-11-9.5-10.0	9.5	10.0	19-Feb-15	0.0027 U	0.0074 U	0.0036 U	0.0033 U	0.0035 U	0.0028 U	0.0018 U	0.0018 U
	SB-12-2.5-3.5	2.5	3.5	13-Feb-15	0.0036 U	0.0097 U	0.0047 U	0.0044 U	0.0046 U	0.0037 U	0.0023 U	0.0023 U
	SB-12-11.0-12.0	11.0	12.0	13-Feb-15	0.0034 U	0.009 U	0.0044 U	0.0041 U	0.0043 U	0.0035 U	0.0022 U	0.0022 U
	SB-13-3.0-4.0	3.0	4.0	13-Feb-15	0.0038 U	0.01 U	0.005 U	0.0046 U	0.0049 U	0.004 U	0.0025 U	0.0025 U
	SB-13-12.0-13.0	12.0	13.0	13-Feb-15	0.0034 U	0.0092 U	0.0045 U	0.0041 U	0.0044 U	0.0035 U	0.0022 U	0.0022 U
	SB-14-4.0-4.5	4.0	4.5	18-Feb-15	0.0034 U	0.0093 U	0.0045 U	0.0042 U	0.0044 U	0.0035 U	0.0022 U	0.0022 U
	SB-14-9.5-10.0	9.5	10.0	18-Feb-15	0.0033 U	0.0089 U	0.0044 U	0.004 U	0.0043 U	0.0034 U	0.0022 U	0.0022 U
	SB-15-5.0-5.5	5.0	5.5	18-Feb-15	0.0035 U	0.0095 U	0.0046 U	0.0043 U	0.0045 U	0.0036 U	0.0023 U	0.0023 U
	SB-15-9.5-10.0	9.5	10.0	18-Feb-15	0.0035 U	0.0095 U	0.0047 U	0.0043 U	0.0046 U	0.0036 U	0.0023 U	0.0023 U
	SB-16-3.0-3.5	3.0	3.5	18-Feb-15	0.0035 U	0.0094 U	0.0046 U	0.0042 U	0.0045 U	0.0036 U	0.0023 U	0.0023 U
	SB-16-9.5-10.0	9.5	10.0	18-Feb-15	0.0034 U	0.0093 U	0.0045 U	0.0042 U	0.0044 U	0.0036 U	0.0023 U	0.0023 U
	SB-17-5.0-6.0	5.0	6.0	18-Feb-15	0.014 U	0.028 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
	SB-17-9.0-10.0	9.0	10.0	18-Feb-15	0.0035 U	0.0094 U	0.0046 U	0.0042 U	0.0045 U	0.0036 U	0.0023 U	0.0023 U
	SB-18-5.0-6.0	5.0	6.0	19-Feb-15	0.0027 U	0.0073 U	0.0036 U	0.0033 U	0.0035 U	0.0028 U	0.0033 J	0.0033 J
	SB-18-9.0-10.0	9.0	10.0	19-Feb-15	0.0028 U	0.0076 U	0.0037 U	0.0034 U	0.0036 U	0.0029 U	0.0065 J	0.0065 J
	SB-19-5.5-6.5	5.5	6.5	12-Feb-15	0.0028 U	0.0076 U	0.0037 U	0.0034 U	0.0037 U	0.0029 U	0.0019 U	0.0019 U
	SB-19-8.5-9.5	8.5	9.5	12-Feb-15	0.0028 U	0.0075 U	0.0036 U	0.0034 U	0.0036 U	0.0029 U	0.0018 U	0.0018 U
	SB-20-6.0-7.0	6.0	7.0	13-Feb-15	0.0035 U	0.0093 U	0.0045 U	0.0042 U	0.0045 U	0.0036 U	0.0023 U	0.0023 U
	SB-20-10.5-11.5	10.5	11.5	13-Feb-15	0.0034 U	0.0093 U	0.0045 U	0.0042 U	0.0044 U	0.0035 U	0.0022 U	0.0022 U
	SB-21-1.0-2.0	1.0	2.0	11-Feb-15	0.0028 U	0.0075 U	0.0037 U	0.0034 U	0.0036 U	0.0029 U	0.0067 J	0.0067 J
	SB-22-4.0-5.0	4.0	5.0	13-Feb-15	0.0036 U	0.0098 U	0.0048 U	0.0044 U	0.0047 U	0.0038 U	0.0024 U	0.0024 U
	SB-22-11.0-12.0	11.0	12.0	13-Feb-15	0.0036 U	0.0097 U	0.0047 U	0.0044 U	0.0046 U	0.0037 U	0.0024 U	0.0024 U
	SB-24-3.2-3.8	3.2	3.8	18-Feb-15	0.014 U	0.037 U	0.018 U	0.017 U	0.018 U	0.014 U	0.009 U	0.009 U
	SB-24-7.0-7.3	7.0	7.3	18-Feb-15	0.0028 U	0.0075 U	0.0036 U	0.0034 U	0.0036 U	0.0029 U	0.0018 U	0.0018 U

Notes:

Detected concentrations exceeding screening levels are highlighted in yellow; analytes detected in less than 5 percent of the samples are not screened unless carcinogenic (see Table 5).
PCBs analyzed using EPA Method SW8082.
Soil screening levels based on the lower of the cancer and noncancer environmental screening level (ESL) for direct exposures to soil for a commercial/industrial scenario (Table K-2; SFRWQCB 2013).

[a] Sum of polychlorinated biphenyl (PCB) aroclors calculated as the sum of all detected PCB aroclors. If no aroclors were detected in a sample, then the lowest quantitation limit was reported for the sum.
-- = not applicable (not analyzed or information not provided)
ft bgs = feet below ground surface
mg/kg = milligrams per kilogram
UST = underground storage tank

Qualifiers:
J = Estimated. The analyte was detected and positively identified. The associated numerical value is an estimated value.
U = The analyte was analyzed for, but was not detected.
UJ = The analyte was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

Table 8. Soil Sample Analytical Results—Semivolatile Organic Compounds

					Polycyclic Aromatic Hydrocarbons												Polycyclic Aromatic Hydrocarbons	
Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	Naphthalene (mg/kg)	Acenaphthylene (mg/kg)	Acenaphthene (mg/kg)	Fluorene (mg/kg)	Phenanthrene (mg/kg)	Anthracene (mg/kg)	2-Methylnaphthalene (mg/kg)	Fluoranthene (mg/kg)	Pyrene (mg/kg)	Benzo(a) anthracene (mg/kg)	Chrysene (mg/kg)	Benzo(b) fluoranthene (mg/kg)	Benzo(k) fluoranthene (mg/kg)	Benzo(a)pyrene (mg/kg)
				Screening Level:	15.4	NA	<5%FOD	22002	NA	165016	<5%FOD	22002	33003	1.28	12.83	1.28	1.28	0.13
UST Removal	COMP S1-A-D	--	--	07-Jan-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2004 Geo-Logic	DISP(3.5')	--	--	07-Jan-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	P1(3.5')	--	--	07-Jan-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	TPN(8')	--	--	07-Jan-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	TWP(7.25)	--	--	07-Jan-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Soil and	B1d4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Groundwater	B1d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Investigation	B1d12.5	12.5	12.5	27-Jun-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2007 Geo-Logic	B1d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	B3d4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	B3d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	B3d12.5	12.5	12.5	27-Jun-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	B3d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	B5d4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	B5d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	B5d11.5	11.5	11.5	27-Jun-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	B5d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	B6d5	5.0	5.0	27-Jun-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	B6d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	B6d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	B7Bd4	4.0	4.0	27-Jun-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	B7Cd4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	B7Cd7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	B7Cd12.5	12.5	12.5	27-Jun-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	B7Cd14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	B8d4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	B8d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	B8d12.5	12.5	12.5	27-Jun-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	B8d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Limited Phase II	A-1-4'	4.0	4.0	14-Jul-14	0.0016 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Investigation	A-3-4'	4.0	4.0	14-Jul-14	0.0017 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Allied	A-4-4'	4.0	4.0	14-Jul-14	0.0017 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Engineering	A-6-4'	4.0	4.0	14-Jul-14	0.0016 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Property 2014	A-7-4'	4.0	4.0	14-Jul-14	0.0019 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Geologica	A-8-4'	4.0	4.0	14-Jul-14	0.0018 U	--	--	--	--	--	--	--	--	--	--	--	--	--
	A-9-4'	4.0	4.0	14-Jul-14	0.0016 U	--	--	--	--	--	--	--	--	--	--	--	--	--
	TP-1-8.5'	8.5	8.5	10-Jul-14	0.0017 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Subsurface	SS-1-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Investigation	SS-1-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2015 AEI	SS-2-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	SS-2-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	SS-3-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	SS-3-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	SS-4-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	SS-4-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	SS-5-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	SS-5-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	SS-6-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	SS-7-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	SS-7-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	SB-1-3.5	3.5	3.5	12-Jan-15	0.00098 U	--	--	--	--	--	--	--	--	--	--	--	--	--
	SB-2-3.5	3.5	3.5	12-Jan-15	0.0034 U	--	--	--	--	--	--	--	--	--	--	--	--	--
	SB-3-2	2.0	2.0	12-Jan-15	0.0014 U	--	--	--	--	--	--	--	--	--	--	--	--	--
	SB-4-5'	5.0	5.0	12-Jan-15	0.00048 U	--	--	--	--	--	--	--	--	--	--	--	--	--
	SB-5-5'	5.0	5.0	12-Jan-15	0.00048 U	--	--	--	--	--	--	--	--	--	--	--	--	--
	SB-6-2'	2.0	2.0	12-Jan-15	0.00051 U	--	--	--	--	--	--	--	--	--	--	--	--	--
	SB-7-2'	2.0	2.0	12-Jan-15	0.0006 U	--	--	--	--	--	--	--	--	--	--	--	--	--
	SB-8-2'	2.0	2.0	12-Jan-15	0.0005 U	--	--	--	--	--	--	--	--	--	--	--	--	--
	SB-9-2'	2.0	2.0	12-Jan-15	0.00053 U	--	--	--	--	--	--	--	--	--	--	--	--	--
	SB-10-2'	2.0	2.0	12-Jan-15	0.0005 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Excavation	TBL1-1SW-1.2	1.2	1.2	03-Mar-15	0.079 J	0.092 J	0.018 U	0.038 J	0.39	0.15 J	0.034 J	0.63	0.6	0.52	1.2	1	0.35	0.5
Sampling 2015	TBL1-1B-4.5	4.5	4.5	04-Mar-15	0.015 U	0.0094 U	0.0075 U	0.009 U	0.0091 U	0.01 U	0.011 U	0.011 U	0.0087 J	0.0076 U	0.0092 U	0.0066 U	0.0067 U	0.0067
Integral	TBL1-2SW-1.3	1.3	1.3	04-Mar-15	0.067 U	0.043 U	0.035 U	0.041 U	0.043 J	0.047 U	0.052 U	0.072 J	0.075 J	0.042 J	0.06 J	0.067 J	0.031 U	0.043
	TBL1-2B-2.0	2.0	2.0	05-Mar-15	0.067 U	0.043 U	0.035 U	0.041 U	0.18 J	0.05 J	0.052 U	0.21 J	0.2 J	0.11 J	0.14 J	0.13 J	0.051 J	0.1
	TBL1-3SW-1.2	1.2	1.2	04-Mar-15	0.089 J	0.44	0.12 J	0.31 J	3.7	0.84	0.055 U	4.3	3.9	2.1	2.3	2.1	0.88	1.7
	TBL1-3B-4.5	4.5	4.5	05-Mar-15	0.016 U	0.01 U	0.0082 U	0.0097 U	0.0099 U	0.011 U	0.012 U	0.011 U	0.0089 U	0.0082 U	0.01 U	0.0071 U	0.0073 U	0.0072
	TBL1-4SW-0.9	0.9	0.9	04-Mar-15	0.066 U	0.052 J	0.034 U	0.041 U	0.46	0.064 J	0.051 U	0.63	0.62	0.22 J	0.31 J	0.34 J	0.12 J	0.25
	TBL1-4B-1.5	1.5	1.5	05-Mar-15	0.014 U	0.014 U	0.012 U	0.013 U	0.016 U	0.013 U	0.012 U	0.014 U	0.013 U	0.013 U	0.016 U	0.015 U	0.019 U	0.017
	TBL1-5SW-1.0	1.0	1.0	04-Mar-15	0.095 U	0.061 U	0.049 U	0.059 U	0.47 J	0.066 U	0.073 U	0.69	0.51	0.27 J	0.36 J	0.32 J	0.12 J	0.2

Table 8. Soil Sample Analytical Results—Semivolatile Organic Compounds

					Polycyclic Aromatic Hydrocarbons													Polycyclic Aromatic Hydrocarbons
Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	Naphthalene (mg/kg)	Acenaphthylene (mg/kg)	Acenaphthene (mg/kg)	Fluorene (mg/kg)	Phenanthrene (mg/kg)	Anthracene (mg/kg)	2-Methylnaphthalene (mg/kg)	Fluoranthene (mg/kg)	Pyrene (mg/kg)	Benzo(a) anthracene (mg/kg)	Chrysene (mg/kg)	Benzo(b) fluoranthene (mg/kg)	Benzo(k) fluoranthene (mg/kg)	Benzo(a)pyrene (mg/kg)
	TBL1-6SW-2.3	2.3	2.3	04-Mar-15	0.015 U	0.0094 U	0.0076 U	0.0091 U	0.0092 U	0.01 U	0.011 U	0.011 U	0.0083 U	0.0076 U	0.0093 U	0.0066 U	0.0068 U	0.0067
	TBL1-7SW-2.0	2.0	2.0	04-Mar-15	0.015 U	0.0095 U	0.0076 U	0.0091 U	0.0092 U	0.01 U	0.011 U	0.011 U	0.0083 U	0.0076 U	0.0093 U	0.0066 U	0.0068 U	0.0067
	TBL1-8SW-1.6	1.6	1.6	05-Mar-15	0.083 U	0.053 U	0.043 U	0.051 U	0.052 U	0.058 U	0.064 U	0.06 U	0.051 J	0.043 U	0.052 U	0.037 U	0.038 U	0.038
	TBL1-9SW-0.8	0.8	0.8	05-Mar-15	0.0091 U	0.0088 U	0.0072 U	0.0093 U	0.01 U	0.0072 U	0.01 U	0.013 J	0.015 J	0.0094 J	0.007 U	0.0086 U	0.009 U	0.009
	TBL1-10SW-2.3	2.3	2.3	05-Mar-15	0.0098 U	0.0095 U	0.0078 U	0.01 U	0.011 U	0.0077 U	0.011 U	0.011 J	0.012 J	0.0096 U	0.0076 U	0.0092 U	0.0097 U	0.0097
	TBL1-11SW-0.8	0.8	0.8	05-Mar-15	0.01 U	0.0097 U	0.0079 U	0.01 U	0.013 J	0.0079 U	0.011 U	0.016 J	0.019 J	0.011 J	0.0085 J	0.0094 U	0.0099 U	0.0099
	TBL2-1SW-0.9	0.9	0.9	06-Mar-15	0.015 U	0.015 U	0.013 U	0.013 U	0.017 U	0.014 U	0.012 U	0.015 U	0.013 U	0.014 U	0.017 U	0.016 U	0.02 U	0.018
	TBL2-1B-4.0	4.0	4.0	06-Mar-15	0.014 U	0.014 U	0.012 U	0.012 U	0.062 J	0.013 U	0.012 U	0.17	0.19	0.053 J	0.064 J	0.1	0.036 J	0.059
	TBL2-2SW-0.9	0.9	0.9	06-Mar-15	0.015 U	0.015 U	0.013 U	0.014 U	0.018 U	0.015 U	0.013 U	0.016 U	0.014 U	0.014 U	0.017 U	0.017 U	0.021 U	0.018
	TBL2-2B-4.0	4.0	4.0	06-Mar-15	0.014 U	0.014 U	0.012 U	0.013 U	0.016 U	0.014 U	0.012 U	0.014 U	0.013 U	0.013 U	0.016 U	0.015 U	0.02 U	0.017
	TBL2-3SW-0.9	0.9	0.9	06-Mar-15	0.028 U	0.018 U	0.014 U	0.017 U	0.033 J	0.019 U	0.021 U	0.07 J	0.091 J	0.033 J	0.047 J	0.064 J	0.025 J	0.038
	TBL2-3B-1.8	1.8	1.8	06-Mar-15	0.15 U	0.099 U	0.08 U	0.095 U	0.56 J	0.11 U	0.12 U	1.2	1.4	0.34 J	0.55 J	0.69 J	0.24 J	0.44
	TBL2-4SW-1.3	1.3	1.3	06-Mar-15	0.015 U	0.045 J	0.013 U	0.013 U	0.17	0.019 J	0.012 U	0.16	0.19	0.05 J	0.071 J	0.1	0.035 J	0.054
	TBL2-4B-1.8	1.8	1.8	06-Mar-15	0.016 U	0.015 U	0.014 U	0.014 U	0.027 J	0.015 U	0.013 U	0.072 J	0.094	0.029 J	0.039 J	0.06 J	0.024 J	0.04
	TBL2-5SW-1.3	1.3	1.3	06-Mar-15	0.015 U	0.014 U	0.013 U	0.013 U	0.078	0.014 U	0.012 U	0.16	0.16	0.078	0.097	0.13	0.041 J	0.079
	TBL2-5B-2.2	2.2	2.2	06-Mar-15	0.12 J	0.99	0.063 U	0.074 J	4.7	0.57	0.061 U	9.8	16	4.4	5.8	8.2	2.4	4.9
	TBL2-6SW-1.3	1.3	1.3	06-Mar-15	0.014 U	0.014 U	0.012 U	0.013 U	0.067 J	0.014 U	0.012 U	0.11	0.13	0.043 J	0.061 J	0.081	0.027 J	0.054
	TBL2-7SW-1.4	1.4	1.4	06-Mar-15	0.48 J	4.1	0.25 U	0.47 J	23	2.2	0.25 U	34	44	14	18	26	7.9	15
	TBL2-8SW-1.2	1.2	1.2	06-Mar-15	0.043 U	0.26	0.037 U	0.039 U	1.6	0.16 J	0.036 U	3	3.7	1.1	1.4	2	0.58	1.3
	TP-1-0.5	0.5	0.5	30-Jan-15	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.31	0.37	0.28 U	0.28 U	0.28 U	0.28 U	0.28
	TP-1-2.0	2.0	2.0	30-Jan-15	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29
	TP-2-1.25	1.3	1.3	30-Jan-15	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3
	TP-2-2.0	2.0	2.0	30-Jan-15	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3
	TP-3-2.0	2.0	2.0	30-Jan-15	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27
	TP-4-2.0	2.0	2.0	30-Jan-15	0.28 U	0.28	0.28 U	0.28 U	1.4	0.28 U	0.28 U	4.1	3.7	1	1.4	1.9	0.59	1.5
	TRENCH1-1SW-1.2	1.2	1.2	05-Mar-15	0.014 U	0.014 U	0.012 U	0.013 U	0.043 J	0.013 U	0.012 U	0.072	0.083	0.032 J	0.043 J	0.05 J	0.019 U	0.031
	TRENCH1-1B-2.4	2.4	2.4	05-Mar-15	0.014 U	0.014 U	0.012 U	0.013 U	0.044 J	0.014 U	0.012 U	0.044 J	0.043 J	0.023 J	0.037 J	0.039 J	0.02 U	0.022
	TRENCH1-2SW-1.2	1.2	1.2	05-Mar-15	0.073 U	0.072 U	0.063 U	0.066 U	0.085 U	0.07 U	0.061 U	0.074 U	0.067 U	0.067 U	0.082 U	0.17 J	0.1 U	0.088
	TRENCH1-2B-2.4	2.4	2.4	05-Mar-15	0.0099 U	0.0096 U	0.0078 U	0.01 U	0.026 J	0.0078 U	0.012 J	0.043 J	0.046 J	0.016 J	0.031 J	0.037 J	0.0098 U	0.02
	TRENCH1-3SW-1.2	1.2	1.2	05-Mar-15	0.053 U	0.052 U	0.046 U	0.048 U	0.061 U	0.051 U	0.044 U	0.053 U	0.048 U	0.049 U	0.06 U	0.057 U	0.073 U	0.064
	TRENCH1-4SW-1.2	1.2	1.2	05-Mar-15	0.91 J	9.2	0.32 U	1.2 J	55	6.3	0.31 U	100	130	40	47	65	23	43
	TRENCH1-5SW-1.2	1.2	1.2	05-Mar-15	0.029 J	0.082 J	0.0097 U	0.012 U	0.32	0.053 J	0.014 U	0.67	0.68	0.21	0.34	0.45	0.15	0.26
	TRENCH1-6SW-1.2	1.2	1.2	05-Mar-15	0.014 U	0.013 U	0.011 U	0.014 U	0.018 J	0.011 U	0.015 U	0.045 J	0.048 J	0.017 J	0.021 J	0.034 J	0.014 U	0.021
	TRENCH2-1SW-1.2	1.2	1.2	09-Mar-15	0.015 U	0.014 U	0.013 U	0.013 U	0.03 J	0.014 U	0.012 U	0.061 J	0.077	0.026 J	0.038 J	0.052 J	0.02 U	0.032
	TRENCH2-1B-4.0	4.0	4.0	09-Mar-15	0.015 U	0.014 U	0.013 U	0.013 U	0.017 U	0.014 U	0.012 U	0.015 U	0.013 U	0.013 U	0.017 U	0.016 U	0.02 U	0.018
	TRENCH2-2SW-2.0	2.0	2.0	09-Mar-15	0.016 U	0.016 U	0.014 U	0.014 U	0.018 U	0.015 U	0.013 U	0.016 U	0.014 U	0.015 U	0.018 U	0.017 U	0.022 U	0.019
	TRENCH2-2B-2.4	2.4	2.4	09-Mar-15	0.016 U	0.015 U	0.014 U	0.014 U	0.018 U	0.015 U	0.013 U	0.016 U	0.014 U	0.014 U	0.018 U	0.017 U	0.022 U	0.019
	TRENCH2-3SW-1.2	1.2	1.2	09-Mar-15	0.014 U	0.014 U	0.013 U	0.013 U	0.017 U	0.014 U	0.012 U	0.025 J	0.028 J	0.013 U	0.016 U	0.016 J	0.02 U	0.017
	TRENCH2-3B-2.4	2.4	2.4	09-Mar-15	0.015 U	0.015 U	0.013 U	0.014 U	0.018 U	0.015 U	0.013 U	0.016 U	0.014 U	0.014 U	0.017 U	0.017 U	0.021 U	0.019
	TRENCH2-4SW-1.2	1.2	1.2	09-Mar-15	0.014 J	0.086	0.012 U	0.013 U	0.34	0.048 J	0.012 U	0.82	1	0.31	0.42	0.62	0.19	0.41
	TRENCH2-4B-4.0	4.0	4.0	10-Mar-15	0.016 U	0.016 U	0.014 U	0.014 U	0.018 U	0.015 U	0.013 U	0.016 U	0.014 U	0.014 U	0.018 U	0.017 U	0.022 U	0.019
	TRENCH2-5SW-1.2	1.2	1.2	10-Mar-15	0.052 J	0.21	0.025 U	0.069 J	2	0.18	0.024 U	2.6	3.2	0.87	1.1	1.4	0.48	0.99
	TRENCH2-5B-4.0	4.0	4.0	10-Mar-15	0.017 U	0.017 U	0.015 U	0.015 U	0.019 U	0.016 U	0.014 U	0.017 U	0.015 U	0.015 U	0.019 U	0.018 U	0.023 U	0.02
	TRENCH2-6SW-2.0	2.0	2.0	10-Mar-15	0.089 U	0.088 U	0.078 U	0.081 U	0.1 U	0.086 U	0.075 U	0.091 U	0.085 J	0.082 U	0.1 U	0.097 U	0.12 U	0.11
	TRENCH2-6B-4.0	4.0	4.0	11-Mar-15	0.014 U	0.014 U	0.013 U	0.013 U	0.017 U	0.014 U	0.012 U	0.015 U	0.013 U	0.013 U	0.016 U	0.016 U	0.02 U	0.017
	TRENCH2-7SW-2.0	2.0	2.0	10-Mar-15	0.16 U	0.16 U	0.14 U	0.14 U	0.42 J	0.15 U	0.13 U	0.43 J	0.57 J	0.2 J	0.3 J	0.3 J	0.22 U	0.23
	TRENCH2-8SW-2.0	2.0	2.0	11-Mar-15	0.046 U	0.029 U	0.024 U	0.028 U	0.055 J	0.032 U	0.035 U	0.074 J	0.082 J	0.04 J	0.063 J	0.075 J	0.021 J	0.054
Soil and Groundwater Investigation 2015 Integral	MW-4-0.5-1.5	0.5	1.5	11-Feb-15	0.014 U	0.0092 U	0.0074 U	0.0088 U	0.009 U	0.0099 U	0.011 U	0.01 U	0.0081 U	0.0074 U	0.009 U	0.0064 U	0.0066 U	0.0065
	MW-6-2.5-3.5	2.5	3.5	12-Feb-15	0.0093 U	0.011 U	0.0099 U	0.012 U	0.013 U	0.014 U	0.0077 U	0.012 U	0.013 U	0.012 U	0.014 U	0.011 U	0.011 U	0.011
	SB-11-2.0-2.5	2.0	2.5	19-Feb-15	0.046 U	0.053 U	0.049 U	0.059 U	0.063 U	0.068 U	0.038 U	0.062 U	0.065 U	0.061 U	0.067 U	0.054 U	0.057 U	0.052
	SB-11-9.5-10.0	9.5	10.0	19-Feb-15	0.015 U	0.0096 U	0.0077 U	0.0092 U	0.0094 U	0.01 U	0.011 U	0.011 U	0.0084 U	0.0077 U	0.0094 U	0.0067 U	0.0069 U	0.0068
	SB-12-2.5-3.5	2.5	3.5	13-Feb-15	0.032 U	0.02 U	0.016 U	0.02 U	0.028 J	0.022 U	0.024 U	0.036 J	0.037 J	0.019 J	0.031 J	0.034 J	0.015 U	0.021
	SB-12-11.0-12.0	11.0	12.0	13-Feb-15	0.015 U	0.0095 U	0.0076 U	0.0091 U	0.0092 U	0.01 U	0.011 U	0.011 U	0.0083 U	0.0076 U	0.0093 U	0.0066 U	0.0068 U	0.0067
	SB-13-3.0-4.0	3.0	4.0	13-Feb-15	0.33 U	0.33 U	0.29 U	0.3 U	0.38 U	0.32 U	0.28 U	0.33 U	0.3 U	0.3 U	0.37 U	0.36 U	0.46 U	0.4
	SB-13-12.0-13.0	12.0	13.0	13-Feb-15	0.18 U	0.21 U	0.19 U	0.23 U	0.24 U	0.26 U	0.15 U	0.24 U	0.25 U	0.24 U	0.26 U	0.21 U	0.22 U	0.2
	SB-14-4.0-4.5	4.0	4.5	18-Feb-15	0.018 U	0.021 U	0.019 U	0.023 U	0.024 U	0.026 U	0.015 U	0.024 U	0.025 U	0.024 U	0.026 U	0.021 U	0.022 U	0.02
	SB-14-9.5-10.0	9.5	10.0	18-Feb-15	0.0087 U	0.01 U	0.0093 U	0.011 U	0.012 U	0.013 U	0.0072 U	0.012 U	0.012 U	0.012 U	0.013 U	0.01 U	0.011 U	0.01
	SB-15-5.0-5.5	5.0	5.5	18-Feb-15	0.093 U	0.11 U	0.099 U	0.12 U	0.13 U	0.14 U	0.077 U	0.12 U	0.13 U	0.12 U	0.14 U	0.11 U	0.11 U	0.11
	SB-15-9.5-10.0	9.5	10.0	18-Feb-15	0.0092 U	0.011 U	0.0098 U	0.012 U	0.013 U	0.014 U	0.0076 U	0.012 U	0.013 U	0.012 U	0.013 U	0.011 U	0.011 U	0.01
	SB-16-3.0-3.5	3.0	3.5	18-Feb-15	0.027 U	0.031 U	0.029 U	0.034 U	0.062 J	0.04 U	0.022 U	0.12 J	0.085 J	0.065 J	0.06 J	0.055 J	0.033 U	0.031
	SB-16-9.5-10.0	9.5	10.0	18-Feb-15	0.0091 U	0.011 U	0.0097 U	0.012 U	0.012 U	0.013 U	0.0075 U	0.012 U	0.013 U	0.012 U	0.013 U	0.011 U	0.011 U	0.01
	SB-17-5.0-6.0	5.0	6.0	18-Feb-15	0.089 U	0.1 U	0.095 U	0.11 U	0.12 U	0.13 U	0.074 U	0.12 U	0.13 U	0.12 U	0.13 U	0.1 U	0.11 U	0.1
	SB-17-9.0-10.0	9.0	10.0	18-Feb-15	0.009 UJ	0.01 UJ	0.0096 UJ	0.012 UJ	0.012 UJ	0.013 UJ	0.0074 UJ	0.012 UJ	0.013 UJ	0.012 UJ	0.013 UJ	0.01 UJ	0.011 UJ	0.01
	SB-18-5.0-6.0	5.0	6.0	19-Feb-15	0.015 U	0.0097 U	0.0078 U	0.0093 U	0.0095 U	0.011 U	0.012 U	0.011 U	0.0086 U	0.0079 U	0.0096 U	0.0068 U	0.007 U	0.0069
	SB-18-9.0-10.0	9.0	10.0	19-Feb-15	0.015 U	0.0098 U	0.0079 U	0.0093 U	0.0095 U	0.011 U	0.012 U	0.011 U	0.0086 U	0.0079 U	0.0096 U	0.0068 U	0.007 U	0.0069
	SB-19-5.5-6.5	5.5	6.5	12-Feb-15	0.18 U	0.21 U	0.2 U	0.24 U	0.25 U	0.27 U	0.15 U	0.25 U	0.26 U	0.24 U	0.27 U	0.21 U	0.23 U	0.21
	SB-19-8.5-9.5	8.5	9.5	12-Feb-15	0.18 U	0.21 U	0.19 U	0.23 U	0.25 U	0.26 U	0.15 U	0.24 U	0.25 U	0.24 U	0.26 U	0.21 U	0.22 U	0.2
	SB-20-6.0-7.0	6.0	7.0	13-Feb-15	0.053 U	0.051 U	0.042 U	0.054 U	0.058 U	0.042 U	0.059 U	0.052 U	0.056 U	0.052 U	0.041 U	0.05 U	0.052 U	0.052
	SB-20-10.5-11.5	10.5	11.5	13-Feb-15	0.01 U	0.0099 U	0.0081 U	0.01 U	0.011 U	0.0081 U	0.011 U	0.01 U	0.011 U	0.01 U	0.0079 U	0.0096 U	0.01 U	0.01
	SB-21-1.0-2.0	1.0	2.0	11-Feb-15	0.015 U	0.0099 U	0.008 U	0.0095 U	0.014 J	0.011 U	0.012 U	0.029 J	0.032 J	0.015 J	0.022 J	0.029 J	0.0096 J	0.019

Table 8. Soil Sample Analytical Results—Semivolatile Organic Compounds

					Polycyclic Aromatic Hydrocarbons													Polycyclic Aromatic Hydrocarbons
Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	Naphthalene (mg/kg)	Acenaphthylene (mg/kg)	Acenaphthene (mg/kg)	Fluorene (mg/kg)	Phenanthrene (mg/kg)	Anthracene (mg/kg)	2-Methylnaphthalene (mg/kg)	Fluoranthene (mg/kg)	Pyrene (mg/kg)	Benzo(a) anthracene (mg/kg)	Chrysene (mg/kg)	Benzo(b) fluoranthene (mg/kg)	Benzo(k) fluoranthene (mg/kg)	Benzo(a)pyrene (mg/kg)
	SB-22-4.0-5.0	4.0	5.0	13-Feb-15	0.79 U	0.51 U	0.41 U	0.49 U	0.49 U	0.55 U	0.61 U	0.57 U	0.45 U	0.41 U	0.5 U	0.35 U	0.36 U	0.36
	SB-22-11.0-12.0	11.0	12.0	13-Feb-15	0.19 U	0.22 U	0.2 U	0.24 U	0.26 U	0.28 U	0.15 U	0.25 U	0.26 U	0.25 U	0.27 U	0.22 U	0.23 U	0.21
	SB-24-3.2-3.8	3.2	3.8	18-Feb-15	1.4 U	1.6 U	1.5 U	1.8 U	1.9 U	2 U	1.1 U	1.8 U	1.9 U	1.8 U	2 U	1.6 U	1.7 U	1.6
	SB-24-7.0-7.3	7.0	7.3	18-Feb-15	0.0091 U	0.011 U	0.0097 U	0.012 U	0.012 U	0.013 U	0.0075 U	0.012 U	0.013 U	0.012 U	0.013 U	0.011 U	0.011 U	0.01

Table 8. Soil Sample Analytical Results—Semivolatile Organic Compounds

					Phthalates					Other SVOCs		
Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	Indeno(1,2,3-cd) pyrene (mg/kg)	Dibenzo(a,h) anthracene (mg/kg)	Benzo(g,h,i) perylene (mg/kg)	bis-(2-Ethylhexyl) phthalate (mg/kg)	Di-n-butyl phthalate (mg/kg)	Dibenzofuran (mg/kg)	4-Chloro-3-methylphenol (mg/kg)	n-Nitrosodi phenylamine (mg/kg)
				Screening Level:	1.28	0.38	NA	575	NA	NA	NA	NA
UST Removal 2004 Geo-Logic	COMP S1-A-D	--	--	07-Jan-04	--	--	--	--	--	--	--	--
	DISP(3.5')	--	--	07-Jan-04	--	--	--	--	--	--	--	--
	P1(3.5')	--	--	07-Jan-04	--	--	--	--	--	--	--	--
	TPN(8')	--	--	07-Jan-04	--	--	--	--	--	--	--	--
	TWP(7.25)	--	--	07-Jan-04	--	--	--	--	--	--	--	--
Soil and Groundwater Investigation 2007 Geo-Logic	B1d4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--	--
	B1d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--
	B1d12.5	12.5	12.5	27-Jun-07	--	--	--	--	--	--	--	--
	B1d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--
	B3d4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--	--
	B3d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--
	B3d12.5	12.5	12.5	27-Jun-07	--	--	--	--	--	--	--	--
	B3d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--
	B5d4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--	--
	B5d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--
	B5d11.5	11.5	11.5	27-Jun-07	--	--	--	--	--	--	--	--
	B5d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--
	B6d5	5.0	5.0	27-Jun-07	--	--	--	--	--	--	--	--
	B6d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--
	B6d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--
	B7Bd4	4.0	4.0	27-Jun-07	--	--	--	--	--	--	--	--
	B7Cd4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--	--
	B7Cd7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--
	B7Cd12.5	12.5	12.5	27-Jun-07	--	--	--	--	--	--	--	--
	B7Cd14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--
	B8d4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--	--
	B8d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--
	B8d12.5	12.5	12.5	27-Jun-07	--	--	--	--	--	--	--	--
	B8d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--
Limited Phase II Investigation Allied Engineering Property 2014 Geologica	A-1-4'	4.0	4.0	14-Jul-14	--	--	--	--	--	--	--	--
	A-3-4'	4.0	4.0	14-Jul-14	--	--	--	--	--	--	--	--
	A-4-4'	4.0	4.0	14-Jul-14	--	--	--	--	--	--	--	--
	A-6-4'	4.0	4.0	14-Jul-14	--	--	--	--	--	--	--	--
	A-7-4'	4.0	4.0	14-Jul-14	--	--	--	--	--	--	--	--
	A-8-4'	4.0	4.0	14-Jul-14	--	--	--	--	--	--	--	--
	A-9-4'	4.0	4.0	14-Jul-14	--	--	--	--	--	--	--	--
	TP-1-8.5'	8.5	8.5	10-Jul-14	--	--	--	--	--	--	--	--
Subsurface Investigation 2015 AEI	SS-1-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-1-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-2-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-2-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-3-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-3-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-4-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-4-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-5-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-5-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-6-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-7-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-7-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SB-1-3.5	3.5	3.5	12-Jan-15	--	--	--	--	--	--	--	--
	SB-2-3.5	3.5	3.5	12-Jan-15	--	--	--	--	--	--	--	--
	SB-3-2	2.0	2.0	12-Jan-15	--	--	--	--	--	--	--	--
	SB-4-5'	5.0	5.0	12-Jan-15	--	--	--	--	--	--	--	--
	SB-5-5'	5.0	5.0	12-Jan-15	--	--	--	--	--	--	--	--
	SB-6-2'	2.0	2.0	12-Jan-15	--	--	--	--	--	--	--	--
	SB-7-2'	2.0	2.0	12-Jan-15	--	--	--	--	--	--	--	--
	SB-8-2'	2.0	2.0	12-Jan-15	--	--	--	--	--	--	--	--
	SB-9-2'	2.0	2.0	12-Jan-15	--	--	--	--	--	--	--	--
	SB-10-2'	2.0	2.0	12-Jan-15	--	--	--	--	--	--	--	--
Excavation Sampling 2015 Integral	TBL1-1SW-1.2	1.2	1.2	03-Mar-15	0.3	0.08 J	0.35	0.051 J	0.027 U	0.028 J	0.019 U	0.024 U
	TBL1-1B-4.5	4.5	4.5	04-Mar-15	U 0.0086 U	0.0083 U	0.0093 U	0.0096 U	0.011 U	0.0095 U	0.0098 U	0.0088 U
	TBL1-2SW-1.3	1.3	1.3	04-Mar-15	J 0.048 J	0.038 U	0.09 J	0.045 U	0.05 U	0.044 U	0.045 U	0.041 U
	TBL1-2B-2.0	2.0	2.0	05-Mar-15	J 0.08 J	0.038 U	0.11 J	0.045 U	0.05 U	0.044 U	0.045 U	0.041 U
	TBL1-3SW-1.2	1.2	1.2	04-Mar-15	0.9	0.28 J	1	0.08 J	0.052 U	0.14 J	0.048 U	0.043 U
	TBL1-3B-4.5	4.5	4.5	05-Mar-15	U 0.0093 U	0.009 U	0.01 U	0.01 U	0.012 U	0.01 U	0.011 U	0.0096 U
	TBL1-4SW-0.9	0.9	0.9	04-Mar-15	J 0.19 J	0.04 J	0.27 J	0.044 U	0.049 U	0.043 U	0.045 U	0.04 U
	TBL1-4B-1.5	1.5	1.5	05-Mar-15	U 0.016 U	0.016 U	0.014 U	0.02 J	0.016 U	0.016 U	0.015 U	0.015 U
	TBL1-5SW-1.0	1.0	1.0	04-Mar-15	J 0.12 J	0.054 U	0.17 J	0.063 U	0.07 U	0.062 U	0.064 U	0.058 U

Table 8. Soil Sample Analytical Results—Semivolatile Organic Compounds

								Phthalates			Other SVOCs		
Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	Indeno(1,2,3-cd) pyrene (mg/kg)	Dibenzo(a,h) anthracene (mg/kg)	Benzo(g,h,i) perylene (mg/kg)	bis-(2-Ethylhexyl) phthalate (mg/kg)	Di-n-butyl phthalate (mg/kg)	Dibenzofuran (mg/kg)	4-Chloro-3-methylphenol (mg/kg)	n-Nitrosodi phenylamine (mg/kg)
	TBL1-6SW-2.3	2.3	2.3	04-Mar-15	U 0.0087 U	0.0084 U	0.0094 U	0.0097 U	0.011 U	0.0096 U	0.0099 U	0.0089 U
	TBL1-7SW-2.0	2.0	2.0	04-Mar-15	U 0.0087 U	0.0084 U	0.0094 U	0.0097 U	0.011 U	0.0096 U	0.0099 U	0.0089 U
	TBL1-8SW-1.6	1.6	1.6	05-Mar-15	U 0.049 U	0.047 U	0.053 U	0.055 U	0.061 U	0.054 U	0.055 U	0.05 U
	TBL1-9SW-0.8	0.8	0.8	05-Mar-15	U 0.0084 U	0.0072 U	0.009 U	0.0092 J	0.0086 U	0.0091 U	0.015 U	0.058 U
	TBL1-10SW-2.3	2.3	2.3	05-Mar-15	U 0.0091 U	0.0077 U	0.0096 U	0.011 J	0.0093 U	0.0098 U	0.016 U	0.062 U
	TBL1-11SW-0.8	0.8	0.8	05-Mar-15	U 0.0092 U	0.0079 U	0.0098 U	0.0099 U	0.0095 U	0.01 U	0.017 U	0.064 U
	TBL2-1SW-0.9	0.9	0.9	06-Mar-15	U 0.017 U	0.017 U	0.015 U	0.017 U	0.017 U	0.016 U	0.016 U	0.015 U
	TBL2-1B-4.0	4.0	4.0	06-Mar-15	J 0.083	0.016 U	0.11	0.016 U	0.016 U	0.015 U	0.015 U	0.014 U
	TBL2-2SW-0.9	0.9	0.9	06-Mar-15	U 0.018 U	0.017 U	0.015 U	0.018 U	0.017 U	0.017 U	0.017 U	0.016 U
	TBL2-2B-4.0	4.0	4.0	06-Mar-15	U 0.016 U	0.016 U	0.014 U	0.016 U	0.016 U	0.016 U	0.016 U	0.015 U
	TBL2-3SW-0.9	0.9	0.9	06-Mar-15	J 0.039 J	0.016 U	0.054 J	0.05 J	0.021 U	0.018 U	0.019 U	0.017 U
	TBL2-3B-1.8	1.8	1.8	06-Mar-15	J 0.49 J	0.088 U	0.71 J	0.1 U	0.11 U	0.1 U	0.1 U	0.094 U
	TBL2-4SW-1.3	1.3	1.3	06-Mar-15	J 0.088	0.017 U	0.11	0.017 U	0.017 U	0.017 U	0.016 U	0.015 U
	TBL2-4B-1.8	1.8	1.8	06-Mar-15	J 0.05 J	0.018 U	0.068 J	0.018 U	0.018 U	0.017 U	0.017 U	0.016 U
	TBL2-5SW-1.3	1.3	1.3	06-Mar-15	0.07 J	0.017 U	0.088	0.04 J	0.052 J	0.016 U	0.016 U	0.024 J
	TBL2-5B-2.2	2.2	2.2	06-Mar-15	4.3	0.66	5.1	0.083 U	0.082 U	0.081 U	0.079 U	0.076 U
	TBL2-6SW-1.3	1.3	1.3	06-Mar-15	J 0.048 J	0.016 U	0.062 J	0.016 U	0.016 U	0.016 U	0.015 U	0.015 U
	TBL2-7SW-1.4	1.4	1.4	06-Mar-15	17	2.5	20	0.33 U	0.33 U	0.33 U	0.32 U	0.31 U
	TBL2-8SW-1.2	1.2	1.2	06-Mar-15	1.3	0.21 J	1.7	0.049 U	0.049 U	0.048 U	0.047 U	0.045 U
	TP-1-0.5	0.5	0.5	30-Jan-15	U 0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
	TP-1-2.0	2.0	2.0	30-Jan-15	U 0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
	TP-2-1.25	1.3	1.3	30-Jan-15	U 0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
	TP-2-2.0	2.0	2.0	30-Jan-15	U 0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
	TP-3-2.0	2.0	2.0	30-Jan-15	U 0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
	TP-4-2.0	2.0	2.0	30-Jan-15	1.6	0.28 U	1.8	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
	TRENCH1-1SW-1.2	1.2	1.2	05-Mar-15	J 0.029 J	0.016 U	0.036 J	0.016 U	0.016 U	0.016 U	0.015 U	0.015 U
	TRENCH1-1B-2.4	2.4	2.4	05-Mar-15	J 0.017 U	0.016 U	0.016 J	0.016 U	0.016 U	0.016 U	0.016 U	0.015 U
	TRENCH1-2SW-1.2	1.2	1.2	05-Mar-15	U 0.084 U	0.083 U	0.1 J	0.083 U	0.083 U	0.082 U	0.08 U	0.076 U
	TRENCH1-2B-2.4	2.4	2.4	05-Mar-15	J 0.014 J	0.0078 U	0.017 J	0.0098 U	0.0094 U	0.0099 U	0.017 U	0.063 U
	TRENCH1-3SW-1.2	1.2	1.2	05-Mar-15	U 0.061 U	0.06 U	0.053 U	0.06 U	0.06 U	0.059 U	0.058 U	0.055 U
	TRENCH1-4SW-1.2	1.2	1.2	05-Mar-15	35	5.4	40	0.42 U	0.41 U	0.41 U	0.4 U	0.38 U
	TRENCH1-5SW-1.2	1.2	1.2	05-Mar-15	0.32	0.05 J	0.43	0.013 J	0.014 U	0.012 U	0.013 U	0.011 U
	TRENCH1-6SW-1.2	1.2	1.2	05-Mar-15	J 0.026 J	0.011 U	0.036 J	0.014 U	0.013 U	0.014 U	0.023 U	0.087 U
	TRENCH2-1SW-1.2	1.2	1.2	09-Mar-15	J 0.028 J	0.017 U	0.037 J	0.017 U	0.017 U	0.016 U	0.016 U	0.015 U
	TRENCH2-1B-4.0	4.0	4.0	09-Mar-15	U 0.017 U	0.017 U	0.015 U	0.017 U	0.017 U	0.016 U	0.016 U	0.015 U
	TRENCH2-2SW-2.0	2.0	2.0	09-Mar-15	U 0.018 U	0.018 U	0.016 U	0.018 U	0.018 U	0.018 U	0.017 U	0.017 U
	TRENCH2-2B-2.4	2.4	2.4	09-Mar-15	U 0.018 U	0.018 U	0.016 U	0.018 U	0.018 U	0.017 U	0.017 U	0.016 U
	TRENCH2-3SW-1.2	1.2	1.2	09-Mar-15	U 0.017 U	0.016 U	0.015 J	0.016 U	0.016 U	0.016 U	0.016 U	0.015 U
	TRENCH2-3B-2.4	2.4	2.4	09-Mar-15	U 0.018 U	0.017 U	0.016 U	0.018 U	0.017 U	0.017 U	0.017 U	0.016 U
	TRENCH2-4SW-1.2	1.2	1.2	09-Mar-15	0.33	0.05 J	0.4	0.016 U	0.054 J	0.016 U	0.015 U	0.015 U
	TRENCH2-4B-4.0	4.0	4.0	10-Mar-15	U 0.018 U	0.018 U	0.016 U	0.018 U	0.018 U	0.018 U	0.017 U	0.016 U
	TRENCH2-5SW-1.2	1.2	1.2	10-Mar-15	0.96	0.15 J	1.2	0.033 U	0.033 U	0.034 J	0.032 U	0.03 U
	TRENCH2-5B-4.0	4.0	4.0	10-Mar-15	U 0.019 U	0.019 U	0.017 U	0.019 U	0.019 U	0.019 U	0.018 U	0.018 U
	TRENCH2-6SW-2.0	2.0	2.0	10-Mar-15	U 0.1 U	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.098 U	0.094 U
	TRENCH2-6B-4.0	4.0	4.0	11-Mar-15	U 0.017 U	0.016 U	0.015 U	0.017 U	0.016 U	0.016 U	0.016 U	0.015 U
	TRENCH2-7SW-2.0	2.0	2.0	10-Mar-15	J 0.18 U	0.18 U	0.21 J	0.18 U	0.18 U	0.18 U	0.17 U	0.17 U
	TRENCH2-8SW-2.0	2.0	2.0	11-Mar-15	J 0.05 J	0.026 U	0.076 J	0.03 U	0.034 U	0.03 U	0.031 U	0.028 U
Soil and Groundwater Investigation 2015 Integral	MW-4-0.5-1.5	0.5	1.5	11-Feb-15	U 0.0084 U	0.0081 U	0.0091 U	0.077 J	0.011 U	0.0093 U	0.0096 U	0.0087 U
	MW-6-2.5-3.5	2.5	3.5	12-Feb-15	U 0.011 U	0.011 U	0.012 U	0.016 U	0.015 U	0.013 U	0.01 U	0.013 U
	SB-11-2.0-2.5	2.0	2.5	19-Feb-15	U 0.053 U	0.056 U	0.06 U	0.078 U	0.072 U	0.062 U	0.05 U	0.063 U
	SB-11-9.5-10.0	9.5	10.0	19-Feb-15	U 0.0088 U	0.0085 U	0.0095 U	0.0099 U	0.011 U	0.0097 U	0.01 U	0.0091 U
	SB-12-2.5-3.5	2.5	3.5	13-Feb-15	J 0.02 J	0.018 U	0.027 J	0.021 U	0.023 U	0.021 U	0.021 U	0.019 U
	SB-12-11.0-12.0	11.0	12.0	13-Feb-15	U 0.0087 U	0.0084 U	0.0094 U	0.0097 U	0.011 U	0.0096 U	0.0099 U	0.0089 U
	SB-13-3.0-4.0	3.0	4.0	13-Feb-15	U 0.38 U	0.38 U	0.33 U	0.62 J	0.37 U	0.37 U	0.48 J	0.35 U
	SB-13-12.0-13.0	12.0	13.0	13-Feb-15	U 0.2 U	0.22 U	0.23 U	0.52 J	0.45 J	0.24 U	0.93 J	0.24 U
	SB-14-4.0-4.5	4.0	4.5	18-Feb-15	U 0.02 U	0.022 U	0.024 U	0.3 J	0.072 J	0.024 U	0.28 J	0.025 U
	SB-14-9.5-10.0	9.5	10.0	18-Feb-15	U 0.01 U	0.011 U	0.012 U	0.015 U	0.014 U	0.012 U	0.0095 U	0.012 U
	SB-15-5.0-5.5	5.0	5.5	18-Feb-15	U 0.11 U	0.11 U	0.12 U	0.83 J	0.15 J	0.12 U	0.41 J	0.13 U
	SB-15-9.5-10.0	9.5	10.0	18-Feb-15	U 0.011 U	0.011 U	0.012 U	0.016 U	0.014 U	0.012 U	0.046 J	0.013 U
	SB-16-3.0-3.5	3.0	3.5	18-Feb-15	U 0.031 U	0.033 U	0.035 U	0.52 J	0.05 J	0.036 U	0.029 U	0.037 U
	SB-16-9.5-10.0	9.5	10.0	18-Feb-15	U 0.01 U	0.011 U	0.012 U	0.015 U	0.014 U	0.012 U	0.0098 U	0.012 U
	SB-17-5.0-6.0	5.0	6.0	18-Feb-15	U 0.1 U	0.11 U	0.12 U	0.37 J	0.14 U	0.12 U	0.096 U	0.12 U
	SB-17-9.0-10.0	9.0	10.0	18-Feb-15	UJ 0.01 UJ	0.011 UJ	0.012 UJ	0.015 UJ	0.014 UJ	0.012 UJ	0.0097 U	0.012 UJ
	SB-18-5.0-6.0	5.0	6.0	19-Feb-15	U 0.009 U	0.0087 U	0.0097 U	0.01 U	0.011 U	0.0098 U	0.01 U	0.0092 U
	SB-18-9.0-10.0	9.0	10.0	19-Feb-15	U 0.009 U	0.0087 U	0.0097 U	0.014 J	0.011 U	0.0099 U	0.01 U	0.0092 U
	SB-19-5.5-6.5	5.5	6.5	12-Feb-15	U 0.21 U	0.22 U	0.24 U	0.34 J	0.29 U	0.25 U	0.2 U	0.25 U
	SB-19-8.5-9.5	8.5	9.5	12-Feb-15	U 0.21 U	0.22 U	0.24 U	0.3 U	0.28 U	0.24 U	0.19 U	0.25 U
	SB-20-6.0-7.0	6.0	7.0	13-Feb-15	U 0.049 U	0.042 U	0.052 U	0.41 J	0.67 J	0.053 U	0.42 J	0.34 U
	SB-20-10.5-11.5	10.5	11.5	13-Feb-15	U 0.0094 U	0.008 U	0.01 U	0.01 U	0.0097 U	0.01 U	0.017 U	0.065 U
	SB-21-1.0-2.0	1.0	2.0	11-Feb-15	J 0.025 J	0.0088 U	0.036 J	0.012 J	0.011 U	0.01 U	0.01 U	0.0093 U

Table 8. Soil Sample Analytical Results—Semivolatile Organic Compounds

														Phthalates						Other SVOCs			
Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date		Indeno(1,2,3-cd) pyrene (mg/kg)		Dibenzo(a,h) anthracene (mg/kg)		Benzo(g,h,i) perylene (mg/kg)		bis-(2-Ethylhexyl) phthalate (mg/kg)		Di-n-butyl phthalate (mg/kg)		Dibenzofuran (mg/kg)		4-Chloro-3-methylphenol (mg/kg)		n-Nitrosodi phenylamine (mg/kg)	
	SB-22-4.0-5.0	4.0	5.0	13-Feb-15	U	0.47	U	0.45	U	0.5	U	2.3	J	0.58	U	0.51	U	1.1	J	0.48	U
	SB-22-11.0-12.0	11.0	12.0	13-Feb-15	U	0.21	U	0.23	U	0.25	U	0.32	U	0.29	U	0.25	U	0.2	U	0.26	U
	SB-24-3.2-3.8	3.2	3.8	18-Feb-15	U	1.6	U	1.7	U	1.8	U	6.1	J	2.1	U	1.8	U	26	J	1.9	U
	SB-24-7.0-7.3	7.0	7.3	18-Feb-15	U	0.01	U	0.011	U	0.012	U	0.015	U	0.014	U	0.012	U	0.0099	U	0.013	U

Notes:

Detected concentrations exceeding screening levels are highlighted in yellow; analytes detected in less than 5 percent of the samples are not screened unless carcinogenic (see Table 5).

Only SVOCs for which there was a detection in at least one sample are presented in this table.

SVOCs analyzed using EPA Method SW8270C / SW8260B. When a parameter was analyzed by both methods (e.g., naphthalene), results for 8270C are presented.

Soil screening levels based on the lower of the cancer and noncancer environmental screening level (ESL) for direct exposures to soil for a commercial/industrial scenario (Table K-2; SFRWQCB 2013).

-- = not applicable (not analyzed or information not provided)
ft bgs = feet below ground surface
mg/kg = milligrams per kilogram
<5%FOD = analyte was detected in less than 5 percent of the samples; screening levels not reported here.
NA = not available
SVOC = semivolatile organic compound
UST = underground storage tank

Qualifiers:

J = Estimated. The analyte was detected and positively identified. The associated numerical value is an estimated value.
U = The analyte was analyzed for, but was not detected.
UJ = The analyte was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

Table 9. Soil Sample Analytical Results—Metals

Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Chromium, Hexavalent (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)
				Screening Level:	409	11	190902	2008	1022	1533000	108	304	40880
UST Removal 2004 Geo-Logic	COMP S1-A-D	--	--	07-Jan-04	--	--	--	--	--	--	--	--	--
	DISP(3.5')	--	--	07-Jan-04	--	--	--	--	--	--	--	--	--
	P1(3.5')	--	--	07-Jan-04	--	--	--	--	--	--	--	--	--
	TPN(8')	--	--	07-Jan-04	--	--	--	--	--	--	--	--	--
	TWP(7.25)	--	--	07-Jan-04	--	--	--	--	--	--	--	--	--
Soil and Groundwater Investigation 2007 Geo-Logic	B1d4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B1d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B1d12.5	12.5	12.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B1d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B3d4.5	4.5	4.5	27-Jun-07	0.5 U	1.9	210	0.55	0.25 U	57	--	6.7	26
	B3d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B3d12.5	12.5	12.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B3d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B5d4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B5d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B5d11.5	11.5	11.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B5d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B6d5	5.0	5.0	27-Jun-07	--	--	--	--	--	--	--	--	--
	B6d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B6d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B7Bd4	4.0	4.0	27-Jun-07	43	19	180	0.5 U	50	2800	500	56	390
	B7Cd4.5	4.5	4.5	27-Jun-07	1.2	7	190	0.56	0.53	92	--	13	32
	B7Cd7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B7Cd12.5	12.5	12.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B7Cd14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B8d4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B8d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B8d12.5	12.5	12.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B8d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--	--
Limited Phase II Investigation Allied Engineering Property 2014 Geologica	A-1-4'	4.0	4.0	14-Jul-14	0.09 U	2.5	150	0.3	0.013 U	26	--	4.7	14
	A-3-4'	4.0	4.0	14-Jul-14	9	15	180	0.14 U	0.055 U	100	--	8.3	130
	A-4-4'	4.0	4.0	14-Jul-14	0.077 U	2.8	57	0.22	0.011 U	35	--	4.3	8.4
	A-6-4'	4.0	4.0	14-Jul-14	0.089 U	2.4	65	0.27	0.013 U	30	--	1.6	7.1
	A-7-4'	4.0	4.0	14-Jul-14	0.087 U	1.3	220	0.56	0.16	35	--	6.5	26
	A-8-4'	4.0	4.0	14-Jul-14	0.096 U	2	100	0.28	0.014 U	24	--	5.1	9
	A-9-4'	4.0	4.0	14-Jul-14	0.091 U	2.2	48	0.24	0.014 U	27	--	1.6	4.1
	TP-1-8.5'	8.5	8.5	10-Jul-14	0.069 U	2.2	77	0.35	0.1	39	--	4.4	12
Subsurface Investigation 2015 AEI	SS-1-S	0.0	1.0	12-Jan-15	200	13	250	0.5 U	9.3	1200	290	44	290
	SS-1-1	1.0	1.0	12-Jan-15	0.76	4.7	120	0.5 U	0.25 U	35	--	5.9	17
	SS-2-S	0.0	1.0	12-Jan-15	9.4	22	240	0.5 U	7.7	1300	420	39	330
	SS-2-1	1.0	1.0	12-Jan-15	2	4.4	150	0.5 U	0.63	110	--	7.9	45
	SS-3-S	0.0	1.0	12-Jan-15	0.92	3.5	120	0.5 U	0.4	43	--	6.8	30
	SS-3-1	1.0	1.0	12-Jan-15	5.7	6.9	220	0.5 U	2.7	150	--	37	120
	SS-4-S	0.0	1.0	12-Jan-15	0.96	5.8	180	0.5 U	0.53	39	--	8.2	38
	SS-4-1	1.0	1.0	12-Jan-15	26	9	440	0.5 U	2	86	4 U	9.4	530
	SS-5-S	0.0	1.0	12-Jan-15	1.4	6.9	100	0.5 U	8.3	65	--	9.2	55
	SS-5-1	1.0	1.0	12-Jan-15	2.2	5.6	77	0.5 U	0.78	780	5.6	22	100
	SS-6-S	0.0	1.0	12-Jan-15	1.8	5.4	280	0.5 U	2.2	58	--	8.7	67
	SS-7-S	0.0	1.0	12-Jan-15	3.3	3.2	94	0.5 U	2.2	1100	60	30	46
	SS-7-1	1.0	1.0	12-Jan-15	6.3	9.6	160	0.5 U	22	820	51	37	130
	SB-1-3.5	3.5	3.5	12-Jan-15	--	--	--	--	--	--	--	--	--
	SB-2-3.5	3.5	3.5	12-Jan-15	--	--	--	--	--	--	--	--	--
	SB-3-2	2.0	2.0	12-Jan-15	--	--	--	--	--	--	--	--	--
	SB-4-5'	5.0	5.0	12-Jan-15	--	--	--	--	--	--	--	--	--
	SB-5-5'	5.0	5.0	12-Jan-15	--	--	--	--	--	--	--	--	--
	SB-6-2'	2.0	2.0	12-Jan-15	--	--	--	--	--	--	--	--	--
	SB-7-2'	2.0	2.0	12-Jan-15	--	--	--	--	--	--	--	--	--
	SB-8-2'	2.0	2.0	12-Jan-15	--	--	--	--	--	--	--	--	--
	SB-9-2'	2.0	2.0	12-Jan-15	--	--	--	--	--	--	--	--	--
	SB-10-2'	2.0	2.0	12-Jan-15	--	--	--	--	--	--	--	--	--
Excavation Sampling 2015 Integral	TBL1-1SW-1.2	1.2	1.2	03-Mar-15	18	11	470	0.32	4.4	710	56 J	20	210
	TBL1-1B-4.5	4.5	4.5	04-Mar-15	0.16 U	6.2	89	0.31	0.85	31	--	6.6	19
	TBL1-2SW-1.3	1.3	1.3	04-Mar-15	0.15 U	4.5	96	0.36	3.2	50	--	6.4	35
	TBL1-2B-2.0	2.0	2.0	05-Mar-15	0.16 U	7.5	210	0.32	1.6	49	--	7.7	48
	TBL1-3SW-1.2	1.2	1.2	04-Mar-15	4.2	35	700	0.34	4.7	390	35 J	15	180
	TBL1-3B-4.5	4.5	4.5	05-Mar-15	0.17 U	5	210	0.36	0.67	38	--	5.8	17
	TBL1-4SW-0.9	0.9	0.9	04-Mar-15	0.14 U	9.8	160	0.23	2	56	--	9.8	59

Table 9. Soil Sample Analytical Results—Metals

Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Chromium, Hexavalent (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)
	TBL1-4B-1.5	1.5	1.5	05-Mar-15	0.16 U	6	140	0.41	0.96	64	--	12	21
	TBL1-5SW-1.0	1.0	1.0	04-Mar-15	1.4	28	150	0.24	4.3	76	--	14	58
	TBL1-6SW-2.3	2.3	2.3	04-Mar-15	0.17 U	8.4	230	0.57	1.1	66	--	13	28
	TBL1-7SW-2.0	2.0	2.0	04-Mar-15	0.17 U	6.2	190	0.5	1.2	66	--	13	28
	TBL1-8SW-1.6	1.6	1.6	05-Mar-15	0.21 U	7	160	0.41	1.3	63	--	13	30
	TBL1-9SW-0.8	0.8	0.8	05-Mar-15	0.14 U	5.3	25	0.27	1.1	44	--	14	3.9
	TBL1-10SW-2.3	2.3	2.3	05-Mar-15	0.17 U	6.7	190	0.48	1.1	62	--	12	27
	TBL1-11SW-0.8	0.8	0.8	05-Mar-15	0.18 U	7.2	48	0.3	1.2	53	--	15	6.2
	TBL2-1SW-0.9	0.9	0.9	06-Mar-15	0.56 J	1	86	0.12	1.6	85	--	27	69
	TBL2-1B-4.0	4.0	4.0	06-Mar-15	0.2 J	5.6	160	0.27	0.32	29	--	8	7.9
	TBL2-2SW-0.9	0.9	0.9	06-Mar-15	0.41 J	0.44	28	0.12	1.4	100	--	25	61
	TBL2-2B-4.0	4.0	4.0	06-Mar-15	0.21 J	1.6	120	0.27	0.28	26	--	4.3	8.5
	TBL2-3SW-0.9	0.9	0.9	06-Mar-15	1.9	3.1	55	0.24	2.5	130	17 J	12	47
	TBL2-3B-1.8	1.8	1.8	06-Mar-15	0.63	5.2	180	0.35	0.96	24	--	8.3	35
	TBL2-4SW-1.3	1.3	1.3	06-Mar-15	2.5	7.6	210	0.28	4.3	270	60 J	15	91
	TBL2-4B-1.8	1.8	1.8	06-Mar-15	0.33 J	3.1	150	0.33	0.44	31	--	6	21
	TBL2-5SW-1.3	1.3	1.3	06-Mar-15	1.6	17	220	0.32	5.3	91	--	12	83
	TBL2-5B-2.2	2.2	2.2	06-Mar-15	0.96	4.6	220	0.32	1.3	54	--	8.2	64
	TBL2-6SW-1.3	1.3	1.3	06-Mar-15	0.43 J	3.2	95	0.28	0.56	37	--	6.7	24
	TBL2-7SW-1.4	1.4	1.4	06-Mar-15	2	6.8	300	0.29	3	52	--	11	53
	TBL2-8SW-1.2	1.2	1.2	06-Mar-15	1.3	7	190	0.36	2.3	74	--	12	67
	TP-1-0.5	0.5	0.5	30-Jan-15	1.4	9.5	360 J	0.56 U	1.1	80	16	16	80
	TP-1-2.0	2.0	2.0	30-Jan-15	0.58 U	5.9	430 J	0.58 U	0.29 U	38	0.23 U	25	15
	TP-2-1.25	1.3	1.3	30-Jan-15	0.93	8.5	340 J	0.6 U	0.5	71	0.24 U	11	170
	TP-2-2.0	2.0	2.0	30-Jan-15	0.6 U	3.1	150 J	0.6 U	0.3 U	40	0.24 U	5.1	15
	TP-3-2.0	2.0	2.0	30-Jan-15	0.6	8	150 J	0.54 U	0.27 U	76	0.22 U	17	26
	TP-4-2.0	2.0	2.0	30-Jan-15	1.5	11	400 J	0.56 U	0.28 U	35	0.22 U	13	82
	TRENCH1-1SW-1.2	1.2	1.2	05-Mar-15	0.18 U	14	190	0.45	2.4	52	--	13	58
	TRENCH1-1B-2.4	2.4	2.4	05-Mar-15	0.16 U	5.7	150	0.48	0.96	35	--	7.8	36
	TRENCH1-2SW-1.2	1.2	1.2	05-Mar-15	0.18 U	3.7	700	0.24	3.2	300	81 J	20	69
	TRENCH1-2B-2.4	2.4	2.4	05-Mar-15	0.17 U	7.4	460	0.41	0.95	40	--	12	50
	TRENCH1-3SW-1.2	1.2	1.2	05-Mar-15	0.16 U	4.3	87	0.19	2.4	230	--	16	56
	TRENCH1-4SW-1.2	1.2	1.2	05-Mar-15	0.16 U	4.4	220	0.24	1	33	--	5.7	33
	TRENCH1-5SW-1.2	1.2	1.2	05-Mar-15	0.22 U	6.9	440	0.34	9.9	1100	230 J	17	75
	TRENCH1-6SW-1.2	1.2	1.2	05-Mar-15	0.24 U	7.2	260	0.5	1.9	6.8	--	12	47
	TRENCH2-1SW-1.2	1.2	1.2	09-Mar-15	5.3	5.9	140	0.41	0.87	19	--	11	59
	TRENCH2-1B-4.0	4.0	4.0	09-Mar-15	1.7	3.1	61	0.31	0.31	44	--	3.2	7
	TRENCH2-2SW-2.0	2.0	2.0	09-Mar-15	2	4.1	220	0.36	0.31	36	--	8	29
	TRENCH2-2B-2.4	2.4	2.4	09-Mar-15	0.48 J	2.1	160	0.28	0.19 J	27	--	5.4	15
	TRENCH2-3SW-1.2	1.2	1.2	09-Mar-15	5.6	9	170	0.37	0.88	6.3	--	8.2	38
	TRENCH2-3B-2.4	2.4	2.4	09-Mar-15	1.7	4.3	180	0.37	0.41	39	--	7.9	25
	TRENCH2-4SW-1.2	1.2	1.2	09-Mar-15	8	8.3	910	0.22	2.1	720	230 J	27	100
	TRENCH2-4B-4.0	4.0	4.0	10-Mar-15	0.74	3.8	170	0.52	0.55	41	0.16 UJ	9.1	21
	TRENCH2-5SW-1.2	1.2	1.2	10-Mar-15	16	5.3	290	0.37	0.96	22	--	8.6	35
	TRENCH2-5B-4.0	4.0	4.0	10-Mar-15	0.61 J	3.8	240	0.57	0.56	41	--	6.8	26
	TRENCH2-6SW-2.0	2.0	2.0	10-Mar-15	0.99	6.8	180	0.4	1	30	0.15 UJ	7.1	39
	TRENCH2-6B-4.0	4.0	4.0	11-Mar-15	0.38 J	5.2	67	0.3	0.28 J	31	--	3.2	6.4
	TRENCH2-7SW-2.0	2.0	2.0	10-Mar-15	0.91	4.8	290	0.39	1.1	33	--	7.3	49
	TRENCH2-8SW-2.0	2.0	2.0	11-Mar-15	0.7	4.3	170	0.42	0.69	36	--	6.5	39
Soil and Groundwater Investigation 2015 Integral	MW-4-0.5-1.5	0.5	1.5	11-Feb-15	42	0.1 U	36	0.023 U	19	2500	0.14 U	99	640
	MW-6-2.5-3.5	2.5	3.5	12-Feb-15	0.89	1.9	130	0.31	0.34	28	0.16 U	4.1	12
	SB-11-2.0-2.5	2.0	2.5	19-Feb-15	0.35 J	5.1	160 J	0.43	1.4	44 J	0.15 UJ	9.3	44
	SB-11-9.5-10.0	9.5	10.0	19-Feb-15	0.2 U	8.6	480 J	0.34	0.39	38 J	0.65 J	19	16
	SB-12-2.5-3.5	2.5	3.5	13-Feb-15	6	6	200	0.51	0.65	52	0.16 U	9.9	38
	SB-12-11.0-12.0	11.0	12.0	13-Feb-15	2.2	19	100	0.33	0.64	61	1	13	23
	SB-13-3.0-4.0	3.0	4.0	13-Feb-15	1.1	3	170	0.4	0.2 J	34	0.17 U	7.4	17
	SB-13-12.0-13.0	12.0	13.0	13-Feb-15	3.3	1.4	58	0.28	0.22 J	59	1.1	3.5	12
	SB-14-4.0-4.5	4.0	4.5	18-Feb-15	3.4	2.6	71	0.3	0.5	51	0.62	6.6	11
	SB-14-9.5-10.0	9.5	10.0	18-Feb-15	4.4	3.4	69	0.33	0.62	48	0.15 U	5.6	6.6
	SB-15-5.0-5.5	5.0	5.5	18-Feb-15	4.5	3.5	96	0.36	0.79	53	0.16 U	26	18
	SB-15-9.5-10.0	9.5	10.0	18-Feb-15	7.4	12	230	0.49	1.1	66	0.8	11	17
	SB-16-3.0-3.5	3.0	3.5	18-Feb-15	9.7	2.2	100	0.25	1.8	170	0.15 U	21	180
	SB-16-9.5-10.0	9.5	10.0	18-Feb-15	5.8	13	1100	0.36	1	53	0.83	20	15
	SB-17-5.0-6.0	5.0	6.0	18-Feb-15	4.1	1.3	53	0.32	0.6	44	0.15 U	3.3	9.3
	SB-17-9.0-10.0	9.0	10.0	18-Feb-15	4.7	4.1	63	0.34	0.67	54	0.53	5	12
	SB-18-5.0-6.0	5.0	6.0	19-Feb-15	0.18 U	2.8	62 J	0.26	0.24 J	37 J	0.15 UJ	4.4	12
	SB-18-9.0-10.0	9.0	10.0	19-Feb-15	0.2 U	10	150 J	0.3	0.55	51 J	2.3 J	7.1	17
	SB-19-5.5-6.5	5.5	6.5	12-Feb-15	1.5	2.5	89	0.31	0.57	40	0.16 U	6.4	16

Table 9. Soil Sample Analytical Results—Metals

Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Chromium, Hexavalent (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)
	SB-19-8.5-9.5	8.5	9.5	12-Feb-15	1.5	2.9	370	0.29	0.61	46	0.15 U	8.8	11
	SB-20-6.0-7.0	6.0	7.0	13-Feb-15	0.39 J	0.14 J	52	0.38	0.37	51	0.15 U	3.9	14
	SB-20-10.5-11.5	10.5	11.5	13-Feb-15	0.43 J	1.1	59	0.33	0.43	57	0.57	8.7	18
	SB-21-1.0-2.0	1.0	2.0	11-Feb-15	0.8	2.2	160	0.25	0.41	32	0.15 U	5.1	27
	SB-22-4.0-5.0	4.0	5.0	13-Feb-15	4.4	4	130	0.33	0.4	41	0.16 U	19	26
	SB-22-11.0-12.0	11.0	12.0	13-Feb-15	4.6	1.9	61	0.31	0.36	52	0.16 U	5.9	14
	SB-24-3.2-3.8	3.2	3.8	18-Feb-15	0.48 J	1.6	120	0.27	0.25 J	23	0.15 U	5.3	9.6
	SB-24-7.0-7.3	7.0	7.3	18-Feb-15	2	11	93	0.33	0.76	51	0.64	6.9	11

Table 9. Soil Sample Analytical Results—Metals

Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	Lead (mg/kg)	Mercury (mg/kg)	Molybdenum (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Thallium (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
				Screening Level:	320	87.6	5110	19090	5110	5110	10.22	5110	306600
UST Removal	COMP S1-A-D	--	--	07-Jan-04	40	--	--	--	--	--	--	--	--
2004 Geo-Logic	DISP(3.5')	--	--	07-Jan-04	19	--	--	--	--	--	--	--	--
	P1(3.5')	--	--	07-Jan-04	11	--	--	--	--	--	--	--	--
	TPN(8')	--	--	07-Jan-04	7.2	--	--	--	--	--	--	--	--
	TWP(7.25)	--	--	07-Jan-04	33	--	--	--	--	--	--	--	--
Soil and	B1d4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--	--	--
Groundwater	B1d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--	--
Investigation	B1d12.5	12.5	12.5	27-Jun-07	--	--	--	--	--	--	--	--	--
2007 Geo-Logic	B1d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B3d4.5	4.5	4.5	27-Jun-07	5.9	0.05 U	0.5 U	63	0.5 U	0.5 U	0.5 U	52	54
	B3d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B3d12.5	12.5	12.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B3d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B5d4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B5d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B5d11.5	11.5	11.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B5d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B6d5	5.0	5.0	27-Jun-07	--	--	--	--	--	--	--	--	--
	B6d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B6d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B7Bd4	4.0	4.0	27-Jun-07	8100	0.34	360	1800	0.5 U	8.1	0.5 U	38	1000
	B7Cd4.5	4.5	4.5	27-Jun-07	310	0.15	3.8	110	0.5 U	0.5 U	0.5 U	41	200
	B7Cd7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B7Cd12.5	12.5	12.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B7Cd14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B8d4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B8d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B8d12.5	12.5	12.5	27-Jun-07	--	--	--	--	--	--	--	--	--
	B8d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--	--
Limited Phase II	A-1-4'	4.0	4.0	14-Jul-14	55	0.043	0.069 U	28	0.16 U	0.055 U	0.16 U	18	23
Investigation	A-3-4'	4.0	4.0	14-Jul-14	290	0.42	6.6	33	0.66 U	0.22 U	0.64 U	32	250
Allied	A-4-4'	4.0	4.0	14-Jul-14	2	0.02	0.059 U	37	0.14 U	0.047 U	0.13 U	21	20
Engineering	A-6-4'	4.0	4.0	14-Jul-14	7	0.039	0.069 U	22	0.16 U	0.054 U	0.16 U	20	22
Property 2014	A-7-4'	4.0	4.0	14-Jul-14	14	0.44	0.067 U	54	0.16 U	0.053 U	0.15 U	22	45
Geologica	A-8-4'	4.0	4.0	14-Jul-14	3.8	0.031	0.074 U	21	0.17 U	0.058 U	0.17 U	15	13
	A-9-4'	4.0	4.0	14-Jul-14	2.4	0.025	0.07 U	19	0.16 U	0.055 U	0.16 U	19	16
	TP-1-8.5'	8.5	8.5	10-Jul-14	5.8	0.087	0.054 U	36	0.13 U	0.042 U	0.12 U	25	30
Subsurface	SS-1-S	0.0	1.0	12-Jan-15	22000	0.14	23	870	0.5 U	0.96	0.5 U	22	1900
Investigation	SS-1-1	1.0	1.0	12-Jan-15	120	0.21	0.5 U	22	0.5 U	0.5 U	0.5 U	25	44
2015 AEI	SS-2-S	0.0	1.0	12-Jan-15	33000	0.1	23	350	0.5 U	0.5 U	0.5 U	23	2900
	SS-2-1	1.0	1.0	12-Jan-15	3700	0.21	0.84	37	0.5 U	0.5 U	0.5 U	35	250
	SS-3-S	0.0	1.0	12-Jan-15	93	0.064	1	56	0.5 U	0.5 U	0.5 U	24	130
	SS-3-1	1.0	1.0	12-Jan-15	770	0.42	1.1	34	0.5 U	0.5 U	0.5 U	36	590
	SS-4-S	0.0	1.0	12-Jan-15	180	0.19	1.6	46	0.5 U	0.5 U	0.5 U	32	260
	SS-4-1	1.0	1.0	12-Jan-15	2100	0.59	1.1	51	0.5 U	0.58	0.5 U	39	970
	SS-5-S	0.0	1.0	12-Jan-15	93	0.099	1	60	0.5 U	0.5 U	0.5 U	41	100
	SS-5-1	1.0	1.0	12-Jan-15	520	0.05 U	32	560	0.5 U	0.5 U	0.5 U	18	75
	SS-6-S	0.0	1.0	12-Jan-15	420	0.36	1.3	48	0.5 U	1.2	0.5 U	36	580
	SS-7-S	0.0	1.0	12-Jan-15	5500	0.082	5	670	0.5 U	0.5 U	0.5 U	16	390
	SS-7-1	1.0	1.0	12-Jan-15	3700	0.065	25	410	0.5 U	1.2	0.5 U	36	660
	SB-1-3.5	3.5	3.5	12-Jan-15	--	--	--	--	--	--	--	--	--
	SB-2-3.5	3.5	3.5	12-Jan-15	--	--	--	--	--	--	--	--	--
	SB-3-2	2.0	2.0	12-Jan-15	--	--	--	--	--	--	--	--	--
	SB-4-5'	5.0	5.0	12-Jan-15	--	--	--	--	--	--	--	--	--
	SB-5-5'	5.0	5.0	12-Jan-15	--	--	--	--	--	--	--	--	--
	SB-6-2'	2.0	2.0	12-Jan-15	--	--	--	--	--	--	--	--	--
	SB-7-2'	2.0	2.0	12-Jan-15	--	--	--	--	--	--	--	--	--
	SB-8-2'	2.0	2.0	12-Jan-15	--	--	--	--	--	--	--	--	--
	SB-9-2'	2.0	2.0	12-Jan-15	--	--	--	--	--	--	--	--	--
	SB-10-2'	2.0	2.0	12-Jan-15	--	--	--	--	--	--	--	--	--
Excavation	TBL1-1SW-1.2	1.2	1.2	03-Mar-15	7000	0.54	5.8	76	1.3	0.088 U	0.19 U	38	1600
Sampling 2015	TBL1-1B-4.5	4.5	4.5	04-Mar-15	30	0.16	0.56	36	0.17 U	0.35	0.15 U	37	73
Integral	TBL1-2SW-1.3	1.3	1.3	04-Mar-15	430	0.25	0.92	25	0.16 U	0.4	0.14 U	26	170
	TBL1-2B-2.0	2.0	2.0	05-Mar-15	640	0.31	1	31	0.17 U	0.45	0.15 U	39	270
	TBL1-3SW-1.2	1.2	1.2	04-Mar-15	4200	0.79	3.4	53	0.18 U	0.41	0.15 U	29	1500
	TBL1-3B-4.5	4.5	4.5	05-Mar-15	10	0.065	0.3	44	0.18 U	0.49	0.36 J	43	44
	TBL1-4SW-0.9	0.9	0.9	04-Mar-15	460	0.72	1.2	36	0.15 U	0.37	0.13 U	36	280

Table 9. Soil Sample Analytical Results—Metals

Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	Lead (mg/kg)	Mercury (mg/kg)	Molybdenum (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Thallium (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
	TBL1-4B-1.5	1.5	1.5	05-Mar-15	32	0.24	0.58	89	0.17 U	0.13 J	0.15 U	40	69
	TBL1-5SW-1.0	1.0	1.0	04-Mar-15	360	0.33	2.8	48	0.16 U	1	0.14 U	53	300
	TBL1-6SW-2.3	2.3	2.3	04-Mar-15	42	0.15	0.74	96	0.19 U	0.12 J	0.16 J	39	81
	TBL1-7SW-2.0	2.0	2.0	04-Mar-15	180	0.21	0.82	90	0.18 U	0.1 J	0.16 U	35	93
	TBL1-8SW-1.6	1.6	1.6	05-Mar-15	70	0.36	0.76	77	0.23 U	0.27 J	0.2 U	49	100
	TBL1-9SW-0.8	0.8	0.8	05-Mar-15	5.3	0.021	0.1 J	55	0.15 U	0.13 J	0.13 U	43	48
	TBL1-10SW-2.3	2.3	2.3	05-Mar-15	46	0.14	0.73	85	0.18 U	0.17 J	0.16 U	40	68
	TBL1-11SW-0.8	0.8	0.8	05-Mar-15	5.3	0.03	0.56	63	0.19 U	0.16 J	0.17 U	51	55
	TBL2-1SW-0.9	0.9	0.9	06-Mar-15	58	0.37	0.17 J	100	0.19 U	0.14 J	0.17 U	130	54
	TBL2-1B-4.0	4.0	4.0	06-Mar-15	18	0.11	0.12 J	25	0.18 U	0.046 U	0.16 U	45	25
	TBL2-2SW-0.9	0.9	0.9	06-Mar-15	0.077 U	0.57	0.054 U	94	0.18 U	0.2 J	0.16 U	130	38
	TBL2-2B-4.0	4.0	4.0	06-Mar-15	2.7	0.024	0.079 J	21	0.16 U	0.041 U	0.14 U	22	20
	TBL2-3SW-0.9	0.9	0.9	06-Mar-15	500	2.6	1.4	31	0.16 U	0.041 U	0.14 U	73	180
	TBL2-3B-1.8	1.8	1.8	06-Mar-15	150	0.42	0.76	21	0.19 U	0.72	0.17 U	28	110
	TBL2-4SW-1.3	1.3	1.3	06-Mar-15	3700	0.0011 U	5.2	46	0.19 U	0.047 U	0.16 U	35	270
	TBL2-4B-1.8	1.8	1.8	06-Mar-15	27	0.03	0.2 J	31	0.19 U	0.048 U	0.17 U	22	41
	TBL2-5SW-1.3	1.3	1.3	06-Mar-15	850	0.38	4.4	37	0.17 U	0.042 U	0.15 U	34	280
	TBL2-5B-2.2	2.2	2.2	06-Mar-15	530	0.37	0.93	30	0.17 U	0.093 J	0.15 U	32	170
	TBL2-6SW-1.3	1.3	1.3	06-Mar-15	130	0.19	0.36	24	0.17 U	0.047 J	0.15 U	28	59
	TBL2-7SW-1.4	1.4	1.4	06-Mar-15	480	0.14	1.6	17	0.18 U	0.044 U	0.16 U	38	500
	TBL2-8SW-1.2	1.2	1.2	06-Mar-15	1700	0.18	2.4	25	0.16 U	0.041 U	0.14 U	41	140
	TP-1-0.5	0.5	0.5	30-Jan-15	1000	0.23	2.7	41	0.56 U	0.56 U	0.56 U	63 J	290
	TP-1-2.0	2.0	2.0	30-Jan-15	13	0.081	0.58 U	46	0.58 U	0.58 U	0.58 U	53 J	32
	TP-2-1.25	1.3	1.3	30-Jan-15	640	1.3	0.6 U	79	0.6 U	0.6 U	0.6 U	48 J	310
	TP-2-2.0	2.0	2.0	30-Jan-15	9.9	0.07	0.6 U	25	0.6 U	0.6 U	0.6 U	27 J	22
	TP-3-2.0	2.0	2.0	30-Jan-15	46	0.6	0.54 U	110	0.54 U	0.54 U	0.54 U	55 J	73
	TP-4-2.0	2.0	2.0	30-Jan-15	100	0.35	0.56 U	48	0.56 U	0.56 U	0.56 U	40 J	110
	TRENCH1-1SW-1.2	1.2	1.2	05-Mar-15	310	0.38	4.1	71	0.19 U	0.056 J	0.28 J	52	170
	TRENCH1-1B-2.4	2.4	2.4	05-Mar-15	110	0.47	0.55	43	0.17 U	0.25 J	0.15 U	35	92
	TRENCH1-2SW-1.2	1.2	1.2	05-Mar-15	5100	0.96	3.4	54	0.19 U	0.4	0.17 U	95	510
	TRENCH1-2B-2.4	2.4	2.4	05-Mar-15	68	0.43	0.56	52	0.18 U	0.28 J	0.16 U	41	72
	TRENCH1-3SW-1.2	1.2	1.2	05-Mar-15	1800	0.43	2.2	45	0.17 U	0.35	0.15 U	100	340
	TRENCH1-4SW-1.2	1.2	1.2	05-Mar-15	1100	0.23	0.63	22	0.18 U	0.23 J	0.15 U	23	200
	TRENCH1-5SW-1.2	1.2	1.2	05-Mar-15	2700	0.49	2.7	45	0.24 U	0.059 U	0.51 J	40	3100
	TRENCH1-6SW-1.2	1.2	1.2	05-Mar-15	74	0.13	0.43	5.2	0.26 U	0.28 J	0.23 U	66	99
	TRENCH2-1SW-1.2	1.2	1.2	09-Mar-15	210 J	0.22 J	0.27 J	18	0.16 U	0.084 U	0.18 U	53	99
	TRENCH2-1B-4.0	4.0	4.0	09-Mar-15	3.9 J	0.023 J	0.061 U	51	0.16 U	0.081 U	0.18 U	33	26
	TRENCH2-2SW-2.0	2.0	2.0	09-Mar-15	57 J	0.17 J	0.25 J	38	0.17 U	0.089 U	0.19 U	28	55
	TRENCH2-2B-2.4	2.4	2.4	09-Mar-15	4.5 J	0.027 J	0.067 U	26	0.17 U	0.089 U	0.19 U	19	22
	TRENCH2-3SW-1.2	1.2	1.2	09-Mar-15	52 J	0.063 J	0.73	5.1	0.15 U	0.078 U	0.17 U	39	67
	TRENCH2-3B-2.4	2.4	2.4	09-Mar-15	60 J	0.13 J	0.36	52	0.16 U	0.083 U	0.18 U	26	43
	TRENCH2-4SW-1.2	1.2	1.2	09-Mar-15	24000 J	0.56 J	2.9	27	0.98	0.079 U	0.17 U	71	1800
	TRENCH2-4B-4.0	4.0	4.0	10-Mar-15	25	0.049	0.1 J	63	0.53 J	0.053 U	0.29 J	55	45
	TRENCH2-5SW-1.2	1.2	1.2	10-Mar-15	860	0.32	0.25 J	25	0.17 J	0.041 U	0.38 J	35	110
	TRENCH2-5B-4.0	4.0	4.0	10-Mar-15	6.6	0.039	0.18 J	49	0.64 J	0.055 U	0.26 J	31	46
	TRENCH2-6SW-2.0	2.0	2.0	10-Mar-15	180	0.36	0.51	37	0.17 U	0.21 J	0.43 J	36	190
	TRENCH2-6B-4.0	4.0	4.0	11-Mar-15	3.6	0.015 J	0.077 J	24	0.22 J	0.045 U	0.16 U	33	21
	TRENCH2-7SW-2.0	2.0	2.0	10-Mar-15	310	0.85	0.5	38	0.18 U	0.31	0.53 J	33	290
	TRENCH2-8SW-2.0	2.0	2.0	11-Mar-15	83	0.28	0.26 J	41	0.18 U	0.055 J	0.49 J	30	100
Soil and Groundwater Investigation 2015 Integral	MW-4-0.5-1.5	0.5	1.5	11-Feb-15	250	0.017 J	170	1100	0.18 U	0.092 U	0.2 U	160	170
	MW-6-2.5-3.5	2.5	3.5	12-Feb-15	4.2	0.028	0.16 J	27	0.2 U	0.05 U	0.18 U	24	22
	SB-11-2.0-2.5	2.0	2.5	19-Feb-15	120	0.021 J	0.24 J	48	0.16 U	0.083 U	0.18 U	38	270
	SB-11-9.5-10.0	9.5	10.0	19-Feb-15	5.1	0.043	0.14 J	48	0.57 J	0.096 U	0.21 U	34	27
	SB-12-2.5-3.5	2.5	3.5	13-Feb-15	95 J	0.39	0.54	70	0.17 U	0.085 U	0.19 U	40	98
	SB-12-11.0-12.0	11.0	12.0	13-Feb-15	4.8 J	0.031	0.11 J	49	0.17 U	0.088 U	0.19 U	67	30
	SB-13-3.0-4.0	3.0	4.0	13-Feb-15	12 J	0.072	0.089 J	39	0.19 U	0.095 U	0.21 U	40	30
	SB-13-12.0-13.0	12.0	13.0	13-Feb-15	3.7 J	0.045	0.069 U	32	0.18 U	0.091 U	0.2 U	26	25
	SB-14-4.0-4.5	4.0	4.5	18-Feb-15	2.3	0.04	0.12 J	33	0.18 U	0.045 U	0.16 U	30	24
	SB-14-9.5-10.0	9.5	10.0	18-Feb-15	1.7	0.03	0.15 J	50	0.18 U	0.046 U	0.16 U	33	29
	SB-15-5.0-5.5	5.0	5.5	18-Feb-15	12	0.036	0.33	51	0.17 U	1.3	0.15 U	31	47
	SB-15-9.5-10.0	9.5	10.0	18-Feb-15	5.5	0.05	0.4	58	0.18 U	0.046 U	0.16 U	57	48
	SB-16-3.0-3.5	3.0	3.5	18-Feb-15	51	0.021	10	98	0.17 U	0.52	0.15 U	29	100
	SB-16-9.5-10.0	9.5	10.0	18-Feb-15	3.3	0.029	0.78	75	0.88	0.042 U	0.15 U	67	34
	SB-17-5.0-6.0	5.0	6.0	18-Feb-15	1.7	0.034	0.16 J	37	0.19 U	0.046 U	0.16 U	25	23
	SB-17-9.0-10.0	9.0	10.0	18-Feb-15	2.3	0.062	0.09 J	31	0.19 U	0.047 U	0.17 U	36	28
	SB-18-5.0-6.0	5.0	6.0	19-Feb-15	3.5	0.036	0.064 U	39	0.17 U	0.085 U	0.19 U	24	21
	SB-18-9.0-10.0	9.0	10.0	19-Feb-15	4.4	0.063	0.14 J	38	0.18 U	0.093 U	0.2 U	34	37
	SB-19-5.5-6.5	5.5	6.5	12-Feb-15	34	0.11	0.096 J	35	0.18 U	0.045 U	0.16 U	25	46

Table 9. Soil Sample Analytical Results—Metals

Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	Lead (mg/kg)	Mercury (mg/kg)	Molybdenum (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Thallium (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
	SB-19-8.5-9.5	8.5	9.5	12-Feb-15	2.7	0.045	0.055 U	42	0.18 U	0.045 U	0.16 U	30	28
	SB-20-6.0-7.0	6.0	7.0	13-Feb-15	3.6 J	0.029	0.072 U	42	0.19 U	0.096 U	0.21 U	24	33
	SB-20-10.5-11.5	10.5	11.5	13-Feb-15	4.2 J	0.041	0.069 U	54	0.18 U	0.092 U	0.2 U	38	37
	SB-21-1.0-2.0	1.0	2.0	11-Feb-15	220	0.3	0.27 J	23	0.17 U	0.085 U	0.18 U	24	100
	SB-22-4.0-5.0	4.0	5.0	13-Feb-15	57 J	0.041	0.75	40	0.37 J	0.092 U	0.2 U	30	53
	SB-22-11.0-12.0	11.0	12.0	13-Feb-15	4.7 J	0.057	0.065 U	39	0.17 U	0.087 U	0.19 U	34	31
	SB-24-3.2-3.8	3.2	3.8	18-Feb-15	14	0.024 J	0.19 J	18	0.2 U	0.05 U	0.22 J	20	20
	SB-24-7.0-7.3	7.0	7.3	18-Feb-15	1.6	0.045 J	0.056 U	41	0.18 U	0.046 U	0.16 U	37	33

Notes:

Detected concentrations exceeding screening levels are highlighted in yellow; analytes detected in less than 5 percent of the samples are not screened unless carcinogenic (see Table 5).

Mercury analyzed using EPA Method SW6020 / SW7471A.

Metals analyzed using EPA Method SW6010B / SW6010C / SW6020.

Hexavalent chromium analyzed using EPA Method E218.6 / SW7196A / SW7199.

Soil screening levels based on the lower of the cancer and noncancer environmental screening level (ESL) for direct exposures to soil for a commercial/industrial scenario (Table K-2; SFRWQCB 2013).

-- = not applicable (not analyzed or information not provided)

ft bgs = feet below ground surface

mg/kg = milligrams per kilogram

UST = underground storage tank

Qualifiers:

J = Estimated. The analyte was detected and positively identified. The associated numerical value is an estimated value.

U = The analyte was analyzed for, but was not detected.

UJ = The analyte was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

Table 10. Soil Sample Analytical Results—Volatile Organic Compounds

Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	1,1-Dichloroethene (mg/kg)	cis-1,2-Dichloroethene (mg/kg)	trans-1,2-Dichloroethene (mg/kg)	1,1,2-Trichloro-1,2,2-trifluoroethane (mg/kg)	1,2,4-Trimethylbenzene (mg/kg)	1,3,5-Trimethylbenzene (mg/kg)	1,4-Dichlorobenzene (mg/kg)	2-Butanone (mg/kg)
				Screening Level:	<5%FOD	84.4	587	<5%FOD	NA	NA	13.9	249389
UST Removal 2004 Geo-Logic	COMP S1-A-D	--	--	07-Jan-04	--	--	--	--	--	--	--	--
	DISP(3.5')	--	--	07-Jan-04	--	--	--	--	--	--	--	--
	P1(3.5')	--	--	07-Jan-04	--	--	--	--	--	--	--	--
	TPN(8')	--	--	07-Jan-04	--	--	--	--	--	--	--	--
	TWP(7.25)	--	--	07-Jan-04	--	--	--	--	--	--	--	--
Soil and Groundwater Investigation 2007 Geo-Logic	B1d4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--	--
	B1d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--
	B1d12.5	12.5	12.5	27-Jun-07	--	--	--	--	--	--	--	--
	B1d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--
	B3d4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--	--
	B3d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--
	B3d12.5	12.5	12.5	27-Jun-07	--	--	--	--	--	--	--	--
	B3d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--
	B5d4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--	--
	B5d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--
	B5d11.5	11.5	11.5	27-Jun-07	--	--	--	--	--	--	--	--
	B5d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--
	B6d5	5.0	5.0	27-Jun-07	--	--	--	--	--	--	--	--
	B6d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--
	B6d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--
	B7Bd4	4.0	4.0	27-Jun-07	--	--	--	--	--	--	--	--
	B7Cd4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--	--
	B7Cd7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--
	B7Cd12.5	12.5	12.5	27-Jun-07	--	--	--	--	--	--	--	--
	B7Cd14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--
	B8d4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--	--
	B8d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--	--
	B8d12.5	12.5	12.5	27-Jun-07	--	--	--	--	--	--	--	--
	B8d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--	--
Limited Phase II Investigation Allied Engineering Property 2014 Geologica	A-1-4'	4.0	4.0	14-Jul-14	0.00068 U	0.00074 U	0.00082 U	0.0023 U	0.0018 U	0.00071 U	0.00078 U	0.023 U
	A-3-4'	4.0	4.0	14-Jul-14	0.00071 U	0.00078 U	0.00086 U	0.0024 U	0.0019 U	0.00075 U	0.00081 U	0.024 U
	A-4-4'	4.0	4.0	14-Jul-14	0.0007 U	0.00076 U	0.00084 U	0.0023 U	0.0018 U	0.00073 U	0.0008 U	0.024 U
	A-6-4'	4.0	4.0	14-Jul-14	0.00066 U	0.00072 U	0.00079 U	0.0022 U	0.0017 U	0.00069 U	0.00075 U	0.022 U
	A-7-4'	4.0	4.0	14-Jul-14	0.00078 U	0.00086 U	0.00095 U	0.0026 U	0.0021 U	0.00082 U	0.0009 U	0.027 U
	A-8-4'	4.0	4.0	14-Jul-14	0.00074 U	0.00081 U	0.00089 U	0.0025 U	0.0019 U	0.00077 U	0.00084 U	0.025 U
	A-9-4'	4.0	4.0	14-Jul-14	0.00068 U	0.00075 U	0.00082 U	0.0023 U	0.0018 U	0.00071 U	0.00078 U	0.023 U
	TP-1-8.5'	8.5	8.5	10-Jul-14	0.00069 U	0.00076 U	0.00084 U	0.0023 U	0.0018 U	0.00073 U	0.00079 U	0.023 U
Subsurface Investigation 2015 AEI	SS-1-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-1-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-2-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-2-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-3-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-3-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-4-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-4-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-5-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-5-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-6-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-7-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SS-7-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--	--
	SB-1-3.5	3.5	3.5	12-Jan-15	0.0028 U	0.0024 U	0.0026 U	0.0013 U	0.0039 U	0.0044 U	0.0029 U	0.0088 U
	SB-2-3.5	3.5	3.5	12-Jan-15	0.0097 U	0.0086 U	0.0091 U	0.0046 U	0.014 U	0.015 U	0.01 U	0.031 U
	SB-3-2	2.0	2.0	12-Jan-15	0.0039 U	0.0035 U	0.0037 U	0.0018 U	0.0055 U	0.0062 U	0.0041 U	0.012 U
	SB-4-5'	5.0	5.0	12-Jan-15	0.0014 U	0.0012 U	0.0013 U	0.00064 U	0.0019 U	0.0022 U	0.0014 U	0.0043 U
	SB-5-5'	5.0	5.0	12-Jan-15	0.0013 U	0.0012 U	0.0013 U	0.00063 U	0.0019 U	0.0021 U	0.0014 U	0.0043 U
	SB-6-2'	2.0	2.0	12-Jan-15	0.0015 U	0.0013 U	0.0014 U	0.00069 U	0.0021 U	0.0023 U	0.0015 U	0.0046 U

Table 10. Soil Sample Analytical Results—Volatile Organic Compounds

Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	1,1-Dichloroethene (mg/kg)	cis-1,2-Dichloroethene (mg/kg)	trans-1,2-Dichloroethene (mg/kg)	1,1,2-Trichloro-1,2,2-trifluoroethane (mg/kg)	1,2,4-Trimethylbenzene (mg/kg)	1,3,5-Trimethylbenzene (mg/kg)	1,4-Dichlorobenzene (mg/kg)	2-Butanone (mg/kg)
	SB-7-2'	2.0	2.0	12-Jan-15	0.0017 U	0.0015 U	0.0016 U	0.011	0.0024 U	0.0027 U	0.0018 U	0.0054 U
	SB-8-2'	2.0	2.0	12-Jan-15	0.0014 U	0.0013 U	0.0013 U	0.00067 U	0.002 U	0.0023 U	0.0015 U	0.0045 U
	SB-9-2'	2.0	2.0	12-Jan-15	0.0015 U	0.0013 U	0.0014 U	0.00071 U	0.0021 U	0.0024 U	0.0016 U	0.0048 U
	SB-10-2'	2.0	2.0	12-Jan-15	0.0014 U	0.0012 U	0.0013 U	0.00067 U	0.002 U	0.0022 U	0.0015 U	0.0045 U
Excavation Sampling 2015 Integral	TBL1-1SW-1.2	1.2	1.2	03-Mar-15	--	--	--	--	--	--	0.017 U	--
	TBL1-1B-4.5	4.5	4.5	04-Mar-15	--	--	--	--	--	--	0.0082 U	--
	TBL1-2SW-1.3	1.3	1.3	04-Mar-15	--	--	--	--	--	--	0.038 U	--
	TBL1-2B-2.0	2.0	2.0	05-Mar-15	--	--	--	--	--	--	0.038 U	--
	TBL1-3SW-1.2	1.2	1.2	04-Mar-15	--	--	--	--	--	--	0.04 U	--
	TBL1-3B-4.5	4.5	4.5	05-Mar-15	--	--	--	--	--	--	0.0089 U	--
	TBL1-4SW-0.9	0.9	0.9	04-Mar-15	--	--	--	--	--	--	0.038 U	--
	TBL1-4B-1.5	1.5	1.5	05-Mar-15	--	--	--	--	--	--	0.016 U	--
	TBL1-5SW-1.0	1.0	1.0	04-Mar-15	--	--	--	--	--	--	0.054 U	--
	TBL1-6SW-2.3	2.3	2.3	04-Mar-15	--	--	--	--	--	--	0.0083 U	--
	TBL1-7SW-2.0	2.0	2.0	04-Mar-15	--	--	--	--	--	--	0.0083 U	--
	TBL1-8SW-1.6	1.6	1.6	05-Mar-15	--	--	--	--	--	--	0.047 U	--
	TBL1-9SW-0.8	0.8	0.8	05-Mar-15	--	--	--	--	--	--	0.011 U	--
	TBL1-10SW-2.3	2.3	2.3	05-Mar-15	--	--	--	--	--	--	0.011 U	--
	TBL1-11SW-0.8	0.8	0.8	05-Mar-15	--	--	--	--	--	--	0.012 U	--
	TBL2-1SW-0.9	0.9	0.9	06-Mar-15	--	--	--	--	--	--	0.017 U	--
	TBL2-1B-4.0	4.0	4.0	06-Mar-15	--	--	--	--	--	--	0.016 U	--
	TBL2-2SW-0.9	0.9	0.9	06-Mar-15	--	--	--	--	--	--	0.018 U	--
	TBL2-2B-4.0	4.0	4.0	06-Mar-15	--	--	--	--	--	--	0.016 U	--
	TBL2-3SW-0.9	0.9	0.9	06-Mar-15	--	--	--	--	--	--	0.016 U	--
	TBL2-3B-1.8	1.8	1.8	06-Mar-15	--	--	--	--	--	--	0.087 U	--
	TBL2-4SW-1.3	1.3	1.3	06-Mar-15	--	--	--	--	--	--	0.017 U	--
	TBL2-4B-1.8	1.8	1.8	06-Mar-15	--	--	--	--	--	--	0.018 U	--
	TBL2-5SW-1.3	1.3	1.3	06-Mar-15	--	--	--	--	--	--	0.017 U	--
	TBL2-5B-2.2	2.2	2.2	06-Mar-15	--	--	--	--	--	--	0.083 U	--
	TBL2-6SW-1.3	1.3	1.3	06-Mar-15	--	--	--	--	--	--	0.016 U	--
	TBL2-7SW-1.4	1.4	1.4	06-Mar-15	--	--	--	--	--	--	0.34 U	--
	TBL2-8SW-1.2	1.2	1.2	06-Mar-15	--	--	--	--	--	--	0.049 U	--
	TP-1-0.5	0.5	0.5	30-Jan-15	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.045 U
	TP-1-2.0	2.0	2.0	30-Jan-15	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.043 U
	TP-2-1.25	1.3	1.3	30-Jan-15	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.042 U
	TP-2-2.0	2.0	2.0	30-Jan-15	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.044 U
	TP-3-2.0	2.0	2.0	30-Jan-15	0.0092 U	0.0092 U	0.0092 U	0.0092 U	0.0092 U	0.0092 U	0.0092 U	0.037 U
	TP-4-2.0	2.0	2.0	30-Jan-15	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.042 U
	TRENCH1-1SW-1.2	1.2	1.2	05-Mar-15	--	--	--	--	--	--	0.016 U	--
	TRENCH1-1B-2.4	2.4	2.4	05-Mar-15	--	--	--	--	--	--	0.016 U	--
	TRENCH1-2SW-1.2	1.2	1.2	05-Mar-15	--	--	--	--	--	--	0.084 U	--
	TRENCH1-2B-2.4	2.4	2.4	05-Mar-15	--	--	--	--	--	--	0.011 U	--
	TRENCH1-3SW-1.2	1.2	1.2	05-Mar-15	--	--	--	--	--	--	0.061 U	--
	TRENCH1-4SW-1.2	1.2	1.2	05-Mar-15	--	--	--	--	--	--	0.42 U	--
	TRENCH1-5SW-1.2	1.2	1.2	05-Mar-15	--	--	--	--	--	--	0.011 U	--
	TRENCH1-6SW-1.2	1.2	1.2	05-Mar-15	--	--	--	--	--	--	0.016 U	--
	TRENCH2-1SW-1.2	1.2	1.2	09-Mar-15	--	--	--	--	--	--	0.017 U	--
	TRENCH2-1B-4.0	4.0	4.0	09-Mar-15	--	--	--	--	--	--	0.017 U	--
	TRENCH2-2SW-2.0	2.0	2.0	09-Mar-15	--	--	--	--	--	--	0.018 U	--
	TRENCH2-2B-2.4	2.4	2.4	09-Mar-15	--	--	--	--	--	--	0.018 U	--
	TRENCH2-3SW-1.2	1.2	1.2	09-Mar-15	--	--	--	--	--	--	0.017 U	--
	TRENCH2-3B-2.4	2.4	2.4	09-Mar-15	--	--	--	--	--	--	0.018 U	--
	TRENCH2-4SW-1.2	1.2	1.2	09-Mar-15	--	--	--	--	--	--	0.016 U	--
	TRENCH2-4B-4.0	4.0	4.0	10-Mar-15	0.0007 U	0.0006 U	0.0008 U	0.0006 U	0.0007 U	0.0007 U	0.0005 U	0.0078 J
	TRENCH2-5SW-1.2	1.2	1.2	10-Mar-15	--	--	--	--	--	--	0.033 U	--
	TRENCH2-5B-4.0	4.0	4.0	10-Mar-15	--	--	--	--	--	--	0.019 U	--
	TRENCH2-6SW-2.0	2.0	2.0	10-Mar-15	0.0007 U	0.0006 U	0.0008 U	0.0006 U	0.0007 U	0.0007 U	0.0005 U	0.042

Table 10. Soil Sample Analytical Results—Volatile Organic Compounds

Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	1,1-Dichloroethene (mg/kg)	cis-1,2-Dichloroethene (mg/kg)	trans-1,2-Dichloroethene (mg/kg)	1,1,2-Trichloro-1,2,2-trifluoroethane (mg/kg)	1,2,4-Trimethylbenzene (mg/kg)	1,3,5-Trimethylbenzene (mg/kg)	1,4-Dichlorobenzene (mg/kg)	2-Butanone (mg/kg)
	TRENCH2-6B-4.0	4.0	4.0	11-Mar-15	--	--	--	--	--	--	0.017 U	--
	TRENCH2-7SW-2.0	2.0	2.0	10-Mar-15	--	--	--	--	--	--	0.18 U	--
	TRENCH2-8SW-2.0	2.0	2.0	11-Mar-15	--	--	--	--	--	--	0.026 U	--
Soil and Groundwater Investigation 2015 Integral	MW-4-0.5-1.5	0.5	1.5	11-Feb-15	0.0052 U	0.0065 U	0.0039 U	0.0039 U	0.0094 J	0.0039 U	0.0039 U	0.017 U
	MW-6-2.5-3.5	2.5	3.5	12-Feb-15	0.00095 U	0.00088 U	0.00085 U	0.00045 U	0.00061 U	0.00058 U	0.00055 U	0.0014 U
	SB-11-2.0-2.5	2.0	2.5	19-Feb-15	0.00058 U	0.00055 U	0.00066 U	0.0005 U	0.0006 U	0.00063 U	0.00046 U	0.00065 U
	SB-11-9.5-10.0	9.5	10.0	19-Feb-15	0.00057 U	0.0026 J	0.00065 U	0.0005 U	0.00059 U	0.00062 U	0.00045 U	0.00064 U
	SB-12-2.5-3.5	2.5	3.5	13-Feb-15	0.024 U	0.023 U	0.022 U	0.038 U	0.017 U	0.028 U	0.024 U	0.067 U
	SB-12-11.0-12.0	11.0	12.0	13-Feb-15	0.00074 U	0.00068 U	0.00066 U	0.00034 U	0.00047 U	0.00045 U	0.00042 U	0.0011 U
	SB-13-3.0-4.0	3.0	4.0	13-Feb-15	0.068 U	0.066 U	0.063 U	0.11 U	1.4	0.47 J	0.068 U	0.19 U
	SB-13-12.0-13.0	12.0	13.0	13-Feb-15	0.025 U	0.025 U	0.024 U	0.041 U	0.018 U	0.12 J	0.025 U	0.072 U
	SB-14-4.0-4.5	4.0	4.5	18-Feb-15	0.00063 U	0.0006 U	0.00072 U	0.00055 U	0.00066 U	0.00068 U	0.0005 U	0.00071 U
	SB-14-9.5-10.0	9.5	10.0	18-Feb-15	0.00066 U	0.00063 U	0.00075 U	0.00058 U	0.00069 U	0.00072 U	0.00053 U	0.00074 U
	SB-15-5.0-5.5	5.0	5.5	18-Feb-15	0.0078 U	0.0097 U	0.0058 U	0.0058 U	0.04 J	0.0089 J	0.024 J	0.025 U
	SB-15-9.5-10.0	9.5	10.0	18-Feb-15	0.0005 U	0.00047 U	0.00057 U	0.00044 U	0.00052 U	0.00054 U	0.0004 U	0.001 J
	SB-16-3.0-3.5	3.0	3.5	18-Feb-15	0.0004 U	0.00083 J	0.00056 U	0.00041 U	0.0003 J	0.00029 U	0.00036 U	0.017
	SB-16-9.5-10.0	9.5	10.0	18-Feb-15	0.0011 J	0.013	0.0019 J	0.00039 U	0.00025 U	0.00028 U	0.00034 U	0.0012 U
	SB-17-5.0-6.0	5.0	6.0	18-Feb-15	0.0004 U	0.04 J	0.017 J	0.00041 U	0.00025 U	0.00029 U	0.00036 U	0.035 U
	SB-17-9.0-10.0	9.0	10.0	18-Feb-15	0.00067 J	0.039	0.0054	0.0004 U	0.00025 U	0.00028 U	0.00035 U	0.0013 U
	SB-18-5.0-6.0	5.0	6.0	19-Feb-15	0.00052 U	0.0008 J	0.00059 U	0.00045 U	0.00054 U	0.00056 U	0.00041 U	0.00058 U
	SB-18-9.0-10.0	9.0	10.0	19-Feb-15	0.00051 U	0.0068	0.003 J	0.00044 U	0.00053 U	0.00055 U	0.0004 U	0.00057 U
	SB-19-5.5-6.5	5.5	6.5	12-Feb-15	0.0056 U	0.08 J	0.026 J	0.0041 U	0.0061 U	0.0041 U	0.0041 U	0.018 U
	SB-19-8.5-9.5	8.5	9.5	12-Feb-15	0.00049 U	0.0015 J	0.00094 J	0.00042 U	0.0005 U	0.00053 U	0.00039 U	0.00055 U
	SB-20-6.0-7.0	6.0	7.0	13-Feb-15	0.02 U	0.02 U	0.019 U	0.032 U	0.015 U	0.024 U	0.02 U	0.057 U
	SB-20-10.5-11.5	10.5	11.5	13-Feb-15	0.00042 U	0.00085 J	0.0006 U	0.00043 U	0.00027 U	0.00031 U	0.00038 U	0.0014 U
	SB-21-1.0-2.0	1.0	2.0	11-Feb-15	0.0007 U	0.00066 U	0.00079 U	0.00061 U	0.00072 U	0.00075 U	0.00055 U	0.00078 U
	SB-22-4.0-5.0	4.0	5.0	13-Feb-15	0.025 U	0.024 U	0.023 U	0.04 U	0.026 J	0.03 U	0.025 U	0.071 J
	SB-22-11.0-12.0	11.0	12.0	13-Feb-15	0.00041 U	0.00028 U	0.00058 U	0.00042 U	0.0014 J	0.00045 J	0.00037 U	0.0013 U
	SB-24-3.2-3.8	3.2	3.8	18-Feb-15	0.012 U	0.015 U	0.0091 U	0.0091 U	0.42 J	0.15 J	0.0091 U	0.039 U
	SB-24-7.0-7.3	7.0	7.3	18-Feb-15	0.0057 U	0.007 U	0.0042 U	0.0042 U	0.0067 J	0.0042 U	0.0042 U	0.018 U

Table 10. Soil Sample Analytical Results—Volatile Organic Compounds

Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	2-Hexanone (mg/kg)	4-Isopropyltoluene (mg/kg)	4-Methyl-2-pentanone (mg/kg)	Acetone (mg/kg)	Benzene (mg/kg)	Carbon disulfide (mg/kg)	Ethylbenzene (mg/kg)
				Screening Level:	<5%FOD	NA	237922	594909	3.70	NA	23.8
UST Removal 2004 Geo-Logic	COMP S1-A-D	--	--	07-Jan-04	--	--	--	--	2.1	--	2.2
	DISP(3.5')	--	--	07-Jan-04	--	--	--	--	3.4	--	19
	P1(3.5')	--	--	07-Jan-04	--	--	--	--	0.6	--	0.81
	TPN(8')	--	--	07-Jan-04	--	--	--	--	0.41	--	0.81
	TWP(7.25)	--	--	07-Jan-04	--	--	--	--	6.4	--	7.4
Soil and Groundwater Investigation 2007 Geo-Logic	B1d4.5	4.5	4.5	27-Jun-07	--	--	--	--	0.005 U	--	0.005 U
	B1d7.5	7.5	7.5	27-Jun-07	--	--	--	--	0.087	--	1.5
	B1d12.5	12.5	12.5	27-Jun-07	--	--	--	--	0.005 U	--	0.005 U
	B1d14.5	14.5	14.5	27-Jun-07	--	--	--	--	0.005 U	--	0.005 U
	B3d4.5	4.5	4.5	27-Jun-07	--	--	--	--	0.005 U	--	0.005 U
	B3d7.5	7.5	7.5	27-Jun-07	--	--	--	--	0.005 U	--	0.005 U
	B3d12.5	12.5	12.5	27-Jun-07	--	--	--	--	0.17 U	--	4.2
	B3d14.5	14.5	14.5	27-Jun-07	--	--	--	--	0.005 U	--	0.005 U
	B5d4.5	4.5	4.5	27-Jun-07	--	--	--	--	1.7	--	27
	B5d7.5	7.5	7.5	27-Jun-07	--	--	--	--	1.2	--	8.3
	B5d11.5	11.5	11.5	27-Jun-07	--	--	--	--	0.005 U	--	0.005 U
	B5d14.5	14.5	14.5	27-Jun-07	--	--	--	--	0.005 U	--	0.005 U
	B6d5	5.0	5.0	27-Jun-07	--	--	--	--	0.005 U	--	0.005 U
	B6d7.5	7.5	7.5	27-Jun-07	--	--	--	--	0.05 U	--	0.098
	B6d14.5	14.5	14.5	27-Jun-07	--	--	--	--	0.005 U	--	0.005 U
	B7Bd4	4.0	4.0	27-Jun-07	--	--	--	--	--	--	--
	B7Cd4.5	4.5	4.5	27-Jun-07	--	--	--	--	0.005 U	--	0.005 U
	B7Cd7.5	7.5	7.5	27-Jun-07	--	--	--	--	0.005 U	--	0.005 U
	B7Cd12.5	12.5	12.5	27-Jun-07	--	--	--	--	0.005 U	--	0.005 U
	B7Cd14.5	14.5	14.5	27-Jun-07	--	--	--	--	0.005 U	--	0.005 U
	B8d4.5	4.5	4.5	27-Jun-07	--	--	--	--	0.005 U	--	0.005 U
	B8d7.5	7.5	7.5	27-Jun-07	--	--	--	--	0.098	--	1.1
	B8d12.5	12.5	12.5	27-Jun-07	--	--	--	--	0.005 U	--	0.005 U
	B8d14.5	14.5	14.5	27-Jun-07	--	--	--	--	0.005 U	--	0.005 U
Limited Phase II Investigation Allied Engineering Property 2014 Geologica	A-1-4'	4.0	4.0	14-Jul-14	0.011 U	0.0027 U	0.011 U	0.026 U	0.00071 U	0.0022 U	0.00082 U
	A-3-4'	4.0	4.0	14-Jul-14	0.011 U	0.0029 U	0.011 U	0.096	0.00075 U	0.0023 U	0.00086 U
	A-4-4'	4.0	4.0	14-Jul-14	0.011 U	0.0028 U	0.011 U	0.027 U	0.00073 U	0.0022 U	0.00084 U
	A-6-4'	4.0	4.0	14-Jul-14	0.011 U	0.0026 U	0.011 U	0.025 U	0.00069 U	0.0021 U	0.00079 U
	A-7-4'	4.0	4.0	14-Jul-14	0.013 U	0.0032 U	0.013 U	0.03 U	0.00082 U	0.0025 U	0.00095 U
	A-8-4'	4.0	4.0	14-Jul-14	0.012 U	0.003 U	0.012 U	0.028 U	0.00077 U	0.0024 U	0.00089 U
	A-9-4'	4.0	4.0	14-Jul-14	0.011 U	0.0027 U	0.011 U	0.026 U	0.00071 U	0.0022 U	0.00082 U
	TP-1-8.5'	8.5	8.5	10-Jul-14	0.011 U	0.0028 U	0.011 U	0.027 U	0.00073 U	0.0022 U	0.00084 U
Subsurface Investigation 2015 AEI	SS-1-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--
	SS-1-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--
	SS-2-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--
	SS-2-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--
	SS-3-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--
	SS-3-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--
	SS-4-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--
	SS-4-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--
	SS-5-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--
	SS-5-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--
	SS-6-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--
	SS-7-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--
	SS-7-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--
	SB-1-3.5	3.5	3.5	12-Jan-15	0.0041 U	0.005 U	0.0013 U	0.064 U	0.0026 U	0.0028 U	0.0033 U
	SB-2-3.5	3.5	3.5	12-Jan-15	0.014 U	0.018 U	0.0046 U	0.22 U	0.0091 U	0.0097 U	0.011 U
	SB-3-2	2.0	2.0	12-Jan-15	0.0058 U	0.0071 U	0.0018 U	0.09 U	0.0037 U	0.0039 U	0.0046 U
	SB-4-5'	5.0	5.0	12-Jan-15	0.002 U	0.0025 U	0.00064 U	0.031 U	0.0013 U	0.0014 U	0.0016 U
	SB-5-5'	5.0	5.0	12-Jan-15	0.002 U	0.0025 U	0.00063 U	0.031 U	0.0013 U	0.0013 U	0.0016 U
	SB-6-2'	2.0	2.0	12-Jan-15	0.0021 U	0.0027 U	0.00069 U	0.033 U	0.0014 U	0.0015 U	0.0017 U

Table 10. Soil Sample Analytical Results—Volatile Organic Compounds

Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	2-Hexanone (mg/kg)	4-Isopropyltoluene (mg/kg)	4-Methyl-2-pentanone (mg/kg)	Acetone (mg/kg)	Benzene (mg/kg)	Carbon disulfide (mg/kg)	Ethylbenzene (mg/kg)
	SB-7-2'	2.0	2.0	12-Jan-15	0.0025 U	0.0031 U	0.0008 U	0.039 U	0.0016 U	0.0017 U	0.002 U
	SB-8-2'	2.0	2.0	12-Jan-15	0.0021 U	0.0026 U	0.00067 U	0.033 U	0.0013 U	0.0014 U	0.0017 U
	SB-9-2'	2.0	2.0	12-Jan-15	0.0022 U	0.0027 U	0.00071 U	0.034 U	0.0014 U	0.0015 U	0.0018 U
	SB-10-2'	2.0	2.0	12-Jan-15	0.0021 U	0.0026 U	0.00067 U	0.032 U	0.0013 U	0.0014 U	0.0017 U
Excavation Sampling 2015 Integral	TBL1-1SW-1.2	1.2	1.2	03-Mar-15	--	--	--	--	--	--	--
	TBL1-1B-4.5	4.5	4.5	04-Mar-15	--	--	--	--	--	--	--
	TBL1-2SW-1.3	1.3	1.3	04-Mar-15	--	--	--	--	--	--	--
	TBL1-2B-2.0	2.0	2.0	05-Mar-15	--	--	--	--	--	--	--
	TBL1-3SW-1.2	1.2	1.2	04-Mar-15	--	--	--	--	--	--	--
	TBL1-3B-4.5	4.5	4.5	05-Mar-15	--	--	--	--	--	--	--
	TBL1-4SW-0.9	0.9	0.9	04-Mar-15	--	--	--	--	--	--	--
	TBL1-4B-1.5	1.5	1.5	05-Mar-15	--	--	--	--	--	--	--
	TBL1-5SW-1.0	1.0	1.0	04-Mar-15	--	--	--	--	--	--	--
	TBL1-6SW-2.3	2.3	2.3	04-Mar-15	--	--	--	--	--	--	--
	TBL1-7SW-2.0	2.0	2.0	04-Mar-15	--	--	--	--	--	--	--
	TBL1-8SW-1.6	1.6	1.6	05-Mar-15	--	--	--	--	--	--	--
	TBL1-9SW-0.8	0.8	0.8	05-Mar-15	--	--	--	--	--	--	--
	TBL1-10SW-2.3	2.3	2.3	05-Mar-15	--	--	--	--	--	--	--
	TBL1-11SW-0.8	0.8	0.8	05-Mar-15	--	--	--	--	--	--	--
	TBL2-1SW-0.9	0.9	0.9	06-Mar-15	--	--	--	--	--	--	--
	TBL2-1B-4.0	4.0	4.0	06-Mar-15	--	--	--	--	--	--	--
	TBL2-2SW-0.9	0.9	0.9	06-Mar-15	--	--	--	--	--	--	--
	TBL2-2B-4.0	4.0	4.0	06-Mar-15	--	--	--	--	--	--	--
	TBL2-3SW-0.9	0.9	0.9	06-Mar-15	--	--	--	--	--	--	--
	TBL2-3B-1.8	1.8	1.8	06-Mar-15	--	--	--	--	--	--	--
	TBL2-4SW-1.3	1.3	1.3	06-Mar-15	--	--	--	--	--	--	--
	TBL2-4B-1.8	1.8	1.8	06-Mar-15	--	--	--	--	--	--	--
	TBL2-5SW-1.3	1.3	1.3	06-Mar-15	--	--	--	--	--	--	--
	TBL2-5B-2.2	2.2	2.2	06-Mar-15	--	--	--	--	--	--	--
	TBL2-6SW-1.3	1.3	1.3	06-Mar-15	--	--	--	--	--	--	--
	TBL2-7SW-1.4	1.4	1.4	06-Mar-15	--	--	--	--	--	--	--
	TBL2-8SW-1.2	1.2	1.2	06-Mar-15	--	--	--	--	--	--	--
	TP-1-0.5	0.5	0.5	30-Jan-15	0.011 U	0.011 U	0.011 U	0.22 U	0.011 U	0.011 U	0.011 U
	TP-1-2.0	2.0	2.0	30-Jan-15	0.011 U	0.011 U	0.011 U	0.21 U	0.011 U	0.011 U	0.011 U
	TP-2-1.25	1.3	1.3	30-Jan-15	0.01 U	0.01 U	0.01 U	0.21 U	0.01 U	0.01 U	0.01 U
	TP-2-2.0	2.0	2.0	30-Jan-15	0.011 U	0.011 U	0.011 U	0.22 U	0.011 U	0.011 U	0.011 U
	TP-3-2.0	2.0	2.0	30-Jan-15	0.0092 U	0.0092 U	0.0092 U	0.18 U	0.0092 U	0.0092 U	0.0092 U
	TP-4-2.0	2.0	2.0	30-Jan-15	0.011 U	0.011 U	0.011 U	0.21 U	0.011 U	0.011 U	0.011 U
	TRENCH1-1SW-1.2	1.2	1.2	05-Mar-15	--	--	--	--	--	--	--
	TRENCH1-1B-2.4	2.4	2.4	05-Mar-15	--	--	--	--	--	--	--
	TRENCH1-2SW-1.2	1.2	1.2	05-Mar-15	--	--	--	--	--	--	--
	TRENCH1-2B-2.4	2.4	2.4	05-Mar-15	--	--	--	--	--	--	--
	TRENCH1-3SW-1.2	1.2	1.2	05-Mar-15	--	--	--	--	--	--	--
	TRENCH1-4SW-1.2	1.2	1.2	05-Mar-15	--	--	--	--	--	--	--
	TRENCH1-5SW-1.2	1.2	1.2	05-Mar-15	--	--	--	--	--	--	--
	TRENCH1-6SW-1.2	1.2	1.2	05-Mar-15	--	--	--	--	--	--	--
	TRENCH2-1SW-1.2	1.2	1.2	09-Mar-15	--	--	--	--	--	--	--
	TRENCH2-1B-4.0	4.0	4.0	09-Mar-15	--	--	--	--	--	--	--
	TRENCH2-2SW-2.0	2.0	2.0	09-Mar-15	--	--	--	--	--	--	--
	TRENCH2-2B-2.4	2.4	2.4	09-Mar-15	--	--	--	--	--	--	--
	TRENCH2-3SW-1.2	1.2	1.2	09-Mar-15	--	--	--	--	--	--	--
	TRENCH2-3B-2.4	2.4	2.4	09-Mar-15	--	--	--	--	--	--	--
	TRENCH2-4SW-1.2	1.2	1.2	09-Mar-15	--	--	--	--	--	--	--
	TRENCH2-4B-4.0	4.0	4.0	10-Mar-15	0.0007 U	0.0007 U	0.0007 U	0.061	0.0008 U	0.001 J	0.0008 U
	TRENCH2-5SW-1.2	1.2	1.2	10-Mar-15	--	--	--	--	--	--	--
	TRENCH2-5B-4.0	4.0	4.0	10-Mar-15	--	--	--	--	--	--	--
	TRENCH2-6SW-2.0	2.0	2.0	10-Mar-15	0.0007 U	0.0007 U	0.0007 U	0.18	0.0008 U	0.0007 U	0.0008 U

Table 10. Soil Sample Analytical Results—Volatile Organic Compounds

Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	2-Hexanone (mg/kg)	4-Isopropyltoluene (mg/kg)	4-Methyl-2-pentanone (mg/kg)	Acetone (mg/kg)	Benzene (mg/kg)	Carbon disulfide (mg/kg)	Ethylbenzene (mg/kg)
	TRENCH2-6B-4.0	4.0	4.0	11-Mar-15	--	--	--	--	--	--	--
	TRENCH2-7SW-2.0	2.0	2.0	10-Mar-15	--	--	--	--	--	--	--
	TRENCH2-8SW-2.0	2.0	2.0	11-Mar-15	--	--	--	--	--	--	--
Soil and Groundwater Investigation 2015 Integral	MW-4-0.5-1.5	0.5	1.5	11-Feb-15	0.0081 U	0.0058 U	0.008 U	0.5 J	0.013 J	0.0056 U	0.046 J
	MW-6-2.5-3.5	2.5	3.5	12-Feb-15	0.00089 U	0.00043 U	0.001 U	0.0019 U	0.00092 U	0.00088 U	0.00069 U
	SB-11-2.0-2.5	2.0	2.5	19-Feb-15	0.0006 U	0.0006 U	0.00057 U	0.0032 U	0.00067 U	0.00064 U	0.00069 U
	SB-11-9.5-10.0	9.5	10.0	19-Feb-15	0.00059 U	0.00059 U	0.00057 U	0.0031 U	0.00066 U	0.00063 U	0.00068 U
	SB-12-2.5-3.5	2.5	3.5	13-Feb-15	0.034 U	0.025 U	0.044 U	0.16 U	0.025 U	0.019 U	0.015 U
	SB-12-11.0-12.0	11.0	12.0	13-Feb-15	0.00069 U	0.00033 U	0.0008 U	0.0015 U	0.00071 U	0.00068 U	0.00053 U
	SB-13-3.0-4.0	3.0	4.0	13-Feb-15	0.098 U	0.17 J	0.13 U	4.2	0.07 U	0.054 U	0.044 U
	SB-13-12.0-13.0	12.0	13.0	13-Feb-15	0.037 U	0.074 J	0.048 U	0.17 U	0.026 U	0.02 U	0.016 U
	SB-14-4.0-4.5	4.0	4.5	18-Feb-15	0.00065 U	0.00065 U	0.00063 U	0.0035 U	0.00073 U	0.0007 U	0.00075 U
	SB-14-9.5-10.0	9.5	10.0	18-Feb-15	0.00068 U	0.00068 U	0.00066 U	0.0036 U	0.00077 U	0.00074 U	0.00079 U
	SB-15-5.0-5.5	5.0	5.5	18-Feb-15	0.012 U	0.0086 U	29	0.54 J	0.0058 U	0.0084 U	0.0058 U
	SB-15-9.5-10.0	9.5	10.0	18-Feb-15	0.00052 U	0.00051 U	0.048	0.02	0.00058 U	0.00055 U	0.00059 U
	SB-16-3.0-3.5	3.0	3.5	18-Feb-15	0.0022 J	0.00032 U	0.002 J	0.092	0.00039 U	0.00061 J	0.00034 U
	SB-16-9.5-10.0	9.5	10.0	18-Feb-15	0.00097 U	0.00031 U	0.00042 U	0.0029 U	0.00038 U	0.00041 U	0.00033 U
	SB-17-5.0-6.0	5.0	6.0	18-Feb-15	0.001 U	0.00032 U	0.00043 U	0.15 U	0.00039 U	0.00048 J	0.00034 U
	SB-17-9.0-10.0	9.0	10.0	18-Feb-15	0.00098 U	0.00031 U	0.00043 U	0.0029 U	0.00038 U	0.00042 U	0.00033 U
	SB-18-5.0-6.0	5.0	6.0	19-Feb-15	0.00053 U	0.00053 U	0.00051 U	0.0065 J	0.0006 U	0.00058 U	0.00062 U
	SB-18-9.0-10.0	9.0	10.0	19-Feb-15	0.00052 U	0.00052 U	0.0005 U	0.0028 U	0.00059 U	0.00056 U	0.0006 U
	SB-19-5.5-6.5	5.5	6.5	12-Feb-15	0.0086 U	0.0062 U	0.0085 U	0.14 U	0.0041 U	0.006 U	0.0041 U
	SB-19-8.5-9.5	8.5	9.5	12-Feb-15	0.0005 U	0.0005 U	0.00048 U	0.0027 U	0.00057 U	0.00054 U	0.00058 U
	SB-20-6.0-7.0	6.0	7.0	13-Feb-15	0.029 U	0.021 U	1.5	1.5	0.021 U	0.016 U	0.013 U
	SB-20-10.5-11.5	10.5	11.5	13-Feb-15	0.0011 U	0.00034 U	0.00046 U	0.0035 UJ	0.00042 U	0.00046 U	0.00036 U
	SB-21-1.0-2.0	1.0	2.0	11-Feb-15	0.00072 U	0.00072 U	0.00069 U	0.004 J	0.00081 U	0.00077 U	0.00083 U
	SB-22-4.0-5.0	4.0	5.0	13-Feb-15	0.036 U	0.026 U	3.7	1	0.026 U	0.02 U	0.016 U
	SB-22-11.0-12.0	11.0	12.0	13-Feb-15	0.001 U	0.00045 J	0.029	0.034	0.00041 U	0.00044 U	0.00035 U
	SB-24-3.2-3.8	3.2	3.8	18-Feb-15	0.019 U	0.048 J	0.7 J	0.85 U	0.0091 U	0.013 U	0.015 J
	SB-24-7.0-7.3	7.0	7.3	18-Feb-15	0.0087 U	0.0084 J	0.0086 U	0.21 U	0.0042 U	0.0061 U	0.0042 U

Table 10. Soil Sample Analytical Results—Volatile Organic Compounds

Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	Isopropylbenzene (mg/kg)	Methylene chloride (mg/kg)	n-Butylbenzene (mg/kg)	sec-Butylbenzene (mg/kg)	n-Propylbenzene (mg/kg)	Styrene (mg/kg)	Tetrachloroethene (PCE) (mg/kg)
				Screening Level:	NA	48.6	NA	NA	NA	<5%FOD	2.64
UST Removal 2004 Geo-Logic	COMP S1-A-D	--	--	07-Jan-04	--	--	--	--	--	--	--
	DISP(3.5')	--	--	07-Jan-04	--	--	--	--	--	--	--
	P1(3.5')	--	--	07-Jan-04	--	--	--	--	--	--	--
	TPN(8')	--	--	07-Jan-04	--	--	--	--	--	--	--
	TWP(7.25)	--	--	07-Jan-04	--	--	--	--	--	--	--
Soil and Groundwater Investigation 2007 Geo-Logic	B1d4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--
	B1d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--
	B1d12.5	12.5	12.5	27-Jun-07	--	--	--	--	--	--	--
	B1d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--
	B3d4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--
	B3d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--
	B3d12.5	12.5	12.5	27-Jun-07	--	--	--	--	--	--	--
	B3d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--
	B5d4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--
	B5d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--
	B5d11.5	11.5	11.5	27-Jun-07	--	--	--	--	--	--	--
	B5d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--
	B6d5	5.0	5.0	27-Jun-07	--	--	--	--	--	--	--
	B6d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--
	B6d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--
	B7Bd4	4.0	4.0	27-Jun-07	--	--	--	--	--	--	--
	B7Cd4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--
	B7Cd7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--
	B7Cd12.5	12.5	12.5	27-Jun-07	--	--	--	--	--	--	--
	B7Cd14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--
	B8d4.5	4.5	4.5	27-Jun-07	--	--	--	--	--	--	--
	B8d7.5	7.5	7.5	27-Jun-07	--	--	--	--	--	--	--
	B8d12.5	12.5	12.5	27-Jun-07	--	--	--	--	--	--	--
	B8d14.5	14.5	14.5	27-Jun-07	--	--	--	--	--	--	--
Limited Phase II Investigation Allied Engineering Property 2014 Geologica	A-1-4'	4.0	4.0	14-Jul-14	0.00074 U	0.0044 U	0.0011 U	0.00079 U	0.00072 U	0.00064 U	0.00073 U
	A-3-4'	4.0	4.0	14-Jul-14	0.00078 U	0.0046 U	0.0011 U	0.00083 U	0.00076 U	0.00066 U	0.00077 U
	A-4-4'	4.0	4.0	14-Jul-14	0.00076 U	0.0045 U	0.0011 U	0.00081 U	0.00074 U	0.00065 U	0.00075 U
	A-6-4'	4.0	4.0	14-Jul-14	0.00072 U	0.0042 U	0.0011 U	0.00076 U	0.0007 U	0.00061 U	0.00071 U
	A-7-4'	4.0	4.0	14-Jul-14	0.00086 U	0.0051 U	0.0013 U	0.00091 U	0.00083 U	0.00073 U	0.00085 U
	A-8-4'	4.0	4.0	14-Jul-14	0.00081 U	0.0047 U	0.0012 U	0.00085 U	0.00078 U	0.00069 U	0.0008 U
	A-9-4'	4.0	4.0	14-Jul-14	0.00075 U	0.0044 U	0.0011 U	0.00079 U	0.00072 U	0.00064 U	0.00073 U
	TP-1-8.5'	8.5	8.5	10-Jul-14	0.00076 U	0.0045 U	0.0011 U	0.0008 U	0.00074 U	0.00065 U	0.00075 U
Subsurface Investigation 2015 AEI	SS-1-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--
	SS-1-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--
	SS-2-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--
	SS-2-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--
	SS-3-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--
	SS-3-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--
	SS-4-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--
	SS-4-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--
	SS-5-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--
	SS-5-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--
	SS-6-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--
	SS-7-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--	--
	SS-7-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--	--
	SB-1-3.5	3.5	3.5	12-Jan-15	0.0036 U	0.0059 U	0.0057 U	0.0055 U	0.0047 U	0.0023 U	0.0037 U
	SB-2-3.5	3.5	3.5	12-Jan-15	0.013 U	0.021 U	0.02 U	0.019 U	0.017 U	0.008 U	0.013 U
	SB-3-2	2.0	2.0	12-Jan-15	0.0051 U	0.0083 U	0.0081 U	0.0078 U	0.0067 U	0.0032 U	0.0053 U
	SB-4-5'	5.0	5.0	12-Jan-15	0.0018 U	0.0029 U	0.0028 U	0.0027 U	0.0023 U	0.0011 U	0.0018 U
	SB-5-5'	5.0	5.0	12-Jan-15	0.0017 U	0.0029 U	0.0028 U	0.0027 U	0.0023 U	0.0011 U	0.0018 U
	SB-6-2'	2.0	2.0	12-Jan-15	0.0019 U	0.0031 U	0.003 U	0.0029 U	0.0025 U	0.0012 U	0.002 U

Table 10. Soil Sample Analytical Results—Volatile Organic Compounds

Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	Isopropylbenzene (mg/kg)	Methylene chloride (mg/kg)	n-Butylbenzene (mg/kg)	sec-Butylbenzene (mg/kg)	n-Propylbenzene (mg/kg)	Styrene (mg/kg)	Tetrachloroethene (PCE) (mg/kg)
	SB-7-2'	2.0	2.0	12-Jan-15	0.0022 U	0.0036 U	0.0035 U	0.0034 U	0.0029 U	0.0014 U	0.0023 U
	SB-8-2'	2.0	2.0	12-Jan-15	0.0018 U	0.003 U	0.0029 U	0.0029 U	0.0024 U	0.0012 U	0.0019 U
	SB-9-2'	2.0	2.0	12-Jan-15	0.0019 U	0.0032 U	0.0031 U	0.003 U	0.0026 U	0.0012 U	0.002 U
	SB-10-2'	2.0	2.0	12-Jan-15	0.0018 U	0.003 U	0.0029 U	0.0028 U	0.0024 U	0.0012 U	0.0019 U
Excavation Sampling 2015 Integral	TBL1-1SW-1.2	1.2	1.2	03-Mar-15	--	--	--	--	--	--	--
	TBL1-1B-4.5	4.5	4.5	04-Mar-15	--	--	--	--	--	--	--
	TBL1-2SW-1.3	1.3	1.3	04-Mar-15	--	--	--	--	--	--	--
	TBL1-2B-2.0	2.0	2.0	05-Mar-15	--	--	--	--	--	--	--
	TBL1-3SW-1.2	1.2	1.2	04-Mar-15	--	--	--	--	--	--	--
	TBL1-3B-4.5	4.5	4.5	05-Mar-15	--	--	--	--	--	--	--
	TBL1-4SW-0.9	0.9	0.9	04-Mar-15	--	--	--	--	--	--	--
	TBL1-4B-1.5	1.5	1.5	05-Mar-15	--	--	--	--	--	--	--
	TBL1-5SW-1.0	1.0	1.0	04-Mar-15	--	--	--	--	--	--	--
	TBL1-6SW-2.3	2.3	2.3	04-Mar-15	--	--	--	--	--	--	--
	TBL1-7SW-2.0	2.0	2.0	04-Mar-15	--	--	--	--	--	--	--
	TBL1-8SW-1.6	1.6	1.6	05-Mar-15	--	--	--	--	--	--	--
	TBL1-9SW-0.8	0.8	0.8	05-Mar-15	--	--	--	--	--	--	--
	TBL1-10SW-2.3	2.3	2.3	05-Mar-15	--	--	--	--	--	--	--
	TBL1-11SW-0.8	0.8	0.8	05-Mar-15	--	--	--	--	--	--	--
	TBL2-1SW-0.9	0.9	0.9	06-Mar-15	--	--	--	--	--	--	--
	TBL2-1B-4.0	4.0	4.0	06-Mar-15	--	--	--	--	--	--	--
	TBL2-2SW-0.9	0.9	0.9	06-Mar-15	--	--	--	--	--	--	--
	TBL2-2B-4.0	4.0	4.0	06-Mar-15	--	--	--	--	--	--	--
	TBL2-3SW-0.9	0.9	0.9	06-Mar-15	--	--	--	--	--	--	--
	TBL2-3B-1.8	1.8	1.8	06-Mar-15	--	--	--	--	--	--	--
	TBL2-4SW-1.3	1.3	1.3	06-Mar-15	--	--	--	--	--	--	--
	TBL2-4B-1.8	1.8	1.8	06-Mar-15	--	--	--	--	--	--	--
	TBL2-5SW-1.3	1.3	1.3	06-Mar-15	--	--	--	--	--	--	--
	TBL2-5B-2.2	2.2	2.2	06-Mar-15	--	--	--	--	--	--	--
	TBL2-6SW-1.3	1.3	1.3	06-Mar-15	--	--	--	--	--	--	--
	TBL2-7SW-1.4	1.4	1.4	06-Mar-15	--	--	--	--	--	--	--
	TBL2-8SW-1.2	1.2	1.2	06-Mar-15	--	--	--	--	--	--	--
	TP-1-0.5	0.5	0.5	30-Jan-15	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
	TP-1-2.0	2.0	2.0	30-Jan-15	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
	TP-2-1.25	1.3	1.3	30-Jan-15	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
	TP-2-2.0	2.0	2.0	30-Jan-15	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
	TP-3-2.0	2.0	2.0	30-Jan-15	0.0092 U	0.0092 U	0.0092 U	0.0092 U	0.0092 U	0.0092 U	0.0092 U
	TP-4-2.0	2.0	2.0	30-Jan-15	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
	TRENCH1-1SW-1.2	1.2	1.2	05-Mar-15	--	--	--	--	--	--	--
	TRENCH1-1B-2.4	2.4	2.4	05-Mar-15	--	--	--	--	--	--	--
	TRENCH1-2SW-1.2	1.2	1.2	05-Mar-15	--	--	--	--	--	--	--
	TRENCH1-2B-2.4	2.4	2.4	05-Mar-15	--	--	--	--	--	--	--
	TRENCH1-3SW-1.2	1.2	1.2	05-Mar-15	--	--	--	--	--	--	--
	TRENCH1-4SW-1.2	1.2	1.2	05-Mar-15	--	--	--	--	--	--	--
	TRENCH1-5SW-1.2	1.2	1.2	05-Mar-15	--	--	--	--	--	--	--
	TRENCH1-6SW-1.2	1.2	1.2	05-Mar-15	--	--	--	--	--	--	--
	TRENCH2-1SW-1.2	1.2	1.2	09-Mar-15	--	--	--	--	--	--	--
	TRENCH2-1B-4.0	4.0	4.0	09-Mar-15	--	--	--	--	--	--	--
	TRENCH2-2SW-2.0	2.0	2.0	09-Mar-15	--	--	--	--	--	--	--
	TRENCH2-2B-2.4	2.4	2.4	09-Mar-15	--	--	--	--	--	--	--
	TRENCH2-3SW-1.2	1.2	1.2	09-Mar-15	--	--	--	--	--	--	--
	TRENCH2-3B-2.4	2.4	2.4	09-Mar-15	--	--	--	--	--	--	--
	TRENCH2-4SW-1.2	1.2	1.2	09-Mar-15	--	--	--	--	--	--	--
	TRENCH2-4B-4.0	4.0	4.0	10-Mar-15	0.0007 U	0.0012 U	0.0007 U	0.0007 U	0.0007 U	0.0006 U	0.0007 U
	TRENCH2-5SW-1.2	1.2	1.2	10-Mar-15	--	--	--	--	--	--	--
	TRENCH2-5B-4.0	4.0	4.0	10-Mar-15	--	--	--	--	--	--	--
	TRENCH2-6SW-2.0	2.0	2.0	10-Mar-15	0.0007 U	0.0012 U	0.0007 U	0.0007 U	0.0007 U	0.0006 U	0.0007 U

Table 10. Soil Sample Analytical Results—Volatile Organic Compounds

Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	Isopropylbenzene (mg/kg)	Methylene chloride (mg/kg)	n-Butylbenzene (mg/kg)	sec-Butylbenzene (mg/kg)	n-Propylbenzene (mg/kg)	Styrene (mg/kg)	Tetrachloroethene (PCE) (mg/kg)
	TRENCH2-6B-4.0	4.0	4.0	11-Mar-15	--	--	--	--	--	--	--
	TRENCH2-7SW-2.0	2.0	2.0	10-Mar-15	--	--	--	--	--	--	--
	TRENCH2-8SW-2.0	2.0	2.0	11-Mar-15	--	--	--	--	--	--	--
Soil and Groundwater Investigation 2015 Integral	MW-4-0.5-1.5	0.5	1.5	11-Feb-15	0.011 J	0.11 U	0.037 J	0.011 J	0.041 J	0.0039 U	0.0039 U
	MW-6-2.5-3.5	2.5	3.5	12-Feb-15	0.00051 U	0.0011 U	0.00039 U	0.00043 U	0.00045 U	0.00059 U	0.0035 J
	SB-11-2.0-2.5	2.0	2.5	19-Feb-15	0.00063 U	0.001 U	0.00057 U	0.00059 U	0.00064 U	0.0005 U	0.00062 U
	SB-11-9.5-10.0	9.5	10.0	19-Feb-15	0.00062 U	0.001 U	0.00056 U	0.00058 U	0.00063 U	0.00049 U	0.00061 U
	SB-12-2.5-3.5	2.5	3.5	13-Feb-15	0.025 U	0.023 U	0.028 U	0.027 U	0.021 U	0.022 U	0.02 U
	SB-12-11.0-12.0	11.0	12.0	13-Feb-15	0.00039 U	0.00087 U	0.0003 U	0.00033 U	0.00035 U	0.00045 U	0.00041 U
	SB-13-3.0-4.0	3.0	4.0	13-Feb-15	0.092 J	0.067 U	0.3 J	0.21 J	0.27 J	0.063 U	0.057 U
	SB-13-12.0-13.0	12.0	13.0	13-Feb-15	0.035 J	0.025 U	0.064 J	0.055 J	0.042 J	0.023 U	0.021 U
	SB-14-4.0-4.5	4.0	4.5	18-Feb-15	0.00068 U	0.0011 U	0.00062 U	0.00064 U	0.0007 U	0.00054 U	0.00067 U
	SB-14-9.5-10.0	9.5	10.0	18-Feb-15	0.00072 U	0.0012 U	0.00065 U	0.00068 U	0.00073 U	0.00057 U	0.00071 U
	SB-15-5.0-5.5	5.0	5.5	18-Feb-15	0.007 U	0.16 U	0.011 U	0.0088 U	0.0083 U	0.0058 U	0.0058 U
	SB-15-9.5-10.0	9.5	10.0	18-Feb-15	0.00054 U	0.0009 U	0.00049 U	0.00051 U	0.00055 U	0.00043 U	0.00053 U
	SB-16-3.0-3.5	3.0	3.5	18-Feb-15	0.00027 U	0.00061 J	0.00033 U	0.00023 U	0.00028 U	0.00026 J	0.00022 U
	SB-16-9.5-10.0	9.5	10.0	18-Feb-15	0.00026 U	0.0012 J	0.00032 U	0.00022 U	0.00027 U	0.00025 U	0.00021 U
	SB-17-5.0-6.0	5.0	6.0	18-Feb-15	0.00027 U	0.00049 J	0.00033 U	0.00023 U	0.00028 U	0.00026 U	0.046 J
	SB-17-9.0-10.0	9.0	10.0	18-Feb-15	0.00026 U	0.00098 J	0.00032 U	0.00022 U	0.00027 U	0.00026 U	0.001 J
	SB-18-5.0-6.0	5.0	6.0	19-Feb-15	0.00056 U	0.00093 U	0.00051 U	0.00053 U	0.00057 U	0.00044 U	0.0054
	SB-18-9.0-10.0	9.0	10.0	19-Feb-15	0.00055 U	0.0011 J	0.0005 U	0.00052 U	0.00056 U	0.00043 U	0.00054 U
	SB-19-5.5-6.5	5.5	6.5	12-Feb-15	0.005 U	0.12 U	0.0078 U	0.0063 U	0.0059 U	0.0041 U	0.5
	SB-19-8.5-9.5	8.5	9.5	12-Feb-15	0.00053 U	0.00087 U	0.00048 U	0.0005 U	0.00054 U	0.00042 U	0.004 J
	SB-20-6.0-7.0	6.0	7.0	13-Feb-15	0.021 U	0.02 U	0.024 U	0.023 U	0.018 U	0.019 U	0.017 U
	SB-20-10.5-11.5	10.5	11.5	13-Feb-15	0.00028 U	0.0013 J	0.00035 U	0.00024 U	0.0003 U	0.00028 U	0.00023 U
	SB-21-1.0-2.0	1.0	2.0	11-Feb-15	0.00075 U	0.0013 U	0.00069 U	0.00071 U	0.00077 U	0.0006 U	0.0012 J
	SB-22-4.0-5.0	4.0	5.0	13-Feb-15	0.026 U	0.025 U	0.029 U	0.028 U	0.022 U	0.023 U	0.068 J
	SB-22-11.0-12.0	11.0	12.0	13-Feb-15	0.00028 U	0.00081 J	0.00034 U	0.00024 U	0.00029 U	0.00027 U	0.0035 J
	SB-24-3.2-3.8	3.2	3.8	18-Feb-15	0.021 J	0.25 U	0.017 U	0.014 U	0.013 U	0.0091 U	0.0091 U
	SB-24-7.0-7.3	7.0	7.3	18-Feb-15	0.0051 U	0.12 U	0.0079 U	0.0063 U	0.006 U	0.0042 U	0.028 J

Table 10. Soil Sample Analytical Results—Volatile Organic Compounds

Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	Toluene (mg/kg)	Trichloroethene (TCE) (mg/kg)	Vinyl chloride (mg/kg)	o-Xylene (mg/kg)	Xylene, Isomers m & p (mg/kg)	Xylenes (mg/kg)
				Screening Level:	4860	8.35	0.159	2607	2607	2607
UST Removal 2004 Geo-Logic	COMP S1-A-D	--	--	07-Jan-04	0.41	--	--	--	--	4.4
	DISP(3.5')	--	--	07-Jan-04	0.6	--	--	--	--	4.5
	P1(3.5')	--	--	07-Jan-04	3.3	--	--	--	--	3.4
	TPN(8')	--	--	07-Jan-04	0.05 U	--	--	--	--	0.31
	TWP(7.25)	--	--	07-Jan-04	1 U	--	--	--	--	8.6
Soil and Groundwater Investigation 2007 Geo-Logic	B1d4.5	4.5	4.5	27-Jun-07	0.005 U	--	--	--	--	0.005 U
	B1d7.5	7.5	7.5	27-Jun-07	0.05 U	--	--	--	--	0.14
	B1d12.5	12.5	12.5	27-Jun-07	0.005 U	--	--	--	--	0.005 U
	B1d14.5	14.5	14.5	27-Jun-07	0.005 U	--	--	--	--	0.005 U
	B3d4.5	4.5	4.5	27-Jun-07	0.005 U	--	--	--	--	0.005 U
	B3d7.5	7.5	7.5	27-Jun-07	0.005 U	--	--	--	--	0.005 U
	B3d12.5	12.5	12.5	27-Jun-07	0.17 U	--	--	--	--	3.8
	B3d14.5	14.5	14.5	27-Jun-07	0.005 U	--	--	--	--	0.005 U
	B5d4.5	4.5	4.5	27-Jun-07	1 U	--	--	--	--	2
	B5d7.5	7.5	7.5	27-Jun-07	0.5 U	--	--	--	--	6.2
	B5d11.5	11.5	11.5	27-Jun-07	0.005 U	--	--	--	--	0.005 U
	B5d14.5	14.5	14.5	27-Jun-07	0.005 U	--	--	--	--	0.005 U
	B6d5	5.0	5.0	27-Jun-07	0.012	--	--	--	--	0.043
	B6d7.5	7.5	7.5	27-Jun-07	0.27	--	--	--	--	1.4
	B6d14.5	14.5	14.5	27-Jun-07	0.005 U	--	--	--	--	0.005 U
	B7Bd4	4.0	4.0	27-Jun-07	--	--	--	--	--	--
	B7Cd4.5	4.5	4.5	27-Jun-07	0.005 U	--	--	--	--	0.005 U
	B7Cd7.5	7.5	7.5	27-Jun-07	0.005 U	--	--	--	--	0.005 U
	B7Cd12.5	12.5	12.5	27-Jun-07	0.005 U	--	--	--	--	0.005 U
	B7Cd14.5	14.5	14.5	27-Jun-07	0.005 U	--	--	--	--	0.005 U
	B8d4.5	4.5	4.5	27-Jun-07	0.005 U	--	--	--	--	0.005 U
	B8d7.5	7.5	7.5	27-Jun-07	0.05 U	--	--	--	--	0.59
	B8d12.5	12.5	12.5	27-Jun-07	0.005 U	--	--	--	--	0.005 U
	B8d14.5	14.5	14.5	27-Jun-07	0.005 U	--	--	--	--	0.005 U
Limited Phase II Investigation Allied Engineering Property 2014 Geologica	A-1-4'	4.0	4.0	14-Jul-14	0.00078 U	0.00069 U	0.0008 U	--	--	0.0013 U
	A-3-4'	4.0	4.0	14-Jul-14	0.00081 U	0.00072 U	0.00084 U	--	--	0.0014 U
	A-4-4'	4.0	4.0	14-Jul-14	0.0008 U	0.00071 U	0.00082 U	--	--	0.0014 U
	A-6-4'	4.0	4.0	14-Jul-14	0.00075 U	0.00067 U	0.00077 U	--	--	0.0013 U
	A-7-4'	4.0	4.0	14-Jul-14	0.0009 U	0.0008 U	0.00092 U	--	--	0.0015 U
	A-8-4'	4.0	4.0	14-Jul-14	0.00084 U	0.00075 U	0.00087 U	--	--	0.0014 U
	A-9-4'	4.0	4.0	14-Jul-14	0.00078 U	0.00069 U	0.0008 U	--	--	0.0013 U
	TP-1-8.5'	8.5	8.5	10-Jul-14	0.00079 U	0.0007 U	0.00081 U	--	--	0.0014 U
Subsurface Investigation 2015 AEI	SS-1-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--
	SS-1-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--
	SS-2-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--
	SS-2-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--
	SS-3-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--
	SS-3-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--
	SS-4-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--
	SS-4-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--
	SS-5-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--
	SS-5-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--
	SS-6-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--
	SS-7-S	0.0	1.0	12-Jan-15	--	--	--	--	--	--
	SS-7-1	1.0	1.0	12-Jan-15	--	--	--	--	--	--
	SB-1-3.5	3.5	3.5	12-Jan-15	0.0036 U	0.0028 U	0.0024 U	--	--	0.0041 U
	SB-2-3.5	3.5	3.5	12-Jan-15	0.013 U	0.0097 U	0.0086 U	--	--	0.014 U
	SB-3-2	2.0	2.0	12-Jan-15	0.0051 U	0.0039 U	0.0035 U	--	--	0.0058 U
	SB-4-5'	5.0	5.0	12-Jan-15	0.0018 U	0.0014 U	0.0012 U	--	--	0.002 U
	SB-5-5'	5.0	5.0	12-Jan-15	0.0017 U	0.0013 U	0.0012 U	--	--	0.002 U
	SB-6-2'	2.0	2.0	12-Jan-15	0.0019 U	0.022	0.0013 U	--	--	0.0021 U

Table 10. Soil Sample Analytical Results—Volatile Organic Compounds

Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	Toluene (mg/kg)	Trichloroethene (TCE) (mg/kg)	Vinyl chloride (mg/kg)	o-Xylene (mg/kg)	Xylene, Isomers m & p (mg/kg)	Xylenes (mg/kg)
	SB-7-2'	2.0	2.0	12-Jan-15	0.0022 U	0.0017 U	0.0015 U	--	--	0.0025 U
	SB-8-2'	2.0	2.0	12-Jan-15	0.0018 U	0.0014 U	0.0013 U	--	--	0.0021 U
	SB-9-2'	2.0	2.0	12-Jan-15	0.0019 U	0.0015 U	0.0013 U	--	--	0.0022 U
	SB-10-2'	2.0	2.0	12-Jan-15	0.0018 U	0.0014 U	0.0012 U	--	--	0.0021 U
Excavation Sampling 2015 Integral	TBL1-1SW-1.2	1.2	1.2	03-Mar-15	--	--	--	--	--	--
	TBL1-1B-4.5	4.5	4.5	04-Mar-15	--	--	--	--	--	--
	TBL1-2SW-1.3	1.3	1.3	04-Mar-15	--	--	--	--	--	--
	TBL1-2B-2.0	2.0	2.0	05-Mar-15	--	--	--	--	--	--
	TBL1-3SW-1.2	1.2	1.2	04-Mar-15	--	--	--	--	--	--
	TBL1-3B-4.5	4.5	4.5	05-Mar-15	--	--	--	--	--	--
	TBL1-4SW-0.9	0.9	0.9	04-Mar-15	--	--	--	--	--	--
	TBL1-4B-1.5	1.5	1.5	05-Mar-15	--	--	--	--	--	--
	TBL1-5SW-1.0	1.0	1.0	04-Mar-15	--	--	--	--	--	--
	TBL1-6SW-2.3	2.3	2.3	04-Mar-15	--	--	--	--	--	--
	TBL1-7SW-2.0	2.0	2.0	04-Mar-15	--	--	--	--	--	--
	TBL1-8SW-1.6	1.6	1.6	05-Mar-15	--	--	--	--	--	--
	TBL1-9SW-0.8	0.8	0.8	05-Mar-15	--	--	--	--	--	--
	TBL1-10SW-2.3	2.3	2.3	05-Mar-15	--	--	--	--	--	--
	TBL1-11SW-0.8	0.8	0.8	05-Mar-15	--	--	--	--	--	--
	TBL2-1SW-0.9	0.9	0.9	06-Mar-15	--	--	--	--	--	--
	TBL2-1B-4.0	4.0	4.0	06-Mar-15	--	--	--	--	--	--
	TBL2-2SW-0.9	0.9	0.9	06-Mar-15	--	--	--	--	--	--
	TBL2-2B-4.0	4.0	4.0	06-Mar-15	--	--	--	--	--	--
	TBL2-3SW-0.9	0.9	0.9	06-Mar-15	--	--	--	--	--	--
	TBL2-3B-1.8	1.8	1.8	06-Mar-15	--	--	--	--	--	--
	TBL2-4SW-1.3	1.3	1.3	06-Mar-15	--	--	--	--	--	--
	TBL2-4B-1.8	1.8	1.8	06-Mar-15	--	--	--	--	--	--
	TBL2-5SW-1.3	1.3	1.3	06-Mar-15	--	--	--	--	--	--
	TBL2-5B-2.2	2.2	2.2	06-Mar-15	--	--	--	--	--	--
	TBL2-6SW-1.3	1.3	1.3	06-Mar-15	--	--	--	--	--	--
	TBL2-7SW-1.4	1.4	1.4	06-Mar-15	--	--	--	--	--	--
	TBL2-8SW-1.2	1.2	1.2	06-Mar-15	--	--	--	--	--	--
	TP-1-0.5	0.5	0.5	30-Jan-15	0.011 U	0.011 U	0.011 U	--	--	0.011 U
	TP-1-2.0	2.0	2.0	30-Jan-15	0.011 U	0.011 U	0.011 U	--	--	0.011 U
	TP-2-1.25	1.3	1.3	30-Jan-15	0.01 U	0.01 U	0.01 U	--	--	0.01 U
	TP-2-2.0	2.0	2.0	30-Jan-15	0.011 U	0.011 U	0.011 U	--	--	0.011 U
	TP-3-2.0	2.0	2.0	30-Jan-15	0.0092 U	0.0092 U	0.0092 U	--	--	0.0092 U
	TP-4-2.0	2.0	2.0	30-Jan-15	0.011 U	0.011 U	0.011 U	--	--	0.011 U
	TRENCH1-1SW-1.2	1.2	1.2	05-Mar-15	--	--	--	--	--	--
	TRENCH1-1B-2.4	2.4	2.4	05-Mar-15	--	--	--	--	--	--
	TRENCH1-2SW-1.2	1.2	1.2	05-Mar-15	--	--	--	--	--	--
	TRENCH1-2B-2.4	2.4	2.4	05-Mar-15	--	--	--	--	--	--
	TRENCH1-3SW-1.2	1.2	1.2	05-Mar-15	--	--	--	--	--	--
	TRENCH1-4SW-1.2	1.2	1.2	05-Mar-15	--	--	--	--	--	--
	TRENCH1-5SW-1.2	1.2	1.2	05-Mar-15	--	--	--	--	--	--
	TRENCH1-6SW-1.2	1.2	1.2	05-Mar-15	--	--	--	--	--	--
	TRENCH2-1SW-1.2	1.2	1.2	09-Mar-15	--	--	--	--	--	--
	TRENCH2-1B-4.0	4.0	4.0	09-Mar-15	--	--	--	--	--	--
	TRENCH2-2SW-2.0	2.0	2.0	09-Mar-15	--	--	--	--	--	--
	TRENCH2-2B-2.4	2.4	2.4	09-Mar-15	--	--	--	--	--	--
	TRENCH2-3SW-1.2	1.2	1.2	09-Mar-15	--	--	--	--	--	--
	TRENCH2-3B-2.4	2.4	2.4	09-Mar-15	--	--	--	--	--	--
	TRENCH2-4SW-1.2	1.2	1.2	09-Mar-15	--	--	--	--	--	--
	TRENCH2-4B-4.0	4.0	4.0	10-Mar-15	0.0009 U	0.0008 U	0.0005 U	0.0007 U	0.0016 U	--
	TRENCH2-5SW-1.2	1.2	1.2	10-Mar-15	--	--	--	--	--	--
	TRENCH2-5B-4.0	4.0	4.0	10-Mar-15	--	--	--	--	--	--
	TRENCH2-6SW-2.0	2.0	2.0	10-Mar-15	0.0009 U	0.0008 U	0.0005 U	0.0007 U	0.0015 U	--

Table 10. Soil Sample Analytical Results—Volatile Organic Compounds

Study Name	Sample ID	Sample Upper Depth (ft bgs)	Sample Lower Depth (ft bgs)	Date	Toluene (mg/kg)	Trichloroethene (TCE) (mg/kg)	Vinyl chloride (mg/kg)	o-Xylene (mg/kg)	Xylene, Isomers m & p (mg/kg)	Xylenes (mg/kg)
	TRENCH2-6B-4.0	4.0	4.0	11-Mar-15	--	--	--	--	--	--
	TRENCH2-7SW-2.0	2.0	2.0	10-Mar-15	--	--	--	--	--	--
	TRENCH2-8SW-2.0	2.0	2.0	11-Mar-15	--	--	--	--	--	--
Soil and Groundwater Investigation 2015 Integral	MW-4-0.5-1.5	0.5	1.5	11-Feb-15	0.039 U	0.0039 U	0.014 U	0.012 J	0.028 J	--
	MW-6-2.5-3.5	2.5	3.5	12-Feb-15	0.00072 U	0.0036 J	0.00095 U	0.00064 U	0.0013 U	--
	SB-11-2.0-2.5	2.0	2.5	19-Feb-15	0.00074 U	0.0047 J	0.0004 U	0.00057 U	0.0013 U	--
	SB-11-9.5-10.0	9.5	10.0	19-Feb-15	0.00073 U	0.03	0.00039 U	0.00057 U	0.0013 U	--
	SB-12-2.5-3.5	2.5	3.5	13-Feb-15	0.023 U	0.024 U	0.039 U	0.022 U	0.046 U	--
	SB-12-11.0-12.0	11.0	12.0	13-Feb-15	0.00056 U	0.00066 U	0.00073 U	0.00049 U	0.00098 U	--
	SB-13-3.0-4.0	3.0	4.0	13-Feb-15	0.067 U	0.068 U	0.11 U	0.073 J	0.13 U	--
	SB-13-12.0-13.0	12.0	13.0	13-Feb-15	0.025 U	0.025 U	0.042 U	0.043 J	0.049 U	--
	SB-14-4.0-4.5	4.0	4.5	18-Feb-15	0.0008 U	0.00076 U	0.00043 U	0.00063 U	0.0015 U	--
	SB-14-9.5-10.0	9.5	10.0	18-Feb-15	0.00084 U	0.0008 U	0.00045 U	0.00066 U	0.0015 U	--
	SB-15-5.0-5.5	5.0	5.5	18-Feb-15	0.058 U	0.0058 U	0.021 U	0.0058 U	0.0058 U	--
	SB-15-9.5-10.0	9.5	10.0	18-Feb-15	0.00064 U	0.00061 U	0.00034 U	0.0005 U	0.0011 U	--
	SB-16-3.0-3.5	3.0	3.5	18-Feb-15	0.00029 U	0.0011 J	0.00042 U	0.00024 U	0.00082 U	--
	SB-16-9.5-10.0	9.5	10.0	18-Feb-15	0.00028 U	0.14	0.00041 U	0.00024 U	0.00079 U	--
	SB-17-5.0-6.0	5.0	6.0	18-Feb-15	0.00037 J	0.01 J	0.098 J	0.00024 U	0.00082 U	--
	SB-17-9.0-10.0	9.0	10.0	18-Feb-15	0.00028 U	0.073	0.019	0.00024 U	0.0008 U	--
	SB-18-5.0-6.0	5.0	6.0	19-Feb-15	0.00066 U	0.0077	0.00036 U	0.00052 U	0.0012 U	--
	SB-18-9.0-10.0	9.0	10.0	19-Feb-15	0.00065 U	0.0031 J	0.00035 U	0.0005 U	0.0012 U	--
	SB-19-5.5-6.5	5.5	6.5	12-Feb-15	0.042 U	0.11 J	0.05 J	0.0041 U	0.0041 U	--
	SB-19-8.5-9.5	8.5	9.5	12-Feb-15	0.00062 U	0.00059 U	0.0099	0.00048 U	0.0011 U	--
	SB-20-6.0-7.0	6.0	7.0	13-Feb-15	0.02 U	0.02 U	0.034 U	0.018 U	0.039 U	--
	SB-20-10.5-11.5	10.5	11.5	13-Feb-15	0.0003 U	0.0014 J	0.00045 U	0.00026 U	0.00087 U	--
	SB-21-1.0-2.0	1.0	2.0	11-Feb-15	0.00089 U	0.00086 J	0.00048 U	0.00069 U	0.0016 U	--
	SB-22-4.0-5.0	4.0	5.0	13-Feb-15	0.025 U	0.025 U	0.041 U	0.023 U	0.048 U	--
	SB-22-11.0-12.0	11.0	12.0	13-Feb-15	0.0003 U	0.00039 U	0.00043 U	0.00025 U	0.00084 U	--
	SB-24-3.2-3.8	3.2	3.8	18-Feb-15	0.092 U	0.0091 U	0.032 U	0.036 J	0.052 J	--
	SB-24-7.0-7.3	7.0	7.3	18-Feb-15	0.042 U	0.025 J	0.015 U	0.0042 U	0.0042 U	--

Notes:

Detected concentrations exceeding screening levels are highlighted in yellow; analytes detected in less than 5 percent of the samples are not screened unless carcinogenic (see Table 5).

Only VOCs for which there was a detection in at least one sample are presented in this table.

VOCs analyzed using EPA Method SW8260B / SW8270C / SW8021F. When a parameter was analyzed by multiple methods (e.g., 1,4-Dichlorobenzene), results for 8260B are presented.

Soil screening levels based on the lower of the cancer and noncancer environmental screening level (ESL) for direct exposures to soil for a commercial/industrial scenario (Table K-2; SFRWQCB 2013).

-- = not applicable (not analyzed or information not provided)
<5%FOD = analyte was detected in less than 5 percent of the samples; screening levels not reported here.
ft bgs = feet below ground surface
mg/kg = milligrams per kilogram
NA = not available
VOC = semivolatile organic compound
UST = underground storage tank

Qualifiers:
J = Estimated. The analyte was detected and positively identified. The associated numerical value is an estimated value.
U = The analyte was analyzed for, but was not detected.
UJ = The analyte was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

Table 11. Groundwater Sample Analytical Results—Total Petroleum Hydrocarbons

Study Name	Sample ID	Date	Diesel Range Organics (µg/L)	Gasoline Range Organics (µg/L)	Oil Range Organics (µg/L)
		Screening Level:	640	3700	640
UST Removal 2004 Geo-Logic	Tank Pit Water	07-Jan-04	--	8600	--
Soil and Groundwater Investigation 2007 Geo-Logic	B1 Water	27-Jun-07	--	5200	--
	B3 Water	27-Jun-07	--	810	--
	B5 Water	27-Jun-07	--	1600	--
	B6 Water	27-Jun-07	--	630	--
	B7 Water	27-Jun-07	--	50 U	--
	B8 Water	27-Jun-07	--	1900	--
Historical Groundwater Monitoring Various Dates Geo-Logic	MW-1_20100504	04-May-10	--	380	--
	MW-1_20101105	05-Nov-10	--	120	--
	MW-1_20110513	13-May-11	--	250	--
	MW-1_20111205	05-Dec-11	--	200	--
	MW-1_20120601	01-Jun-12	--	50 U	--
	MW-1_20121203	03-Dec-12	--	50 U	--
	MW-1_20130603	03-Jun-13	--	50 U	--
	MW-1_20131202	02-Dec-13	--	50 U	--
	MW-2_20100504	04-May-10	--	2300	--
	MW-2_20101105	05-Nov-10	--	110	--
	MW-2_20110513	13-May-11	--	2600	--
	MW-2_20111205	05-Dec-11	--	990	--
	MW-2_20120601	01-Jun-12	--	1400	--
	MW-2_20121203	03-Dec-12	--	50 U	--
	MW-2_20130603	03-Jun-13	--	50 U	--
	MW-2_20131202	02-Dec-13	--	50 U	--
	MW-3_20100504	04-May-10	--	50 U	--
	MW-3_20101105	05-Nov-10	--	50 U	--
	MW-3_20110513	13-May-11	--	50 U	--
	MW-3_20111205	05-Dec-11	--	50 U	--
	MW-3_20120601	01-Jun-12	--	50 U	--
	MW-3_20121203	03-Dec-12	--	50 U	--
	MW-3_20130603	03-Jun-13	--	50 U	--
	MW-3_20131202	02-Dec-13	--	50 U	--
Limited Phase II Investigation Allied Engineering Property 2014 Geologica	A-1A	14-Jul-14	25 U	--	180
	A-3	14-Jul-14	8500	--	9900
	A-4	14-Jul-14	--	--	--
	A-5	14-Jul-14	29 U	--	45 U
	A-8	14-Jul-14	23 U	--	35 U
	A-9	14-Jul-14	25 U	--	38 U
	TP-1	10-Jul-14	8300	--	2600
Subsurface Investigation 2015 AEI	SB-1-GW	12-Jan-15	--	--	--
	SB-2-GW	12-Jan-15	--	--	--
	SB-3-GW	12-Jan-15	--	--	--
	SB-4-GW	12-Jan-15	--	--	--
	SB-5-GW	12-Jan-15	--	--	--
	SB-6-GW	12-Jan-15	--	--	--
	SB-7-GW	12-Jan-15	--	--	--
	SB-8-GW	12-Jan-15	--	--	--
	SB-9-GW	12-Jan-15	--	--	--
	SB-10-GW	12-Jan-15	--	--	--

Table 11. Groundwater Sample Analytical Results—Total Petroleum Hydrocarbons

			Diesel Range Organics		Gasoline Range Organics		Oil Range Organics	
Soil and Groundwater Investigation 2015 Integral	MW-1-GW	24-Feb-15	120	J	80		96	J
	MW-2-GW	24-Feb-15	91	J	36	U	96	U
	MW-3-GW	24-Feb-15	22	J	17	U	96	U
	MW-4A-GW	19-Mar-15	31	U	29	U	100	U
	MW-4B-GW	19-Mar-15	18	U	19	U	100	U
	MW-5A-GW	19-Mar-15	18	U	33	U	100	U
	DUP-GW-031915[a]	19-Mar-15	18	U	21	U	100	U
	MW-5B-GW	19-Mar-15	66	J	15	UJ	100	U
	MW-6A-GW	25-Feb-15	42	J	56	J	96	U
	MW-6B-GW	25-Feb-15	28	J	14	J	96	U
	SB-11-GW	19-Feb-15	180	J	36	U	210	J
	SB-12-GW	13-Feb-15	16	U	21	U	96	U
	SB-13-GW	13-Feb-15	210	J	33	U	430	
	SB-14-GW	18-Feb-15	38	U	19	U	96	U
	SB-15-GW	18-Feb-15	690	J	160	J	420	
	SB-16-GW	18-Feb-15	380	J	26	U	1500	
	SB-17-GW	18-Feb-15	130	J	27	U	1000	
	DUP-021815[b]	18-Feb-15	130	J	20	U	1000	
	SB-18-GW	19-Feb-15	690	J	57		230	J
	SB-19-GW	17-Feb-15	--		--		--	
	SB-20-GW	17-Feb-15	1400	J	25	U	2600	
	SB-22-GW	17-Feb-15	--		--		--	
	SB-23-GW	19-Feb-15	130	J	33	U	190	J
	SB-24-GW	18-Feb-15	3400		110	J	6400	

Notes:

Detected concentrations exceeding screening levels are highlighted in yellow; analytes detected in less than 5 percent of the samples are not screened (see Table 5).

Gasoline-range purgeable total petroleum hydrocarbons were analyzed using EPA Methods SW8021F / SW8260B / CATPH.
Diesel-range and oil-range extractable total petroleum hydrocarbons were analyzed using EPA Method SW8015B / CATPH.
Groundwater screening levels are based on surface water screening levels for the protection of marine aquatic life (Table F-4a; SFRWQCB 2013), except in some cases (see Table 5).

[a] Duplicate sample for MW-5A-GW.

[b] Duplicate sample for SB-17-GW.

-- = not applicable (not analyzed or information not provided)

µg/L = micrograms per liter

UST = underground storage tank

Qualifiers:

J = Estimated. The analyte was detected and positively identified. The associated numerical value is an estimated value.
U = The analyte was analyzed for, but was not detected.
UJ = The analyte was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

Table 12. Groundwater Sample Analytical Results—Polychlorinated Biphenyls

Study Name	Sample ID	Date	Aroclor 1016 (µg/L)	Aroclor 1221 (µg/L)	Aroclor 1232 (µg/L)	Aroclor 1242 (µg/L)	Aroclor 1248 (µg/L)	Aroclor 1254 (µg/L)	Aroclor 1260 (µg/L)	Sum of Aroclors [c] (mg/kg)
		Screening Level:								ND
UST Removal 2004 Geo-Logic	Tank Pit Water	07-Jan-04	--	--	--	--	--	--	--	--
Soil and Groundwater Investigation 2007 Geo-Logic	B1 Water	27-Jun-07	--	--	--	--	--	--	--	--
	B3 Water	27-Jun-07	--	--	--	--	--	--	--	--
	B5 Water	27-Jun-07	--	--	--	--	--	--	--	--
	B6 Water	27-Jun-07	--	--	--	--	--	--	--	--
	B7 Water	27-Jun-07	--	--	--	--	--	--	--	--
	B8 Water	27-Jun-07	--	--	--	--	--	--	--	--
Historical Groundwater Monitoring Various Dates Geo-Logic	MW-1_20100504	04-May-10	--	--	--	--	--	--	--	--
	MW-1_20101105	05-Nov-10	--	--	--	--	--	--	--	--
	MW-1_20110513	13-May-11	--	--	--	--	--	--	--	--
	MW-1_20111205	05-Dec-11	--	--	--	--	--	--	--	--
	MW-1_20120601	01-Jun-12	--	--	--	--	--	--	--	--
	MW-1_20121203	03-Dec-12	--	--	--	--	--	--	--	--
	MW-1_20130603	03-Jun-13	--	--	--	--	--	--	--	--
	MW-1_20131202	02-Dec-13	--	--	--	--	--	--	--	--
	MW-2_20100504	04-May-10	--	--	--	--	--	--	--	--
	MW-2_20101105	05-Nov-10	--	--	--	--	--	--	--	--
	MW-2_20110513	13-May-11	--	--	--	--	--	--	--	--
	MW-2_20111205	05-Dec-11	--	--	--	--	--	--	--	--
	MW-2_20120601	01-Jun-12	--	--	--	--	--	--	--	--
	MW-2_20121203	03-Dec-12	--	--	--	--	--	--	--	--
	MW-2_20130603	03-Jun-13	--	--	--	--	--	--	--	--
	MW-2_20131202	02-Dec-13	--	--	--	--	--	--	--	--
	MW-3_20100504	04-May-10	--	--	--	--	--	--	--	--
	MW-3_20101105	05-Nov-10	--	--	--	--	--	--	--	--
	MW-3_20110513	13-May-11	--	--	--	--	--	--	--	--
	MW-3_20111205	05-Dec-11	--	--	--	--	--	--	--	--
	MW-3_20120601	01-Jun-12	--	--	--	--	--	--	--	--
	MW-3_20121203	03-Dec-12	--	--	--	--	--	--	--	--
	MW-3_20130603	03-Jun-13	--	--	--	--	--	--	--	--
	MW-3_20131202	02-Dec-13	--	--	--	--	--	--	--	--
Limited Phase II Investigation Allied Engineering Property 2014 Geologica	A-1A	14-Jul-14	--	--	--	--	--	--	--	--
	A-3	14-Jul-14	--	--	--	--	--	--	--	--
	A-4	14-Jul-14	--	--	--	--	--	--	--	--
	A-5	14-Jul-14	--	--	--	--	--	--	--	--
	A-8	14-Jul-14	--	--	--	--	--	--	--	--
	A-9	14-Jul-14	--	--	--	--	--	--	--	--
	TP-1	10-Jul-14	--	--	--	--	--	--	--	--
Subsurface Investigation 2015 AEI	SB-1-GW	12-Jan-15	--	--	--	--	--	--	--	--
	SB-2-GW	12-Jan-15	--	--	--	--	--	--	--	--
	SB-3-GW	12-Jan-15	--	--	--	--	--	--	--	--
	SB-4-GW	12-Jan-15	--	--	--	--	--	--	--	--
	SB-5-GW	12-Jan-15	--	--	--	--	--	--	--	--
	SB-6-GW	12-Jan-15	--	--	--	--	--	--	--	--
	SB-7-GW	12-Jan-15	--	--	--	--	--	--	--	--
	SB-8-GW	12-Jan-15	--	--	--	--	--	--	--	--
	SB-9-GW	12-Jan-15	--	--	--	--	--	--	--	--
	SB-10-GW	12-Jan-15	--	--	--	--	--	--	--	--

Table 12. Groundwater Sample Analytical Results—Polychlorinated Biphenyls

Study Name	Sample ID	Date	Aroclor 1016 (µg/L)	Aroclor 1221 (µg/L)	Aroclor 1232 (µg/L)	Aroclor 1242 (µg/L)	Aroclor 1248 (µg/L)	Aroclor 1254 (µg/L)	Aroclor 1260 (µg/L)	Sum of Aroclors [c] (mg/kg)
Soil and Groundwater Investigation 2015 Integral	MW-1-GW	24-Feb-15	0.16 U	0.32 U	0.14 U	0.16 U	0.16 U	0.16 U	0.13 U	0.13 U
	MW-2-GW	24-Feb-15	0.16 U	0.32 U	0.14 U	0.16 U	0.16 U	0.16 U	0.13 U	0.13 U
	MW-3-GW	24-Feb-15	0.16 U	0.32 U	0.14 U	0.16 U	0.16 U	0.16 U	0.13 U	0.13 U
	MW-4A-GW	19-Mar-15	0.17 U	0.34 U	0.15 U	0.17 U	0.17 U	0.17 U	0.14 U	0.14 U
	MW-4B-GW	19-Mar-15	0.17 U	0.34 U	0.15 U	0.17 U	0.17 U	0.17 U	0.14 U	0.14 U
	MW-5A-GW	19-Mar-15	0.16 U	0.32 U	0.14 U	0.16 U	0.16 U	0.15 U	0.13 U	0.13 U
	DUP-GW-031915[a]	19-Mar-15	0.17 U	0.34 U	0.15 U	0.17 U	0.17 U	0.17 U	0.14 U	0.14 U
	MW-5B-GW	19-Mar-15	0.16 U	0.32 U	0.14 U	0.16 U	0.16 U	0.16 U	0.13 U	0.13 U
	MW-6A-GW	25-Feb-15	0.16 U	0.32 U	0.14 U	0.16 U	0.16 U	0.16 U	0.13 U	0.13 U
	MW-6B-GW	25-Feb-15	0.16 U	0.32 U	0.14 U	0.16 U	0.16 U	0.15 U	0.13 U	0.13 U
	SB-11-GW	19-Feb-15	0.16 U	0.32 U	0.14 U	0.16 U	0.16 U	0.16 U	0.13 U	0.13 U
	SB-12-GW	13-Feb-15	0.16 U	0.32 U	0.14 U	0.16 U	0.16 U	0.16 U	0.13 U	0.13 U
	SB-13-GW	13-Feb-15	0.16 U	0.32 U	0.14 U	0.16 U	0.16 U	0.16 U	0.13 U	0.13 U
	SB-14-GW	18-Feb-15	0.16 U	0.32 U	0.14 U	0.16 U	0.16 U	0.16 U	0.13 U	0.13 U
	SB-15-GW	18-Feb-15	0.16 U	0.32 U	0.14 U	0.16 U	0.16 U	0.16 U	0.13 U	0.13 U
	SB-16-GW	18-Feb-15	0.16 U	0.32 U	0.14 U	0.16 U	0.16 U	0.16 U	0.13 U	0.13 U
	SB-17-GW	18-Feb-15	0.16 U	0.32 U	0.14 U	0.16 U	0.16 U	0.16 U	0.13 U	0.13 U
	DUP-021815[b]	18-Feb-15	0.16 U	0.32 U	0.14 U	0.16 U	0.16 U	0.16 U	0.13 U	0.13 U
	SB-18-GW	19-Feb-15	0.16 U	0.32 U	0.14 U	0.16 U	0.16 U	0.16 U	0.13 U	0.13 U
	SB-19-GW	17-Feb-15	0.16 U	0.32 U	0.14 U	0.16 U	0.16 U	0.16 U	0.13 U	0.13 U
	SB-20-GW	17-Feb-15	0.16 U	0.32 U	0.14 U	0.16 U	0.16 U	0.16 U	0.13 U	0.13 U
	SB-22-GW	17-Feb-15	0.16 U	0.32 U	0.14 U	0.16 U	0.16 U	0.16 U	0.13 U	0.13 U
	SB-23-GW	19-Feb-15	0.16 U	0.32 U	0.14 U	0.16 U	0.16 U	0.16 U	0.13 U	0.13 U
	SB-24-GW	18-Feb-15	0.16 U	0.32 U	0.14 U	0.16 U	0.16 U	0.16 U	0.13 U	0.13 U

Notes:

PCBs analyzed using EPA Method SW8082.
PCBs were not detected in groundwater and therefore, not screened.
[a] Duplicate sample for MW-5A-GW.
[b] Duplicate sample for SB-17-GW.
[c] Sum of PCB aroclors calculated as the sum of all detected PCB aroclors. If no aroclors were detected then the lowest quantitation limit was used.
-- = not applicable (not analyzed or information not provided)
µg/L = micrograms per liter
ND = not detected
PCB = polychlorinated biphenyl
UST = underground storage tank

Qualifiers:

U = The analyte was analyzed for, but was not detected.

Table 13. Groundwater Sample Analytical Results—Semivolatile Organic Compounds

Study Name	Sample ID	Date	4-Chloro-3-methylphenol (µg/L)	4-Methylphenol (p-Cresol) (µg/L)	Benzoic acid (µg/L)	bis-(2-Ethylhexyl) phthalate (µg/L)	Diethyl phthalate (µg/L)	Naphthalene (µg/L)	Phenol (µg/L)
		Screening Value:	NA	<5%FOD	<5%FOD	480	1.7	62	<5%FOD
UST Removal 2004 Geo-Logic	Tank Pit Water	07-Jan-04	--	--	--	--	--	--	--
Soil and Groundwater Investigation 2007 Geo-Logic	B1 Water	27-Jun-07	--	--	--	--	--	--	--
	B3 Water	27-Jun-07	--	--	--	--	--	--	--
	B5 Water	27-Jun-07	--	--	--	--	--	--	--
	B6 Water	27-Jun-07	--	--	--	--	--	--	--
	B7 Water	27-Jun-07	--	--	--	--	--	--	--
	B8 Water	27-Jun-07	--	--	--	--	--	--	--
Historical Groundwater Monitoring Various Dates Geo-Logic	MW-1_20100504	04-May-10	--	--	--	--	--	--	--
	MW-1_20101105	05-Nov-10	--	--	--	--	--	--	--
	MW-1_20110513	13-May-11	--	--	--	--	--	--	--
	MW-1_20111205	05-Dec-11	--	--	--	--	--	--	--
	MW-1_20120601	01-Jun-12	--	--	--	--	--	--	--
	MW-1_20121203	03-Dec-12	--	--	--	--	--	--	--
	MW-1_20130603	03-Jun-13	--	--	--	--	--	--	--
	MW-1_20131202	02-Dec-13	--	--	--	--	--	--	--
	MW-2_20100504	04-May-10	--	--	--	--	--	--	--
	MW-2_20101105	05-Nov-10	--	--	--	--	--	--	--
	MW-2_20110513	13-May-11	--	--	--	--	--	--	--
	MW-2_20111205	05-Dec-11	--	--	--	--	--	--	--
	MW-2_20120601	01-Jun-12	--	--	--	--	--	--	--
	MW-2_20121203	03-Dec-12	--	--	--	--	--	--	--
	MW-2_20130603	03-Jun-13	--	--	--	--	--	--	--
	MW-2_20131202	02-Dec-13	--	--	--	--	--	--	--
	MW-3_20100504	04-May-10	--	--	--	--	--	--	--
	MW-3_20101105	05-Nov-10	--	--	--	--	--	--	--
	MW-3_20110513	13-May-11	--	--	--	--	--	--	--
	MW-3_20111205	05-Dec-11	--	--	--	--	--	--	--
	MW-3_20120601	01-Jun-12	--	--	--	--	--	--	--
	MW-3_20121203	03-Dec-12	--	--	--	--	--	--	--
	MW-3_20130603	03-Jun-13	--	--	--	--	--	--	--
	MW-3_20131202	02-Dec-13	--	--	--	--	--	--	--
Limited Phase II Investigation Allied Engineering Property 2014 Geologica	A-1A	14-Jul-14	--	--	--	--	--	0.22 U	--
	A-3	14-Jul-14	--	--	--	--	--	0.22 U	--
	A-4	14-Jul-14	--	--	--	--	--	0.22 U	--
	A-5	14-Jul-14	--	--	--	--	--	0.22 U	--
	A-8	14-Jul-14	--	--	--	--	--	0.22 U	--
	A-9	14-Jul-14	--	--	--	--	--	0.22 U	--
	TP-1	10-Jul-14	--	--	--	--	--	0.22 U	--
Subsurface Investigation 2015 AEI	SB-1-GW	12-Jan-15	--	--	--	--	--	1 U	--
	SB-2-GW	12-Jan-15	--	--	--	--	--	1 U	--
	SB-3-GW	12-Jan-15	--	--	--	--	--	1 U	--
	SB-4-GW	12-Jan-15	--	--	--	--	--	1 U	--
	SB-5-GW	12-Jan-15	--	--	--	--	--	1 U	--
	SB-6-GW	12-Jan-15	--	--	--	--	--	1 U	--
	SB-7-GW	12-Jan-15	--	--	--	--	--	1 U	--
	SB-8-GW	12-Jan-15	--	--	--	--	--	1 U	--
	SB-9-GW	12-Jan-15	--	--	--	--	--	1 U	--
	SB-10-GW	12-Jan-15	--	--	--	--	--	1 U	--

Table 13. Groundwater Sample Analytical Results—Semivolatile Organic Compounds

Study Name	Sample ID	Date	4-Chloro-3-methylphenol (µg/L)	4-Methylphenol (p-Cresol) (µg/L)	Benzoic acid (µg/L)	bis-(2-Ethylhexyl) phthalate (µg/L)	Diethyl phthalate (µg/L)	Naphthalene (µg/L)	Phenol (µg/L)
Soil and Groundwater Investigation 2015 Integral	MW-1-GW	24-Feb-15	1.4 U	1.5 U	10 U	1.7 U	1.6 U	1.4 U	1.7 U
	MW-2-GW	24-Feb-15	1.4 U	1.5 U	10 U	1.7 U	1.6 U	1.4 U	1.7 U
	MW-3-GW	24-Feb-15	1.4 U	1.5 U	10 U	1.7 U	1.6 U	1.4 U	1.7 U
	MW-4A-GW	19-Mar-15	1 U	1.7 U	15 U	4.7 J	1 U	1.9 U	1 U
	MW-4B-GW	19-Mar-15	1 U	1.6 U	15 U	2.9 J	0.98 U	1.8 U	0.98 U
	MW-5A-GW	19-Mar-15	1 U	1.7 U	16 U	1.8 U	1 U	1.9 U	1 U
	DUP-GW-031915[a]	19-Mar-15	1 U	1.7 U	16 U	2.7 J	1 U	1.9 U	1 U
	MW-5B-GW	19-Mar-15	1 U	1.7 U	15 U	1.8 U	1 U	1.9 U	1 U
	MW-6A-GW	25-Feb-15	1.4 U	1.5 U	10 U	1.7 U	1.6 U	1.4 U	1.7 U
	MW-6B-GW	25-Feb-15	1.3 U	1.4 U	9.6 U	1.6 U	1.5 U	1.4 U	1.6 U
	SB-11-GW	19-Feb-15	1.5 U	1.2 U	6.9 U	1.9 U	1.5 U	1.4 U	0.8 U
	SB-12-GW	13-Feb-15	0.82 U	0.6 U	15 U	1.6 U	0.68 U	0.58 U	0.98 U
	SB-13-GW	13-Feb-15	310	0.6 U	15 U	1.6 U	0.68 U	0.58 U	0.98 U
	SB-14-GW	18-Feb-15	1.5 U	1.1 U	6.5 U	1.8 U	1.4 U	1.3 U	0.76 U
	SB-15-GW	18-Feb-15	1.5 U	7.5 J	8.4 J	7.7 J	1.5 U	1.4 U	0.8 U
	SB-16-GW	18-Feb-15	1.4 U	1.5 U	10 U	45 J	1.6 UJ	1.4 UJ	1.7 U
	SB-17-GW	18-Feb-15	1.4 U	1.5 U	10 U	24 J	1.6 U	1.4 U	1.7 U
	DUP-021815[b]	18-Feb-15	1.4 U	1.5 U	10 U	8.5 J	1.6 U	1.4 U	1.7 U
	SB-18-GW	19-Feb-15	1.5 U	1.2 U	6.9 U	1.9 U	1.5 U	1.4 U	0.8 U
	SB-19-GW	17-Feb-15	0.82 U	0.6 U	15 U	1.6 UJ	0.68 UJ	0.58 UJ	0.98 U
	SB-20-GW	17-Feb-15	6.5 J	0.6 U	15 U	1.6 U	0.68 U	0.58 U	0.98 U
	SB-22-GW	17-Feb-15	2.1 J	0.6 U	15 U	1.6 UJ	1.2 J	0.58 UJ	0.98 U
	SB-23-GW	19-Feb-15	1.4 U	1.5 U	10 U	2.3 J	1.6 UJ	1.4 UJ	2.9 J
	SB-24-GW	18-Feb-15	46	1.2 U	--	3.1 J	--	0.2 U	0.8 U

Notes:

Detected concentrations exceeding screening levels are highlighted in yellow; analytes detected in less than 5 percent of the samples are not screened (see Table 5).
Only SVOCs for which there was a detection in at least one sample are presented in this table.
SVOCs analyzed using EPA Method SW8270C / SW8260B. When a parameter was analyzed by both methods (e.g., naphthalene), results for 8270C are presented.
Groundwater screening levels are based on surface water screening levels for the protection of marine aquatic life (Table F-4a; SFRWQCB 2013), except in some cases (see Table 5).

[a] Duplicate sample for MW-5A-GW.
[b] Duplicate sample for SB-17-GW.
-- = not applicable (not analyzed or information not provided)
<5%FOD = analyte was detected in less than 5 percent of the samples; screening levels not reported here.
NA = not available
µg/L = micrograms per liter
SVOC = semivolatile organic compound
UST = underground storage tank

Qualifiers:
J = Estimated. The analyte was detected and positively identified. The associated numerical value is an estimated value.
U = The analyte was analyzed for, but was not detected.
UJ = The analyte was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

Table 14. Groundwater Sample Analytical Results—Metals

Study Name	Sample ID	Date	Antimony (µg/L)	Arsenic (µg/L)	Barium (µg/L)	Beryllium (µg/L)	Cadmium (µg/L)	Chromium (µg/L)	Chromium, Hexavalent (µg/L)	Cobalt (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Molybdenum (µg/L)	Nickel (µg/L)	Selenium (µg/L)	Silver (µg/L)	Thallium (µg/L)	Vanadium (µg/L)	Zinc (µg/L)
		Screening Level:	500	36	NA	0.53	9.3	1000	ND	NA	6	8.1	0.025	NA	8.2	5	0.19	4	NA	81
UST Removal	Tank Pit Water	07-Jan-04																		
2004 Geo-Logic			--	--	--	--	--	--	--	--	--	260	--	--	--	--	--	--	--	--
Soil and	B1 Water	27-Jun-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Groundwater	B3 Water	27-Jun-07	1 U	82	6100	5.5	5300	2900	--	330	930	2900	4.8	42	3000	3.6	4.6	1.9	1900	2600
Investigation	B5 Water	27-Jun-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2007 Geo-Logic	B6 Water	27-Jun-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	B7 Water	27-Jun-07	1.9	16	680	0.71	16	390	--	28	130	3300	0.31	38	230	0.9	0.54 U	0.5	180	610
	B8 Water	27-Jun-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Historical	MW-1_20100504	04-May-10	0.5 U	17	130	0.5 U	0.29	0.5 U	--	6.2	0.5 U	2.1	0.025 U	4.8	120	0.5 U	0.19 U	0.5 U	6	5.9
Groundwater	MW-1_20101105	05-Nov-10	0.5 U	15	93	0.5 U	0.25 U	0.5 U	--	1.4	0.83	0.5 U	0.025 U	2	75	0.5 U	0.19 U	0.5 U	2.7	5 U
Monitoring	MW-1_20110513	13-May-11	0.5 U	18	100	0.5 U	0.25 U	0.5 U	--	0.92	0.5 U	0.5 U	0.025 U	2.3	85	0.5 U	0.19 U	0.5 U	0.71	5 U
VariousDates	MW-1_20111205	05-Dec-11	0.5 U	19	110	0.5 U	0.25 U	0.5 U	--	0.76	0.5 U	0.5 U	0.025 U	1.8	82	0.5 U	0.19 U	0.5 U	1.7	5 U
Geo-Logic	MW-1_20120601	01-Jun-12	0.5 U	11	99	0.5 U	0.25 U	1 U	--	0.7	0.5 U	0.5 U	0.025 U	1.6	59	0.5 U	0.19 U	0.5 U	0.75	5 U
	MW-1_20121203	03-Dec-12	0.5 U	4.7	120	0.5 U	0.25 U	0.5 U	--	2.2	0.62	0.5 U	0.025 U	0.8	54	0.5 U	0.19 U	0.5 U	6.1	5 U
	MW-1_20130603	03-Jun-13	0.5 U	9.4	78	0.5 U	0.25 U	0.5 U	--	1.3	0.5 U	0.5 U	0.025 U	1.1	25	0.5 U	0.19 U	0.5 U	23	5 U
	MW-1_20131202	02-Dec-13	0.5 U	8	110	0.5 U	0.25 U	0.5 U	--	0.5 U	0.5 U	0.5 U	0.025 U	1	32	0.5 U	0.19 U	0.5 U	15	5 U
	MW-2_20100504	04-May-10	0.5 U	4.1	84	0.5 U	1	0.5 U	--	7.9	1.7	4	0.025 U	2.4	190	0.5 U	0.19 U	0.5 U	8	14
	MW-2_20101105	05-Nov-10	0.5 U	5.3	61	0.5 U	0.25 U	0.5 U	--	1.9	3.6	1.7	0.025 U	0.74	110	0.5 U	0.19 U	0.5 U	9.1	10
	MW-2_20110513	13-May-11	0.5 U	5.7	62	0.5 U	0.25 U	0.5 U	--	1.6	0.5 U	0.5 U	0.025 U	0.56	170	0.5 U	0.19 U	0.5 U	3.7	5 U
	MW-2_20111205	05-Dec-11	0.5 U	7.8	81	0.5 U	0.25 U	0.5 U	--	0.98	0.5 U	0.81	0.025 U	0.5 U	220	0.5 U	0.19 U	0.5 U	5.1	5 U
	MW-2_20120601	01-Jun-12	0.5 U	5.4	89	0.5 U	0.25 U	1 U	--	1.1	0.5 U	0.5 U	0.025 U	0.5 U	220	0.5 U	0.19 U	0.5 U	5.6	5 U
	MW-2_20121203	03-Dec-12	0.5 U	5.3	83	0.5 U	0.5	0.5 U	--	3.2	3.7	1.4	0.025 U	0.5 U	120	0.5 U	0.19 U	0.5 U	7.3	68
	MW-2_20130603	03-Jun-13	0.5 U	5.9	86	0.5 U	0.25 U	0.5 U	--	2.2	0.5 U	0.5 U	0.025 U	0.57	83	0.5 U	0.19 U	0.5 U	2.5	5 U
	MW-2_20131202	02-Dec-13	0.5 U	7.3	83	0.5 U	0.25 U	0.5 U	--	0.92	0.7	0.5 U	0.025 U	0.5 U	41	0.5 U	0.19 U	0.5 U	5.5	6.6
	MW-3_20100504	04-May-10	0.65	2.7	180	0.5 U	2.1	0.5 U	--	5.9	6.4	14	0.025 U	20	85	0.5 U	0.19 U	0.5 U	4.4	7
	MW-3_20101105	05-Nov-10	0.91	2.1	81	0.5 U	6.2	7.6	--	3.6	7.7	4.9	0.055	26	15	2.7	3	0.5 U	3.3	35
	MW-3_20110513	13-May-11	0.5 U	2.7	63	0.5 U	0.51	0.5 U	--	2.1	4.9	2.1	0.025 U	6	55	0.7	0.19 U	0.5 U	4.4	5 U
	MW-3_20111205	05-Dec-11	0.5 U	5.5	48	0.5 U	0.91	0.57	--	0.64	4.9	1	0.025 U	14	52	2.1	0.19 U	0.5 U	7.6	5 U
	MW-3_20120601	01-Jun-12	0.5 U	3.3	38	0.5 U	0.37	1 U	--	3.8	5.3	1.1	0.025 U	6.1	91	0.5 U	0.19 U	0.5 U	6.3	6.8
	MW-3_20121203	03-Dec-12	0.5 U	3.4	63	0.5 U	0.34	2.7	--	2.3	3.1	0.5 U	0.025 U	11	24	9.5	0.23	0.5 U	5.3	5 U
	MW-3_20130603	03-Jun-13	0.5 U	2.8	71	0.5 U	0.38	0.65	--	1.6	3.3	0.58	0.025 U	7.6	82	1.2	0.19 U	0.5 U	5.3	5 U
	MW-3_20131202	02-Dec-13	5 U	5 U	110	5 U	2.5 U	5 U	--	5 U	5 U	5 U	0.25 U	18	57	14	1.9 U	5 U	5 U	50 U
Limited Phase II	A-1A	14-Jul-14	4.1 U	1.8 U	98	0.59 U	0.21 U	0.7 U	--	2.2	3.7 U	13	0.1 U	16	10	3 U	1.2 U	1.8 U	0.78 U	22
Investigation	A-3	14-Jul-14	4.1 U	1.8 U	320	0.59 U	0.21 U	0.7 U	--	86	3.7 U	1.2 U	1.1	67	340	3 U	1.2 U	1.8 U	0.78 U	44
Allied	A-4	14-Jul-14	4.1 U	1.8 U	110	0.59 U	0.21 U	0.7 U	--	0.68 U	3.7 U	9.5	0.1 U	15	0.8 U	3 U	1.2 U	1.8 U	0.78 U	20
Engineering	A-5	14-Jul-14	4.1 U	1.8 U	150	0.59 U	0.21 U	0.7 U	--	0.68 U	3.7 U	6.7	0.1 U	19	0.8 U	3 U	1.2 U	1.8 U	110	4.1 U
Property 2014	A-8	14-Jul-14	4.1 U	1.8 U	87	0.59 U	0.21 U	0.7 U	--	0.68 U	3.7 U	9.4	0.1 U	22	23	3 U	1.2 U	1.8 U	47	4.1 U
Geologica	A-9	14-Jul-14	4.1 U	1.8 U	220	0.59 U	0.21 U	0.7 U	--	0.68 U	3.7 U	9.4	0.1 U	36	37	3 U	1.2 U	1.8 U	0.78 U	4.1 U
	TP-1	10-Jul-14	4.1 U	1.8 U	490	0.59 U	0.21 U	0.7 U	--	5.3	3.7 U	46	0.1 U	18	33	3 U	1.2 U	1.8 U	0.78 U	70
Subsurface	SB-1-GW	12-Jan-15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Investigation	SB-2-GW	12-Jan-15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2015 AEI	SB-3-GW	12-Jan-15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	SB-4-GW	12-Jan-15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	SB-5-GW	12-Jan-15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	SB-6-GW	12-Jan-15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	SB-7-GW	12-Jan-15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	SB-8-GW	12-Jan-15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	SB-9-GW	12-Jan-15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	SB-10-GW	12-Jan-15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Soil and	MW-1-GW	24-Feb-15	0.65 U	11	150	0.3 U	0.58 U	1.5 J	10 U	0.32 U	0.99 U	0.91 U	0.021 U	2.4 J	96	2.3 U	0.66 U	2 U	4.8 J	3 U
Groundwater	MW-2-GW	24-Feb-15	0.65 U	2 J	72	0.3 U	0.58 U	0.6 J	10 U	0.44 J	0.99 U	0.91 U	0.064 U	0.91 J	100	2.3 U	0.66 U	2 U	4.6 J	24
Investigation	MW-3-GW	24-Feb-15	2.3 U	9.2	76	0.21 J	0.28 U	0.77 J	10 U	0.89 U	3.5 J	1.3 U	0.04 U	11	28	14	3.6 J	0.02 U	4.1 J	5.1 U
2015 Integral	MW-4A-GW	19-Mar-15	2.3 U	1 U	210	0.39 J	0.28 U	0.6 U	2 U	5.9	4 J	1.3 UJ	0.029 J	6	76	30	3.9 J	0.054 J	4.9 J	11 U
	MW-4B-GW	19-Mar-15	2.3 U	1 U	110	0.15 U	0.28 U	0.6 U	2 U	0.89 U	0.67 U	1.3 UJ	0.021 U	4.6 J	0.84 J	8.3 J	1.1 U	2 U	6.2	6.3 U
	MW-5A-GW	19-Mar-15	2.3 U	1.6 U	12	0.15 U	0.28 U	0.6 U	2 U	0.89 U	1.3 J	1.3 UJ	0.021 U	2.2 J	1.5 J	6.1 J	1.1 U	2 U	6	6 U
	DUP-GW-031915[a]	19-Mar-15	2.3 U	3 U	12	0.15 U	0.28 U	0.6 U	2 U	0.89 U	0.67 U	1.3 UJ	0.029 J	2.1 J	0.75 U	9.1 J	1.1 J	2 U	6	4.3 U
	MW-5B-GW	19-Mar-15	2.3 U	1 U	58	0.15 U	0.28 U	0.6 U	2 U	0.89 U	0.7 J	1.3 UJ	0.021 U	7.7	0.75 U	9.7 J	1.1 U	2 U	6.6	6 U
	MW-6A-GW	25-Feb-15	0.65 U	1.5 J	32	0.3 U	0.58 U	0.75 J	10 U	0.32 U	0.99 U	0.91 U	0.064 U	1.5 J	3.4 U	2.3 U	0.66 U	2.1 J	5.1	5.6 U
	MW-6B-GW	25-Feb-15	0.65 U	7.4	50	0.3 U	0.58 U	0.57 U	10 U	0.32 U	0.99 U	0.91 U	0.023 U	2 J	1.3 U	2.3 U	0.66 U	2.1 J	7.2	4.8 U
	SB-11-GW	19-Feb-15	2.3 U	1 U	77	0.15 U	0.28 U	0.6 U	10 U	0.89 U	0.67 U	1.3 U	0.04 U	8.2	2.1 J	5.1 J	1.1 U	2.8 U	4.4 J	4.1 U
	SB-12-GW	13-Feb-15	0.65 U	1.3 U	120	0.3 U	0.58 U	0.93 J	10 U	2 J	0.99 U	0.91 U	0.04 U	17	6.4	2.3 U	0.66 U	2 U	9.9	3 U
	SB-13-GW	13-Feb-15	0.65 U	1.3 U	190	0.3 U	0.58 U	1.3 J	10 U	1.3 J	0.99 U	0.91 U	0.04 U	35	21	4.6 J	0.66 U	2 U	150	3 U
	SB-14-GW	18-Feb-15	0.65 U	2.8 J	110	0.3 U	0.58 U	0.67 J	10 U	0.32 U	0.99 U	0.91 U	0.091 U	30	6	2.3 U	0.66 U	2 U	44	3 U
	SB-15-GW	18-Feb-15	0.65 U	1.3 U	72	0.3 U	0.58 U	0.57 U	10 U	0.32 U	0.99 U	0.91 U	0.04 U	13	4.5 J	2.3 U	0.66 U	2 U	3.3 J	3 U
	SB-16-GW	18-Feb-15	0.65 U	1.3 U	56	0.3 U	0.58 U	0.57 U	10 U	0.32 U	0.99 U	0.91 U	0.04 U	52	6.7	2.3 U	0.66 U	2 U	1.2 J	3 U
	SB-17-GW	18-Feb-15	0.65 U	1.3 U	57	0.3 U	0.58 U	0.57 U	10 U	0.32 U	0.99 U	0.91 U	0.04 U	14	2.5 J	2.3 U	0.66 U	2 U	4 J	3 U
	DUP-021815[b]	18-Feb-15	0.65 U	1.3 U	65	0.3 U	0.58 U	0.57 U	10 U	0.32 U	0.99 U	0.91 U	0.04 U	13	1.4 J	2.3 U	0.66 U	2 U	4.7 J	3 U
	SB-18-GW	19-Feb-15	5 J	5.4	120	0.15 U	5.4	0.6 U	10 U	1.2 J	1.9 J	6.9	0.04 U	15	7.4	6.7 J	1.1 U	2.8 U	8.4	2.8 U
	SB-19-GW	17-Feb-15	0.65 U	1.3 U	66	0.3 U	0.58 U	1.2 J	10 U	0.32 U	0.99 U	0.91 U	0.04 U	17	4.2 J	2.3 U	0.66 U	2 U	22	3 U
	SB-20-GW	17-Feb-15	0.65 U	1.3 U	56	0.3 U	0.58 U	0.68 J	10 U	0.32 U	0.99 U	0.91 U	0.04 U	57	6.3	2.3 U	0.66 U	2 U	1.6 J	3 U
	SB-22-GW	17-Feb-15	0.65 U	1.3 U	71	0.3 U	0.58 U	2.4 J	10 U	0.32 U	0.99 U	0.91 U	0.04 U	37	5.6	2.3 U	0.66 U	2 U	3.9 J	3 U
	SB-23-GW	19-Feb-15	2.3 U	1 U	120	0.15 U	0.28 U	0.6 U	10 U	0.89 U	0.67 U	1.3 U	0.042 J	13	6.2	7.1 J	1.1 U	2.8 U	4 J	2.8 U

Table 14. Groundwater Sample Analytical Results—Metals

Study Name	Sample ID	Date	Antimony (µg/L)	Arsenic (µg/L)	Barium (µg/L)	Beryllium (µg/L)	Cadmium (µg/L)	Chromium (µg/L)	Chromium, Hexavalent (µg/L)	Cobalt (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Molybdenum (µg/L)	Nickel (µg/L)	Selenium (µg/L)	Silver (µg/L)	Thallium (µg/L)	Vanadium (µg/L)	Zinc (µg/L)
	SB-24-GW	18-Feb-15	0.65 U	5.5	260	0.3 U	0.58 U	1.3 J	10 U	0.77 J	0.99 U	0.91 U	0.15 U	4.5 J	13	2.3 U	0.66 U	2 U	7	3 U

Notes:

Detected concentrations exceeding screening levels are highlighted in yellow; analytes detected in less than 5 percent of the samples are not screened (see Table 5).
Mercury analyzed using EPA Method E200.8 / SW7470A.
Metals analyzed using EPA Method E200.8 / E200.9 / SW6010B / SW6020.
Hexavalent chromium analyzed using SW7196A.
Groundwater screening levels are based on surface water screening levels for the protection of marine aquatic life (Table F-4a; SFRWQCB 2013), except in some cases (see Table 5).
[a] Duplicate sample for MW-5A-GW.
[b] Duplicate sample for SB-17-GW.
-- = not applicable (not analyzed or information not provided)
NA = not available
ND = not detected
µg/L = micrograms per liter
UST = underground storage tank

Qualifiers:

J = Estimated. The analyte was detected and positively identified. The associated numerical value is an estimated value.
U = The analyte was analyzed for, but was not detected.
UJ = The analyte was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

Table 15. Groundwater Sample Analytical Results—Volatile Organic Compounds

Study Name	Sample ID	Date	1,1-Dichloroethene (µg/L)	1,2-Dichloroethane (µg/L)	cis-1,2-Dichloroethene (µg/L)	trans-1,2-Dichloroethene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	1,3,5-Trimethylbenzene (µg/L)	2-Butanone (µg/L)	2-Chlorotoluene (µg/L)	4-Isopropyltoluene (µg/L)	4-Methyl-2-pentanone (µg/L)
		Screening Level:	22400	NA	22400	22400	NA	NA	NA	NA	NA	NA
UST Removal 2004 Geo-Logic	Tank Pit Water	07-Jan-04	--	8.4	--	--	--	--	--	--	--	--
Soil and Groundwater Investigation 2007 Geo-Logic	B1 Water	27-Jun-07	--	5 U	--	--	--	--	--	--	--	--
	B3 Water	27-Jun-07	--	0.5 U	--	--	--	--	--	--	--	--
	B5 Water	27-Jun-07	--	5 U	--	--	--	--	--	--	--	--
	B6 Water	27-Jun-07	--	0.5 U	--	--	--	--	--	--	--	--
	B7 Water	27-Jun-07	--	0.5 U	--	--	--	--	--	--	--	--
	B8 Water	27-Jun-07	--	5 U	--	--	--	--	--	--	--	--
Historical Groundwater Monitoring VariousDates Geo-Logic	MW-1_20100504	04-May-10	--	0.5 U	--	--	--	--	--	--	--	--
	MW-1_20101105	05-Nov-10	--	0.5 U	--	--	--	--	--	--	--	--
	MW-1_20110513	13-May-11	--	0.5 U	--	--	--	--	--	--	--	--
	MW-1_20111205	05-Dec-11	--	0.5 U	--	--	--	--	--	--	--	--
	MW-1_20120601	01-Jun-12	--	0.5 U	--	--	--	--	--	--	--	--
	MW-1_20121203	03-Dec-12	--	0.5 U	--	--	--	--	--	--	--	--
	MW-1_20130603	03-Jun-13	--	0.5 U	--	--	--	--	--	--	--	--
	MW-1_20131202	02-Dec-13	--	0.5 U	--	--	--	--	--	--	--	--
	MW-2_20100504	04-May-10	--	5 U	--	--	--	--	--	--	--	--
	MW-2_20101105	05-Nov-10	--	0.5 U	--	--	--	--	--	--	--	--
	MW-2_20110513	13-May-11	--	5 U	--	--	--	--	--	--	--	--
	MW-2_20111205	05-Dec-11	--	2.5 U	--	--	--	--	--	--	--	--
	MW-2_20120601	01-Jun-12	--	5 U	--	--	--	--	--	--	--	--
	MW-2_20121203	03-Dec-12	--	0.5 U	--	--	--	--	--	--	--	--
	MW-2_20130603	03-Jun-13	--	0.5 U	--	--	--	--	--	--	--	--
	MW-2_20131202	02-Dec-13	--	0.5 U	--	--	--	--	--	--	--	--
	MW-3_20100504	04-May-10	--	0.5 U	--	--	--	--	--	--	--	--
	MW-3_20101105	05-Nov-10	--	0.5 U	--	--	--	--	--	--	--	--
	MW-3_20110513	13-May-11	--	0.5 U	--	--	--	--	--	--	--	--
	MW-3_20111205	05-Dec-11	--	0.5 U	--	--	--	--	--	--	--	--
	MW-3_20120601	01-Jun-12	--	0.5 U	--	--	--	--	--	--	--	--
	MW-3_20121203	03-Dec-12	--	0.5 U	--	--	--	--	--	--	--	--
	MW-3_20130603	03-Jun-13	--	0.5 U	--	--	--	--	--	--	--	--
	MW-3_20131202	02-Dec-13	--	0.5 U	--	--	--	--	--	--	--	--
Limited Phase II Investigation Allied Engineering Property 2014 Geologica	A-1A	14-Jul-14	0.2 U	0.077 U	19	0.52	0.2 U	0.17 U	8.4 U	0.2 U	0.2 U	4.5 U
	A-3	14-Jul-14	0.2 U	0.077 U	0.076 U	0.13 U	0.2 U	0.17 U	8.4 U	0.2 U	0.2 U	4.5 U
	A-4	14-Jul-14	0.2 U	0.077 U	0.076 U	0.13 U	0.2 U	0.17 U	8.4 U	0.2 U	0.2 U	4.5 U
	A-5	14-Jul-14	0.2 U	0.077 U	13	0.13 U	0.2 U	0.17 U	8.4 U	0.2 U	0.2 U	4.5 U
	A-8	14-Jul-14	0.79	1.7	54	10	0.2 U	0.17 U	8.4 U	0.2 U	0.2 U	4.5 U
	A-9	14-Jul-14	0.2 U	0.077 U	19	2.8	0.2 U	0.17 U	8.4 U	0.2 U	0.2 U	4.5 U
	TP-1	10-Jul-14	0.2 U	0.077 U	0.076 U	0.13 U	0.2 U	0.17 U	8.4 U	0.2 U	0.2 U	4.5 U
Subsurface Investigation 2015 AEI	SB-1-GW	12-Jan-15	1 U	1 U	54	4.1	1 U	1 U	--	1 U	1 U	--
	SB-2-GW	12-Jan-15	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	--
	SB-3-GW	12-Jan-15	1 U	1 U	67	1.8	1 U	1 U	--	1 U	1 U	--
	SB-4-GW	12-Jan-15	1 U	1 U	3.9	1 U	1 U	1 U	--	1 U	1 U	--
	SB-5-GW	12-Jan-15	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	--
	SB-6-GW	12-Jan-15	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	--
	SB-7-GW	12-Jan-15	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	--
	SB-8-GW	12-Jan-15	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	--
	SB-9-GW	12-Jan-15	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	--
	SB-10-GW	12-Jan-15	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	--

Table 15. Groundwater Sample Analytical Results—Volatile Organic Compounds

Study Name	Sample ID	Date	1,1-Dichloroethene (µg/L)	1,2-Dichloroethane (µg/L)	cis-1,2-Dichloroethene (µg/L)	trans-1,2-Dichloroethene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	1,3,5-Trimethylbenzene (µg/L)	2-Butanone (µg/L)	2-Chlorotoluene (µg/L)	4-Isopropyltoluene (µg/L)	4-Methyl-2-pentanone (µg/L)
Soil and Groundwater Investigation 2015 Integral	MW-1-GW	24-Feb-15	0.2 U	0.1 U	2.5	1.1	0.1 U	0.1 U	0.4 U	0.1 U	0.1 U	0.7 U
	MW-2-GW	24-Feb-15	0.2 U	0.1 U	0.5 J	0.2 U	0.1 U	0.1 U	0.4 U	0.1 U	0.1 U	0.7 U
	MW-3-GW	24-Feb-15	0.2 U	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U	0.4 U	0.1 U	0.1 U	0.7 U
	MW-4A-GW	19-Mar-15	0.1 U	0.1 U	1.3	0.1 U	0.1 U	0.1 U	0.3 U	0.2 U	0.1 U	0.1 U
	MW-4B-GW	19-Mar-15	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 U	0.2 U	0.1 U	0.1 U
	MW-5A-GW	19-Mar-15	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 U	0.2 U	0.1 U	0.1 U
	DUP-GW-031915[a]	19-Mar-15	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 U	0.2 U	0.1 U	0.1 U
	MW-5B-GW	19-Mar-15	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 U	0.2 U	0.1 U	0.1 U
	MW-6A-GW	25-Feb-15	0.2 U	0.1 U	7.3	0.6	0.1 U	0.1 U	0.4 U	0.1 U	0.1 U	0.1 U
	MW-6B-GW	25-Feb-15	0.2 U	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U	0.4 U	0.1 U	0.1 U	0.1 U
	SB-11-GW	19-Feb-15	0.2 U	0.1 U	0.4 J	0.2 U	0.1 U	0.1 U	0.4 U	0.1 U	0.1 U	0.7 U
	SB-12-GW	13-Feb-15	0.2 U	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U	0.4 U	0.1 U	0.1 U	0.1 U
	SB-13-GW	13-Feb-15	0.2 U	0.1 U	0.1 U	0.2 U	1.7	0.5 J	0.4 U	0.1 U	0.2 J	0.1 U
	SB-14-GW	18-Feb-15	0.2 U	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U	0.4 U	0.1 U	0.1 U	0.8 J
	SB-15-GW	18-Feb-15	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U	280
	SB-16-GW	18-Feb-15	0.1 U	0.1 U	1.4	0.1 U	0.1 U	0.1 U	0.5 J	0.1 U	0.1 U	0.2 U
	SB-17-GW	18-Feb-15	0.2 U	0.1 U	1.8 J	0.3 J	0.1 U	0.1 U	0.5 J	0.1 U	0.1 U	0.7 U
	DUP-021815[b]	18-Feb-15	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U	0.2 U
	SB-18-GW	19-Feb-15	0.5 J	2.7	65	25	0.1 U	0.1 U	0.4 U	0.1 U	0.1 U	0.2 J
	SB-19-GW	17-Feb-15	0.2 U	0.1 U	0.4 J	0.2 U	0.1 U	0.1 U	0.4 U	0.1 U	0.1 U	0.7 U
	SB-20-GW	17-Feb-15	0.2 U	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U	0.4 U	0.1 U	0.1 U	2.3 J
	SB-22-GW	17-Feb-15	0.2 U	0.1 U	0.1 U	0.2 U	0.3 J	0.1 U	0.7 J	0.1 U	0.1 U	47
	SB-23-GW	19-Feb-15	0.2 U	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U	0.4 U	0.1 J	0.1 U	0.1 U
	SB-24-GW	18-Feb-15	0.6 J	0.2 U	39	7.9	0.9	0.3 J	0.5 U	0.1 U	0.2 J	1.1 J

Table 15. Groundwater Sample Analytical Results—Volatile Organic Compounds

Study Name	Sample ID	Date	Acetone (µg/L)	Benzene (µg/L)	Bromomethane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	Ethylbenzene (µg/L)	Isopropylbenzene (µg/L)	Methylene chloride (µg/L)	Methyl-tert-butyl ether (MTBE) (µg/L)
		Screening Level:	NA	350	3200	NA	3200	<5%FOD	43	NA	<5%FOD	8000
UST Removal 2004 Geo-Logic	Tank Pit Water	07-Jan-04	--	570	--	--	--	--	150	--	--	1.7 U
Soil and Groundwater Investigation 2007 Geo-Logic	B1 Water	27-Jun-07	--	170	--	--	--	--	86	--	--	5 U
	B3 Water	27-Jun-07	--	2.4	--	--	--	--	0.5 U	--	--	0.93
	B5 Water	27-Jun-07	--	160	--	--	--	--	87	--	--	5 U
	B6 Water	27-Jun-07	--	0.5 U	--	--	--	--	0.5 U	--	--	0.81
	B7 Water	27-Jun-07	--	0.5 U	--	--	--	--	0.5 U	--	--	0.5 U
	B8 Water	27-Jun-07	--	100	--	--	--	--	19	--	--	5 U
Historical Groundwater Monitoring VariousDates Geo-Logic	MW-1_20100504	04-May-10	--	22	--	--	--	--	0.95	--	--	0.5 U
	MW-1_20101105	05-Nov-10	--	4.5	--	--	--	--	0.5 U	--	--	0.5 U
	MW-1_20110513	13-May-11	--	14	--	--	--	--	0.5 U	--	--	0.5 U
	MW-1_20111205	05-Dec-11	--	8.9	--	--	--	--	0.5 U	--	--	0.5 U
	MW-1_20120601	01-Jun-12	--	2.1	--	--	--	--	0.5 U	--	--	0.5 U
	MW-1_20121203	03-Dec-12	--	1	--	--	--	--	0.5 U	--	--	0.5 U
	MW-1_20130603	03-Jun-13	--	1.5	--	--	--	--	0.5 U	--	--	0.5 U
	MW-1_20131202	02-Dec-13	--	0.5 U	--	--	--	--	0.5 U	--	--	0.5 U
	MW-2_20100504	04-May-10	--	210	--	--	--	--	34	--	--	5 U
	MW-2_20101105	05-Nov-10	--	28	--	--	--	--	2.3	--	--	0.55
	MW-2_20110513	13-May-11	--	240	--	--	--	--	57	--	--	5 U
	MW-2_20111205	05-Dec-11	--	140	--	--	--	--	9.8	--	--	2.5 U
	MW-2_20120601	01-Jun-12	--	190	--	--	--	--	34	--	--	5 U
	MW-2_20121203	03-Dec-12	--	4.4	--	--	--	--	0.5 U	--	--	0.5 U
	MW-2_20130603	03-Jun-13	--	2.3	--	--	--	--	0.5 U	--	--	0.5 U
	MW-2_20131202	02-Dec-13	--	7.1	--	--	--	--	0.5 U	--	--	0.5 U
	MW-3_20100504	04-May-10	--	0.5 U	--	--	--	--	0.5 U	--	--	1.6
	MW-3_20101105	05-Nov-10	--	0.5 U	--	--	--	--	0.5 U	--	--	0.5 U
	MW-3_20110513	13-May-11	--	0.5 U	--	--	--	--	0.5 U	--	--	0.84
	MW-3_20111205	05-Dec-11	--	0.5 U	--	--	--	--	0.5 U	--	--	0.84
	MW-3_20120601	01-Jun-12	--	0.5 U	--	--	--	--	0.5 U	--	--	0.7
	MW-3_20121203	03-Dec-12	--	0.5 U	--	--	--	--	0.5 U	--	--	0.5 U
	MW-3_20130603	03-Jun-13	--	0.5 U	--	--	--	--	0.5 U	--	--	0.5 U
	MW-3_20131202	02-Dec-13	--	0.5 U	--	--	--	--	0.5 U	--	--	0.5 U
Limited Phase II Investigation Allied Engineering Property 2014 Geologica	A-1A	14-Jul-14	8 U	0.25 U	0.49 U	0.78 U	0.4 U	0.19 U	0.13 U	0.2 U	1.5 U	2.6
	A-3	14-Jul-14	8 U	0.25 U	0.49 U	0.78 U	0.4 U	0.19 U	0.13 U	0.2 U	1.5 U	0.069 U
	A-4	14-Jul-14	8 U	0.25 U	0.49 U	0.78 U	0.4 U	0.19 U	0.13 U	0.2 U	1.5 U	1.1
	A-5	14-Jul-14	8 U	0.25 U	0.49 U	0.78 U	0.4 U	0.19 U	0.13 U	0.2 U	1.5 U	6.1
	A-8	14-Jul-14	8 U	0.25 U	0.49 U	0.78 U	0.4 U	0.19 U	0.13 U	0.2 U	1.5 U	0.069 U
	A-9	14-Jul-14	8 U	0.25 U	0.49 U	0.78 U	0.4 U	0.19 U	0.13 U	0.2 U	1.5 U	0.069 U
	TP-1	10-Jul-14	8 U	0.25 U	0.49 U	0.78 U	0.4 U	0.19 U	0.13 U	0.2 U	1.5 U	0.069 U
Subsurface Investigation 2015 AEI	SB-1-GW	12-Jan-15	--	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	--
	SB-2-GW	12-Jan-15	--	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	--
	SB-3-GW	12-Jan-15	--	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	--
	SB-4-GW	12-Jan-15	--	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	--
	SB-5-GW	12-Jan-15	--	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	--
	SB-6-GW	12-Jan-15	--	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	--
	SB-7-GW	12-Jan-15	--	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	--
	SB-8-GW	12-Jan-15	--	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	--
	SB-9-GW	12-Jan-15	--	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	--
	SB-10-GW	12-Jan-15	--	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	--

Table 15. Groundwater Sample Analytical Results—Volatile Organic Compounds

Study Name	Sample ID	Date	Acetone (µg/L)	Benzene (µg/L)	Bromomethane (µg/L)	Carbon disulfide (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	Ethylbenzene (µg/L)	Isopropylbenzene (µg/L)	Methylene chloride (µg/L)	Methyl-tert-butyl ether (MTBE) (µg/L)
Soil and Groundwater	MW-1-GW	24-Feb-15	1.6 U	1.4	0.2 U	0.1 U	0.1 U	0.3 U	0.1 U	0.1 J	0.2 U	0.1 U
Investigation 2015	MW-2-GW	24-Feb-15	1.6 U	2.2	0.2 U	0.1 U	0.1 U	0.3 U	0.1 U	0.1 U	0.2 U	0.2 J
Integral	MW-3-GW	24-Feb-15	1.6 U	0.1 U	0.2 U	0.1 U	0.1 U	0.3 U	0.1 U	0.1 U	0.2 U	0.1 U
	MW-4A-GW	19-Mar-15	0.7 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.2 U	4.7
	MW-4B-GW	19-Mar-15	0.6 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U
	MW-5A-GW	19-Mar-15	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	2.1
	DUP-GW-031915[a]	19-Mar-15	0.8 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	2.2
	MW-5B-GW	19-Mar-15	1.1 U	0.1 U	0.1 U	0.1 U	0.9	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U
	MW-6A-GW	25-Feb-15	0.6 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 J	5.3
	MW-6B-GW	25-Feb-15	1.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J
	SB-11-GW	19-Feb-15	1.7 U	0.1 U	0.2 U	0.1 U	0.1 U	0.3 U	0.1 U	0.1 U	0.2 U	4.3
	SB-12-GW	13-Feb-15	1.7 J	0.1 U	0.6 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
	SB-13-GW	13-Feb-15	1.9 J	0.1 U	0.7 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.8
	SB-14-GW	18-Feb-15	1.6 U	0.1 U	0.2 U	0.1 U	0.1 U	0.3 U	0.1 U	0.1 U	0.2 U	0.9
	SB-15-GW	18-Feb-15	4.2 J	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 J
	SB-16-GW	18-Feb-15	3.3 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	3.7
	SB-17-GW	18-Feb-15	2.9 J	0.1 U	0.2 U	0.1 U	0.1 U	0.3 U	0.1 U	0.1 U	0.2 U	0.8
	DUP-021815[b]	18-Feb-15	3.3 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.7
	SB-18-GW	19-Feb-15	3.7 U	0.2 J	0.2 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
	SB-19-GW	17-Feb-15	2.5 J	0.1 U	0.2 U	0.1 U	0.1 U	0.3 U	0.1 U	0.1 U	0.2 U	0.9
	SB-20-GW	17-Feb-15	2 J	0.1 U	0.6 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.7
	SB-22-GW	17-Feb-15	22	0.1 J	0.6 J	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J
	SB-23-GW	19-Feb-15	1.9 U	0.2 J	3	0.4 J	0.1 U	1.1	0.1 U	0.1 U	0.3 U	0.1 U
	SB-24-GW	18-Feb-15	5.3 J	0.1 U	0.3 U	0.1 U	0.1 U	0.4 U	0.1 U	0.1 U	0.3 U	4.9

Table 15. Groundwater Sample Analytical Results—Volatile Organic Compounds

Study Name	Sample ID	Date	n-Butylbenzene (µg/L)	n-Propylbenzene (µg/L)	sec-Butylbenzene (µg/L)	tert-Butylbenzene (µg/L)	tert-Butyl alcohol (TBA) (µg/L)	Tetrachloroethene (PCE) (µg/L)	Toluene (µg/L)	Trichloroethene (TCE) (µg/L)	Vinyl chloride (µg/L)	o-Xylene (µg/L)	Xylene, Isomers m & p (µg/L)	Xylenes (µg/L)
		Screening Level:	NA	NA	NA	<5%FOD	NA	225	2500	2190	782	100	100	100
UST Removal 2004 Geo-Logic	Tank Pit Water	07-Jan-04	--	--	--	--	17 U	--	480	--	--	--	--	400
Soil and Groundwater Investigation 2007 Geo-Logic	B1 Water	27-Jun-07	--	--	--	--	50 U	--	14	--	--	--	--	47
	B3 Water	27-Jun-07	--	--	--	--	5 U	--	1	--	--	--	--	0.71
	B5 Water	27-Jun-07	--	--	--	--	50 U	--	3.8	--	--	--	--	55
	B6 Water	27-Jun-07	--	--	--	--	5 U	--	0.5 U	--	--	--	--	0.5
	B7 Water	27-Jun-07	--	--	--	--	5 U	--	0.5 U	--	--	--	--	0.5
	B8 Water	27-Jun-07	--	--	--	--	50 U	--	8.2	--	--	--	--	21
Historical Groundwater Monitoring VariousDates Geo-Logic	MW-1_20100504	04-May-10	--	--	--	--	2.4	--	0.77	--	--	--	--	1.2
	MW-1_20101105	05-Nov-10	--	--	--	--	2 U	--	0.5 U	--	--	--	--	0.5
	MW-1_20110513	13-May-11	--	--	--	--	2 U	--	0.5 U	--	--	--	--	0.5
	MW-1_20111205	05-Dec-11	--	--	--	--	2 U	--	0.5 U	--	--	--	--	0.5
	MW-1_20120601	01-Jun-12	--	--	--	--	2 U	--	0.5 U	--	--	--	--	0.5
	MW-1_20121203	03-Dec-12	--	--	--	--	2 U	--	0.5 U	--	--	--	--	0.5
	MW-1_20130603	03-Jun-13	--	--	--	--	2 U	--	0.5 U	--	--	--	--	0.5
	MW-1_20131202	02-Dec-13	--	--	--	--	2 U	--	0.5 U	--	--	--	--	0.5
	MW-2_20100504	04-May-10	--	--	--	--	20 U	--	5.8	--	--	--	--	130
	MW-2_20101105	05-Nov-10	--	--	--	--	2 U	--	0.5 U	--	--	--	--	0.5
	MW-2_20110513	13-May-11	--	--	--	--	20 U	--	5 U	--	--	--	--	25
	MW-2_20111205	05-Dec-11	--	--	--	--	10 U	--	2.5 U	--	--	--	--	3.7
	MW-2_20120601	01-Jun-12	--	--	--	--	20 U	--	5 U	--	--	--	--	15
	MW-2_20121203	03-Dec-12	--	--	--	--	2 U	--	0.5 U	--	--	--	--	0.5
	MW-2_20130603	03-Jun-13	--	--	--	--	2 U	--	0.5 U	--	--	--	--	0.5
	MW-2_20131202	02-Dec-13	--	--	--	--	2 U	--	0.5 U	--	--	--	--	0.5
	MW-3_20100504	04-May-10	--	--	--	--	2 U	--	0.5 U	--	--	--	--	0.5
	MW-3_20101105	05-Nov-10	--	--	--	--	2 U	--	0.5 U	--	--	--	--	0.5
	MW-3_20110513	13-May-11	--	--	--	--	2 U	--	0.5 U	--	--	--	--	0.5
	MW-3_20111205	05-Dec-11	--	--	--	--	3.4	--	0.5 U	--	--	--	--	0.5
	MW-3_20120601	01-Jun-12	--	--	--	--	2 U	--	0.5 U	--	--	--	--	0.5
	MW-3_20121203	03-Dec-12	--	--	--	--	2 U	--	0.5 U	--	--	--	--	0.5
	MW-3_20130603	03-Jun-13	--	--	--	--	2 U	--	0.5 U	--	--	--	--	0.5
	MW-3_20131202	02-Dec-13	--	--	--	--	2 U	--	0.5 U	--	--	--	--	0.5
Limited Phase II Investigation Allied Engineering Property 2014 Geologica	A-1A	14-Jul-14	0.3 U	0.2 U	0.17 U	0.2 U	--	120	0.17 U	70	0.2 U	--	--	0.49
	A-3	14-Jul-14	0.3 U	0.2 U	0.17 U	0.2 U	--	0.2 U	0.17 U	0.2 U	0.2 U	--	--	0.49
	A-4	14-Jul-14	0.3 U	0.2 U	0.17 U	0.2 U	--	0.2 U	0.17 U	0.2 U	4	--	--	0.49
	A-5	14-Jul-14	0.3 U	0.2 U	0.17 U	0.2 U	--	160	0.17 U	48	0.2 U	--	--	0.49
	A-8	14-Jul-14	0.3 U	0.2 U	0.17 U	0.2 U	--	9.8	0.17 U	69	1.8	--	--	0.49
	A-9	14-Jul-14	0.3 U	0.2 U	0.17 U	0.2 U	--	0.2 U	0.17 U	4.6	0.2 U	--	--	0.49
	TP-1	10-Jul-14	0.3 U	0.2 U	0.17 U	0.2 U	--	0.2 U	0.17 U	0.2 U	0.2 U	--	--	0.49
Subsurface Investigation 2015 AEI	SB-1-GW	12-Jan-15	1 U	1 U	1 U	1 U	--	3	1 U	110	14	1 U	1 U	--
	SB-2-GW	12-Jan-15	1 U	1 U	1 U	1 U	--	1 U	1 U	1.5	1 U	1 U	1 U	--
	SB-3-GW	12-Jan-15	1 U	1 U	1 U	1 U	--	1000	1 U	310	1 U	1 U	1 U	--
	SB-4-GW	12-Jan-15	1 U	1 U	1 U	1 U	--	1 U	1 U	5	1 U	1 U	1 U	--
	SB-5-GW	12-Jan-15	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	--
	SB-6-GW	12-Jan-15	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	--
	SB-7-GW	12-Jan-15	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	--
	SB-8-GW	12-Jan-15	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	--
	SB-9-GW	12-Jan-15	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	--
	SB-10-GW	12-Jan-15	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	--

Table 15. Groundwater Sample Analytical Results—Volatile Organic Compounds

Study Name	Sample ID	Date	n-Butylbenzene (µg/L)	n-Propylbenzene (µg/L)	sec-Butylbenzene (µg/L)	tert-Butylbenzene (µg/L)	tert-Butyl alcohol (TBA) (µg/L)	Tetrachloroethene (PCE) (µg/L)	Toluene (µg/L)	Trichloroethene (TCE) (µg/L)	Vinyl chloride (µg/L)	o-Xylene (µg/L)	Xylene, Isomers m & p (µg/L)	Xylenes (µg/L)
Soil and Groundwater	MW-1-GW	24-Feb-15	0.1 U	0.1 U	0.1 U	0.2 J	--	0.1 U	0.1 U	1.2	0.4 J	0.1 U	0.1 U	--
Investigation 2015	MW-2-GW	24-Feb-15	0.1 U	0.1 U	0.1 U	0.1 U	--	0.1 U	0.1 U	0.7	0.1 U	0.1 U	0.1 U	--
Integral	MW-3-GW	24-Feb-15	0.1 U	0.1 U	0.1 U	0.1 U	--	0.1 U	0.1 U	0.5 J	0.1 U	0.1 U	0.1 U	--
	MW-4A-GW	19-Mar-15	0.1 U	0.1 U	0.1 U	0.1 U	--	20	0.1 U	12	0.1 U	0.2 U	0.1 U	--
	MW-4B-GW	19-Mar-15	0.1 U	0.1 U	0.1 U	0.1 U	--	0.2 J	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	--
	MW-5A-GW	19-Mar-15	0.1 U	0.1 U	0.1 U	0.1 U	--	0.2 U	0.1 U	2.4	0.1 U	0.2 U	0.1 U	--
	DUP-GW-031915[a]	19-Mar-15	0.1 U	0.1 U	0.1 U	0.1 U	--	0.2 U	0.1 U	2.1	0.1 U	0.2 U	0.1 U	--
	MW-5B-GW	19-Mar-15	0.1 U	0.1 U	0.1 U	0.1 U	--	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	--
	MW-6A-GW	25-Feb-15	0.1 U	0.1 U	0.1 U	0.1 U	--	70	0.1 U	57	0.1 U	0.1 U	0.1 U	--
	MW-6B-GW	25-Feb-15	0.1 U	0.1 U	0.1 U	0.1 U	--	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	--
	SB-11-GW	19-Feb-15	0.1 U	0.1 U	0.1 U	0.1 U	--	0.1 U	0.1 U	4.2	0.1 U	0.1 U	0.1 U	--
	SB-12-GW	13-Feb-15	0.1 U	0.1 U	0.1 U	0.1 U	--	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	--
	SB-13-GW	13-Feb-15	0.2 J	0.3 J	0.1 J	0.1 U	--	0.1 U	0.2 J	0.2 J	0.1 U	0.4 J	0.2 J	--
	SB-14-GW	18-Feb-15	0.1 U	0.1 U	0.1 U	0.1 U	--	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	--
	SB-15-GW	18-Feb-15	0.1 U	0.1 U	0.1 U	0.1 U	--	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	--
	SB-16-GW	18-Feb-15	0.1 U	0.1 U	0.1 U	0.1 U	--	0.1 U	0.1 U	12	0.1 U	0.1 U	0.1 U	--
	SB-17-GW	18-Feb-15	0.1 U	0.1 U	0.1 U	0.1 U	--	0.6	0.1 U	0.4 J	1 J	0.1 U	0.1 U	--
	DUP-021815[b]	18-Feb-15	0.1 U	0.1 U	0.1 U	0.1 U	--	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	--
	SB-18-GW	19-Feb-15	0.1 U	0.1 U	0.1 U	0.1 U	--	3.2	0.1 U	38	0.4 J	0.1 U	0.1 U	--
	SB-19-GW	17-Feb-15	0.1 U	0.1 U	0.1 U	0.1 U	--	2.9	0.3 J	0.9	0.2 J	0.1 U	0.1 U	--
	SB-20-GW	17-Feb-15	0.1 U	0.1 U	0.1 U	0.1 U	--	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	--
	SB-22-GW	17-Feb-15	0.1 U	0.1 U	0.1 U	0.1 U	--	0.7	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	--
	SB-23-GW	19-Feb-15	0.1 U	0.1 U	0.1 U	0.1 U	--	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	--
	SB-24-GW	18-Feb-15	0.2 J	0.2 J	0.2 J	0.1 U	--	41	0.1 U	110	0.3 J	0.2 J	0.2 U	--

Notes:

Detected concentrations exceeding screening levels are highlighted in yellow; analytes detected in less than 5 percent of the samples are not screened (see Table 5).
Only VOCs for which there was a detection in at least one sample are presented in this table.
VOCs analyzed using EPA Method SW8260B / SW8021F. When a parameter was analyzed by both methods (e.g., MBTE), results for 8260B are presented.
Groundwater screening levels are based on surface water screening levels for the protection of marine aquatic life (Table F-4a; SFRWQCB 2013), except in some cases (see Table 5).

[a] Duplicate sample for MW-5A-GW.
[b] Duplicate sample for SB-17-GW.
-- = not applicable (not analyzed or information not provided)
<5%FOD = analyte was detected in less than 5 percent of the samples; screening levels not reported here.
NA = not available
µg/L = micrograms per liter
UST = underground storage tank
VOC = volatile organic compound

Qualifiers:
J = Estimated. The analyte was detected and positively identified. The associated numerical value is an estimated value.
U = The analyte was analyzed for, but was not detected.
UJ = The analyte was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

Table 16. Surface Sediment Sample Analytical Results—Total Petroleum Hydrocarbons

Sample ID	Sample Date	Sample Depth[a]	TPHd (mg/kg)	TPHmo (mg/kg)
Screening Level[b]			144	144
Current Investigation Results				
SD-0001	1/12/2015	grab	<1.8	<9.1
SD-0002	1/12/2015	grab	4.1	19
SD-0003	1/12/2015	grab	3.3	11
SD-0004	1/12/2015	grab	4.4	16
SD-0005	1/12/2015	grab	2.1	17
SD-0006	1/12/2015	grab	3.3	46
SD-0007	1/12/2015	grab	2.3	13
SD-0008	1/12/2015	grab	10	21

Notes:

TPHd analyzed using EPA Method SW8015B following silica gel clean-up.
TPHmo analyzed using EPA Method SW8015B following silica gel clean-up.
All concentrations are reported on a dry weight basis.

<0.050 = not detected at or above the specified laboratory method detection limit
TPHd = total petroleum hydrocarbons as diesel in the carbon range of C10-C23
TPHmo = total petroleum hydrocarbons as motor oil in the carbon range of C18-C36

[a] Sample Depth = Depth of penetration of the sampling device. Multiple grabs were collected from each sample location and composited together in order to achieve sufficient sample volume for required analyses. Sampler penetration was poor as a result of debris present in most locations. Penetration depth ranged from approximately 1.5 to 8 cm, and was generally 5 cm.

[b] Screening Level = TPH screening levels protective of marine ecological receptors (USACE, 1997). See report text for additional information.

Table 17. Surface Sediment Sampling Analytical Results – Priority Pollutant Metals

Sample ID	Sample Date	Sample Depth[a]	Antimony (mg/kg)	Arsenic (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Thallium (mg/kg)	Zinc (mg/kg)
Screening Level[b]															
ER-L			--	8.2	--	1.2	81	34	46.7	0.15	20.9	--	1	--	150
ER-M			--	70	--	9.6	370	270	218	0.71	51.6	--	3.7	--	410
Ambient Level[c]			--	15.3	--	0.33	112	68.1	43.2	0.47	112	0.64	0.58	--	158
Current Investigation Results															
SD-0001	1/12/2015	grab	2.6	22	<0.91	1.1	**2,700**	160	40	0.29	**470**	<0.91	<0.91	<0.91	110
SD-0002	1/12/2015	grab	1.8	16	<0.99	<0.99	150	130	73	0.47	**120**	<0.99	<0.99	<0.99	150
SD-0003	1/12/2015	grab	2.2	9.5	<0.91	1.2	190	93	**260**	0.37	94	<0.91	<0.91	<0.91	270
SD-0004	1/12/2015	grab	2.2	11	<1.0	0.53	210	93	73	0.40	**170**	<1.0	<1.0	<1.0	160
SD-0005	1/12/2015	grab	3.2	24	<0.85	<0.85	**410**	**410**	140	0.31	**130**	<0.85	<0.85	<0.85	190
SD-0006	1/12/2015	grab	1.0	4.2	<0.89	0.69	99	65	140	0.43	70	<0.89	<0.89	<0.89	200
SD-0007	1/12/2015	grab	5.0	24	<0.79	0.92	250	97	120	0.31	**180**	<0.79	<0.79	<0.79	160
SD-0008	1/12/2015	grab	1.0	6.9	<0.99	0.63	230	110	70	0.47	72	<0.99	<0.99	<0.99	170

Notes:

Priority pollutant metals analyzed using EPA Method SW6020. All concentrations are reported on a dry weight basis.

<0.050 = not detected at or above the specified laboratory method detection limit

-- = not available

Shading indicates exceedance of ER-L and ambient' bold values also exceed the ERM

[a] Sample Depth = Depth of penetration of the sampling device. Multiple grabs were collected from each sample location and composited together in order to achieve sufficient sample volume for required analyses. Sampler penetration was poor as a result of debris present in most locations. Penetration depth ranged from approximately 1.5 to 8 cm, and was generally 5 cm.

[b] Screening Level = Effects Range-Low (ER-L) and Effects Range-Median (ER-M) values (NOAA, 2008; Water Board, 2002). See report text for additional information.

[c] Ambient Level = 10-year rolling average for mercury (SFEI, 2014); bay-wide ambient values for other metals (Water Board, 2002). See report text for additional information.

APPENDIX A

SOIL BORING LOGS

SOIL BORING LOG KEY

Major Divisions		Symbols	Typical Names
Coarse Grained Soils (More than 1/2 of soil >No. 200 sieve size)	**Gravels** (More than 50% coarse fraction > no. 4 sieve	GW	Well-graded gravels or gravel-sand mixtures, little to no fines
		GP	Poorly-graded gravels or gravel-sand mixtures, little to no fines
		GM	Silty gravels, gravel-sand-silt mixtures
		GC	Clayey gravels or gravel-sand-clay mixtures
	Sands (Less than 50% coars fraction > no. 4 sieve)	SW	Well-graded sands or gravel-sand mixtures, little to no fines
		SP	poorly-graded sands or gravelly sands, little to no fines
		SM	Silty sands, sand-silt mixtures
		SC	Clayey sands, sand-clay mixtures
Fine Grained Soils (More than 1/2 of soil <No. 200 sieve size)	**Silts & Clays** Liquid limit* less than 50%	ML	Inorganic silts and very fine sands, silty or clayey fine sands or clayey silts with slight plasticity
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy or silty clays, lean clays
		OL	Organic silts and organic silty clays of low plasticity
	Silts & Clays Liquid limit* greater than 50%	MH	Inorganic silts, micaceous or ditomaceous fine sand or silty soils, elastic silts
		CH	Inorganic clays of high plasticity, fat clays
		OH	Organic clays of medium to high plasticity, organic silty clay, organic silts
Highly Organic Soils		Pt	Peat or other highly organic soils
Fill		Concrete	Concrete

*Liquid limit represents the moisture contnet (in percent) of a soil at which point the soil no longer behaves like a plastic and starts to behave like a liquid.

Based on Unified Soil Classification System and ASTM Standard D2487 and D2488

Encountered Groundwater

Groundwater, First Observed

Groundwater, Static

Sample Moisture

Dry	No Moisture, dry to touch
Moist	Damp but no visible moisture
Wet	Visible free water

Recovery

X	No recovery
I	Recovery

Sample Plasticity (Fine-Grained Soils)

Non-Plastic -	Cannot be rolled at any moisture content
Low -	Barely rolled, lump cannot be formed when drier than plastic limit
Medium -	Easily rolled, lump crumbles when drier than plastic limit
High -	Easily rolled yet takes considerable time to reach the plastic limit, lump can be formed without crumbling when drier than the plastic limit

Partical Size Range (Course-Grained Soils)

Gravel -	Fine, Coarse
Sand -	Fine, Medium, Coarse

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STATION ID	MW-4A
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	S. Sherman
APPROVED BY	S. Sherman, PG 9240

SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	DESCRIPTION (USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.)
	I				GP	GRAVEL: very dark brown (7.5YR 2.5/3), fine and coarse gravel, abundant rooting, few metal debris, moist
MW-4-0.5-1.5	I	3.0	--- 1			from 0.5 ft to 2.0 ft bgs black (N 0.5), slight odor, some metal shavings
	I					
	I		--- 2			
	X					
	X		--- 3			from 2 to 4 ft bgs void space
	X					
	X		--- 4			
	I	1.1				
	I		--- 5			at 4.5 ft bgs wet
	I				CL	Sandy CLAY: greenish gray (5GY 6/1), fine sand, medium plasticity, no odor, moist
	I	0.4	--- 6			
	I					
	I		--- 7			
	I					
	I	2.2	--- 8			
	I					at 8.0 ft bgs dark greenish gray (10Y 4/1)
	I		--- 9			
	I	3.1				
	I		-- 10			
	I	2.5			SC	Clayey SAND: greenish gray (5GY 6/1), fine sand, moist
	I		-- 11			
	I				SP	Poorly graded SAND: greenish gray (5GY 6/1), fine sand, moist
	I		-- 12			
	I	1.7				
	I		-- 13			
	I					at 13.0 ft bgs wet
	I		-- 14			
	I	1.7				at 14.0 ft bgs light olive brown (2.5Y 5/3)
	I		-- 15			
	I					
	I	1.8	-- 16			
	I					
	I		-- 17			
	I					
	I	1.3	-- 18			
	I					
	I		-- 19			
	I					
	I	2.8	-- 20			
	I					

DRILLING CONTRACTOR	National EWP
DRILLING METHOD	Direct-Push / Hollow Stem Auger
SAMPLING EQUIPMENT	Dual-tube
DRILL START DATE	February 11, 2015
GROUT DATE	February 12, 2015

COORDINATES (Latitude, Longitude)	6060072.66495, 2107713.34989
SURFACE ELEVATION	8.83
DATUM	NAD1983 State Plane California III

Notes:

8" diameter borehole

Casings
0 ft to 12.83 ft bgs: PVC Sch. 40 blank, 0.154" wall thickness, 2" outer diameter
12.83 ft to 22.25 ft bgs: PVC Sch. 40 screen, 0.154" wall thickness, 2" outside diameter, 0.01" milled slot size

Annular Material
0 ft to 1 ft bgs: Concrete
1 ft to 8 ft bgs: Type I/II Cement
8 ft to 10 ft bgs: Hydrated Medium Bentonite Chips
10 ft to 22.69 ft bgs: #2/16 Sand Filter Pack
22.69 ft to 50 ft bgs: Medium Bentonite Chips

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STATION ID	MW-4A
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	S. Sherman
APPROVED BY	S. Sherman, PG 9240

SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	DESCRIPTION (USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.)
	I				SP	
	I	2.3	-- 21			
	I					at 21.0 ft bgs greenish gray (5GY 6/1)
	I		-- 22			
	I					at 22 ft bgs increasing clay
	I	2.1	-- 23		CL	Sandy CLAY: greenish gray (5GY 6/1), fine sand, low plasticity, moist
	I					
	I		-- 24			at 23.5 ft bgs decreasing sand
	I	2.3				
	I		-- 25			
	I				SW	Well graded SAND: light olive brown (2.5Y 5/3), rounded to subrounded fine gravel and fine to medium sand, wet
	I	1.1	-- 26			
	I					
	I		-- 27			
	I				CL	Sandy CLAY: grayish brown (2.5Y 5/2), fine sand, trace fine gravel, low plasticity, moist
	I	2.2	-- 28			
	I				SP	Poorly graded SAND: light olive brown (2.5Y 5/3), fine sand, wet
	I		-- 29			
	I	2.0				
	X		-- 30			
	I					
	I	1.8	-- 31			
	I					
	I				SW	Well graded SAND: light olive brown (2.5Y 5/3), rounded to subrounded fine gravel and fine to medium sand, wet
	I		-- 32			
	I	2.0				
	I		-- 33			
	I					
	I		-- 34			
	I	2.9				
	I		-- 35			
	X					
	X		-- 36			
	I					
	I	2.6	-- 37			
	I					
	I		-- 38		CL	CLAY: light olive brown (5Y 6/2), trace fine sand, medium plasticity, moist
	I					
	I	2.0	-- 39			
	I					
	I		-- 40			
	X					

DRILLING CONTRACTOR	National EWP
DRILLING METHOD	Direct-Push / Hollow Stem Auger
SAMPLING EQUIPMENT	Dual-tube
DRILL START DATE	February 11, 2015
GROUT DATE	February 12, 2015

COORDINATES (Latitude, Longitude)	6060072.66495, 2107713.34989
SURFACE ELEVATION	8.83
DATUM	NAD1983 State Plane California III

Notes:

8" diameter borehole

Casings
0 ft to 12.83 ft bgs: PVC Sch. 40 blank, 0.154" wall thickness, 2" outer diameter
12.83 ft to 22.25 ft bgs: PVC Sch. 40 screen, 0.154" wall thickness, 2" outside diameter, 0.01" milled slot size

Annular Material
0 ft to 1 ft bgs: Concrete
1 ft to 8 ft bgs: Type I/II Cement
8 ft to 10 ft bgs: Hydrated Medium Bentonite Chips
10 ft to 22.69 ft bgs: #2/16 Sand Filter Pack
22.69 ft to 50 ft bgs: Medium Bentonite Chips

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(415) 393-4750

STATION ID	MW-4A
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	S. Sherman
APPROVED BY	S. Sherman, PG 9240

SAMPLE INFORMATION						DESCRIPTION
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.
	X				CL	
	X		-- 41			
	X					
	X		-- 42			
	I	2.7				
	I		-- 43			
	I					
	I		-- 44			
	I	1.7				
	I		-- 45			at 44.5 ft bgs abundant shells, increasing sand
	X					
	X		-- 46			
	X					
	I	1.9	-- 47			
	I					
	I		-- 48			
	I	2.4				
	I		-- 49			
	I					
	I	1.8	-- 50			
						End of boring at 50 ft

DRILLING CONTRACTOR	National EWP	COORDINATES (Latitude, Longitude)	6060072.66495, 2107713.34989
DRILLING METHOD	Direct-Push / Hollow Stem Auger		
SAMPLING EQUIPMENT	Dual-tube	SURFACE ELEVATION	8.83
DRILL START DATE	February 11, 2015	DATUM	NAD1983 State Plane California III
GROUT DATE	February 12, 2015		

Notes:

8" diameter borehole

Casings
0 ft to 12.83 ft bgs: PVC Sch. 40 blank, 0.154" wall thickness, 2" outer diameter
12.83 ft to 22.25 ft bgs: PVC Sch. 40 screen, 0.154" wall thickness, 2" outside diameter, 0.01" milled slot size

Annular Material
0 ft to 1 ft bgs: Concrete
1 ft to 8 ft bgs: Type I/II Cement
8 ft to 10 ft bgs: Hydrated Medium Bentonite Chips
10 ft to 22.69 ft bgs: #2/16 Sand Filter Pack
22.69 ft to 50 ft bgs: Medium Bentonite Chips

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STATION ID	MW-4B
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	S. Sherman
APPROVED BY	S. Sherman, PG 9240

SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	DESCRIPTION (USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.)
	I				GP	GRAVEL: very dark brown (7.5YR 2.5/3), fine and coarse gravel, abundant rooting, few metal debris, moist
	I	3.0	--- 1			from 0.5 ft to 2.0 ft bgs black (N 0.5), slight odor, some metal shavings
	I					
	I		--- 2			
	X					
	X		--- 3			from 2 to 4 ft bgs void space
	X					
	X		--- 4			
	I	1.1				
	I		--- 5			at 4.5 ft bgs wet
	I				CL	Sandy CLAY: greenish gray (5GY 6/1), fine sand, medium plasticity, no odor, moist
	I	0.4	--- 6			
	I					
	I		--- 7			
	I					
	I	2.2	--- 8			
	I					at 8.0 ft bgs dark greenish gray (10Y 4/1)
	I		--- 9			
	I	3.1				
	I		-- 10			
	I	2.5			SC	Clayey SAND: greenish gray (5GY 6/1), fine sand, moist
	I		-- 11			
	I				SP	Poorly graded SAND: greenish gray (5GY 6/1), fine sand, moist
	I		-- 12			
	I	1.7				
	I		-- 13			
	I					at 13.0 ft bgs wet
	I		-- 14			
	I	1.7				at 14.0 ft bgs light olive brown (2.5Y 5/3)
	I		-- 15			
	I					
	I	1.8	-- 16			
	I					
	I		-- 17			
	I					
	I	1.3	-- 18			
	I					
	I		-- 19			
	I					
	I	2.8	-- 20			
	I					

DRILLING CONTRACTOR	National EWP
DRILLING METHOD	Direct-Push / Hollow Stem Auger
SAMPLING EQUIPMENT	Dual-tube
DRILL START DATE	February 13, 2015
GROUT DATE	February 13, 2015

COORDINATES (Latitude, Longitude)	6060068.76512, 2107715.65503
SURFACE ELEVATION	8.89
DATUM	NAD1983 State Plane California III

Notes:

8" diameter borehole

Casings
0 ft to 26.92 ft bgs: PVC Sch. 40 blank, 0.154" wall thickness, 2" outer diameter
26.92 ft to 36.34 ft bgs: PVC Sch. 40 screen, 0.154" wall thickness, 2" outside diameter, 0.01" milled slot size

Annular Material
0 ft to 1 ft bgs: Concrete
1 ft to 23 ft bgs: Type I/II Cement
23 ft to 25 ft bgs: Hydrated Medium Bentonite Chips
25 ft bgs to 36.78 ft bgs: #2/16 Sand Filter Pack

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STATION ID	MW-4B
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	S. Sherman
APPROVED BY	S. Sherman, PG 9240

SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	DESCRIPTION (USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.)
	I				SP	
	I	2.3	-- 21			
	I					at 21.0 ft bgs greenish gray (5GY 6/1)
	I		-- 22			
	I					at 22 ft bgs increasing clay
	I	2.1	-- 23		CL	Sandy CLAY: greenish gray (5GY 6/1), fine sand, low plasticity, moist
	I					
	I		-- 24			at 23.5 ft bgs decreasing sand
	I	2.3				
	I		-- 25			
	I				SW	Well graded SAND: light olive brown (2.5Y 5/3), rounded to subrounded fine gravel and fine to medium sand, wet
	I	1.1	-- 26			
	I					
	I		-- 27			
	I				CL	Sandy CLAY: grayish brown (2.5Y 5/2), fine sand, trace fine gravel, low plasticity, moist
	I	2.2	-- 28			
	I				SP	Poorly graded SAND: light olive brown (2.5Y 5/3), fine sand, wet
	I		-- 29			
	I	2.0				
	X		-- 30			
	I					
	I	1.8	-- 31			
	I					
	I				SW	Well graded SAND: light olive brown (2.5Y 5/3), rounded to subrounded fine gravel and fine to medium sand, wet
	I	2.0	-- 32			
	I					
	I		-- 33			
	I					
	I		-- 34			
	I	2.9				
	I		-- 35			
	X					
	X		-- 36			
	I					
	I	2.6	-- 37		CL	CLAY: light olive brown (5Y 6/2), trace fine sand, medium plasticity, moist
						End of boring at 36.78 ft

DRILLING CONTRACTOR	National EWP
DRILLING METHOD	Direct-Push / Hollow Stem Auger
SAMPLING EQUIPMENT	Dual-tube
DRILL START DATE	February 13, 2015
GROUT DATE	February 13, 2015

COORDINATES (Latitude, Longitude)	6060068.76512, 2107715.65503
SURFACE ELEVATION	8.89
DATUM	NAD1983 State Plane California III

Notes:

8" diameter borehole

Casings
0 ft to 26.92 ft bgs: PVC Sch. 40 blank, 0.154" wall thickness, 2" outer diameter
26.92 ft to 36.34 ft bgs: PVC Sch. 40 screen, 0.154" wall thickness, 2" outside diameter, 0.01" milled slot size

Annular Material
0 ft to 1 ft bgs: Concrete
1 ft to 23 ft bgs: Type I/II Cement
23 ft to 25 ft bgs: Hydrated Medium Bentonite Chips
25 ft bgs to 36.78 ft bgs: #2/16 Sand Filter Pack

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STATION ID	MW-5A
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	S. Sherman
APPROVED BY	S. Sherman, PG 9240

SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	DESCRIPTION (USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.)
	I				GC	Clayey GRAVEL with sand: yellowish brown (10YR 5/6), angular fine to coarse sand and fine to coarse gravel, moist
	I	0.1	--- 1			
	X					
	X		--- 2			
	X					
	X		--- 3			
	X					
	I		--- 4			
	I					
	I	0.1	--- 5			at 4.9 ft bgs wet
	X					
	X		--- 6			
	X					
	X		--- 7			
	X					
	X		--- 8			
	I	0.1				
	I		--- 9			
	I				SC	Clayey SAND: grayish brown (2.5Y 5/2), fine sand, wet
	I	0.4	-- 10			
	I					
	I		-- 11			
	I				SP	Poorly graded SAND: grayish brown (2.5Y 5/2), rounded fine sand, wet
	I		-- 12			
	I	0.1				
	I		-- 13			
	I					
	I		-- 14			
	I					at 14.0 ft bgs light olive brown (2.5Y 5/4)
	I		-- 15			
	I					
	I	0.3	-- 16			
	I					
	I		-- 17			
	I	0.6				
	I		-- 18			
	I					
	I		-- 19			
	I					
	I	0.3	-- 20			
	I					at 20.0 ft bgs greenish gray (10Y 6/1)

DRILLING CONTRACTOR	National EWP
DRILLING METHOD	Direct-Push / Hollow Stem Auger
SAMPLING EQUIPMENT	Dual-tube
DRILL START DATE	February 17, 2015
GROUT DATE	February 18, 2015

COORDINATES (Latitude, Longitude)	6059943.34402, 2107795.81916
SURFACE ELEVATION	10.64
DATUM	NAD1983 State Plane California III

Notes:

8" diameter borehole

Casings
0 ft to 14.54 ft bgs: PVC Sch. 40 blank, 0.154" wall thickness, 2" outer diameter
14.54 ft to 23.96 ft bgs: PVC Sch. 40 screen, 0.154" wall thickness, 2" outside diameter, 0.01" milled slot size

Annular Material
0 ft to 1 ft bgs: Concrete
1 ft to 10.5 ft bgs: Type I/II Cement
10.5 ft to 12.5 ft bgs: Hydrated Medium Bentonite Chips
12.5 ft to 24.4 ft bgs: #2/16 Sand Filter Pack

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STATION ID	MW-5A
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	S. Sherman
APPROVED BY	S. Sherman, PG 9240

SAMPLE INFORMATION						DESCRIPTION
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.
	I				SP	
	I	0.2	-- 21			
	I					
	I		-- 22			
	I					
	I		-- 23		SC	Clayey SAND: greenish gray (10Y 6/1), fine sand, wet
	I					
	I	0	-- 24			
	I					
			-- 25			End of boring at 24.4 ft

DRILLING CONTRACTOR	National EWP
DRILLING METHOD	Direct-Push / Hollow Stem Auger
SAMPLING EQUIPMENT	Dual-tube
DRILL START DATE	February 17, 2015
GROUT DATE	February 18, 2015

COORDINATES (Latitude, Longitude)	6059943.34402, 2107795.81916
SURFACE ELEVATION	10.64
DATUM	NAD1983 State Plane California III

Notes:

8" diameter borehole

Casings
0 ft to 14.54 ft bgs: PVC Sch. 40 blank, 0.154" wall thickness, 2" outer diameter
14.54 ft to 23.96 ft bgs: PVC Sch. 40 screen, 0.154" wall thickness, 2" outside diameter, 0.01" milled slot size

Annular Material
0 ft to 1 ft bgs: Concrete
1 ft to 10.5 ft bgs: Type I/II Cement
10.5 ft to 12.5 ft bgs: Hydrated Medium Bentonite Chips
12.5 ft to 24.4 ft bgs: #2/16 Sand Filter Pack

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(415) 393-4750

STATION ID	MW-5B
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	S. Sherman
APPROVED BY	S. Sherman, PG 9240

SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	DESCRIPTION (USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.)
	I				GC	Clayey GRAVEL with sand: yellowish brown (10YR 5/6), angular fine to coarse sand and fine to coarse gravel, moist
	I	0.1	--- 1			
	X					
	X		--- 2			
	X					
	X		--- 3			
	X					
	I		--- 4			
	I					
	I	0.1	--- 5			at 4.9 ft bgs wet
	X					
	X		--- 6			
	X					
	X		--- 7			
	X					
	X		--- 8			
	I	0.1				
	I		--- 9			
	I				SC	Clayey SAND: grayish brown (2.5Y 5/2), fine sand, wet
	I	0.4	-- 10			
	I					
	I		-- 11			
	I				SP	Poorly graded SAND: grayish brown (2.5Y 5/2), rounded fine sand, wet
	I		-- 12			
	I	0.1				
	I		-- 13			
	I					
	I		-- 14			
	I					at 14.0 ft bgs light olive brown (2.5Y 5/4)
	I		-- 15			
	I					
	I	0.3	-- 16			
	I					
	I		-- 17			
	I	0.6				
	I		-- 18			
	I					
	I		-- 19			
	I					
	I	0.3	-- 20			
	I					at 20.0 ft bgs greenish gray (10Y 6/1)

DRILLING CONTRACTOR	National EWP
DRILLING METHOD	Direct-Push / Hollow Stem Auger
SAMPLING EQUIPMENT	Dual-tube
DRILL START DATE	February 17, 2015
GROUT DATE	February 17, 2015

COORDINATES (Latitude, Longitude)	6059939.12904, 2107797.85594
SURFACE ELEVATION	10.84
DATUM	NAD1983 State Plane California III

Notes:

8" diamater borehole

Casings
0 ft to 30.55 ft bgs: PVC Sch. 40 blank, 0.154" wall thickness, 2" outer diameter
30.55 ft to 42.85 ft bgs: PVC Sch. 40 screen, 0.154" wall thickness, 2" outside diameter, 0.01" milled slot size

Annular Material
0 ft to 1 ft bgs: Concrete
1 ft to 27 ft bgs: Type I/II Cement
27 ft to 29 ft bgs: Hydrated Medium Bentonite Chips
29 ft to 43.5 ft bgs: #2/16 Sand Filter Pack
43.5 ft to 50 ft bgs: Medium Bentonite Chips

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STATION ID	MW-5B
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	S. Sherman
APPROVED BY	S. Sherman, PG 9240

SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	DESCRIPTION (USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.)
	I				SP	
	I	0.2	-- 21			
	I					
	I		-- 22			
	I					
	I		-- 23		SC	Clayey SAND: greenish gray (10Y 6/1), fine sand, wet
	I					
	I	0	-- 24			
	I					
	I	0.1	-- 25		CL	Sandy CLAY: dark greenish gray (5GY 4/1), fine sand, medium plasticity, moist
	I					at 25.0 ft bgs decreasing sand
	I	0.1	-- 26			
	I					
	I		-- 27			
	I	0.1				
	I		-- 28			
	I					
	I		-- 29			
	I					at 29.0 ft bgs light greenish gray (10Y 7/1)
	I	0.1	-- 30			
	I				SC	Clayey SAND: grayish brown (2.5Y 5/2), fine sand, moist
	I	0.1	-- 31			
	I				SP	Poorly graded SAND: grayish brown (2.5Y 5/2), fine sand, wet
	I				CL	CLAY with sand: grayish brown (2.5Y 5/2), fine sand, low plasticity, moist
	I	0.1	-- 32			at 32 ft bgs increasing fine gravel and fine to coarse sand
	I					
	I		-- 33		SW	Well graded SAND: grayish brown (2.5Y 5/2), rounded fine to coarse sand, trace subangular gravel, wet
	I					
	I		-- 34			
	I					
	I	0.1	-- 35			
	X					
	X		-- 36			
	X					
	X		-- 37			
	I					
	I	0.2	-- 38			
	I					
	I		-- 39			
	I					
	I	0.2	-- 40			
	I					

DRILLING CONTRACTOR	National EWP
DRILLING METHOD	Direct-Push / Hollow Stem Auger
SAMPLING EQUIPMENT	Dual-tube
DRILL START DATE	February 17, 2015
GROUT DATE	February 17, 2015

COORDINATES (Latitude, Longitude)	6059939.12904, 2107797.85594
SURFACE ELEVATION	10.84
DATUM	NAD1983 State Plane California III

Notes:

8" diamater borehole

Casings
0 ft to 30.55 ft bgs: PVC Sch. 40 blank, 0.154" wall thickness, 2" outer diameter
30.55 ft to 42.85 ft bgs: PVC Sch. 40 screen, 0.154" wall thickness, 2" outside diameter, 0.01" milled slot size

Annular Material
0 ft to 1 ft bgs: Concrete
1 ft to 27 ft bgs: Type I/II Cement
27 ft to 29 ft bgs: Hydrated Medium Bentonite Chips
29 ft to 43.5 ft bgs: #2/16 Sand Filter Pack
43.5 ft to 50 ft bgs: Medium Bentonite Chips

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STATION ID	MW-5B
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	S. Sherman
APPROVED BY	S. Sherman, PG 9240

SAMPLE INFORMATION						DESCRIPTION
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.
	X				SW	
	X		-- 41			
	X					
	X		-- 42			
	X					
	X		-- 43			
	I					
	I		-- 44		CL	Sandy CLAY: grayish brown (2.5Y 5/2), fine sand, medium plasticity, moist
	I	0.1				
	I		-- 45			
	I					
	I		-- 46			
	I	0.1				
	I		-- 47			
	I	0.1				
	I		-- 48			
	I					
	I		-- 49			
	I	0.1				at 49 ft bgs abundant shells
	I		-- 50			
						End of boring at 50 ft

DRILLING CONTRACTOR	National EWP
DRILLING METHOD	Direct-Push / Hollow Stem Auger
SAMPLING EQUIPMENT	Dual-tube
DRILL START DATE	February 17, 2015
GROUT DATE	February 17, 2015

COORDINATES (Latitude, Longitude)	6059939.12904, 2107797.85594
SURFACE ELEVATION	10.84
DATUM	NAD1983 State Plane California III

Notes:

8" diamater borehole

Casings
0 ft to 30.55 ft bgs: PVC Sch. 40 blank, 0.154" wall thickness, 2" outer diameter
30.55 ft to 42.85 ft bgs: PVC Sch. 40 screen, 0.154" wall thickness, 2" outside diameter, 0.01" milled slot size

Annular Material
0 ft to 1 ft bgs: Concrete
1 ft to 27 ft bgs: Type I/II Cement
27 ft to 29 ft bgs: Hydrated Medium Bentonite Chips
29 ft to 43.5 ft bgs: #2/16 Sand Filter Pack
43.5 ft to 50 ft bgs: Medium Bentonite Chips

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STATION ID	MW-6A
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	C. Lyles
APPROVED BY	S. Sherman, PG 9240

SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	DESCRIPTION (USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.)
	I					CONCRETE
	I	5.1	--- 1			
	I					
	I		--- 2			
	I				SW	Gravelly SAND: dark olive gray (5Y 3/2), fine to coarse sand, fine gravel, dry
MW-6-2.5-3.5	I	4.3	--- 3		ML	SILT: black (N 0.5), low plasticity, moist
	I					
	I	5	--- 4			
	X					
	X		--- 5		CL	CLAY with sand: olive gray (5Y 5/2), fine sand, medium plasticity, moist
	I	4				
	I		--- 6			
	I					
	I		--- 7			
	I	6.5				
	I		--- 8			
	I					
	I		--- 9			at 8.5 ft bgs dark yellowish brown (10YR 4/6) mottling, increasing sand
	I	9.7				
	I		-- 10			
	I	4.6			SP	Poorly graded SAND: black (5Y 2.5/1), fine sand, wet
	I		-- 11			at 10.2 ft bgs light olive gray (5Y 6/2)
	I					
	I	9.7	-- 12			
	I					
	I		-- 13			
	X					
	X		-- 14			
	X					
	X		-- 15			
	I	7.8				at 15 ft bgs pale olive (5Y 6/3)
	I		-- 16			
	I					
	I		-- 17			
	I	9.4				at 17 ft bgs light olive brown (2.5Y 5/4)
	I		-- 18			
	I					
	I		-- 19			
	I					
	I	9.1	-- 20			
	I					

DRILLING CONTRACTOR	National EWP
DRILLING METHOD	Direct-Push / Hollow Stem Auger
SAMPLING EQUIPMENT	Dual-tube
DRILL START DATE	February 12, 2015
GROUT DATE	February 12, 2015

COORDINATES (Latitude, Longitude)	6060015.37612, 2107645.85308
SURFACE ELEVATION	11.47
DATUM	NAD1983 State Plane California III

Notes:

8" diameter borehole

Casings
0 ft to 14.78 ft bgs: PVC Sch. 40 blank, 0.154" wall thickness, 2" outer diameter
14.78 ft to 24.2 ft bgs: PVC Sch. 40 screen, 0.154" wall thickness, 2" outside diameter, 0.01" milled slot size

Annular Material
0 ft to 1 ft bgs: Concrete
1 ft to 10.5 ft bgs: Type I/II Cement
10.5 ft to 12.5 ft bgs: Hydrated Medium Bentonite Chips
12.5 ft bgs to 24.64 ft bgs: #2/16 Sand Filter Pack

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STATION ID	MW-6A
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	C. Lyles
APPROVED BY	S. Sherman, PG 9240

SAMPLE INFORMATION						DESCRIPTION
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.
	I				SP	
	I	5.1	-- 21			
	I					
	I		-- 22			
	I	5.2				
	I		-- 23			
	I					
	I		-- 24			
	I					
	I	6.7	-- 25		CL	Sandy CLAY: gray (5Y 5/1), fine sand, low plasticity, moist
						End of boring at 24.64 ft

DRILLING CONTRACTOR	National EWP
DRILLING METHOD	Direct-Push / Hollow Stem Auger
SAMPLING EQUIPMENT	Dual-tube
DRILL START DATE	February 12, 2015
GROUT DATE	February 12, 2015

COORDINATES (Latitude, Longitude)	6060015.37612, 2107645.85308
SURFACE ELEVATION	11.47
DATUM	NAD1983 State Plane California III

Notes:

8" diameter borehole

Casings
0 ft to 14.78 ft bgs: PVC Sch. 40 blank, 0.154" wall thickness, 2" outer diameter
14.78 ft to 24.2 ft bgs: PVC Sch. 40 screen, 0.154" wall thickness, 2" outside diameter, 0.01" milled slot size

Annular Material
0 ft to 1 ft bgs: Concrete
1 ft to 10.5 ft bgs: Type I/II Cement
10.5 ft to 12.5 ft bgs: Hydrated Medium Bentonite Chips
12.5 ft bgs to 24.64 ft bgs: #2/16 Sand Filter Pack

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STATION ID	MW-6B
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	C. Lyles
APPROVED BY	S. Sherman, PG 9240

SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	DESCRIPTION (USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.)
	I					CONCRETE
	I	5.1	--- 1			
	I					
	I		--- 2			
	I				SW	Gravelly SAND: dark olive gray (5Y 3/2), fine to coarse sand, fine gravel, dry
MW-6-2.5-3.5	I	4.3	--- 3		ML	SILT: black (N 0.5), low plasticity, moist
	I					
	I	5	--- 4			
	X					
	X		--- 5		CL	CLAY with sand: olive gray (5Y 5/2), fine sand, medium plasticity, moist
	I	4				
	I		--- 6			
	I					
	I		--- 7			
	I	6.5				
	I		--- 8			
	I					
	I		--- 9			at 8.5 ft bgs dark yellowish brown (10YR 4/6) mottling, increasing sand
	I	9.7				
	I		-- 10			
	I	4.6			SP	Poorly graded SAND: black (5Y 2.5/1), fine sand, wet at 10.2 ft bgs light olive gray (5Y 6/2)
	I		-- 11			
	I					
	I	9.7	-- 12			
	I					
	I		-- 13			
	X					
	X		-- 14			
	X					
	X		-- 15			
	I	7.8				at 15 ft bgs pale olive (5Y 6/3)
	I		-- 16			
	I					
	I		-- 17			
	I	9.4				at 17 ft bgs light olive brown (2.5Y 5/4)
	I		-- 18			
	I					
	I		-- 19			
	I					
	I	9.1	-- 20			
	I					

DRILLING CONTRACTOR	National EWP
DRILLING METHOD	Direct-Push / Hollow Stem Auger
SAMPLING EQUIPMENT	Dual-tube
DRILL START DATE	February 12, 2015
GROUT DATE	February 13, 2015

COORDINATES (Latitude, Longitude)	6060019.23198, 2107643.20314
SURFACE ELEVATION	11.38
DATUM	NAD1983 State Plane California III

Notes:

8" diameter borehole

Casings
0 ft to 28.06 ft bgs: PVC Sch. 40 blank, 0.154" wall thickness, 2" outer diameter
28.06 ft to 32.73 ft bgs: PVC Sch. 40 screen, 0.154" wall thickness, 2" outside diameter, 0.01" milled slot size

Annular Material
0 ft to 1 ft bgs: Concrete
1 ft to 25 ft bgs: Type I/II Cement
25 ft to 27 ft bgs: Hydrated Medium Bentonite Chips
27 ft to 33.3 ft bgs: #2/16 Sand Filter Pack
33.3 ft to 45 ft bgs: Medium Bentonite Chips
45 ft to 50 ft bgs: Collapsed

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STATION ID	MW-6B
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	C. Lyles
APPROVED BY	S. Sherman, PG 9240

SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	DESCRIPTION (USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.)
	I				SP	
	I	5.1	-- 21			
	I					
	I		-- 22			
	I	5.2				
	I		-- 23			
	I					
	I		-- 24			
	I					
	I	6.7	-- 25		CL	Sandy CLAY: gray (5Y 5/1), fine sand, low plasticity, moist
	I					
	I	4.8	-- 26			
	I					at 26 ft bgs increasing sand
	I		-- 27			
	I					
	I	5.2	-- 28		SC	Clayey SAND with gravel: greenish gray (10Y 6/1), subrounded fine to coarse sand and fine gravel, low plasticity, moist
	I					
	I		-- 29			
	I					
	I	5.1	-- 30		CL	CLAY: grayish brown (2.5Y 5/2), low plasticity, moist
	I					
	I	5	-- 31			
	I					at 31 ft bgs light olive brown (2.5Y 5/4), medium plasticity, moist
	I		-- 32			
	I					
	I	0.6	-- 33			
	I					
	I		-- 34			
	I					at 34 ft bgs few subrounded fine gravels, moist
	I	1.9	-- 35			
	I					
	I	1.7	-- 36			
	I					
	I		-- 37			
	I	3.2				
	I		-- 38			
	I					
	I		-- 39			
	I					from 39 to 42 ft bgs few shell fragments
	I	3.2	-- 40			
	I					

DRILLING CONTRACTOR	National EWP
DRILLING METHOD	Direct-Push / Hollow Stem Auger
SAMPLING EQUIPMENT	Dual-tube
DRILL START DATE	February 12, 2015
GROUT DATE	February 13, 2015

COORDINATES (Latitude, Longitude)	6060019.23198, 2107643.20314
SURFACE ELEVATION	11.38
DATUM	NAD1983 State Plane California III

Notes:

8" diameter borehole

Casings
0 ft to 28.06 ft bgs: PVC Sch. 40 blank, 0.154" wall thickness, 2" outer diameter
28.06 ft to 32.73 ft bgs: PVC Sch. 40 screen, 0.154" wall thickness, 2" outside diameter, 0.01" milled slot size

Annular Material
0 ft to 1 ft bgs: Concrete
1 ft to 25 ft bgs: Type I/II Cement
25 ft to 27 ft bgs: Hydrated Medium Bentonite Chips
27 ft to 33.3 ft bgs: #2/16 Sand Filter Pack
33.3 ft to 45 ft bgs: Medium Bentonite Chips
45 ft to 50 ft bgs: Collapsed

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STATION ID	MW-6B
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	C. Lyles
APPROVED BY	S. Sherman, PG 9240

SAMPLE INFORMATION						DESCRIPTION
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.
	I				CL	
	I		-- 41			
	I	3.5				
	I		-- 42			
	I					
	I		-- 43			
	I	3.0				
	I		-- 44			
	X					
	X		-- 45			
	X					
	X		-- 46			
	X					
	X		-- 47			No recovery from 45 to 50 ft bgs due to broken inner casing
	X					
	X		-- 48			
	X					
	X		-- 49			
	X					
	X		-- 50			
						End of boring at 50 ft bgs

DRILLING CONTRACTOR	National EWP
DRILLING METHOD	Direct-Push / Hollow Stem Auger
SAMPLING EQUIPMENT	Dual-tube
DRILL START DATE	February 12, 2015
GROUT DATE	February 13, 2015

COORDINATES (Latitude, Longitude)	6060019.23198, 2107643.20314
SURFACE ELEVATION	11.38
DATUM	NAD1983 State Plane California III

Notes:

8" diameter borehole

Casings
0 ft to 28.06 ft bgs: PVC Sch. 40 blank, 0.154" wall thickness, 2" outer diameter
28.06 ft to 32.73 ft bgs: PVC Sch. 40 screen, 0.154" wall thickness, 2" outside diameter, 0.01" milled slot size

Annular Material
0 ft to 1 ft bgs: Concrete
1 ft to 25 ft bgs: Type I/II Cement
25 ft to 27 ft bgs: Hydrated Medium Bentonite Chips
27 ft to 33.3 ft bgs: #2/16 Sand Filter Pack
33.3 ft to 45 ft bgs: Medium Bentonite Chips
45 ft to 50 ft bgs: Collapsed

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STATION ID	SB-11
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	S. Sherman
APPROVED BY	S. Sherman, PG 9240

SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	DESCRIPTION (USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.)
	I					CONCRETE
	I		--- 1			
	I					
	I	1.2	--- 2		ML	Sandy SILT: very dark grayish brown (10YR 3/2), low plasticity, moist
SB-11-2.0-2.5	I					
	I	1.0	--- 3			
	I					at 3.0 ft bgs black (N 0.5)
	I		--- 4			
	I					
	I	0.5	--- 5		CL	CLAY: dark gray (5Y 4/1), medium plasticity, moist
	I					
	I		--- 6			at 5.5 ft bgs increasing sand
	I	1.7				at 6 ft bgs olive gray (5Y 5/2), decreasing sand
	I		--- 7			
	I					
	I	2.0	--- 8			
	I					at 8 ft bgs dark yellowish brown (10YR 4/6) mottling
	I		--- 9			
	I					
SB-11-9.5-10.0	I	2.0	-- 10			at 9.5 ft bgs increasing sand
						Not logged beyond 10 ft bgs
			-- 11			
			-- 12			
			-- 13			
			-- 14			
			-- 15			
			-- 16			
			-- 17			
			-- 18			
			-- 19			
			-- 20			
						Hydropunch to 20 ft bgs; end of boring

DRILLING CONTRACTOR	National EWP
DRILLING METHOD	Geoprobe 7730DT
SAMPLING EQUIPMENT	Macrocore
DRILL START DATE	February 19, 2015
GROUT DATE	February 19, 2015

COORDINATES (Latitude, Longitude)	6059903.862, 2107755.373
SURFACE ELEVATION	11.43
DATUM	NAD1983 State Plane California III

Notes:

Sample SB-11-GW groundwater hydropunch sample collected from 15-20 ft bgs.

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STATION ID	SB-12
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	C. Lyles
APPROVED BY	S. Sherman, PG 9240

SAMPLE INFORMATION						DESCRIPTION
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.
	I					CONCRETE
	I	0.0	--- 1		ML	SILT with sand: brown (10YR 4/3), fine to coarse sand, few subangular gravels, low plasticity, moist from 1.25 ft to 1.5 ft bgs abundant poorly graded fine gravel
	I					
	I		--- 2			at 1.5 ft bgs hydrocarbon-like odor in material that is black (7.5 YR 2.5/1)
	I					
SB-12-2.5-3.5	I	1.9	--- 3			
	I					at 3.0 ft bgs black (10YR 2/1), medium to coarse sand, strong hydrocarbon-like odor, few glass fragments
	I		--- 4			
	I					
	I	0.5	--- 5			
	I					
	I		--- 6			
	I	0.1			CL	CLAY with sand: dark gray (10YR 4/1), fine sand, low plasticity, moderate hydrocarbon-like odor, moist
	I		--- 7			
	I					
	I	0.0	--- 8			
	I					at 8 ft bgs brown (10YR 5/3), few to some dark yellowish brown (10YR 4/6) mottling
	I		--- 9			
	I					
	I	0.0	-- 10			
	X					
	I		-- 11		ML	Sandy SILT: yellowish brown (10YR 5/4), fine sand, low plasticity, no odor, moist
SB-12-11.0-12.0	I	0.1				
	I		-- 12			
	I					
	I		-- 13			at 12.5 ft bgs increasing sand
	I	0			SP	Poorly graded SAND: yellowish brown (10YR 5/4), fine sand, wet
	I		-- 14			
	I					
	I		-- 15			
	I	0				
						End of boring at 15.5 ft bgs

DRILLING CONTRACTOR	National EWP
DRILLING METHOD	Geoprobe 7730DT
SAMPLING EQUIPMENT	Macrocore
DRILL START DATE	February 13, 2015
GROUT DATE	February 13, 2015

COORDINATES (Latitude, Longitude)	6059903.862, 2107755.373
SURFACE ELEVATION	11.43
DATUM	NAD1983 State Plane California III

Notes:
Groundwater sample SB-12-GW collected using installed temporary well.

No LNAPL observed in temporary well.

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STATION ID	SB-13
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	C. Lyles
APPROVED BY	S. Sherman, PG 9240

SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	DESCRIPTION (USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.)
						1 ft bgs to concrete surface
			--- 1			
	I					CONCRETE
	I		--- 2			
	I					
	I		--- 3			
SB-13-3.0-4.0	I				ML	SILT with sand: black (N 0.5), fine sand, some gray (2.5Y 5.1), low plasticity, strong hydrocarbon-like odor, moist
	I	34.2	--- 4			
	I					
	I		--- 5			
	I					
	I	30.1	--- 6			
	X					
	X		--- 7			
	X					at 7 ft bgs gray (5Y 5/1), increasing sand
	X		--- 8			
	I				CL	CLAY with sand: gray (5Y 5/1), fine sand, low plasticity, strong hydrocarbon-like odor, moist
	I	12.8	--- 9			
	I					
	I		-- 10			
	I	3.0				from 10 ft to 13 ft bgs dark yellowish brown (10YR 4/6) mottling
	I		-- 11			
	I					
	I		-- 12			
SB-13-12.0-13.0	I	0.1			SP	Poorly graded SAND: yellowish brown (10YR 5/4), fine sand, dark yellowish brown (10YR 4/6) mottling, no odor, moist
	I		-- 13			
	I				ML	SILT with sand: dark yellowish brown (10YR 4/4), low plasticity, moist
	I	2.0	-- 14			
	I					
	I		-- 15		SP	Poorly graded SAND: gray (5Y 5/1), fine sand, wet
	I					
	I	0.4	-- 16			
	I					
	I		-- 17			
	I					at 17 ft bgs yellowish brown (10YR 5/4)
	I	0.0	-- 18			
						End of boring at 18 ft bgs.

DRILLING CONTRACTOR	National EWP
DRILLING METHOD	Geoprobe 7730DT
SAMPLING EQUIPMENT	Macrocore
DRILL START DATE	February 13, 2015
GROUT DATE	February 13, 2015

COORDINATES (Latitude, Longitude)	6059903.862, 2107755.373
SURFACE ELEVATION	11.43
DATUM	NAD1983 State Plane California III

Notes:
Groundwater sample SB-13-GW collected using installed temporary well.

No LNAPL observed in temporary well.

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STATION ID	SB-14
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	C. Lyles
APPROVED BY	S. Sherman, PG 9240

SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	DESCRIPTION (USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.)
						1 ft bgs to concrete surface
			--- 1			
	I					CONCRETE
	I		--- 2			
	I					
	I		--- 3			
	I					
	I		--- 4			
SB-14-4.0-4.5	I				CL	Sandy CLAY: light olive brown (2.5Y 5.3), fine sand, low plasticity, slight sewage-like odor, moist
	I	0.0	--- 5			
	I					
	I		--- 6			
	I	1.5				
	I		--- 7			at 6.5 ft bgs increasing clay, no odor, few dark yellowish brown (10YR 4/6) and black (7.5YR 2.5/1) mottling
	I					
	I	2.4	--- 8			
	I					
	I		--- 9			
	I					at 9 ft bgs increasing sand
SB-14-9.5-10.0	I	2.9	-- 10			
						Not logged beyond 10 ft bgs
			-- 11			
			-- 12			
			-- 13			
			-- 14			
			-- 15			
			-- 16			
			-- 17			
			-- 18			
			-- 19			
			-- 20			
						Hydropunch to 20 ft bgs; end of boring

DRILLING CONTRACTOR	National EWP
DRILLING METHOD	Geoprobe 7730DT
SAMPLING EQUIPMENT	Macrocore
DRILL START DATE	February 18, 2015
GROUT DATE	February 18, 2015

COORDINATES (Latitude, Longitude)	6059922.80077, 2107652.03158
SURFACE ELEVATION	11.43
DATUM	NAD1983 State Plane California III

Notes:
Groundwater sample SB-14-GW collected from 15-20 ft bgs with hydropunch.

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STATION ID	SB-15
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	C. Lyles
APPROVED BY	S. Sherman, PG 9240

SAMPLE INFORMATION						DESCRIPTION
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.
						1 ft bgs to concrete surface
			--- 1			
	I					CONCRETE
	I		--- 2			
	I					
	I		--- 3			
	I					
	I		--- 4			
	X					no recovery; operator noted gravel base rock likely present from 4.0 to 4.5 ft bgs
	I		--- 5		CL	Sandy CLAY: dark greenish gray (10Y 4/1), fine sand, low plasticity, sewage-like odor, wet
SB-15-5.0-5.5	I	7.5				
	I		--- 6			
	I					
	I		--- 7			
	I	0.5				at 7 ft bgs grayish brown (2.5Y 5/2), increasing clay, no odor, moist
	I		--- 8			
	I					
	I		--- 9			
	I	0.2				
SB-15-9.5-10.0	I		-- 10			
						Not logged beyond 10 ft bgs
			-- 11			
			-- 12			
			-- 13			
			-- 14			
			-- 15			
			-- 16			
			-- 17			
			-- 18			
			-- 19			
			-- 20			
						Hydropunch to 20 ft bgs; end of boring

DRILLING CONTRACTOR	National EWP
DRILLING METHOD	Geoprobe 7730DT
SAMPLING EQUIPMENT	Macrocore
DRILL START DATE	February 18, 2015
GROUT DATE	February 18, 2015

COORDINATES (Latitude, Longitude)	6059922.80077, 2107652.03158
SURFACE ELEVATION	11.43
DATUM	NAD1983 State Plane California III

Notes:
Groundwater sample SB-15-GW collected from 15-20 ft bgs with hydropunch.

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STATION ID	SB-16
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	C. Lyles
APPROVED BY	S. Sherman, PG 9240

SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	DESCRIPTION (USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.)
						1 ft bgs to concrete surface
			--- 1			
	I					CONCRETE
	I		--- 2			
	I					
	I		--- 3			
SB-16-3.0-3.5	I				ML	SILT: black (N 0.5), low plasticity, strong hydrocarbon-like odor, moist
	I	2.0	--- 4			from 3.0 ft to 3.2 ft bgs NAPL present
	I					from 3.2 ft to 4.2 ft bgs slight hydrocarbon-like odor, no NAPL
	I	0.0	--- 5			from 4.2 ft bgs increasing fine sand, dark greenish gray (10Y 4/1)
	I				CL	Sandy CLAY: dark greenish gray (10Y 4/1), fine sand, low plasticity, moist
	I	8.4	--- 6			
	I					
	I		--- 7			
	I	0.4				
	I		--- 8			
	I					
	I		--- 9			
	I					
SB-16-9.5-10.0	I	2.1	-- 10		SC	Clayey SAND: grayish brown (2.5Y 5/2), fine sand, few dark yellowish brown (10YR 4/6) and black (7.5YR 2.5/1) mottling, moist
	I					
	I		-- 11			
	I	2.1				at 11 ft bgs increasing silt and sand
	I		-- 12			
	I					
	I	0.3	-- 13			
	I				SP	Poorly graded SAND: dark greenish gray (10Y 4/1), wet
	I					
	I		-- 14			
	I	1.1				at 14 ft bgs olive brown (2.5Y 4/3)
	I		-- 15			
	X					Not logged beyond 15 ft bgs
	X		-- 16			
	X					
	X		-- 17			
	X					
	X		-- 18			
	X					
	X		-- 19			
	X					
	X		-- 20			
						End of boring at 20 ft bgs

DRILLING CONTRACTOR	National EWP
DRILLING METHOD	Geoprobe 7730DT
SAMPLING EQUIPMENT	Macrocore
DRILL START DATE	February 18, 2015
GROUT DATE	February 18, 2015

COORDINATES (Latitude, Longitude)	6059870.91698, 2107687.7129
SURFACE ELEVATION	11.43
DATUM	NAD1983 State Plane California III

Groundwater sample SB-16-GW collected using installed temporary well.

No LNAPL observed in temporary well.

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STATION ID	SB-17
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	C. Lyles
APPROVED BY	S. Sherman, PG 9240

SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	DESCRIPTION (USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.)
						1 ft bgs to concrete surface
			--- 1			
	I					CONCRETE
	I		--- 2			
	I					
	I		--- 3			
	I					
	I		--- 4			
	I					
	I		--- 5			
SB-17-5.0-6.0	I	2.4			ML	SILT: from 5.0 to 5.2 ft bgs black (N 0.5), low plasticity, moderate hydrocarbon-like odor, moist
	I		--- 6			from 5.2 ft to 5.7 ft bgs dark greenish gray (10Y 4/1), no odor
	I					at 5.7 ft bgs pale olive (5Y 6/3)
	I		--- 7			
	I	0.7				
	I		--- 8			
	I					at 8 ft bgs few dark yellowish brown (10YR 4/6) and black (7.5YR 2.5/1) mottling
	I		--- 9			
SB-17-9.0-10.0	I	0.7				
	I		-- 10		SC	Clayey SAND: pale olive (5Y 6/3), fine sand, wet
	I					
	I	0.4	-- 11			
	I					
	I		-- 12			
	I	0.7				
	I		-- 13		SP	Poorly graded SAND: dark greenish gray (10GY 4/1), fine sand, wet
	I					
	I		-- 14			at 13.5 ft bgs olive brown (2.5Y 4/3)
	I					
	I	0.0	-- 15			
						Not logged beyond 15 ft bgs
			-- 16			
			-- 17			
			-- 18			
			-- 19			
			-- 20			
						Hydropunch to 20 ft bgs; end of boring

DRILLING CONTRACTOR	National EWP
DRILLING METHOD	Geoprobe 7730DT
SAMPLING EQUIPMENT	Macrocore
DRILL START DATE	February 18, 2015
GROUT DATE	February 18, 2015

COORDINATES (Latitude, Longitude)	6059843.91396, 2107703.34804
SURFACE ELEVATION	11.43
DATUM	NAD1983 State Plane California III

Notes:
Groundwater sample SB-17-GW collected from 15-20 ft bgs with hydropunch.
Collected DUP-021815 from this location.

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STATION ID	SB-18
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	S. Sherman
APPROVED BY	S. Sherman, PG 9240

SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	DESCRIPTION (USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.)
	I					CONCRETE
	I		--- 1		SW-SC	Gravelly SAND with clay: dark yellowish brown (10YR 4/4), angular fine gravel, subrounded fine to coarse sand, moist
	I	0.4				
	I		--- 2		ML	Sandy SILT: black (N 0.5), fine sand, low plasticity, moist
	I					
	I		--- 3			
	I	2.8				
	I		--- 4			
	I					
	I	2.9	--- 5			
SB-18-5.0-6.0	I	5.1			CL	Sandy CLAY: dark greenish gray (5GY 4/1), fine sand, low plasticity, slight hydrocarbon odor, moist
	I		--- 6			
	I					
	I	2.2	--- 7			at 6.5 ft bgs no odor at 7 ft bgs greenish gray (10Y 5/1)
	I					
	I		--- 8			
	I					at 8 ft bgs dark yellowish brown (10YR 4/6) mottling
	I	1.8	--- 9			
SB-18-9.0-10.0	I					
	I		-- 10			
	X					
	X		-- 11			
	I				SP	Poorly graded SAND: grayish brown (2.5Y 5/3), fine sand, wet
	I	2.4	-- 12			
	I					
	I		-- 13			
	I					
	I		-- 14			
	I	2.2				at 14 ft bgs dark greenish gray (10GY 4/1)
	I		-- 15			at 14.7 ft bgs olive gray (5Y 4/2)
						End of boring at 15 ft bgs

DRILLING CONTRACTOR	National EWP
DRILLING METHOD	Geoprobe 7730DT
SAMPLING EQUIPMENT	Macrocore
DRILL START DATE	February 19, 2015
GROUT DATE	February 19, 2015

COORDINATES (Latitude, Longitude)	6059806.27285, 2107731.75121
SURFACE ELEVATION	11.43
DATUM	NAD1983 State Plane California III

Notes:
Groundwater sample SB-18-GW collected from 10 ft bgs at an alternate location 10 feet to the south of this soil boring in an adjacent concrete pit. The alternate location was advanced via hand auger with refusal in coarse gravel.

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STATION ID	SB-19
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	C. Lyles
APPROVED BY	S. Sherman, PG 9240

SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	DESCRIPTION (USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.)
						2 ft bgs to concrete surface
			--- 1			
			--- 2			
	I					CONCRETE
	I		--- 3			
	I					
	I		--- 4			
	I					
	I		--- 5			
	I				GP	Poorly graded GRAVEL: angular fine gravel, residual NAPL, hydrocarbon-like odor
SB-19-5.5-6.5	I	63.8	--- 6		ML	SILT with sand: gray (2.5Y 5/1), fine sand, black (N 0.5) mottling, residual NAPL, strong hydrocarbon-like odor, moist
	I					
	I		--- 7		CL	CLAY with sand: olive gray (5Y 5/2), fine sand, low plasticity, hydrocarbon-like odor, moist
	I					
	I	69.1	--- 8			
	I					from 8 ft to 9 ft bgs black (7.5YR 2.5/1) nodules
SB-19-8.5-9.5	I		--- 9			
	I	18.6				from 9 ft to 10 ft bgs dark yellowish brown (10YR 4/6) mottling
	X		-- 10			
	I				SP	Poorly graded SAND: yellowish brown (10YR 5/4), fine sand, low plasticity, hydrocarbon-like odor, wet
	I	23.1	-- 11			
	I					
	I		-- 12			
	I					
	I	6.4	-- 13			at 12.5 ft bgs dark gray (10YR 4/1)
	I					
	I		-- 14			
	I					at 14 ft bgs grades to brown (10YR 5/3)
	I	11.1	-- 15			
						Not logged beyond 15 ft bgs
			-- 16			
			-- 17			
			-- 18			
			-- 19			
			-- 20			
						Hydropunch to 20 ft bgs; end of boring

DRILLING CONTRACTOR	National EWP
DRILLING METHOD	Geoprobe 7730DT
SAMPLING EQUIPMENT	Macrocore/Dual-tube
DRILL START DATE	February 12, 2015
GROUT DATE	February 17, 2015

COORDINATES (Latitude, Longitude)	6059829.0409, 2107682.27026
SURFACE ELEVATION	11.43
DATUM	NAD1983 State Plane California III

Notes:
Measured 0.7 ft of LNAPL thickness in installed temporary well.

Poor recovery during purging for sampling on 2/13/15.

Collected groundwater sample SB-19-GW on 2/17/15 with hydropunch from 15-20 ft bgs.

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STATION ID	SB-20
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	C. Lyles
APPROVED BY	S. Sherman, PG 9240

SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	DESCRIPTION (USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.)
						2.2 ft bgs to concrete surface
			--- 1			
			--- 2			
	I					CONCRETE
	I		--- 3			
	I					
	I		--- 4			
	I					
	I		--- 5			
	I					
	I		--- 6		ML	Sandy SILT: gray (N 6/), fine sand, low plasticity, indiscernible odor, moist
SB-20-6.0-7.0	I	2.7				
	I		--- 7			
	I					
	I		--- 8		CL	CLAY with sand: grayish brown (10YR 5/2), fine sand, low plasticity, indiscernible odor, moist
	I	1.8				
	I		--- 9			from 8.5 ft to 9.5 ft bgs few black (N 0.5) nodules
	I					
	I		-- 10			from 9.5 ft to 10.5 ft bgs dark yellowish brown (10YR 4/6) mottling
	I	0.2				
SB-20-10.5-11.5	I		-- 11			
	I	0.1				
	I		-- 12			
	I					at 12 ft bgs increasing sand
	I	0.1	-- 13			
	I					at 13 ft bgs wet
	I		-- 14		SP	Poorly graded SAND: dark bluish gray (5B 4/1), fine sand, no odor, wet
	I					
	I	0.1	-- 15			
	X					
	I		-- 16			
	I	0.1				at 16 ft bgs light yellowish brown (2.5Y 6/3), fine and medium sand
	I		-- 17			
	I					
	I	0.1	-- 18			
	I					
	I		-- 19			
	I					
	I	0.1	-- 20			
	I					End of boring at 20.5 ft bgs

DRILLING CONTRACTOR	National EWP
DRILLING METHOD	Geoprobe 7730DT
SAMPLING EQUIPMENT	Macrocore
DRILL START DATE	February 13, 2015
GROUT DATE	February 17, 2015

COORDINATES (Latitude, Longitude)	6059872.64863, 2107654.47375
SURFACE ELEVATION	11.43
DATUM	NAD1983 State Plane California III

Notes:
Poor recovery from temporary well installed to 15.5 ft bgs on 2/13/15.

Groundwater sample SB-20-GW collected on 2/17/15 with hydropunch from 15.5 to 20.5 ft bgs.

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STATION ID	SB-21
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	S. Sherman
APPROVED BY	S. Sherman, PG 9240

SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	DESCRIPTION (USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.)
	I					CONCRETE
	I		--- 1		GC	Clayey GRAVEL with sand: brown (7.5YR 4/4), angular to subrounded fine to coarse gravel and medium to coarse sand, dry
SB-21-1.0-2.0	I	5.1				
	I		--- 2		ML	Sandy SILT: black (N 0.5), fine sand, low to no plasticity, moist
	I					
	I	4.3	--- 3			
	I					at 3 ft bgs very dark grayish brown (10YR 3/2), decreasing sand
	I		--- 4		CL	Sandy CLAY: light yellowish brown (2.5Y 6/3), fine sand, low plasticity, moist
	I					
	I	5.2	--- 5			
	I					
	I	0.9	--- 6			
	I					
	I		--- 7			
	I					at 7 ft bgs decreasing sand
	I	0.8	--- 8			
	I					
	I		--- 9			
	I					
	I	0.9	-- 10			
	I					
	I	1.0	-- 11			at 10.5 ft bgs increasing sand
	I				SP	Poorly graded SAND: greenish gray (10Y 5/1), fine sand, moist
	I		-- 12			
	I	0.8			SC	Clayey SAND: light olive brown (2.5Y 5/4), fine sand, moist
	I		-- 13			
	I				SP	Poorly graded SAND: greenish gray (5GY 5/1), fine sand, moist
	I		-- 14			
	I	0.8				
	I		-- 15			
	I					at 15 ft bgs light olive brown (2.5Y 5/3)
	I	0.9	-- 16			
	I					at 16 ft bgs wet
	I		-- 17			
	I					
	I	0.9	-- 18			
	I					
	I		-- 19			
	I					at 19 ft bgs moist
	I	0.8	-- 20			
	I					

DRILLING CONTRACTOR	National EWP
DRILLING METHOD	Geoprobe 7730DT
SAMPLING EQUIPMENT	Dual-tube
DRILL START DATE	February 11, 2015
GROUT DATE	February 11, 2015

COORDINATES (Latitude, Longitude)	6059872.64863, 2107654.47375
SURFACE ELEVATION	11.43
DATUM	NAD1983 State Plane California III

Notes:

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STATION ID	SB-21
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	S. Sherman
APPROVED BY	S. Sherman, PG 9240

SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	DESCRIPTION (USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.)
	I				SP	
	I	3.3	-- 21			
	I					
	I		-- 22			at 21.5 ft bgs wet
	I					
	I	3.2	-- 23			
	I					
	I		-- 24			at 23.5 ft bgs greenish gray (10Y 5/1)
	I	3.1				at 24 ft bgs moist
	I		-- 25			
	I	6.1				at 25 ft bgs increasing clay, wet
	I		-- 26		CL	Sandy CLAY: greenish gray (5GY 5/1), fine sand, medium plasticity, moist
	I					
	I		-- 27			at 26.5 ft bgs decreasing sand
	I	3.1				
	X		-- 28			
	X					
	X		-- 29			
	X					
	X		-- 30			
	I				SP	Poorly graded SAND: greenish gray (10Y 6/1), fine sand, wet
	I	5.1	-- 31			
	I				CL	CLAY: greenish gray (10Y 6/1), low plasticity, moist
	I		-- 32			
	I					
	I	4.9	-- 33			
	I					
	I		-- 34			
	I					
	I	4.6	-- 35			at 34.5 ft bgs increasing sand
	I				SC	Clayey SAND with gravel: greenish gray (10Y 6/1), subrounded fine gravel and fine to coarse sand, wet
	I		-- 36			
	I	2.9				
	I		-- 37			
	I					at 37 ft bgs moist
	I	3.8	-- 38			
	I					
	I		-- 39			
	I				CL	CLAY: greenish gray (10Y 5/1), trace gravel, medium plasticity, moist
	I	3.9	-- 40			
	I					

DRILLING CONTRACTOR	National EWP
DRILLING METHOD	Geoprobe 7730DT
SAMPLING EQUIPMENT	Dual-tube
DRILL START DATE	February 11, 2015
GROUT DATE	February 11, 2015

COORDINATES (Latitude, Longitude)	6059872.64863, 2107654.47375
SURFACE ELEVATION	11.43
DATUM	NAD1983 State Plane California III

Notes:

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STATION ID	SB-21
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	S. Sherman
APPROVED BY	S. Sherman, PG 9240

SAMPLE INFORMATION						DESCRIPTION
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.
	I				SP	Poorly graded SAND: greenish gray (10Y 5/1), fine sand, wet
	I	3.4	-- 41			
	I					
	I		-- 42		CL	CLAY: greenish gray (10Y 5/1), trace fine sand, medium plasticity, moist
	I					
	I	5.3	-- 43			
	I					
	I		-- 44			at 43.5 ft bgs light olive brown (2.5Y 5/5) mottling
	I					
	I	4.3	-- 45			
	I					at 45 ft bgs greenish gray (10Y 5/1)
	I		-- 46			
	I	3.2				
	I		-- 47			
	I					at 47 ft bgs increasing sand
	I		-- 48			
	I	3.5				
	I		-- 49			at 48.5 ft bgs decreasing sand
	I					
	I	2.7	-- 50			at 49.5 ft bgs abundant shell fragments
						End of boring at 50 ft bgs

DRILLING CONTRACTOR	National EWP	COORDINATES (Latitude, Longitude)	6059872.64863, 2107654.47375
DRILLING METHOD	Geoprobe 7730DT		
SAMPLING EQUIPMENT	Dual-tube	SURFACE ELEVATION	11.43
DRILL START DATE	February 11, 2015	DATUM	NAD1983 State Plane California III
GROUT DATE	February 11, 2015		

Notes:

integral consulting inc.
115 Sansome St, Suite 200
San Francisco, CA 94104
(415) 393-4750

STATION ID	SB-22
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	C. Lyles
APPROVED BY	S. Sherman, PG 9240

SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	DESCRIPTION (USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.)
						0.5 ft bgs to concrete surface
	I		--- 1			CONCRETE
	I					
	I		--- 2			
	I					
	I		--- 3			
	I					
	I		--- 4			
SB-22-4.0-5.0	I	0.8			ML	SILT with sand: black (10YR 2/1), low plasticity, strong sewage-like odor, moist
	I		--- 5			
	I					at 5 ft bgs gray (N 6/), increasing fine sand
	I		--- 6			
	I	0.4				
	X		--- 7			
	X					
	X		--- 8			
	X					
	X		--- 9			
	I	0.1			CL	CLAY with sand: brown (10YR 5/3), medium plasticity, indiscernible odor, moist
	I		-- 10			
	I					
	I		-- 11			
SB-22-11.0-12.0	I	2.1				
	I		-- 12			
	I					from 12 ft to 14 ft bgs dark reddish brown (10YR 4/6) mottling
	I		-- 13			
	I					at 13 ft bgs increasing sand, wet
	I		-- 14			
	I	1.1			SM	Silty SAND: yellowish brown (10YR 5/4), fine sand, no odor, wet
	I		-- 15			
	I					
	I		-- 16			
	I	0.2			SP	Poorly graded SAND: grayish brown (10YR 5/2), fine sand, wet
	I		-- 17			
	I					
	I		-- 18			
	I					
	I	0.0	-- 19			
						Not logged beyond 19 ft bgs
			-- 20			
						Hydropunch to 20 ft bgs; end of boring

DRILLING CONTRACTOR	National EWP
DRILLING METHOD	Geoprobe 7730DT
SAMPLING EQUIPMENT	Macrocore
DRILL START DATE	February 13, 2015
GROUT DATE	February 17, 2015

COORDINATES (Latitude, Longitude)	6059896.51554, 2107637.43649
SURFACE ELEVATION	11.43
DATUM	NAD1983 State Plane California III

Notes:
Measured 0.09 ft of LNAPL thickness in installed temporary well.

Poor recovery during purging for sampling on 2/13/15.

Collected groundwater sample SB-19-GW on 2/17/15 with hydropunch from 15-20 ft bgs.

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115 Sansome St, Suite 200
San Francisco, CA 94104
(415) 393-4750

STATION ID	SB-23
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	S. Sherman
APPROVED BY	S. Sherman, PG 9240

SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	DESCRIPTION (USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.)
	I					CONCRETE
	I	1.3	--- 1		SW-SC	Gravelly SAND with Clay: dark yellowish brown (10YR 4/4), angular fine gravel, subrounded fine to coarse sand, dry
	I					CONCRETE
	I		--- 2		ML	Sandy SILT: black (N 0.5), fine sand, low plasticity, moist
	I	2.1				
	I		--- 3			
	I					
	I		--- 4			
	I	1.5				
	I		--- 5		CL	CLAY: very dark gray (10YR 3/1), medium plasticity, moist
	I					
	I	2.4	--- 6			at 6 ft bgs dark gray (5Y 4/1)
	I					
	I		--- 7			at 7 ft bgs olive gray (5Y 5/2)
	I					
	I	1.8	--- 8			at 8 ft bgs increasing sand
	I					
	I		--- 9			
	I				SP	Poorly graded SAND: greenish gray, (10Y 6/1), moist
	I	2.2	-- 10			Not logged beyond 10 ft bgs
			-- 11			
			-- 12			
			-- 13			
			-- 14			
			-- 15			
			-- 16			
			-- 17			
			-- 18			
			-- 19			
			-- 20			
						Hydropunch to 20 ft bgs; end of boring

DRILLING CONTRACTOR	National EWP
DRILLING METHOD	Geoprobe 7730DT
SAMPLING EQUIPMENT	Macrocore
DRILL START DATE	February 19, 2015
GROUT DATE	February 19, 2015

COORDINATES (Latitude, Longitude)	6059987.89247, 2107572.13678
SURFACE ELEVATION	11.43
DATUM	NAD1983 State Plane California III

Notes:
Groundwater sample SB-23-GW collected with hydropunch from 15 ft to 20 ft bgs.

integral consulting inc
115 Sansome St, Suite 200
San Francisco, CA 94104
(415) 393-4750

STATION ID	SB-24
PROJECT	Allied Engineering
LOCATION	Alameda, California
PROJECT NUMBER	C1374
LOGGED BY	S. Sherman
APPROVED BY	S. Sherman, PG 9240

SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)	STRATA	Group Symbol	DESCRIPTION (USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.)
						2.8 ft bgs to concrete surface
			--- 1			
			--- 2			
	I		--- 3			CONCRETE from 2.8 ft to 3.2 ft bgs
SB-24-3.2-3.8	I				ML	Sandy SILT: black (N 0.5), fine sand, low plasticity, strong hydrocarbon-like odor, moist
	I	42	--- 4			
	I					
	I		--- 5			
	I	72			CL	Sandy CLAY: greenish gray (5GY 5/1), fine sand, low plasticity, slight hydrocarbon-like odor, moist
	I		--- 6			
	I					
	I		--- 7			
SB-24-7.0-7.3	I	13			SC	Clayey SAND: greenish gray (5GY 5/1), fine sand, slight hydrocarbon-like odor, moist
	I		--- 8			
	I					
	I	2.7	--- 9		▽	at 9 ft bgs wet
	I					
	I		-- 10			
	I				SP	Poorly graded SAND: greenish gray (5GY 5/1), fine sand, slight hydrocarbon-like odor, wet
	I	1.8	-- 11			
	I					
	I		-- 12			at 11.5 ft bgs no odor
	I					
	I		-- 13			
	I	1.8				
	I		-- 14			
	I					at 14 ft bgs light olive brown (2.5Y 5/4)
	I		-- 15			
	I					
	I	2.8	-- 16			
						End of boring at 16 ft bgs

DRILLING CONTRACTOR	National EWP
DRILLING METHOD	NA
SAMPLING EQUIPMENT	Hand Auger 3.25" diameter
DRILL START DATE	February 18, 2015
GROUT DATE	February 18, 2015

COORDINATES (Latitude, Longitude)	6059990.44793, 2107626.3355
SURFACE ELEVATION	11.43
DATUM	NAD1983 State Plane California III

Notes:
Boring location is adjacent to pit sump.

Groundwater sample SB-24-GW collected using installed temporary well.

No LNAPL observed in temporary well.

APPENDIX B

ALAMEDA COUNTY PUBLIC WORKS DEPARTMENT WELL CONSTRUCTION AND BORING PERMITS

Alameda County Public Works Agency - Water Resources Well Permit

Public Works Agency
Alameda County

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 02/05/2015 By jamesy

Permit Numbers: W2015-0091 to W2015-0094
Permits Valid from 02/11/2015 to 02/13/2015

Application Id: 1423171917164
City of Project Site: Alameda
Site Location: 2421 Blanding Ave
Alameda, CA 94501
Project Start Date: 02/11/2015
Completion Date: 02/13/2015
Assigned Inspector: Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org

Applicant: Integral Consulting Inc. - Chris Lyles
115 Sansome St., Suite 200, San Francisco, CA 94104
Phone: 301-706-0791

Property Owner: Allied Land Company
2421 Blanding Ave, Alameda, CA 94501
Phone: --

Client: Concrete works Cladding Company
1137 57th Ave, Oakland, CA 94621
Phone: --

Contact: Ben Wishnoff
Phone: 707-953-4440
Cell: 707-953-4440

Total Due: $1456.00
Receipt Number: WR2015-0051 **Total Amount Paid:** $1456.00
Payer Name : Mala Pattanayek Paid By: MC **PAID IN FULL**

Works Requesting Permits:

Well Construction-Monitoring-Monitoring - 3 Wells
Driller: National EWP - Lic #: 953646 - Method: hstem **Work Total: $1191.00**

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2015-0091	02/05/2015	05/12/2015	MW-4	8.00 in.	2.00 in.	30.00 ft	50.00 ft
W2015-0092	02/05/2015	05/12/2015	MW-5	8.00 in.	2.00 in.	30.00 ft	50.00 ft
W2015-0093	02/05/2015	05/12/2015	MW-6	8.00 in.	2.00 in.	30.00 ft	50.00 ft

Specific Work Permit Conditions

1. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

2. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

3. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the

permits and requirements have been approved or obtained.

4. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Include permit number and site map.

5. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

6. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.

7. Minimum surface seal thickness is two inches of cement grout placed by tremie.

8. Minimum seal (Neat Cement seal) depth for monitoring wells is 5 feet below ground surface(BGS) or the maximum depth practicable or 20 feet.

9. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

Borehole(s) for Investigation-Environmental/Monitorinig Study - 13 Boreholes
Driller: National EWP - Lic #: 953646 - Method: DP **Work Total: $265.00**

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2015-0094	02/05/2015	05/12/2015	13	1.75 in.	50.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.

2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

4. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

5. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

6. NOTE:
Under California laws, the owner/operator are responsible for reporting the contamination to the governmental regulatory agencies under Section 25295(a). The owner/operator is liable for civil penalties under Section 25299(a)(4) and criminal penalties under Section 25299(d) for failure to report a leak. The owner/operator is liable for civil penalties under Section 25299(b)(4) for knowing failure to ensure compliance with the law by the operator. These penalty provisions do not apply to a potential buyer.

7. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

8. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

Alameda County Public Works Agency - Water Resources Well Permit

Public Works Agency
Alameda County

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 03/26/2015 By jamesy

Permit Numbers: W2015-0256 to W2015-0258
Permits Valid from 03/26/2015 to 03/26/2015

Application Id: 1424461675623
City of Project Site: Alameda
Site Location: 2421 Blanding Avenue, Alameda, CA
Project Start Date: 03/26/2015
Completion Date: 03/26/2015
Assigned Inspector: Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org

Applicant: Integral Consulting Inc. - Christopher Lyles
115 Sansome Street, Suite 200, San Francisco, CA 94104
Phone: 415-393-4750

Property Owner: Allied Land Company
2421 Blanding Avenue, Alameda, CA 94501
Phone: --

Client: Concrete Works Cladding Company
1137 57th Ave, Oakland, CA 94621
Phone: --

Total Due: $1191.00
Receipt Number: WR2015-0138 **Total Amount Paid:** $1191.00
Payer Name : Paid By: VISA **PAID IN FULL**

Works Requesting Permits:

Well Construction-Monitoring-Monitoring - 3 Wells
Driller: National EWP - Lic #: 953646 - Method: hstem **Work Total: $1191.00**

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2015-0256	03/26/2015	06/24/2015	MW-5A	8.00 in.	2.00 in.	30.00 ft	50.00 ft
W2015-0257	03/26/2015	06/24/2015	MW-5B	8.00 in.	2.00 in.	30.00 ft	50.00 ft
W2015-0258	03/26/2015	06/24/2015	MW-6A	8.00 in.	2.00 in.	30.00 ft	50.00 ft

Specific Work Permit Conditions

1. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

2. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

3. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

4. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Include permit number and site map.

5. Applicant shall submit the copies of the approved encroachment permit to this office within 10 days.

6. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

7. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.

8. Minimum surface seal thickness is two inches of cement grout placed by tremie.

9. Minimum seal (Neat Cement seal) depth for monitoring wells is 5 feet below ground surface(BGS) or the maximum depth practicable or 20 feet.

10. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

11. After The fact Permit-Wor was completed on 2/17 and 2/18 2015.

APPENDIX C

STANDARD OPERATING PROCEDURES

STANDARD OPERATING PROCEDURE (SOP) AP-03

SAMPLE CUSTODY

SCOPE AND APPLICATION

This SOP describes Integral procedures for custody management of environmental samples.

A stringent, established program of sample chain-of-custody will be followed during sample storage and shipping activities to account for each sample. The procedure outlined herein will be used with SOP AP-01, which covers sample packaging and shipping; SOP AP-02, which covers the use of field logbooks and other types of field documentation; and SOP AP-04, which covers sample labeling. Chain-of-custody (COC) forms ensure that samples are traceable from the time of collection through processing and analysis until final disposition. A sample is considered to be in a person's custody if any of the following criteria are met:

1. The sample is in the person's possession
2. The sample is in the person's view after being in his or her possession
3. The sample is in the person's possession and is being transferred to a designated secure area
4. The sample has been locked up to prevent tampering after it was in the person's possession.

At no time is it acceptable for samples to be outside of Integral personnel's custody unless the samples have been transferred to a secure area (i.e., locked up). If the samples cannot be placed in a secure area, then an Integral field team member must physically remain with the samples (e.g., at lunch time one team member must remain with the samples).

CHAIN-OF-CUSTODY FORMS

The COC form is critical because it documents sample possession from the time of collection through final disposition. The form also provides information to the laboratory regarding what analyses are to be performed on the samples that are shipped.

Complete the COC form after each field collection activity and before shipping the samples to the laboratory. Sampling personnel are responsible for the care and custody of the samples until they are shipped. The individuals relinquishing and receiving the samples must sign the

COC form(s), indicating the time and date of the transfer, when transferring possession of the samples.

A COC form consists of three-part carbonless paper with white, yellow, and pink copies. The sampling team leader keeps the pink copy. The white and yellow sheets are placed in a sealed plastic bag and secured inside the top of each transfer container (e.g., cooler). Field staff retain the pink sheet for filing at the Integral project manager's location. Each COC form has a unique four-digit number. This number and the samples on the form must be recorded in the field logbook. Integral also uses computer-generated COC forms. If computer-generated forms are used, then the forms must be printed in triplicate and all three sheets signed so that two sheets can accompany the shipment to the laboratory and one sheet can be retained on file. Alternatively, if sufficient time is available, the computer-generated forms will be printed on three-part carbonless paper.

Record on the COC form the project-assigned sample number and the unique tag number at the bottom of each sample label. The COC form also identifies the sample collection date and time, type of sample, project name, and sampling personnel. In addition, the COC form provides information on the preservative or other sample pretreatment applied in the field and the analyses to be conducted by referencing a list of specific analyses or the statement of work for the laboratory. The COC form is sent to the laboratory along with the sample(s).

PROCEDURES

Use the following guidelines to ensure the integrity of the samples:

1. Sign and date each COC form. Have the person who relinquishes custody of the samples also sign this form.
2. At the end of each sampling day and prior to shipping or storage, make COC entries for all samples. Check the information on the labels and tags against field logbook entries.
3. Do not sign the COC form until the team leader has checked the information for inaccuracies. Make corrections by drawing a single line through any incorrect entry, and then initial and date it. Make revised entries in the space below the entries. After making corrections, mark out any blank lines remaining on the COC form, using single lines that are initialed and dated. This procedure will prevent any unauthorized additions.

   At the bottom of each COC form is a space for the signatures of the persons relinquishing and receiving the samples and the time and date of the transfer. The time the samples were relinquished should match exactly the time they were received by another party. Under no circumstances should there be any time when custody of the samples is undocumented.

4. If samples are sent by a commercial carrier not affiliated with the laboratory, such as FedEx or United Parcel Service (UPS), record the name of the carrier on the COC form. Also enter on the COC form any tracking numbers supplied by the carrier. The time of transfer should be as close to the actual drop-off time as possible. After signing the COC forms and removing the pink copy, seal them inside the transfer container.
5. If errors are found after the shipment has left the custody of sampling personnel, make a corrected version of the forms and send it to all relevant parties. Fix minor errors by making the change on a copy of the original with a brief explanation and signature. Errors in the signature block may require a letter of explanation.
6. Provide a COC form and an Archive Record form for any samples that are archived internally at Integral.

Upon completion of the field sampling event, the sampling team leader is responsible for submitting all COC forms to be copied. A discussion of copy distribution is provided in SOP AP-02.

CUSTODY SEAL

As security against unauthorized handling of the samples during shipping, affix two custody seals to each sample cooler. Place the custody seals across the opening of the cooler (front right and back left) prior to shipping. Be sure the seals are properly affixed to the cooler so they cannot be removed during shipping. Additional tape across the seal may be prudent.

SHIPPING AIR BILLS

When samples are shipped from the field to the testing laboratory via a commercial carrier (e.g., FedEx, UPS), the shipper provides an air bill or receipt. Upon completion of the field sampling event, the sampling team leader will be responsible for submitting the sender's copy of all shipping air bills to be copied at an Integral office. A discussion of copy distribution is provided in SOP AP-02. Note the air bill number (or tracking number) on the applicable COC forms or, alternatively, note the applicable COC form number on the air bill to enable the tracking of samples if a cooler becomes lost.

ACKNOWLEDGMENT OF SAMPLE RECEIPT FORMS

In most cases, when samples are sent to a testing laboratory, an Acknowledgment of Sample Receipt form is faxed to the project QA/QC coordinator the day the samples are received by the laboratory. The person receiving this form is responsible for reviewing it, making sure that the laboratory has received all the samples that were sent, and verifying that the correct analyses were requested. If an error is found, call the laboratory immediately, and document

any decisions made during the telephone conversation, in writing, on the Acknowledgment of Sample Receipt form. In addition, correct the COC form and fax the corrected version to the laboratory.

Submit the Acknowledgment of Sample Receipt form (and any modified COC forms) to be copied. A discussion of copy distribution is provided in SOP AP-02.

ARCHIVE RECORD FORMS

On the rare occasion that samples are archived at an Integral office, it is the responsibility of the project manager to complete an Archive Record form. This form is to be accompanied by a copy of the COC form for the samples, and will be placed in a locked file cabinet. The original COC form remains with the samples in a sealed Ziploc® bag.

STANDARD OPERATING PROCEDURE (SOP) AP-04

SAMPLE LABELING

SCOPE AND APPLICATION

This SOP describes the general Integral procedures for labeling samples, and the three kinds of labels that can be used on a project (i.e., sample labels, sample tags, and internal sample labels). Consult the project-specific sampling and analysis plan (SAP) to determine the exact sample identifiers and sample labels that are required for a given project. If they are not specified in the SAP, then follow the designations below.

SAMPLE IDENTIFIERS

Before field sampling begins, establish sample identifiers to be assigned to each sample as it is collected. Sample identifiers consist of codes designed to fulfill three purposes: 1) to identify related samples (i.e., replicates) to ensure proper data analysis and interpretation, 2) to obscure the relationships between samples so that laboratory analysis will be unbiased by presumptive similarities between samples, and 3) to track individual sample containers to ensure that the laboratory receives all material associated with a single sample. To accomplish these purposes, each container may have three different codes associated with it: the sample identifier, the sample number, and the sample tag number. These codes and their use are described as follows:

- **Sample Identification Code**—The sample identification code (Sample ID) is a unique designation that identifies where and how the sample was collected. The sample identifier is recorded in the field logbook *only* and is not provided on the sample label or chain-of-custody (COC) form. The sample identifier is a multiple-part code. The first component begins with the letter abbreviation; for example, "SWNS" or "SWNB" to designate the surface water sample was collected from the near-surface or near-bottom of the water column. The second part could identify the sampling event; for example, "1" to designate Round 1 sampling. The third part could contain an abbreviation for whether the station is a single point (SP), a transect (TR), a composite (CO), or a vertically integrated station (VI). The station number would be the final component of the sample identifier. Use leading zeros for stations with numbers below 100 for ease of data management and correct data sorting.

  If appropriate, add a supplemental component to the sample identifier to code field

duplicate samples and splits. Use a single letter (i.e., a suffix of "A" and "B") to indicate field duplicates or splits in the final component of the sample identifiers. For equipment decontamination blanks, assign sequential numbers starting at 900 instead of station numbers. Use a sample type code that corresponds to the sample type for which the decontamination blank was collected. Additional codes may be adopted, if necessary, to reflect sampling equipment requirements (see project-specific SAP).

Examples of sample IDs are as follows:

- SWNS-1-SP-002: Surface water sample collected from the near-surface at a single point during Round 1 from Station 2.
- SWNB-1-TR-010-A: Duplicate surface water sample from the near-bottom transect during Round 1 from Station 10.

- **Sample Number**—The sample number is an arbitrary number assigned to each distinct sample or split that is shipped to the laboratory for separate analysis. The sample number appears on the sample containers and the COC forms. Each sample will be assigned a unique sample number. All aliquots of a composited field sample will have the same sample number. In cases where samples consist of multiple bottles from the same location, assign each bottle the same sample number and time. However, assign replicates from the same location different sample numbers and times. Sample numbers of related field replicates will not necessarily have any shared content.

  Each field split of a single sample will also have a different sample number and time. The sample number is generally a unique six-digit number that includes a two-digit media code and a four-digit number. The media code may be site-specific, but the Integral default codes are as follows:

  - SS—Surface soil
  - BH—Subsurface soil or rock (typically from borehole)
  - GW—Groundwater
  - SW—Surface water
  - PW—Pore water
  - SD—Sediment
  - BT—Biota or biological tissue

  The exact sample numbering scheme may vary from project to project. Variances in the sample numbering scheme will be described in the project-specific SAP for the field event. Example sample numbers are PW0001, PW0002, PW0003, etc.

- **Tag Number—**Attach a different tag number to each sample container. If the amount of material (i.e., everything associated with a single sample number) is too large for a single container, assign each container the same sample number and a different sample tag. A sample will also be split between containers if a different preservation technique is used for each container (i.e., because different analyses will be conducted).

  The sample tag number is a unique five- or six-digit number assigned to each sample label (or "tag") for multiple bottles per sample. Integral sample labels come with a preprinted sample tag number. The tag number provides a unique tracking number to a specific sample bottle. This allows for greater flexibility in tracking sample bottles and assists in field quality control when filling out documentation and shipping. Sample tags are not used by many other consultants, and there may be resistance from such firms during teaming situations. However, experience has shown that tags can be very valuable, both in the field and while processing data from field efforts.

  Record tag numbers on the COC form. Laboratories use tag numbers only to confirm that they have received all of the containers that were filled and shipped. Data are reported by sample number.

Assign sample numbers sequentially in the field; sample labels are preprinted with sequential tag numbers.

SAMPLE LABELS

Integral sample labels are designed to uniquely identify each individual sample container that is collected during a sampling event. Field sampling teams are provided with preprinted sample labels, which must be affixed to each sample container used. Fill out the labels at the time the samples are collected, documenting the following information:

- Sample number
- Site name or project number
- Date and time sample is collected
- Initials of the samplers
- Preservatives used, if any
- A unique number (commonly referred to as the "Tag Number") that is preprinted on the label consisting of five or six digits; used to identify individual containers.

SAMPLE TAGS

Integral sample tags are designed to be affixed to each container that is used for a sample. Sample tags are required only for environmental samples collected in certain U.S.

Environmental Protection Agency (EPA) regions (e.g., EPA Region 5). Field crews are provided with preprinted sample tags. Attach sample tags to each individual sample container with a rubber band or wire through a reinforced hole in the tag. Mark all sample tag entries with indelible ink. Fill out the tags at the time the samples are collected, documenting the following information:

- Sample number
- Site name or project number
- Date and time sample is collected
- Initials of the samplers
- Preservatives used, if any
- Type of analysis.

A space for the laboratory sample number (provided by the laboratory at log-in) will also be provided on the sample tag.

INTERNAL SAMPLE LABELS

For benthic infaunal samples, wash away the sediment from the sample and collect the remaining benthic infauna into a sample container. Affix sample label (as discussed above) to the outside of the sample container. In addition, place an internal sample label inside the sample container. This internal sample label is made of waterproof paper; be sure to make all internal sample label entries with pencil. Fill out the internal sample labels at the time the samples are collected, documenting the following information:

- Sample number
- Site name or project number
- Date and time sample is collected
- Initials of the samplers
- Preservative used (e.g., formalin).

STANDARD OPERATING PROCEDURE (SOP) GW-01

DECONTAMINATION OF GROUNDWATER SAMPLING EQUIPMENT

SCOPE AND APPLICATION

This SOP describes procedures for decontaminating sampling equipment used for groundwater sampling that could come in contact with contaminated media. To prevent potential cross contamination of samples, all reusable groundwater sampling and processing equipment will be decontaminated before each use. At the sample collection site, a decontamination area will be established in a clean location, upwind of actual sampling locations, if possible. This decontamination area is where all groundwater sampling and processing equipment will be cleaned. Decontaminated equipment will be stored away from areas that may cause recontamination. When handling decontamination chemicals, field personnel will follow all relevant procedures and will wear protective equipment as stipulated in the site-specific health and safety plan.

This SOP describes procedures for decontaminating sampling and processing equipment contaminated by either inorganic or organic materials. General procedures were adopted from the Standard Practice for Decontamination of Field Equipment Used at Waste Sites (ASTM 2002).

EQUIPMENT AND REAGENTS REQUIRED

- Plastic sheeting
- 55-gal, U.S. Department of Transportation-approved drums (if required)
- Alconox® or Liquinox® detergent
- Acid rinses (for inorganic constituent sampling); either reagent-grade diluted nitric or hydrochloric acid (if required)
- Solvent rinses (for organic constituent sampling); either pesticide-grade hexane, isopropanol, or acetone (if required)
- Deionized/distilled water (generally provided by laboratory) and potable water
- 5-gal buckets or other appropriate containers

- 4-ft length of 2-in. polyvinyl chloride (PVC) tubing with an end cap (if required)
- Scrub brushes
- Personal protective equipment, including appropriate gloves and goggles.

PROCEDURES

The following sections detail the procedures for decontaminating sampling equipment that has been, or could be, contaminated with inorganic or organic chemicals and for decontaminating the submersible pump.

Inorganic Chemicals—Decontamination of Sampling Equipment

1. Wipe equipment free of gross solids.
2. Wash equipment with an Alconox® or Liquinox® solution, scrubbing off any residue.
3. Rinse generously with potable water.
4. Rinse equipment with acid (0.1 N nitric or hydrochloric) if specified in the site sampling and analysis plan (SAP).
5. Rinse with deionized water.
6. Allow to air dry, if practical.
7. Wrap equipment in new aluminum foil if it will not be used promptly.
8. Place all sampling equipment, gloves, and other disposable materials in garbage bags after decontaminating. The wash and rinse must be placed in containers for proper disposal.

Organic Chemicals—Decontamination of Sampling Equipment

1. Wipe equipment free of gross solids.
2. Wash equipment with an Alconox® or Liquinox® solution, scrubbing off any residues.
3. Rinse generously with tap water.
4. Rinse equipment with solvent (pesticide-grade hexane, isopropanol, or acetone) if specified in the site SAP.
5. Rinse with deionized water.
6. Allow to air dry, if practical.
7. Wrap equipment in new aluminum foil if it will not be used promptly.

8. Place all sampling equipment, gloves, and other disposable materials in garbage bags after decontaminating. Place wash and rinse fluids in containers for proper disposal.

Decontamination of Submersible Pump

1. Place the pump in a 5-gal bucket containing potable water and a small amount of Alconox® or Liquinox® detergent. Place discharge hose into same bucket.
2. Turn on the system and pump water through the sampling system. Add more potable water as needed and pump for 2 minutes.
3. Place the pump into a second 5-gal bucket containing tap water leaving the discharge hose in the first bucket. Turn on the system and pump until the soapy water is purged from the pump and tubing. Place the discharge hose into the second 5-gal bucket of water and pump for 1 minute.
4. Turn off system and place the pump into the 4-ft section of 2-in. inside diameter PVC tubing fitted with an end cap. Pour organic-free deionized water into the decontamination tube. Stand by with additional deionized water.
5. Turn on the pump and pull deionized water through the system. Add more water until at least 3 L of deionized water is pumped through the system.
6. Remove the pump from the decontamination tube.
7. Place all sampling equipment, gloves, and other disposable materials in garbage bags after decontaminating. Place wash and rinse fluids in containers for proper disposal.

REFERENCE

ASTM. 2002. Standard practice for decontamination of field equipment used at waste sites. D5088-02. American Society for Testing and Materials, West Conshohocken, PA.

STANDARD OPERATING PROCEDURE (SOP) GW-02

MEASUREMENT OF DEPTH TO WATER

SCOPE AND APPLICATION

This SOP describes the required equipment and the procedures used for the collection of water level data. Alternate equipment may be used if necessary, as long as the general procedures described below are followed. Typically water levels are collected from all the site wells as expeditiously as possible so that the water level data can be used to create potentiometric surface maps that are representative of a "single" point in time. This SOP does not address interpretation of water level data and the special care and hydraulic expertise that should be used to interpret water level data sets in unique environments (i.e., tidally influenced wells).

Depth to groundwater surface is measured using an electric water level meter. A light on the water level meter illuminates and an alarm sounds when the weighted probe tip contacts the water surface in the well and completes an electronic circuit. The measured depth to water is determined to within 0.01 ft by noting the point on the probe cable that corresponds to the measuring point at the top of the well/piezometer casing at the initial point of contact. The measuring point should be notched at the lip of the casing, typically either on the high side or on the north side.

EQUIPMENT AND REAGENTS REQUIRED

- Electronic water level indicator (Solinst® or equivalent)
- Potable and distilled/deionized water
- Alconox® or Liquinox® detergent
- Tape measure with stainless steel weights
- Disposable bailer (if light, nonaqueous-phase liquid [LNAPL] conditions are unknown)

PROCEDURES

Water Level Measurements

1. Check the operation of the meter by turning on the indicator switch and pressing the test button.
2. Open well cap to allow equilibration with ambient atmospheric pressure.
3. Monitor air quality at the well head if volatile contaminants are or may be present, or as specified by the project-specific health and safety plan.
4. Check for possible presence of LNAPL using a new 3-ft long disposable bailer affixed to nylon rope if conditions are unknown. Gradually lower the bailer until the bottom of the bailer is approximately 2 ft below the top of the water surface. Slowly raise the bailer to the surface and measure the product thickness using a tape measure. Record the measurement in the field logbook. Properly dispose of the bailer.
5. Decontaminate the probe and graduated cable with an Alconox® or Liquinox® solution followed by a distilled or deionized water rinse.
6. Hold the water level indicator and cable reel above the well casing and lower indicator probe and cable gradually into well until a tone (e.g., buzzer) and/or the indicator light illuminates, denoting that the indicator probe has made contact with the water surface. Stop lowering the cable.
7. Note the point on the graduated cable that corresponds to the measuring point at the top of the casing when the electronic circuit is first completed. If necessary, grasp tape with thumb and index finger exactly at the measuring point marked at the top of the well casing. Pull tape out of well slowly and read the measurement.
8. Draw the cable about 1 ft above the surface of the water, then lower it and repeat Steps 6 through 8. If the two readings differ by more than 0.01 ft, repeat until the measured readings stabilize. Water level records should always use the measurement taken as the indicator is lowered into the well, not as it is raised.
9. Remove the cable from the well or piezometer.
10. Record the stabilized depth-to-water measurement in the field logbook.
11. Decontaminate the probe and graduated cable with Alconox® and tap-water wash and distilled or deionized water, as appropriate.

12. Lower a weighted steel measuring tape slowly from center of well or piezometer if the total depth of the well needs to be measured. Alternately, the water level meter can be used to measure the total depth of the well. However, when measuring the total depth, the depth from the measuring point of the probe to the bottom of the probe must be **added** to the measurement because the graduated cable is referenced to the point of the probe where the electronic circuit is completed. Sounding the bottom of the well prior to sampling of the well is **NOT** recommended because of the potential for resuspension of settled formation solids in the well.
13. Draw tape up very slowly until it is taut again when the weight hits the bottom or until the tape slackens noticeably.
14. Note the tape reading at level of casing top. Record this as well depth in the field logbook to the nearest 0.01 ft.

STANDARD OPERATING PROCEDURE (SOP) GW-03

LOW-FLOW GROUNDWATER SAMPLING

SCOPE AND APPLICATION

This SOP presents the methods to be used for monitoring well purging and groundwater sampling using low-flow (minimal drawdown) sampling methods. The procedures outlined in this SOP are in accordance with groundwater sampling methods recommended by USEPA (1992, 1996). Details on site-specific sampling activities, equipment selection (i.e., pumps), site-specific field parameters, field quality control and quality assurance (QA/QC) samples, and laboratory analyses are presented in the work plan, field sampling plan (FSP), or quality assurance program plan (QAPP). Where possible, sampling should first be conducted in areas least affected by chemicals of interest, followed by increasingly affected areas (i.e., clean to dirty).

EQUIPMENT REQUIRED

- Electronic water level meter
- Groundwater parameter meter capable of measuring field parameters required by the FSP or the QAPP
- Flow-through cell
- Sampling equipment (one from list):
  - Submersible pump (bladder or Grundfos®): pump, control box, power source (typically a portable generator or 12V battery)
  - Peristaltic pump: pump with pump head, silicone tubing, tubing connectors, power source (typically 12 V battery)
- Decontamination equipment and supplies (buckets, scrub brushes, deionized or distilled water, potable water, and Liquinox® or Alconox® detergent)
- Groundwater sampling forms and logbook
- Sample tubing (type and length are project- and site-dependent)
- Sample tags/labels and appropriate documentation (e.g., chain-of-custody forms, logbook, and groundwater sample collection forms)

- Insulated cooler(s), chain-of-custody seals, Ziploc® bags
- Sample containers with preservative (if required), coolers, and ice.

PROCEDURES

The following sections provide guidelines for preparation for purging, well purging, and groundwater sampling.

Preparation for Purging

Preparation for purging includes inspecting the condition of the well, monitoring health and safety conditions, and calibrating and decontaminating sampling equipment. General procedures are presented below:

1. Ensure that the area around well head is clean and free of debris. If necessary, place a plastic drop cloth around well head to prevent sampling equipment from coming into contact with the ground surface.
2. Inspect condition of well (e.g., well in locked position, tightness of cap, measuring point well marked, disturbance of surface casing, straightness of well casing, condition of concrete pad). Indicate condition of well on the sampling form.
3. Remove well cap. If the site health and safety plan (HSP) identifies organic compounds as potential contaminants of concern, screen well headspace and breathing-zone headspace (if specified in the HSP) for organic vapors using the appropriate field monitoring instrument (e.g., photoionization detector).
4. Decontaminate all equipment (as specified in the FSP, QAPP, or in accordance with SOP GW-01) before use in each well. Wear nitrile gloves and/or other protective equipment as specified in the site-specific HSP during possible water-contact or equipment-contact activities. At a minimum, change gloves between each well or when it is possible for potential contaminants to be introduced into the well.
5. Measure water level using a decontaminated electronic water level meter as described in SOP GW-02 when the water level in the well has equilibrated.
6. Obtain a sample from the well using a bailer and observe the contents for evidence of free floating product (SOP GW-02), if suspected (see FSP or QAPP). Alternatively, measure free product thickness using an oil–water interface probe.
7. Calculate the well casing volume as follows:

$$\text{well casing volume (gal)} = \pi(r^2)(h)(7.48\ \text{gal/ft}^3)$$

Where:

h	=	height of water in the well casing (i.e., depth to bottom of the well minus depth to water) in feet
r	=	radius of the inside of the well casing in feet.

8. Calibrate water quality meters for measuring field parameters as appropriate. At a minimum, collect temperature, pH, and specific conductance measurements during purging and prior to sampling. Other field parameters, including dissolved oxygen, redox potential, and turbidity (recommended for inorganics) may be required as specified in the work plan or FSP. Record equipment calibration and maintenance in the field logbook. Decontaminate meters between wells by rinsing with distilled or deionized water. Manage rinsate water used for these measurements in the same manner as purge water, as defined in the work plan or FSP.

Well Purging

Monitoring wells are purged before groundwater samples are collected for analyses. The purpose of well purging is to remove stagnant groundwater from the well. Field parameters (i.e., pH, temperature, specific conductance, redox potential, dissolved oxygen, and turbidity) are measured during the purging process to verify that stagnant water has been removed and that groundwater conditions are stable prior to sampling to ensure a representative groundwater sample is collected. A variety of pumps can be used to purge and sample the monitoring well (refer to the FSP or QAPP for the specified pump type). Refer to the manufacturer's instructions for operation of the specified pump. General procedures for purging are as follows:

1. Remove well cap.
2. Connect pump.

   Submersible Pump (bladder or Grundfos):

   a. Remove the pump from the pump holder and rinse with distilled water.

   b. Connect appropriate length of tubing to pump.

   c. Connect the pump to control box.

   d. Connect the control box to the power supply.

   Peristaltic Pump:

   a. Connect new or pre-cleaned tubing to peristaltic pump.

   b. Connect the pump to the power supply.

c. Lower the pump intake or intake tubing (as applicable) into the water column. The pump intake should be placed at the middle or slightly above the middle of the screened interval in confined aquifers (USEPA 1996) or in unconfined aquifers not screened across the water table. Place the pump intake near the top of the water column for unconfined aquifers screened across the water table (USEPA 1996).

3. Insert multimeter into flow-through cell. Connect the discharge hose from the pump to the flow-through cell. Direct discharge from flow-through cell to an appropriately sized container to manage purge water. **DO NOT** immerse water quality meter probes into purge water containing free product because this may damage the probes.
4. Turn on the pump. Conduct purging at a rate that will minimize drawdown in the well (i.e., purge at a rate less than or equal to recharge, if possible). Recommended purge rates are generally less than 0.13 gal/min (0.5 L/min) (USEPA 1996), or a rate that results in minimal (i.e., less than 0.3 ft) of drawdown in the well. Actual purge rates will vary based on aquifer material and well construction.
5. Record field parameters on the groundwater sampling form or logbook every 3 to 5 minutes. Purging should continue at a constant rate until the water quality parameters have stabilized for three successive measurements according to the stabilization criteria provided in the table below (USEPA 1996). In the event that even very low purge rates result in evacuation of the well, collect groundwater samples for laboratory analyses as soon as sufficient groundwater accumulates in the well, regardless of the stabilization of field parameters.

Field Parameter	Stabilization Criteria
Temperature	± 1°C
pH	± 0.1 standard units
Specific Conductance	± 3 percent
Dissolved Oxygen	± 10 percent
Redox Potential	± 10 mV
Turbidity (nephelometric turbidity units)	± 10 percent

Groundwater Sample Collection

Groundwater sampling is conducted following proper purging of the well. Where possible, groundwater samples for analyses should be collected directly from the pump discharge at the lowest rate possible to minimize cross contamination, suspension of solids, and aeration of the sample.

Sample groundwater after the water quality parameters have stabilized. The general procedures for groundwater sample collection are as follows:

1. Turn down flow rate on the control box so that water flow is stopped or minimal while maintaining sufficient pressure in the system to prevent water in the tubing or flow-through cell from flowing back into the well. If a peristaltic pump is used, turn off the pump. Take care not to release the pump head because the loss of suction will cause the water in the tubing to drain back into the well.
2. Disconnect the pump discharge hose from flow-through cell or cut the tubing just before the connection to the flow-through cell.
3. Introduce groundwater samples directly from the pump discharge tube into the proper sample container and fill it to capacity. Place a bucket beneath the sampling tube to catch any unsampled water. Target analytes, container types, and preservatives are specified in the FSP or QAPP.
4. Collect groundwater samples for multiple compounds in the recommended following order (USEPA 1992):
   - Volatile organic compounds (VOCs)
   - Dissolved gases and total organic carbon (TOC)
   - Semivolatile organic compounds (SVOCs)
   - Metals and cyanide
   - Major water quality cations and anions
   - Radionuclides.
5. Increase pump flow rate slightly so that the flow rate is approximately the same as was used for purging and fill necessary sample bottles. If sampling for VOCs, flow rate should be just enough to create a trickle of water. If sampling for other analytes, flow rate may be increased. When collecting samples for VOCs, direct the flow from the pump discharge down the side of the sample container to minimize aeration. Hold caps in hand to minimize contamination of sample. Fill all VOC sample containers to the top. A positive meniscus at the top of the container will help ensure that no air is trapped inside when cap is screwed down on the container. No air bubbles should be trapped in the sample when the container is sealed. VOC sample bottles must be checked after filling to ensure no air bubbles are present. Invert the bottle and lightly tap it to release any bubbles beneath the cap. If an air bubble is present, the VOC sample must be retaken using a fresh bottle.

6. Conduct field filtration, if required by the FSP or QAPP (recommended for inorganic analytes). If applicable, attach a new, disposable filter cartridge (typically 0.45 μm) to the discharge line. Collect filtered samples last and pre-rinse them by running a minimum of 0.25 gal of groundwater through them prior to collecting the sample (USEPA 1996). Introduce filtered water directly into the appropriate sample container. Note that alternate field filtration methods may be specified in the FSP or QAPP.
7. Collect QA/QC samples (i.e., duplicate, equipment rinsate, trip blank, laboratory matrix spike, and laboratory matrix spike duplicate, as applicable) at the same time by filling all bottles from the same flow. The number and types of QA/QC samples are specified in the FSP or QAPP.
8. Label sample bottles with date, sample number, time, sampler's name, and type of preservative, as described in the project-specific QAPP and in accordance with SOP AP-04. Place sample bottles in a cooler or on ice to keep samples cool (4°C). Samples must be cooled continuously from the time of collection to the time of receipt at the laboratory, as described in SOP AP-01.
9. Reconnect the discharge tubing to the flow-through cell with the multimeter. Continue pumping for 1 to 2 minutes and collect a set of post-sampling field parameters. Record the parameters on the groundwater sampling form or in the logbook.
10. Remove pump and/or tubing from the well. Close and lock the well. Decontaminate the sampling equipment in accordance with SOP GW-01. Purge, wash, and rinse water should be managed as specified in the FSP or QAPP.
11. Complete chain-of-custody form, package samples for shipment, and ship samples or arrange for courier to laboratory.
12. Document all field observations made and data generated in conjunction with the sample collection on the groundwater field sampling form.

REFERENCES

USEPA. 1992. RCRA ground-water monitoring: draft technical guidance. U.S. Environmental Protection Agency, Office of Solid Waste, Washington, DC.

USEPA. 1996. Low-flow (minimal drawdown) ground-water sampling procedures. EPA/540/S-95/504. U.S. Environmental Protection Agency, Office of Research and Development, Office of Solid Waste and Emergency Response, Washington, DC.

STANDARD OPERATING PROCEDURE (SOP) SL-01

DECONTAMINATION OF SOIL SAMPLING EQUIPMENT

SCOPE AND APPLICATION

This SOP describes procedures for decontaminating sampling and processing equipment contaminated by either organic or inorganic materials. To prevent potential cross contamination of samples, all reusable soil sampling and processing equipment is decontaminated before each use. At the sample collection site, a decontamination area is established in a clean location that is upwind of actual sampling locations, if possible. All soil sampling and processing equipment is cleaned in this location. Decontaminated equipment is stored away from areas that may cause recontamination. When handling decontamination chemicals, field personnel must follow all relevant procedures and wear protective clothing as stipulated in the site-specific health and safety plan (HSP).

Sampling equipment may be used to collect samples that will 1) undergo a full-suite analysis (organics, metals, and conventional parameters) or 2) be analyzed for metals and conventional parameters only. Decontamination of sampling equipment (e.g., hand auger, split-spoon sampler) used for both analyte groups should follow the order of a detergent wash, site water rinse, organic solvent rinses, and final site water rinse. Sample processing equipment (e.g., bowls, spoons) is rinsed with distilled/deionized water instead of with site water.

EQUIPMENT AND REAGENTS REQUIRED

Equipment required for decontamination includes the following:

- Steam cleaner and collection basin (if required)
- 55-gal, Department of Transportation (DOT)-approved drums (if required)
- Polyethylene or polypropylene tub (to collect solvent rinsate)
- Plastic bucket(s) (e.g., 5-gal bucket)
- Tap water or site water (i.e., potable water)
- Carboy, distilled/deionized water (analyte-free; received from testing laboratory or other reliable source)
- Properly labeled squirt bottles

- Funnels
- Alconox®, Liquinox®, or equivalent industrial nonphosphate detergent
- Pesticide-grade ethanol and hexane (consult project-specific field sampling plan [FSP], as the solvents may vary by U.S. Environmental Protection Agency [EPA] region or state)
- 10 percent diluted nitric acid or hydrochloric acid (reagent grade) for inorganic contaminants (if required; see project-specific FSP)
- Baking soda (if required)
- Long handled, hard-bristle brushes
- Plastic sheeting, garbage bags, and aluminum foil
- Personal protective equipment as specified in the HSP.

PROCEDURES

Decontamination Procedures for Full Suite Analysis (Organic, Metal, or Conventional Parameters)

Two organic solvents are used in this procedure. The first is miscible with water (e.g., ethanol) and is intended to scavenge water from the surface of the sampling equipment and allow the equipment to dry quickly. This allows the second solvent to fully contact the surface of the sampler. Make sure that the solvent ordered is anhydrous or has a very low water content (i.e., <1 percent). If ethanol is used, make sure that the denaturing agent in the alcohol is not one of the sample analytes. The second organic solvent is hydrophobic (e.g., hexane) and is intended to dissolve any organic chemicals that are on the surface of the equipment.

The exact solvents used for a given project may vary by EPA region or state (see project-specific FSP). Integral uses ethanol and hexane as preferred solvents for equipment decontamination. If specified in the project-specific FSP, isopropanol or acetone can be substituted for ethanol, and methanol can be substituted for hexane in the decontamination sequence. The choice of solvents is also dependent on the kind of material from which the equipment is made (e.g., acetone cannot be used on polycarbonate), and the ambient temperature (e.g., hexane is too volatile in hot climates). In addition, although methanol is slightly more effective than other solvents, its use is discouraged because of its potential toxicity to sampling personnel. Always follow the procedures listed in the site-specific HSP when decontaminating sampling equipment (e.g., always stand upwind when using volatile solvents, wear appropriate gloves and safety glasses or goggles). Containerize all decontamination fluids for proper disposal, following procedures listed in the FSP.

The specific procedures for decontaminating soil sampling equipment and soil compositing equipment are as follows:

1. Rinse the equipment thoroughly with tap or site water to remove visible soil. This step should be performed onsite for all equipment. After removing visible solids, set aside sampling equipment that does not need to be used again that day and see that it is thoroughly cleaned in the field laboratory at the end of the day.
2. Pour a small amount of concentrated laboratory detergent into a bucket (i.e., about 1 to 2 tablespoons per 5-gal bucket) and fill it halfway with tap or site water. If the detergent is in crystal form, make sure all crystals are completely dissolved prior to use.
3. Scrub the equipment in the detergent solution using a long-handled brush with rigid bristles, using a back-and-forth motion. Be sure to clean the outside of the compositing bowls and other pieces that may be covered with soil.
4. Double rinse the equipment with tap or site water and set upright on a stable surface to drain. The more completely the equipment drains, the less solvent will be needed in the next step. Do not allow any surface that will come in contact with the sample to touch any contaminated surface. If acid and solvent rinses are not required by the FSP, skip to step 8.
5. If an acid rinse is required by the FSP, rinse the equipment using a squirt bottle using a 10 percent acid solution. Double-rinse equipment with tap or site water and set right-side-up on a stable surface to drain. If solvent rinses are not required by the FSP, skip to step 8.
6. Carefully rinse the equipment with ethanol from a squirt bottle, and let the excess solvent drain into a waste container (which may need to be equipped with a funnel). These solvents act primarily as a drying agent by scavenging water from the equipment surface and carrying it away, but they also work as a solvent for some organic contamination. Hand-augers must be held over the waste container and turned slowly so the stream of solvent contacts the entire surface. The sample apparatus may be turned on its side, and if applicable, opened to be washed more effectively. Set the equipment in a clean location and allow it to air dry. Use only enough solvent to scavenge all of the water and flow off the surface of the equipment (i.e., establish sheet flow) into the waste container. Allow equipment to drain as much as possible. Ideally, the equipment will be dry. The more thoroughly it drains, the less solvent will be needed in the next step.
7. Carefully rinse the drained or air-dried equipment with hexane from a squirt bottle, and let the excess solvent drain into the waste container, which may need to be equipped with a funnel. Hexane acts as the primary solvent of organic chemicals. Ethanol is soluble in hexane but water is not. If water beading occurs, it means that the

equipment was not thoroughly rinsed with ethanol or that the ethanol that was purchased was not free of water. When the equipment has been rinsed with hexane, set it in a clean location and allow the hexane to evaporate before using the equipment for sampling. Use only enough solvent to scavenge all of the ethanol and flow off the surface of the equipment (i.e., establish sheet flow) into the waste container.

8. Do a final rinse with site water for the sampling equipment (i.e., hand-auger) and distilled/deionized water for the processing equipment (i.e., stainless-steel bowls and spoons). Equipment does not need to be dried before use.
9. If the decontaminated sampling equipment is not to be used immediately, wrap small stainless-steel items in aluminum foil (dull side facing the cleaned area).

   If the sample collection or processing equipment is precleaned at the field laboratory and transported to the site, then the decontaminated equipment will be wrapped in aluminum foil (dull side facing the cleaned area) and stored and transported in a clean plastic bag (e.g., a trash bag) until ready for use, unless the project-specific FSP lists special handling procedures.
10. After decontaminating all of the sampling equipment, dispose of the disposable gloves and used foil per the procedures listed in the project-specific FSP. When not in use, keep the waste solvent container closed and store in a secure area. The waste should be transferred to empty solvent bottles for disposal at a licensed facility per the procedures listed in the project-specific FSP. When not in use, keep the waste acid container closed and store in a secure area. The acid waste should be neutralized with baking soda or containerized and disposed of per the procedures listed in the project-specific FSP.

Decontamination Procedures for Metals and Conventional Parameters Only

The specific procedures for decontaminating soil sampling equipment and soil processing equipment are as follows:

1. Rinse the equipment thoroughly with tap or site water to remove the visible soil. Perform this step onsite for all equipment. Set aside any pieces that do not need to be used again that day see that they are thoroughly cleaned in the field laboratory at the end of the day.
2. Pour a small amount of concentrated laboratory detergent into a bucket (i.e., about 1 to 2 tablespoons per 5-gal bucket) and fill it halfway with tap or site water. If the detergent is in crystal form, make sure all crystals are completely dissolved prior to use.

3. Scrub the equipment in the detergent solution using a long-handled brush with rigid bristles. Be sure to clean the outside of the compositing bowls and other pieces that may be covered with soil.
4. Double-rinse the equipment with tap or site water (if an acid rinse is required) or with distilled/deionized water (if no acid rinse) and set right-side-up on a stable surface to drain. Do not allow any surface that will come in contact with the sample to touch any contaminated surface.
5. If an acid rinse is required by the FSP, rinse the equipment using a squirt bottle containing a 10 percent acid solution. Double-rinse equipment with distilled/deionized water and set right-side-up on a stable surface to drain.
6. If the decontaminated sampling equipment is not to be used immediately, wrap small stainless-steel items in aluminum foil (dull side facing the cleaned area).

   If the sample collecting or processing equipment is cleaned at the field laboratory and transported to the site, then the decontaminated equipment will be wrapped in aluminum foil (dull side facing the cleaned area) and stored and transported in a clean plastic bag until ready for use, unless the project-specific FSP lists special handling procedures.
7. After decontaminating all of the sampling equipment, place the disposable gloves and used foil in garbage bags for disposal in a solid waste landfill. When not in use, keep the waste acid container closed and store in a secure area. The acid waste should be neutralized with baking soda and disposed of per the procedures listed in the project-specific FSP.

Decontamination Procedures for Drill Rig or Test Pit Sampling Equipment

1. Decontaminate sampling equipment before use, between samples and stations, and upon completion of sampling operations.
2. Equipment used during drilling/test pit operations should be decontaminated in the Exclusion Zone prior to transport to the Support Zone (refer to site-specific HSP).
3. If the steam-cleaning location is in an area outside of the Exclusion Zone, remove loose soil on the drill rig, augers, drill pipe, and rods, and other large equipment at the drill site, then move the equipment directly to the steam-cleaning decontamination area for more thorough cleaning.
4. To decontaminate a drill rig or backhoe, pressure wash with a steam cleaner using potable water rinse upon mobilization, between drilling locations, and upon demobilization. Cleaning water can generally be allowed to drain directly on the ground near the station (refer to the FSP).

5. To decontaminate auger, drill rods, and other down-hole tools, pressure wash with a steam cleaner and potable water rinse upon mobilization, between drilling locations, and upon demobilization. All decontamination fluids are to be containerized for proper disposal.
6. To decontaminate split-spoon and hand-auger samplers, follow the decontamination procedures listed above (the selected decontamination procedures is dependent upon analyte list provided in the project-specific FSP). To the extent possible, allow to air dry prior to sampling. If the split-spoon is not used immediately, wrap it in aluminum foil. All decontamination fluids are to be containerized for proper disposal.

STANDARD OPERATING PROCEDURE (SOP) SL-06

LOGGING OF SOIL BOREHOLES

SCOPE AND APPLICATION

This SOP describes how to complete a Soil Boring Log form, which must be completed for Integral projects where soil boring techniques are performed during field exploration. A correctly completed form contains all of the information that must be recorded in the field to adequately characterize soil boreholes.

These procedures are adapted from ASTM D-2488-00. Field staff are encouraged to examine ASTM D-2488-00 in its entirety. This SOP represents minor modifications to emphasize environmental investigations rather than geotechnical investigations, for which the standards were written. Because each environmental project is unique and because job requirements can vary widely, the minimum standards presented may need to be supplemented with additional technical descriptions or field test results. However, all soil boring field logs, regardless of special project circumstances, must include information addressed in this SOP to achieve the minimum acceptable standards required by Integral.

LOG FORM INFORMATION

Project Number—Use the standard contract number.

Client—Identify the name of the client and the project site location.

Location—If stations, coordinates, mileposts, or similar markers are applicable, use them to identify the location of the project. If this information is not available, identify the facility (e.g., 20 ft NE of Retort #1).

Drilling Method—Identify the bit size and type, drilling fluid (if used), and method of drilling (e.g., rotary, hollow-stem auger, cable tool) and the name of the drill rig (e.g., Mobil B 61, CME 55).

Diameter—Provide the diameter of the borehole. If the borehole has variable diameters, provide the depth interval for each diameter.

Sampling Method—Identify the type of sampler(s) used (e.g., standard split spoon, Dames & Moore sampler, grab).

Drilling Contractor—Provide the name of the drilling contractor.

Integral Staff—Enter the name(s) of Integral staff members performing logging and sampling activities.

Water Level Information—Provide the date, time, depth to static water, and casing depth. Generally, water levels should be taken each day before resuming drilling and at the completion of drilling. If water is not encountered in the boring, this information should be recorded.

Boring Number—Provide the boring number. A numbering system should be developed prior to drilling that does not conflict with other site information, such as previous drilling or other sampling activities.

Sheet—Number the sheets consecutively for each boring and continue the consecutive depth numbering.

Drilling Start and Finish—Provide the drilling start and finish dates and times.

For consecutive sheets, provide (at a minimum) the job number, boring number, and sheet number.

TECHNICAL DATA

Sampler Type—Provide the sampler type (e.g., SS = split spoon, G = grab).

Depth of Casing—Enter the depth of the casing below ground surface immediately prior to sampling.

Driven/Recovery—Provide the length that the sampler was driven and the length of sample recovered in the sampler. This column would not apply to grab samples.

Sample Number/Sample Depth—Provide the sample number. The sample numbering scheme should be established prior to drilling. One method is to use the boring number and consecutive alphabetical letters. For instance, the first sample obtained from boring MW-4 would be identified as 4A, the second would be identified as 4B, and so on. Another method for sample identification is naming the boring number with the depth. For example, the sample from Boring 1 at 10 ft would be labeled B1-10'. The depth of the sample is the depth of the casing plus the length to the middle of the recovered sample to the nearest 0.1 ft. Typically, split spoon samplers are 18 in. long. Samples should be obtained from the middle of the recovered sample. The depth of the sample with the casing at 10 ft would then be 10.7 ft.

Number of Blows—For standard split-spoon samplers, record the number of blows for each 6 in. of sampler penetration. A typical blow count of 6, 12, and 14 is recorded as 6/12/14. Refusal is a penetration of less than 6 in. with a blow count of 50. A partial penetration of 50 blows for 4 in. is recorded as 50/4". Total blows will be recorded for nonstandard split spoons (e.g., 5-ft tube used for continuous sampling).

Blank Columns—Two blank columns are provided. Use these columns for site-specific information, usually related to the chemicals of concern. Examples for a hydrocarbon site would be sheen and photoionization detector readings of the samples.

Depth—Use a depth scale that is appropriate for the complexity of the subsurface conditions. The boxes located to the right of the scale should be used to graphically indicate sample locations as shown in the example.

Surface Conditions—Describe the surface conditions (e.g., paved, 4-in. concrete slab, grass, natural vegetation and surface soil, oil-stained gravel).

Soil Description—Enter the soil classification and definition of soil contacts using the format described in SOP SL-04, *Field Classification of Soil*.

Comments—Include all pertinent observations. Drilling observations might include drilling chatter, rod-bounce (boulder), sudden differences in drilling speed, damaged samplers, and malfunctioning equipment. Information provided by the driller should be attributed to the driller. Information on possible contaminants might include odor, staining, color, and presence or absence of some indicator of contamination. Describe what it is that indicates contamination (e.g., fuel-like odor, oily sheen in drill cuttings, yellow water in drill cuttings).

ATTACHMENT 1. SOIL BORING LOG FORM

integral consulting inc.
319 SW Washington St., Suite 1150
Portland, OR 97204
(503) 284-5545

STATION NUMBER
PROJECT
LOCATION
PROJECT NUMBER
LOGGED BY

SAMPLE INFORMATION						STRATA	DESCRIPTION
Sample ID	Depth	Time	Tag No.	% Recov.	Depth (Feet)		USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.
					2--		
					4--		
					6--		
					8--		
					10--		
					12--		
					14--		

DRILLING CONTRACTOR
DRILLING METHOD
SAMPLING EQUIPMENT
DRILLING STARTED
COORDINATES
SURFACE ELEVATION
DATUM

Location Sketch

ATTACHMENT 2. ASTM D 2488 – 00, STANDARD PRACTICE FOR DESCRIPTION AND IDENTIFICATION OF SOILS (VISUAL-MANUAL PROCEDURE)

Designation: D 2488 – 00

Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)[1]

This standard is issued under the fixed designation D 2488; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

This standard has been approved for use by agencies of the Department of Defense.

1. Scope *

1.1 This practice covers procedures for the description of soils for engineering purposes.

1.2 This practice also describes a procedure for identifying soils, at the option of the user, based on the classification system described in Test Method D 2487. The identification is based on visual examination and manual tests. It must be clearly stated in reporting an identification that it is based on visual-manual procedures.

1.2.1 When precise classification of soils for engineering purposes is required, the procedures prescribed in Test Method D 2487 shall be used.

1.2.2 In this practice, the identification portion assigning a group symbol and name is limited to soil particles smaller than 3 in. (75 mm).

1.2.3 The identification portion of this practice is limited to naturally occurring soils (disturbed and undisturbed).

NOTE 1—This practice may be used as a descriptive system applied to such materials as shale, claystone, shells, crushed rock, etc. (see Appendix X2).

1.3 The descriptive information in this practice may be used with other soil classification systems or for materials other than naturally occurring soils.

1.4 The values stated in inch-pound units are to be regarded as the standard.

1.5 *This standard does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.* For specific precautionary statements see Section 8.

1.6 *This practice offers a set of instructions for performing one or more specific operations. This document cannot replace education or experience and should be used in conjunction with professional judgment. Not all aspects of this practice may be applicable in all circumstances. This ASTM standard is not intended to represent or replace the standard of care by which the adequacy of a given professional service must be judged, nor should this document be applied without consideration of a project's many unique aspects. The word "Standard" in the title of this document means only that the document has been approved through the ASTM consensus process.*

2. Referenced Documents

2.1 *ASTM Standards:*

D 653 Terminology Relating to Soil, Rock, and Contained Fluids[2]

D 1452 Practice for Soil Investigation and Sampling by Auger Borings[2]

D 1586 Test Method for Penetration Test and Split-Barrel Sampling of Soils[2]

D 1587 Practice for Thin-Walled Tube Sampling of Soils[2]

D 2113 Practice for Diamond Core Drilling for Site Investigation[2]

D 2487 Classification of Soils for Engineering Purposes (Unified Soil Classification System)[2]

D 3740 Practice for Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and rock as Used in Engineering Design and Construction[3]

D 4083 Practice for Description of Frozen Soils (Visual-Manual Procedure)[2]

3. Terminology

3.1 *Definitions*—Except as listed below, all definitions are in accordance with Terminology D 653.

NOTE 2—For particles retained on a 3-in. (75-mm) US standard sieve, the following definitions are suggested:
Cobbles—particles of rock that will pass a 12-in. (300-mm) square opening and be retained on a 3-in. (75-mm) sieve, and
Boulders—particles of rock that will not pass a 12-in. (300-mm) square opening.

3.1.1 *clay*—soil passing a No. 200 (75-µm) sieve that can be made to exhibit plasticity (putty-like properties) within a range of water contents, and that exhibits considerable strength when air-dry. For classification, a clay is a fine-grained soil, or the

[1] This practice is under the jurisdiction of ASTM Committee D-18 on Soil and Rock and is the direct responsibility of Subcommittee D18.07 on Identification and Classification of Soils.

Current edition approved Feb. 10, 2000. Published May 2000. Originally published as D 2488 – 66 T. Last previous edition D 2488 – 93$^{\epsilon 1}$.

[2] *Annual Book of ASTM Standards*, Vol 04.08.

[3] *Annual Book of ASTM Standards*, Vol 04.09.

***A Summary of Changes section appears at the end of this standard.**

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fine-grained portion of a soil, with a plasticity index equal to or greater than 4, and the plot of plasticity index versus liquid limit falls on or above the "A" line (see Fig. 3 of Test Method D 2487).

3.1.2 *gravel*—particles of rock that will pass a 3-in. (75-mm) sieve and be retained on a No. 4 (4.75-mm) sieve with the following subdivisions:

coarse—passes a 3-in. (75-mm) sieve and is retained on a ¾-in. (19-mm) sieve.

fine—passes a ¾-in. (19-mm) sieve and is retained on a No. 4 (4.75-mm) sieve.

3.1.3 *organic clay*—a clay with sufficient organic content to influence the soil properties. For classification, an organic clay is a soil that would be classified as a clay, except that its liquid limit value after oven drying is less than 75 % of its liquid limit value before oven drying.

3.1.4 *organic silt*—a silt with sufficient organic content to influence the soil properties. For classification, an organic silt is a soil that would be classified as a silt except that its liquid limit value after oven drying is less than 75 % of its liquid limit value before oven drying.

3.1.5 *peat*—a soil composed primarily of vegetable tissue in various stages of decomposition usually with an organic odor, a dark brown to black color, a spongy consistency, and a texture ranging from fibrous to amorphous.

3.1.6 *sand*—particles of rock that will pass a No. 4 (4.75-mm) sieve and be retained on a No. 200 (75-µm) sieve with the following subdivisions:

coarse—passes a No. 4 (4.75-mm) sieve and is retained on a No. 10 (2.00-mm) sieve.

medium—passes a No. 10 (2.00-mm) sieve and is retained on a No. 40 (425-µm) sieve.

fine—passes a No. 40 (425-µm) sieve and is retained on a No. 200 (75-µm) sieve.

3.1.7 *silt*—soil passing a No. 200 (75-µm) sieve that is nonplastic or very slightly plastic and that exhibits little or no strength when air dry. For classification, a silt is a fine-grained soil, or the fine-grained portion of a soil, with a plasticity index less than 4, or the plot of plasticity index versus liquid limit falls below the "A" line (see Fig. 3 of Test Method D 2487).

4. Summary of Practice

4.1 Using visual examination and simple manual tests, this practice gives standardized criteria and procedures for describing and identifying soils.

4.2 The soil can be given an identification by assigning a group symbol(s) and name. The flow charts, Fig. 1a and Fig. 1b for fine-grained soils, and Fig. 2, for coarse-grained soils, can be used to assign the appropriate group symbol(s) and name. If the soil has properties which do not distinctly place it into a specific group, borderline symbols may be used, see Appendix X3.

NOTE 3—It is suggested that a distinction be made between *dual symbols* and *borderline symbols.*

Dual Symbol—A dual symbol is two symbols separated by a hyphen, for example, GP-GM, SW-SC, CL-ML used to indicate that the soil has been identified as having the properties of a classification in accordance with Test Method D 2487 where two symbols are required. Two symbols are required when the soil has between 5 and 12 % fines or when the liquid limit and plasticity index values plot in the CL-ML area of the plasticity chart.

Borderline Symbol—A borderline symbol is two symbols separated by a slash, for example, CL/CH, GM/SM, CL/ML. A borderline symbol should be used to indicate that the soil has been identified as having properties that do not distinctly place the soil into a specific group (see Appendix X3).

5. Significance and Use

5.1 The descriptive information required in this practice can be used to describe a soil to aid in the evaluation of its significant properties for engineering use.

5.2 The descriptive information required in this practice should be used to supplement the classification of a soil as determined by Test Method D 2487.

5.3 This practice may be used in identifying soils using the classification group symbols and names as prescribed in Test Method D 2487. Since the names and symbols used in this practice to identify the soils are the same as those used in Test Method D 2487, it shall be clearly stated in reports and all other appropriate documents, that the classification symbol and name are based on visual-manual procedures.

5.4 This practice is to be used not only for identification of soils in the field, but also in the office, laboratory, or wherever soil samples are inspected and described.

5.5 This practice has particular value in grouping similar soil samples so that only a minimum number of laboratory tests need be run for positive soil classification.

NOTE 4—The ability to describe and identify soils correctly is learned more readily under the guidance of experienced personnel, but it may also be acquired systematically by comparing numerical laboratory test results for typical soils of each type with their visual and manual characteristics.

5.6 When describing and identifying soil samples from a given boring, test pit, or group of borings or pits, it is not necessary to follow all of the procedures in this practice for every sample. Soils which appear to be similar can be grouped together; one sample completely described and identified with the others referred to as similar based on performing only a few of the descriptive and identification procedures described in this practice.

5.7 This practice may be used in combination with Practice D 4083 when working with frozen soils.

NOTE 5—Notwithstanding the statements on precision and bias contained in this standard: The precision of this test method is dependent on the competence of the personnel performing it and the suitability of the equipment and facilities used. Agencies that meet the criteria of Practice D 3740 are generally considered capable of competent and objective testing. Users of this test method are cautioned that compliance with Practice D 3740 does not in itself assure reliable testing. Reliable testing depends on several factors; Practice D 3740 provides a means for evaluating some of those factors.

6. Apparatus

6.1 *Required Apparatus*:

6.1.1 *Pocket Knife or Small Spatula*.

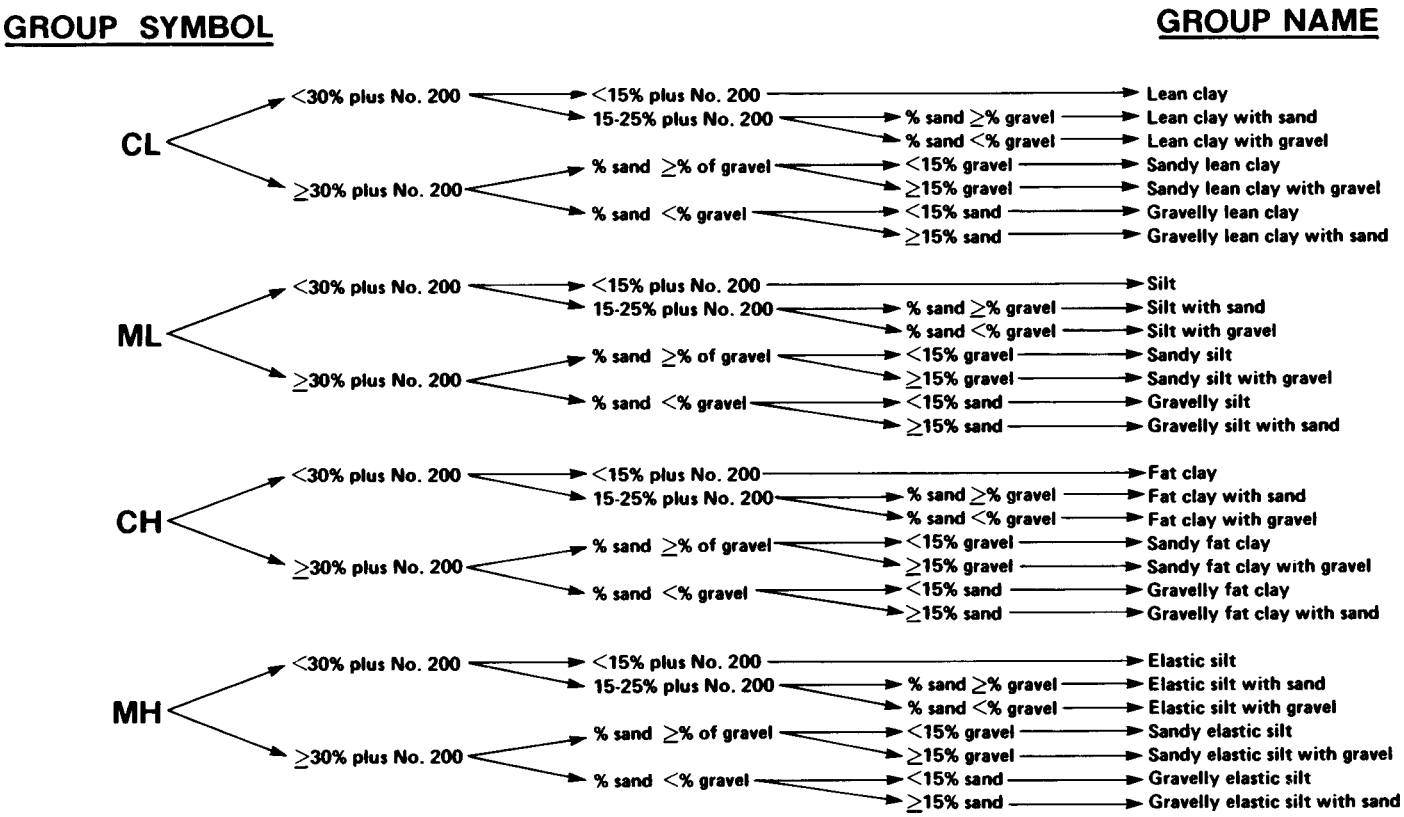
6.2 *Useful Auxiliary Apparatus*:

6.2.1 *Small Test Tube and Stopper* (or jar with a lid).

6.2.2 *Small Hand Lens*.

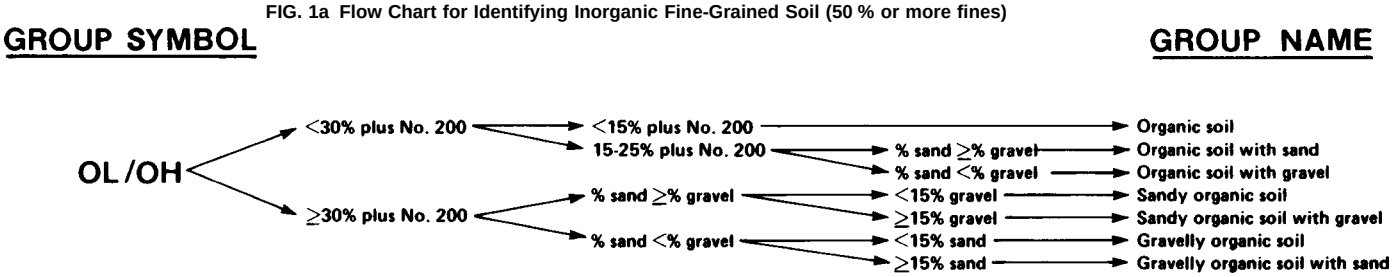
7. Reagents

7.1 *Purity of Water*—Unless otherwise indicated, references



NOTE 1—Percentages are based on estimating amounts of fines, sand, and gravel to the nearest 5 %.

FIG. 1a Flow Chart for Identifying Inorganic Fine-Grained Soil (50 % or more fines)



NOTE 1—Percentages are based on estimating amounts of fines, sand, and gravel to the nearest 5 %.

FIG. 1 b Flow Chart for Identifying Organic Fine-Grained Soil (50 % or more fines)

to water shall be understood to mean water from a city water supply or natural source, including non-potable water.

7.2 *Hydrochloric Acid*—A small bottle of dilute hydrochloric acid, HCl, one part HCl (10 *N*) to three parts water (This reagent is optional for use with this practice). See Section 8.

8. Safety Precautions

8.1 When preparing the dilute HCl solution of one part concentrated hydrochloric acid (10 *N*) to three parts of distilled water, slowly add acid into water following necessary safety precautions. Handle with caution and store safely. If solution comes into contact with the skin, rinse thoroughly with water.

8.2 **Caution**—Do not add water to acid.

9. Sampling

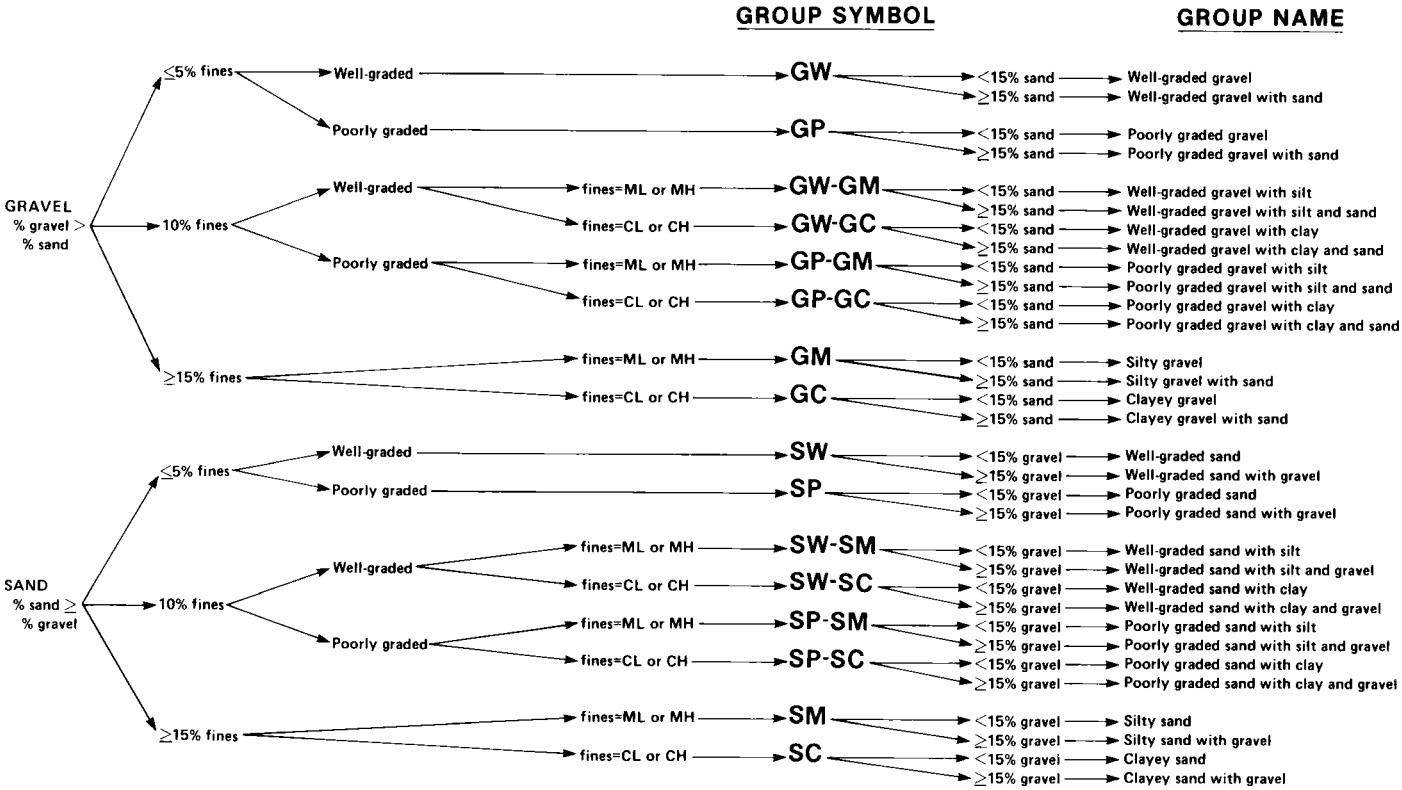
9.1 The sample shall be considered to be representative of the stratum from which it was obtained by an appropriate, accepted, or standard procedure.

NOTE 6—Preferably, the sampling procedure should be identified as having been conducted in accordance with Practices D 1452, D 1587, or D 2113, or Test Method D 1586.

9.2 The sample shall be carefully identified as to origin.

NOTE 7—Remarks as to the origin may take the form of a boring number and sample number in conjunction with a job number, a geologic stratum, a pedologic horizon or a location description with respect to a permanent monument, a grid system or a station number and offset with respect to a stated centerline and a depth or elevation.

9.3 For accurate description and identification, the minimum amount of the specimen to be examined shall be in accordance with the following schedule:



NOTE 1—Percentages are based on estimating amounts of fines, sand, and gravel to the nearest 5 %.

FIG. 2 Flow Chart for Identifying Coarse-Grained Soils (less than 50 % fines)

Maximum Particle Size, Sieve Opening	Minimum Specimen Size, Dry Weight
4.75 mm (No. 4)	100 g (0.25 lb)
9.5 mm (⅜ in.)	200 g (0.5 lb)
19.0 mm (¾ in.)	1.0 kg (2.2 lb)
38.1 mm (1½ in.)	8.0 kg (18 lb)
75.0 mm (3 in.)	60.0 kg (132 lb)

NOTE 8—If random isolated particles are encountered that are significantly larger than the particles in the soil matrix, the soil matrix can be accurately described and identified in accordance with the preceeding schedule.

9.4 If the field sample or specimen being examined is smaller than the minimum recommended amount, the report shall include an appropriate remark.

10. Descriptive Information for Soils

10.1 *Angularity*—Describe the angularity of the sand (coarse sizes only), gravel, cobbles, and boulders, as angular, subangular, subrounded, or rounded in accordance with the criteria in Table 1 and Fig. 3. A range of angularity may be stated, such as: subrounded to rounded.

10.2 *Shape*—Describe the shape of the gravel, cobbles, and boulders as flat, elongated, or flat and elongated if they meet the criteria in Table 2 and Fig. 4. Otherwise, do not mention the shape. Indicate the fraction of the particles that have the shape, such as: one-third of the gravel particles are flat.

10.3 *Color*—Describe the color. Color is an important property in identifying organic soils, and within a given locality it may also be useful in identifying materials of similar geologic origin. If the sample contains layers or patches of varying colors, this shall be noted and all representative colors shall be described. The color shall be described for moist samples. If the color represents a dry condition, this shall be stated in the report.

TABLE 1 Criteria for Describing Angularity of Coarse-Grained Particles (see Fig. 3)

Description	Criteria
Angular	Particles have sharp edges and relatively plane sides with unpolished surfaces
Subangular	Particles are similar to angular description but have rounded edges
Subrounded	Particles have nearly plane sides but have well-rounded corners and edges
Rounded	Particles have smoothly curved sides and no edges

10.4 *Odor*—Describe the odor if organic or unusual. Soils containing a significant amount of organic material usually have a distinctive odor of decaying vegetation. This is especially apparent in fresh samples, but if the samples are dried, the odor may often be revived by heating a moistened sample. If the odor is unusual (petroleum product, chemical, and the like), it shall be described.

10.5 *Moisture Condition*—Describe the moisture condition as dry, moist, or wet, in accordance with the criteria in Table 3.

10.6 *HCl Reaction*—Describe the reaction with HCl as none, weak, or strong, in accordance with the critera in Table 4. Since calcium carbonate is a common cementing agent, a report of its presence on the basis of the reaction with dilute hydrochloric acid is important.

10.7 *Consistency*—For intact fine-grained soil, describe the

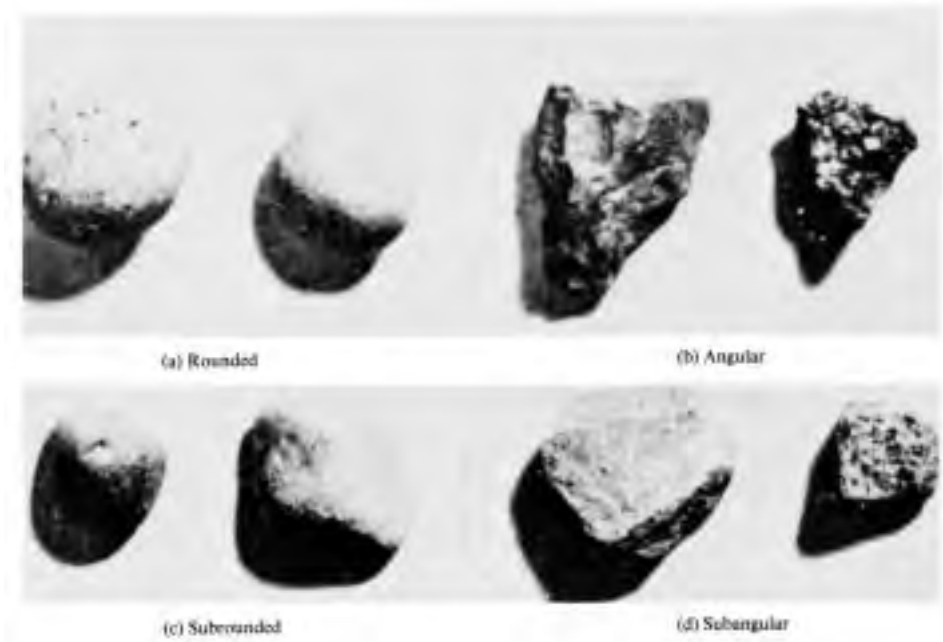


FIG. 3 Typical Angularity of Bulky Grains

TABLE 2 Criteria for Describing Particle Shape (see Fig. 4)

The particle shape shall be described as follows where length, width, and thickness refer to the greatest, intermediate, and least dimensions of a particle, respectively.	
Flat	Particles with width/thickness > 3
Elongated	Particles with length/width > 3
Flat and elongated	Particles meet criteria for both flat and elongated

consistency as very soft, soft, firm, hard, or very hard, in accordance with the criteria in Table 5. This observation is inappropriate for soils with significant amounts of gravel.

10.8 *Cementation*—Describe the cementation of intact coarse-grained soils as weak, moderate, or strong, in accordance with the criteria in Table 6.

10.9 *Structure*—Describe the structure of intact soils in accordance with the criteria in Table 7.

10.10 *Range of Particle Sizes*—For gravel and sand components, describe the range of particle sizes within each component as defined in 3.1.2 and 3.1.6. For example, about 20 % fine to coarse gravel, about 40 % fine to coarse sand.

10.11 *Maximum Particle Size*—Describe the maximum particle size found in the sample in accordance with the following information:

10.11.1 *Sand Size*—If the maximum particle size is a sand size, describe as fine, medium, or coarse as defined in 3.1.6. For example: maximum particle size, medium sand.

10.11.2 *Gravel Size*—If the maximum particle size is a gravel size, describe the maximum particle size as the smallest sieve opening that the particle will pass. For example, maximum particle size, 1½ in. (will pass a 1½-in. square opening but not a ¾-in. square opening).

10.11.3 *Cobble or Boulder Size*—If the maximum particle size is a cobble or boulder size, describe the maximum dimension of the largest particle. For example: maximum dimension, 18 in. (450 mm).

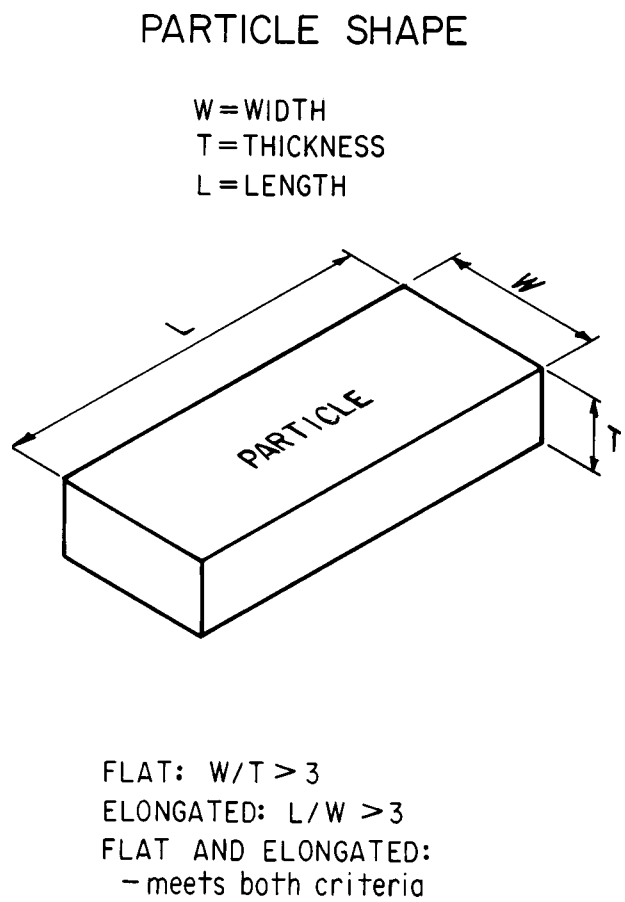


FIG. 4 Criteria for Particle Shape

10.12 *Hardness*—Describe the hardness of coarse sand and larger particles as hard, or state what happens when the

TABLE 3 Criteria for Describing Moisture Condition

Description	Criteria
Dry	Absence of moisture, dusty, dry to the touch
Moist	Damp but no visible water
Wet	Visible free water, usually soil is below water table

TABLE 4 Criteria for Describing the Reaction With HCl

Description	Criteria
None	No visible reaction
Weak	Some reaction, with bubbles forming slowly
Strong	Violent reaction, with bubbles forming immediately

TABLE 5 Criteria for Describing Consistency

Description	Criteria
Very soft	Thumb will penetrate soil more than 1 in. (25 mm)
Soft	Thumb will penetrate soil about 1 in. (25 mm)
Firm	Thumb will indent soil about ¼in. (6 mm)
Hard	Thumb will not indent soil but readily indented with thumbnail
Very hard	Thumbnail will not indent soil

TABLE 6 Criteria for Describing Cementation

Description	Criteria
Weak	Crumbles or breaks with handling or little finger pressure
Moderate	Crumbles or breaks with considerable finger pressure
Strong	Will not crumble or break with finger pressure

TABLE 7 Criteria for Describing Structure

Description	Criteria
Stratified	Alternating layers of varying material or color with layers at least 6 mm thick; note thickness
Laminated	Alternating layers of varying material or color with the layers less than 6 mm thick; note thickness
Fissured	Breaks along definite planes of fracture with little resistance to fracturing
Slickensided	Fracture planes appear polished or glossy, sometimes striated
Blocky	Cohesive soil that can be broken down into small angular lumps which resist further breakdown
Lensed	Inclusion of small pockets of different soils, such as small lenses of sand scattered through a mass of clay; note thickness
Homogeneous	Same color and appearance throughout

particles are hit by a hammer, for example, gravel-size particles fracture with considerable hammer blow, some gravel-size particles crumble with hammer blow. "Hard" means particles do not crack, fracture, or crumble under a hammer blow.

10.13 Additional comments shall be noted, such as the presence of roots or root holes, difficulty in drilling or augering hole, caving of trench or hole, or the presence of mica.

10.14 A local or commercial name or a geologic interpretation of the soil, or both, may be added if identified as such.

10.15 A classification or identification of the soil in accordance with other classification systems may be added if identified as such.

11. Identification of Peat

11.1 A sample composed primarily of vegetable tissue in various stages of decomposition that has a fibrous to amorphous texture, usually a dark brown to black color, and an organic odor, shall be designated as a highly organic soil and shall be identified as peat, PT, and not subjected to the identification procedures described hereafter.

12. Preparation for Identification

12.1 The soil identification portion of this practice is based on the portion of the soil sample that will pass a 3-in. (75-mm) sieve. The larger than 3-in. (75-mm) particles must be removed, manually, for a loose sample, or mentally, for an intact sample before classifying the soil.

12.2 Estimate and note the percentage of cobbles and the percentage of boulders. Performed visually, these estimates will be on the basis of volume percentage.

NOTE 9—Since the percentages of the particle-size distribution in Test Method D 2487 are by dry weight, and the estimates of percentages for gravel, sand, and fines in this practice are by dry weight, it is recommended that the report state that the percentages of cobbles and boulders are by volume.

12.3 Of the fraction of the soil smaller than 3 in. (75 mm), estimate and note the percentage, by dry weight, of the gravel, sand, and fines (see Appendix X4 for suggested procedures).

NOTE 10—Since the particle-size components appear visually on the basis of volume, considerable experience is required to estimate the percentages on the basis of dry weight. Frequent comparisons with laboratory particle-size analyses should be made.

12.3.1 The percentages shall be estimated to the closest 5 %. The percentages of gravel, sand, and fines must add up to 100 %.

12.3.2 If one of the components is present but not in sufficient quantity to be considered 5 % of the smaller than 3-in. (75-mm) portion, indicate its presence by the term *trace*, for example, trace of fines. A trace is not to be considered in the total of 100 % for the components.

13. Preliminary Identification

13.1 The soil is *fine grained* if it contains 50 % or more fines. Follow the procedures for identifying fine-grained soils of Section 14.

13.2 The soil is *coarse grained* if it contains less than 50 % fines. Follow the procedures for identifying coarse-grained soils of Section 15.

14. Procedure for Identifying Fine-Grained Soils

14.1 Select a representative sample of the material for examination. Remove particles larger than the No. 40 sieve (medium sand and larger) until a specimen equivalent to about a handful of material is available. Use this specimen for performing the dry strength, dilatancy, and toughness tests.

14.2 *Dry Strength*:

14.2.1 From the specimen, select enough material to mold into a ball about 1 in. (25 mm) in diameter. Mold the material until it has the consistency of putty, adding water if necessary.

14.2.2 From the molded material, make at least three test specimens. A test specimen shall be a ball of material about ½ in. (12 mm) in diameter. Allow the test specimens to dry in air, or sun, or by artificial means, as long as the temperature does not exceed 60°C.

14.2.3 If the test specimen contains natural dry lumps, those that are about ½ in. (12 mm) in diameter may be used in place of the molded balls.

NOTE 11—The process of molding and drying usually produces higher strengths than are found in natural dry lumps of soil.

14.2.4 Test the strength of the dry balls or lumps by crushing between the fingers. Note the strength as none, low, medium, high, or very high in accorance with the criteria in Table 8. If natural dry lumps are used, do not use the results of any of the lumps that are found to contain particles of coarse sand.

14.2.5 The presence of high-strength water-soluble cementing materials, such as calcium carbonate, may cause exceptionally high dry strengths. The presence of calcium carbonate can usually be detected from the intensity of the reaction with dilute hydrochloric acid (see 10.6).

14.3 *Dilatancy*:

14.3.1 From the specimen, select enough material to mold into a ball about ½ in. (12 mm) in diameter. Mold the material, adding water if necessary, until it has a soft, but not sticky, consistency.

14.3.2 Smooth the soil ball in the palm of one hand with the blade of a knife or small spatula. Shake horizontally, striking the side of the hand vigorously against the other hand several times. Note the reaction of water appearing on the surface of the soil. Squeeze the sample by closing the hand or pinching the soil between the fingers, and note the reaction as none, slow, or rapid in accordance with the criteria in Table 9. The reaction is the speed with which water appears while shaking, and disappears while squeezing.

14.4 *Toughness*:

14.4.1 Following the completion of the dilatancy test, the test specimen is shaped into an elongated pat and rolled by hand on a smooth surface or between the palms into a thread about ⅛ in. (3 mm) in diameter. (If the sample is too wet to roll easily, it should be spread into a thin layer and allowed to lose some water by evaporation.) Fold the sample threads and reroll repeatedly until the thread crumbles at a diameter of about ⅛ in. The thread will crumble at a diameter of ⅛ in. when the soil is near the plastic limit. Note the pressure required to roll the thread near the plastic limit. Also, note the strength of the thread. After the thread crumbles, the pieces should be lumped together and kneaded until the lump crumbles. Note the toughness of the material during kneading.

14.4.2 Describe the toughness of the thread and lump as low, medium, or high in accordance with the criteria in Table 10.

TABLE 8 Criteria for Describing Dry Strength

Description	Criteria
None	The dry specimen crumbles into powder with mere pressure of handling
Low	The dry specimen crumbles into powder with some finger pressure
Medium	The dry specimen breaks into pieces or crumbles with considerable finger pressure
High	The dry specimen cannot be broken with finger pressure. Specimen will break into pieces between thumb and a hard surface
Very high	The dry specimen cannot be broken between the thumb and a hard surface

TABLE 9 Criteria for Describing Dilatancy

Description	Criteria
None	No visible change in the specimen
Slow	Water appears slowly on the surface of the specimen during shaking and does not disappear or disappears slowly upon squeezing
Rapid	Water appears quickly on the surface of the specimen during shaking and disappears quickly upon squeezing

14.5 *Plasticity*—On the basis of observations made during the toughness test, describe the plasticity of the material in accordance with the criteria given in Table 11.

14.6 Decide whether the soil is an *inorganic* or an *organic* fine-grained soil (see 14.8). If inorganic, follow the steps given in 14.7.

14.7 *Identification of Inorganic Fine-Grained Soils*:

14.7.1 Identify the soil as a *lean clay*, CL, if the soil has medium to high dry strength, no or slow dilatancy, and medium toughness and plasticity (see Table 12).

14.7.2 Identify the soil as a *fat clay*, CH, if the soil has high to very high dry strength, no dilatancy, and high toughness and plasticity (see Table 12).

14.7.3 Identify the soil as a *silt*, ML, if the soil has no to low dry strength, slow to rapid dilatancy, and low toughness and plasticity, or is nonplastic (see Table 12).

14.7.4 Identify the soil as an *elastic silt*, MH, if the soil has low to medium dry strength, no to slow dilatancy, and low to medium toughness and plasticity (see Table 12).

NOTE 12—These properties are similar to those for a lean clay. However, the silt will dry quickly on the hand and have a smooth, silky feel when dry. Some soils that would classify as MH in accordance with the criteria in Test Method D 2487 are visually difficult to distinguish from lean clays, CL. It may be necessary to perform laboratory testing for proper identification.

14.8 *Identification of Organic Fine-Grained Soils*:

14.8.1 Identify the soil as an *organic soil*, OL/OH, if the soil contains enough organic particles to influence the soil properties. Organic soils usually have a dark brown to black color and may have an organic odor. Often, organic soils will change color, for example, black to brown, when exposed to the air. Some organic soils will lighten in color significantly when air dried. Organic soils normally will not have a high toughness or plasticity. The thread for the toughness test will be spongy.

NOTE 13—In some cases, through practice and experience, it may be possible to further identify the organic soils as organic silts or organic clays, OL or OH. Correlations between the dilatancy, dry strength, toughness tests, and laboratory tests can be made to identify organic soils in certain deposits of similar materials of known geologic origin.

TABLE 10 Criteria for Describing Toughness

Description	Criteria
Low	Only slight pressure is required to roll the thread near the plastic limit. The thread and the lump are weak and soft
Medium	Medium pressure is required to roll the thread to near the plastic limit. The thread and the lump have medium stiffness
High	Considerable pressure is required to roll the thread to near the plastic limit. The thread and the lump have very high stiffness

TABLE 11 Criteria for Describing Plasticity

Description	Criteria
Nonplastic	A ⅛-in. (3-mm) thread cannot be rolled at any water content
Low	The thread can barely be rolled and the lump cannot be formed when drier than the plastic limit
Medium	The thread is easy to roll and not much time is required to reach the plastic limit. The thread cannot be rerolled after reaching the plastic limit. The lump crumbles when drier than the plastic limit
High	It takes considerable time rolling and kneading to reach the plastic limit. The thread can be rerolled several times after reaching the plastic limit. The lump can be formed without crumbling when drier than the plastic limit

TABLE 12 Identification of Inorganic Fine-Grained Soils from Manual Tests

Soil Symbol	Dry Strength	Dilatancy	Toughness
ML	None to low	Slow to rapid	Low or thread cannot be formed
CL	Medium to high	None to slow	Medium
MH	Low to medium	None to slow	Low to medium
CH	High to very high	None	High

14.9 If the soil is estimated to have 15 to 25 % sand or gravel, or both, the words "with sand" or "with gravel" (whichever is more predominant) shall be added to the group name. For example: "lean clay with sand, CL" or "silt with gravel, ML" (see Fig. 1a and Fig. 1b). If the percentage of sand is equal to the percentage of gravel, use "with sand."

14.10 If the soil is estimated to have 30 % or more sand or gravel, or both, the words "sandy" or "gravelly" shall be added to the group name. Add the word "sandy" if there appears to be more sand than gravel. Add the word "gravelly" if there appears to be more gravel than sand. For example: "sandy lean clay, CL", "gravelly fat clay, CH", or "sandy silt, ML" (see Fig. 1a and Fig. 1b). If the percentage of sand is equal to the percent of gravel, use "sandy."

15. Procedure for Identifying Coarse-Grained Soils

(Contains less than 50 % fines)

15.1 The soil is a *gravel* if the percentage of gravel is estimated to be more than the percentage of sand.

15.2 The soil is a *sand* if the percentage of gravel is estimated to be equal to or less than the percentage of sand.

15.3 The soil is a *clean gravel* or *clean sand* if the percentage of fines is estimated to be 5 % or less.

15.3.1 Identify the soil as a *well-graded gravel*, GW, or as a *well-graded sand*, SW, if it has a wide range of particle sizes and substantial amounts of the intermediate particle sizes.

15.3.2 Identify the soil as a *poorly graded gravel*, GP, or as a *poorly graded sand*, SP, if it consists predominantly of one size (uniformly graded), or it has a wide range of sizes with some intermediate sizes obviously missing (gap or skip graded).

15.4 The soil is either a *gravel with fines* or a *sand with fines* if the percentage of fines is estimated to be 15 % or more.

15.4.1 Identify the soil as a *clayey gravel*, GC, or a *clayey sand*, SC, if the fines are clayey as determined by the procedures in Section 14.

15.4.2 Identify the soil as a *silty gravel*, GM, or a *silty sand*, SM, if the fines are silty as determined by the procedures in Section 14.

15.5 If the soil is estimated to contain 10 % fines, give the soil a dual identification using two group symbols.

15.5.1 The first group symbol shall correspond to a clean gravel or sand (GW, GP, SW, SP) and the second symbol shall correspond to a gravel or sand with fines (GC, GM, SC, SM).

15.5.2 The group name shall correspond to the first group symbol plus the words "with clay" or "with silt" to indicate the plasticity characteristics of the fines. For example: "well-graded gravel with clay, GW-GC" or "poorly graded sand with silt, SP-SM" (see Fig. 2).

15.6 If the specimen is predominantly sand or gravel but contains an estimated 15 % or more of the other coarse-grained constituent, the words "with gravel" or "with sand" shall be added to the group name. For example: "poorly graded gravel with sand, GP" or "clayey sand with gravel, SC" (see Fig. 2).

15.7 If the field sample contains any cobbles or boulders, or both, the words "with cobbles" or "with cobbles and boulders" shall be added to the group name. For example: "silty gravel with cobbles, GM."

16. Report

16.1 The report shall include the information as to origin, and the items indicated in Table 13.

NOTE 14—*Example: Clayey Gravel with Sand and Cobbles, GC*—About 50 % fine to coarse, subrounded to subangular gravel; about 30 % fine to coarse, subrounded sand; about 20 % fines with medium plasticity, high dry strength, no dilatancy, medium toughness; weak reaction with HCl; original field sample had about 5 % (by volume) subrounded cobbles, maximum dimension, 150 mm.

In-Place Conditions—Firm, homogeneous, dry, brown

Geologic Interpretation—Alluvial fan

TABLE 13 Checklist for Description of Soils

1. Group name
2. Group symbol
3. Percent of cobbles or boulders, or both (by volume)
4. Percent of gravel, sand, or fines, or all three (by dry weight)
5. Particle-size range:
   Gravel—fine, coarse
   Sand—fine, medium, coarse
6. Particle angularity: angular, subangular, subrounded, rounded
7. Particle shape: (if appropriate) flat, elongated, flat and elongated
8. Maximum particle size or dimension
9. Hardness of coarse sand and larger particles
10. Plasticity of fines: nonplastic, low, medium, high
11. Dry strength: none, low, medium, high, very high
12. Dilatancy: none, slow, rapid
13. Toughness: low, medium, high
14. Color (in moist condition)
15. Odor (mention only if organic or unusual)
16. Moisture: dry, moist, wet
17. Reaction with HCl: none, weak, strong

For intact samples:

18. Consistency (fine-grained soils only): very soft, soft, firm, hard, very hard
19. Structure: stratified, laminated, fissured, slickensided, lensed, homogeneous
20. Cementation: weak, moderate, strong
21. Local name
22. Geologic interpretation
23. Additional comments: presence of roots or root holes, presence of mica, gypsum, etc., surface coatings on coarse-grained particles, caving or sloughing of auger hole or trench sides, difficulty in augering or excavating, etc.

NOTE 15—Other examples of soil descriptions and identification are given in Appendix X1 and Appendix X2.

NOTE 16—If desired, the percentages of gravel, sand, and fines may be stated in terms indicating a range of percentages, as follows:

Trace—Particles are present but estimated to be less than 5 %
Few—5 to 10 %
Little—15 to 25 %
Some—30 to 45 %
Mostly—50 to 100 %

16.2 If, in the soil description, the soil is identified using a classification group symbol and name as described in Test Method D 2487, it must be distinctly and clearly stated in log forms, summary tables, reports, and the like, that the symbol and name are based on visual-manual procedures.

17. Precision and Bias

17.1 This practice provides qualitative information only, therefore, a precision and bias statement is not applicable.

18. Keywords

18.1 classification; clay; gravel; organic soils; sand; silt; soil classification; soil description; visual classification

APPENDIXES

(Nonmandatory Information)

X1. EXAMPLES OF VISUAL SOIL DESCRIPTIONS

X1.1 The following examples show how the information required in 16.1 can be reported. The information that is included in descriptions should be based on individual circumstances and need.

X1.1.1 *Well-Graded Gravel with Sand (GW)*—About 75 % fine to coarse, hard, subangular gravel; about 25 % fine to coarse, hard, subangular sand; trace of fines; maximum size, 75 mm, brown, dry; no reaction with HCl.

X1.1.2 *Silty Sand with Gravel (SM)*—About 60 % predominantly fine sand; about 25 % silty fines with low plasticity, low dry strength, rapid dilatancy, and low toughness; about 15 % fine, hard, subrounded gravel, a few gravel-size particles fractured with hammer blow; maximum size, 25 mm; no reaction with HCl (Note—Field sample size smaller than recommended).

In-Place Conditions—Firm, stratified and contains lenses of silt 1 to 2 in. (25 to 50 mm) thick, moist, brown to gray; in-place density 106 lb/ft^3; in-place moisture 9 %.

X1.1.3 *Organic Soil (OL/OH)*—About 100 % fines with low plasticity, slow dilatancy, low dry strength, and low toughness; wet, dark brown, organic odor; weak reaction with HCl.

X1.1.4 *Silty Sand with Organic Fines (SM)*—About 75 % fine to coarse, hard, subangular reddish sand; about 25 % organic and silty dark brown nonplastic fines with no dry strength and slow dilatancy; wet; maximum size, coarse sand; weak reaction with HCl.

X1.1.5 *Poorly Graded Gravel with Silt, Sand, Cobbles and Boulders (GP-GM)*—About 75 % fine to coarse, hard, subrounded to subangular gravel; about 15 % fine, hard, subrounded to subangular sand; about 10 % silty nonplastic fines; moist, brown; no reaction with HCl; original field sample had about 5 % (by volume) hard, subrounded cobbles and a trace of hard, subrounded boulders, with a maximum dimension of 18 in. (450 mm).

X2. USING THE IDENTIFICATION PROCEDURE AS A DESCRIPTIVE SYSTEM FOR SHALE, CLAYSTONE, SHELLS, SLAG, CRUSHED ROCK, AND THE LIKE

X2.1 The identification procedure may be used as a descriptive system applied to materials that exist in-situ as shale, claystone, sandstone, siltstone, mudstone, etc., but convert to soils after field or laboratory processing (crushing, slaking, and the like).

X2.2 Materials such as shells, crushed rock, slag, and the like, should be identified as such. However, the procedures used in this practice for describing the particle size and plasticity characteristics may be used in the description of the material. If desired, an identification using a group name and symbol according to this practice may be assigned to aid in describing the material.

X2.3 The group symbol(s) and group names should be placed in quotation marks or noted with some type of distinguishing symbol. See examples.

X2.4 Examples of how group names and symbols can be incororated into a descriptive system for materials that are not naturally occurring soils are as follows:

X2.4.1 *Shale Chunks*—Retrieved as 2 to 4-in. (50 to 100-mm) pieces of shale from power auger hole, dry, brown, no reaction with HCl. After slaking in water for 24 h, material identified as “Sandy Lean Clay (CL)”; about 60 % fines with medium plasticity, high dry strength, no dilatancy, and medium toughness; about 35 % fine to medium, hard sand; about 5 % gravel-size pieces of shale.

X2.4.2 *Crushed Sandstone*—Product of commercial crushing operation; “Poorly Graded Sand with Silt (SP-SM)”; about 90 % fine to medium sand; about 10 % nonplastic fines; dry, reddish-brown, strong reaction with HCl.

X2.4.3 *Broken Shells*—About 60 % gravel-size broken

shells; about 30 % sand and sand-size shell pieces; about 10 % fines; "Poorly Graded Gravel with Sand (GP)."

X2.4.4 *Crushed Rock*—Processed from gravel and cobbles in Pit No. 7; "Poorly Graded Gravel (GP)"; about 90 % fine, hard, angular gravel-size particles; about 10 % coarse, hard, angular sand-size particles; dry, tan; no reaction with HCl.

X3. SUGGESTED PROCEDURE FOR USING A BORDERLINE SYMBOL FOR SOILS WITH TWO POSSIBLE IDENTIFICATIONS.

X3.1 Since this practice is based on estimates of particle size distribution and plasticity characteristics, it may be difficult to clearly identify the soil as belonging to one category. To indicate that the soil may fall into one of two possible basic groups, a borderline symbol may be used with the two symbols separated by a slash. For example: SC/CL or CL/CH.

X3.1.1 A borderline symbol may be used when the percentage of fines is estimated to be between 45 and 55 %. One symbol should be for a coarse-grained soil with fines and the other for a fine-grained soil. For example: GM/ML or CL/SC.

X3.1.2 A borderline symbol may be used when the percentage of sand and the percentage of gravel are estimated to be about the same. For example: GP/SP, SC/GC, GM/SM. It is practically impossible to have a soil that would have a borderline symbol of GW/SW.

X3.1.3 A borderline symbol may be used when the soil could be either well graded or poorly graded. For example: GW/GP, SW/SP.

X3.1.4 A borderline symbol may be used when the soil could either be a silt or a clay. For example: CL/ML, CH/MH, SC/SM.

X3.1.5 A borderline symbol may be used when a fine-grained soil has properties that indicate that it is at the boundary between a soil of low compressibility and a soil of high compressibility. For example: CL/CH, MH/ML.

X3.2 The order of the borderline symbols should reflect similarity to surrounding or adjacent soils. For example: soils in a borrow area have been identified as CH. One sample is considered to have a borderline symbol of CL and CH. To show similarity, the borderline symbol should be CH/CL.

X3.3 The group name for a soil with a borderline symbol should be the group name for the first symbol, except for:

CL/CH lean to fat clay
ML/CL clayey silt
CL/ML silty clay

X3.4 The use of a borderline symbol should not be used indiscriminately. Every effort shall be made to first place the soil into a single group.

X4. SUGGESTED PROCEDURES FOR ESTIMATING THE PERCENTAGES OF GRAVEL, SAND, AND FINES IN A SOIL SAMPLE

X4.1 *Jar Method*—The relative percentage of coarse- and fine-grained material may be estimated by thoroughly shaking a mixture of soil and water in a test tube or jar, and then allowing the mixture to settle. The coarse particles will fall to the bottom and successively finer particles will be deposited with increasing time; the sand sizes will fall out of suspension in 20 to 30 s. The relative proportions can be estimated from the relative volume of each size separate. This method should be correlated to particle-size laboratory determinations.

X4.2 *Visual Method*—Mentally visualize the gravel size particles placed in a sack (or other container) or sacks. Then, do the same with the sand size particles and the fines. Then, mentally compare the number of sacks to estimate the percentage of plus No. 4 sieve size and minus No. 4 sieve size present. The percentages of sand and fines in the minus sieve size No. 4 material can then be estimated from the wash test (X4.3).

X4.3 *Wash Test (for relative percentages of sand and fines)*—Select and moisten enough minus No. 4 sieve size material to form a 1-in (25-mm) cube of soil. Cut the cube in half, set one-half to the side, and place the other half in a small dish. Wash and decant the fines out of the material in the dish until the wash water is clear and then compare the two samples and estimate the percentage of sand and fines. Remember that the percentage is based on weight, not volume. However, the volume comparison will provide a reasonable indication of grain size percentages.

X4.3.1 While washing, it may be necessary to break down lumps of fines with the finger to get the correct percentages.

X5. ABBREVIATED SOIL CLASSIFICATION SYMBOLS

X5.1 In some cases, because of lack of space, an abbreviated system may be useful to indicate the soil classification symbol and name. Examples of such cases would be graphical logs, databases, tables, etc.

X5.2 This abbreviated system is not a substitute for the full name and descriptive information but can be used in supplementary presentations when the complete description is referenced.

X5.3 The abbreviated system should consist of the soil classification symbol based on this standard with appropriate lower case letter prefixes and suffixes as:

Prefix:	Suffix:
s = sandy	s = with sand
g = gravelly	g = with gravel
	c = with cobbles
	b = with boulders

X5.4 The soil classification symbol is to be enclosed in parenthesis. Some examples would be:

Group Symbol and Full Name	Abbreviated
CL, Sandy lean clay	s(CL)
SP-SM, Poorly graded sand with silt and gravel	(SP-SM)g
GP, poorly graded gravel with sand, cobbles, and boulders	(GP)scb
ML, gravelly silt with sand and cobbles	g(ML)sc

SUMMARY OF CHANGES

In accordance with Committee D18 policy, this section identifies the location of changes to this standard since the last edition (1993$^{\epsilon 1}$) that may impact the use of this standard.

(1) Added Practice D 3740 to Section 2.

(2) Added Note 5 under 5.7 and renumbered subsequent notes.

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ATTACHMENT 3. FIELD CLASSIFICATION OF SOILS, BASED ON UNIFIED SOIL CLASSIFICATION SYSTEM AND ASTM STANDARD D-2488

integral consulting inc.

Field Classification of Soils, Based on Unified Soil Classification System and ASTM Standard D-2488

Major Divisions		Symbol and Pattern	General Soil Description
Coarse-Grained Soils (More than 1/2 of soil >No. 200 sieve size)	**Gravels**	GW	Well-graded gravels or gravel-sand mixtures, little to no fines
		GP	Poorly-graded gravels or gravel-sand mixtures, little to no fines
		GM	Silty gravels or gravel-sand-silt mixtures
		GC	Clayey gravels or gravel-sand-clay mixtures
	Sands	SW	Well-graded sands or gravel-sand mixtures, little to no fines
		SP	Poorly-graded sands or gravelly sands, little to no fines
		SM	Silty sands, sand-silt mixtures
		SC	Clayey sands, sand-clay mixtures
Fine-Grained Soils (More than 1/2 of soil <No. 200 sieve size)	**Silts**	ML	Inorganic silts with slight plasticity
		MH	Inorganic elastic silts
		OL	Organic elastic silts
	Clays	CL	Inorganic clays of low to medium plasticity, lean clays
		CH	Inorganic clays of high plasticity, fat clays
		OH	Organic clays of medium to high plasticity
Highly Organic Soils		Pt	Peat, sample composed primarily of vegetable tissue

Soil Classification Notes

Groundwater, First Observed

Groundwater, Static

Sampling Equipment

SS	Split Spoon
ST	Shelby Tube
GS	Geoprobe® Macrocore Sampler

Sheen Types

NS	No Sheen
LS	Light Sheen
MS	Moderate Sheen
HS	Heavy Sheen

Sample Moisture

Dry	No moisture, dry to touch
Moist	Damp, but no free water
Wet	Visible free water

Sample Plasticity (Fine-Grained Soils)

Non-Plastic -	Cannot be rolled at any moisture content.
Low -	Can barely be rolled, lump cannot be formed when drier than plastic limit.
Medium -	Can easily be rolled, lump crumbles when drier than plastic limit.
High -	Can easily be rolled, but takes considerable time to reach the plastic limit. Lump can be formed without crumbling when drier than the plastic limit.

Particle Size Range (Coarse-Grained Soils)

Gravel -	Fine, Coarse
Sand -	Fine, Medium, Coarse

STANDARD OPERATING PROCEDURE (SOP) SL-07

SUBSURFACE SOIL SAMPLING

SCOPE AND APPLICATION

The following procedures are designed to be used to collect subsurface soil samples using a hand auger, direct-push drill rig, and a backhoe. *All underground utilities must be located and cleared prior to drilling or excavating.* Soil samples should be collected from areas having lower levels of constituents of interest first, followed by stations with higher expected levels of constituents of interest.

Based on field and site conditions, the procedures listed below may be modified in the field upon agreement of the field team leader and project management, after appropriate annotations have been made in the project-specific field logbook. If specialized sampling methods (e.g., Encore®) are to be used, refer to the manufacturer's recommended procedures. If methanol preservation is required, refer to Integral SOP SL-08 on methanol preservation of soil samples. Record all pertinent information in the Integral field logbook, subsurface soil field collection form, or boring log (as appropriate).

EQUIPMENT AND SUPPLIES REQUIRED

- Subsurface sampling equipment (e.g., hand auger, direct-push drill rig [e.g., Geoprobe®], backhoe, stainless-steel spade) (consult project-specific field sampling plan [FSP] for kind of equipment to be used for a specific field event)
- Large stainless steel mixing bowl and spoon
- Laboratory-supplied sample containers, insulated coolers, and ice
- Chain-of-custody forms, custody seals, sample labels
- Resealable plastic bags (e.g., Ziploc®)
- Camera
- Tape measure
- Logging table
- 6-mil visqueen and duct tape for covering the logging table
- Aluminum foil

- 55-gallon drums for decontamination waters and excess soil (separate drums for liquid and solid wastes) if required by the project-specific FSP
- Field logbook, subsurface soil field collection form, and/or soil boring form, and pens
- Project-specific FSP and health and safety plan (HSP)
- Personal protective equipment (PPE) (safety glasses, steel-toed boots, nitrile gloves, and any other items required by the project-specific HSP)
- Photoionization detector (PID), if required by the project-specific FSP or HSP
- Global positioning system (GPS), if required by the project-specific FSP
- Decontamination equipment.

HAND AUGER SAMPLER

The following procedures are designed to be used during the general operation of a hand auger sampler. The procedures listed below may be modified in the field upon agreement of the field team leader and drill operators, based on field and site conditions, after appropriate annotations have been made in the field logbook.

1. Locate the sample station as directed in the project-specific FSP. Place sample labels on the sample container prior to filling in accordance with Integral's SOP on sample labeling (SOP AP-04).
2. Place plastic sheeting adjacent to the sampling location.
3. Advance the hand auger into subsurface soil.
4. Empty soil from the first interval (as specified in the project-specific FSP) from the hand auger into a decontaminated stainless steel bowl and cover the bowl with aluminum foil. Continue advancing the hand auger until the next appropriate sample interval has been completed.
5. Screen the soil sample for volatile organic compounds (VOCs) using a PID if required by the project-specific FSP.
6. Photograph each interval with depth and site markers visible in the photograph, if applicable.
7. Log the soils in accordance with SOP SL-04 (*Field Classification of Soils*).
8. If VOC samples are required (see project-specific FSP), collect them prior to homogenizing (i.e., mixing) the sample. Collect the VOC sample (with a minimum of disturbance) by placing the sample into the container with no headspace and sealing it tightly. If an Encore® sampling device is specified in the project-specific FSP, follow the sample collection guidelines provided by the manufacturer.

9. (a) If the soil sample is to be a discrete sample (see project-specific FSP), collect soil from the hand auger using a decontaminated stainless-steel spoon and place the sample into a decontaminated stainless-steel bowl. Homogenize the soil to a consistent color and texture.

   (b) If additional sample volume is required to perform the analyses specified in the project-specific FSP, place multiple soil samples collected from nearby locations (it is important to keep the distance between multiple soil borings as close as possible; the maximum distance will be specified in the project-specific FSP) from the same depth interval into a composite sample in a single decontaminated stainless-steel bowl. When a sufficient volume of soil has been obtained, homogenize all of the soil in the bowl to a consistent color and texture using a decontaminated spoon.

10. Discard rocks found in the homogenized soil that are greater than 0.5 in. in diameter after positively identifying them, determining their percentage contribution to the homogenized soil volume, and noting it in the field notebook.

11. Remove samples of the homogenized soil from the compositing bowl and place in the appropriate size sample container. Fill the sample container with soil to just below the container lip, and seal the container tightly.

12. Decontaminate all sampling equipment in accordance with SOP SL-01 and the project-specific FSP.

13. Repeat the process described above for all subsequent sample intervals.

14. Complete the appropriate field books, field data sheets, and quality assurance and quality control (QA/QC) documentation. Record any deviations from the specified sampling procedures or any obstacles encountered.

15. Backfill the borehole with remaining hand auger soil cuttings or place the cuttings in a properly labeled 55-gallon drum, as specified in the project-specific FSP. If soil cuttings are placed in a 55-gallon drum, backfill the borehole with bentonite hole plug pellets and hydrate the pellets with potable water.

16. Mark the sampling location with a wire flag, wooden stake, metal rebar, or flagging, as appropriate. Collect GPS coordinates of the sample location if specified in the project-specific FSP.

DIRECT-PUSH DRILL RIG

The following procedures are designed to be used during the general operation of direct-push drill rig (e.g., Geoprobe®). The procedures listed below may be modified in the field upon agreement of the field team leader and drill operators, based on field and site conditions, after appropriate annotations have been made in the field logbook. The direct-push drill rig will be operated by a licensed drilling contractor.

The direct-push drilling technique hydraulically pushes tools into the ground to collect soil samples. Direct-push drilling techniques can be used to collect soil samples to depths of 30–100 ft, depending on drilling conditions at the site. In addition to soil sample collection, direct-push techniques can be used to collect soil gas samples, reconnoiter groundwater samples, and install small-diameter monitoring wells.

Soil samples can be collected using two types of Macrocore® samplers, open tip and closed tip. These samplers are typically either 4 ft long by 1.5 in. inside diameter (i.d.) or 5 ft long by 2.5 in. i.d. These samplers have a tubular design and utilize acetate liners to collect the soil samples. The following sections of this SOP describe how to collect soil samples using open-tip and closed-tip Macrocore® samplers.

Open-Tip Sampler

The open-tip sampler is typically used in soils that are cohesive (e.g., stiff silts and clays), where the soil boring is stable and stays open when the sampler and rods are removed from the ground.

1. Ensure all underground utilities are cleared prior to initiating drilling activities.
2. Position the direct-push drill rig over the sample station and remove any surface material that will interfere with sampling. Note in the field logbook any surface material that is removed prior to sampling.
3. Determine the interval to be sampled and install a new clean liner into the open tip Macrocore® sampler.
4. Push the sampler to the bottom of the appropriate sample interval.
5. Retract the rods and Macrocore® sampler.
6. After the Macrocore® sampler has been brought to the surface, remove the liner from the sampler, cap both ends of the liner, and inspect it.
7. After the soil sample is judged to be acceptable, label the sample liner with the station identifier, depth interval, and soil orientation (i.e., arrow pointing toward uppermost soil interval).
8. Place the capped sample liner on a new piece of aluminum foil on the logging table and split the liner open with a hook or utility knife. Process the sample in accordance with the "General Sampling Procedures" listed below.
9. Repeat Steps 2–8 for each subsequent sample interval.

Closed-Tip Sampler

The closed-tip sampler is typically used to collect soil samples that are noncohesive (e.g., sandy materials), where the soil boring is unstable and collapses when the rods and sampler are removed from the ground.

1. Ensure all underground utilities are cleared prior to initiating drilling activities.
2. Position the direct-push drill rig over the sample station and remove any surface material that will interfere with sampling. Note in the field logbook any surface material removed prior to sampling.
3. Determine the interval to be sampled and install a drive point and a new clean liner into the closed-tip Macrocore® sampler.
4. Push the rods and sampler to the top of the appropriate sample interval.
5. Retract the rods to release the drive point.
6. Push the sampler to the bottom of the appropriate sample interval.
7. Retract the rods and Macrocore® sampler.
8. Once the soil sample has been brought to the surface, remove the liner from the sampler, cap both ends of the liner, and inspect it.
9. After the soil sample is judged to be acceptable, label the sample liner with the station identifier, depth interval, and soil orientation (i.e., arrow pointing toward uppermost soil interval).
10. Place the capped sample liner on a new piece of aluminum foil on the logging table and split the liner open with a hook or utility knife. Process the sample in accordance with the "General Sampling Procedures" listed below.
11. Repeat Steps 2–10 for each additional sample interval.

General Sampling Procedures

1. After the liner has been split open, screen the soil sample for VOCs using a PID if required by the project-specific FSP.
2. Log the soils in accordance with SOP SL-04 (*Field Classification of Soils*).
3. Photograph each section of the soil boring with appropriate orientation, depth, and site markers visible in the photograph, if specified in the project-specific FSP.

4. If VOC samples are required (see project-specific FSP), collect them prior to sample removal from the liner. Collect the VOC sample (with a minimum of disturbance) by placing the sample into the container with no headspace and seal it tightly. If an Encore® sampling device is specified in the project-specific FSP, follow the sample collection guidelines provided by the manufacturer.
5. Remove the soil from the liner using a decontaminated stainless-steel spoon and place the soil in a decontaminated compositing bowl and thoroughly mix and homogenize the sample using a decontaminated spoon until the color and texture are consistent throughout.
6. (a) If the soil sample is to be a discrete sample (see project-specific FSP), collect soil from the liner using a decontaminated stainless-steel spoon and place the sample into a decontaminated stainless-steel bowl. Homogenize the soil to a consistent color and texture.

   (b) If additional sample volume is required to perform the analyses specified in the project-specific FSP, place multiple soil samples collected from nearby locations (it is important to keep the distance between multiple soil borings as close as possible; the maximum distance will be specified in the project-specific FSP) from the same depth interval into a composite sample in a single decontaminated stainless-steel bowl. When a sufficient volume of soil has been obtained, homogenize all of the soil in the bowl to a consistent color and texture using a decontaminated spoon.
7. Discard rocks found in the homogenized soil that are greater than 0.5 in. in diameter after positively identifying them, determining their percentage contribution to the homogenized soil volume, and noting it in the field notebook.
8. Remove samples of the homogenized soil from the compositing bowl and place in the appropriate size sample container. Fill the sample container with soil to just below the container lip, and seal the container tightly.
9. Repeat the process described above for subsequent sample intervals.
10. Complete the appropriate field books, field data sheets, and QA/QC documentation. Record any deviations from the specified sampling procedures or any obstacles encountered.
11. Backfill the borehole with remaining direct-push sampler cuttings or place the cuttings in a properly labeled 55-gallon drum, as specified in the project-specific FSP. If soil cuttings are placed in a 55-gallon drum, backfill the borehole with bentonite grout (mixed to the manufacturer's specifications) or bentonite hole plug pellets and hydrate the pellets with potable water.
12. Mark the sampling location with a wire flag, wooden stake, metal rebar, or flagging, as appropriate. Collect GPS coordinates of the sample location if specified in the project-specific FSP.

13. Decontaminate all sampling equipment in accordance with SOP SL-01 and the project-specific FSP.

Test Pit Excavations

The following procedures are to be used during the excavation of pits with construction equipment (i.e., backhoe or track-hoe) prior to soil sampling operations. Adhere to all requirements of the site-specific HSP for this specific activity. The procedures listed below may be modified in the field upon agreement of the field team leader and project management, based on field and site conditions, after appropriate annotations have been made in the field logbook.

1. Locate the sample station as directed in the project-specific FSP. Ensure all underground utilities have been cleared prior to initiating excavation activities. Place sample labels on all sample containers prior to filling in accordance with Integral's SOP for sample labeling (SOP AP-04).
2. Select the appropriate orientation for the excavation, basing it on the judgment of the field team leader, backhoe operator, and onsite conditions. Sampling personnel **MUST** remain in visual contact with the backhoe operator at all times, and out of possible "pinch zones" or areas where heavy equipment may move or swing.
3. Place plastic sheeting from the edge of the proposed excavation leading away for a sufficient distance to the proposed temporary stockpile location so that the excavated soil does not slough back into the pit.
4. Begin pit excavation.
5. Continue excavation of the pit to the required depth. If pit entry is necessary, this depth will not exceed 4 ft from the ground surface. Never enter a trench or pit if conditions are unstable. Excavate the proper pit exit trenches, shoring, and sloping to prevent accidental burial of sampling crew, and to meet or exceed all OSHA Construction Standards (29 CFR § 1926; Attachment 201-2) for entrance by sampling personnel. If pit entry is not necessary for sampling activities, pit depth can exceed 4 ft below ground surface. Instruct the backhoe operator to scrape material evenly along an exposed face to collect (to the extent practicable) a representative sample of the soils across the entire face in the bucket. Collect soil samples from the middle of the backhoe bucket.
6. Screen the soil sample for VOCs using a PID if required by the project-specific FSP.
7. Photograph each interval with depth and site markers visible in the photograph, if applicable.
8. Log the test pit soils in accordance with SOP SL-04 (*Field Classification of Soils*).

9. If VOC samples are required (see project-specific FSP), collect them prior to homogenizing (i.e., mixing) the sample. Collect the VOC sample (with a minimum of disturbance) by placing the sample into the container with no headspace and seal it tightly. If an Encore® sampling device is specified in the project-specific FSP, follow the sample collection guidelines provided by the manufacturer.
10. Collect soil using a decontaminated stainless-steel spoon or disposable sampling tool (depending on project-specific requirements; see FSP), which has been evenly removed from the face of the trench wall or from the bucket, and place the sample into a decontaminated stainless-steel bowl. Homogenize the soil to a consistent color and texture.
11. Discard rocks found in the homogenized soil that are greater than 0.5 in. in diameter after positively identifying them, determining their percentage contribution to the homogenized soil volume, and noting it in the field notebook.
12. Remove samples of the homogenized soil from the compositing bowl and place them in the appropriate size sample container. Fill the sample container with soil to just below the container lip and seal it tightly.
13. Decontaminate all sampling equipment in accordance with SOP SL-01 and the project-specific FSP.
14. Repeat the process described above for all subsequent sample intervals.
15. Complete all pertinent field logbooks, field data sheets, and QA/QC documentation. Record any deviations from the specified sampling procedures or any obstacles encountered.
16. Mark the sampling location with a wire flag, wooden stake, metal rebar, or flagging, as appropriate. Collect GPS coordinates of the sample location if specified in the project-specific FSP. Photograph sample location and document in the logbook.
17. Backfill the test pit with the excavated soils. Depending on historical site data (see project-specific FSP), the plastic sheeting will either be disposed of as garbage or it will be drummed and sent to a hazardous waste landfill.

APPENDIX D

MONITORING WELL GROUNDWATER SAMPLE COLLECTION FORMS

integral consulting inc.

GROUNDWATER SAMPLE COLLECTION FORM

700 Larkspur Landing Circle, Suite 199
Larkspur, CA 94939
(415) 464-9452

Well ID: MW-1 Project Name: Allied Engineering
Sample ID: MW-1-GW Project Number: C1374
Date: 2/24/15 Field Staff: S. Sherman

Well Information

Monument Condition: ☒ Good ☐ Needs Repair
Well Cap Condition: ☐ Good ☐ Locked ☐ Replaced ☒ Needs Replacement
Elevation Mark: ☐ Yes ☐ Added ☒ other Sharpie on north TOC
Well Diameter: ☒ 2-inch ☐ 4-inch ☐ 6-inch ☐ Other
Odor: ☐ Comments

Casing Volume

Total Well Depth: 19.89 ft TOC ☐ Clean Bottom ☐ Muddy Bottom ☐ Not Measured
Depth to Water: 7.5 ft TOC
Casing Volume: 12.39 ft (H20) X 0.163 gpf = ~2 gallons
3/4 " = 0.02 gpf 1"= 0.04 gpf 2" = 0.16 gpf 4"=0.65 gpf 6"=1.47 gpf

Purge Data

Pump Type: Peripump Purge Start Time: 14:11
Tubing Type: 1/4" Poly Purge Stop Time: 15:12 Purge Rate (gpm):
Sample Intake Depth: ~17.0 Total volume purged: 5.3 Sample Rate (gpm):

Field Parameters

	Time	Cumulative Vol. Purged (gallons)	pH	Temperature (°C)	Conductivity ~~(S/cm)~~ µS/cm	ORP (mV)	DO (mg/L)	Turbidty (NTU)	WL	Comments
Initial	1413	20.3	6.89	18.65	1821	27	0.71	24	7.50	clear / Interrupted Pumping
Stop 1420 Resume	1440	0.6	6.76	18.44	1836	-18	0.42	—	—	Clear
	1445	1.0	6.75	18.40	1859	-25	0.39	13	7.70	Clear
	1450	2.5	6.75	18.43	1909	-40	0.32	7.8	7.81	Clear
	1455	3.2	6.76	18.42	1923	-49	0.27	—	7.87	Clear
Sample	1500	4.0	6.76	18.43	1885	-49	0.24		7.87	Clear
Final	1512	5.3	—	—	—	—	—	—	7.89	Clear

Sampling Device

Filter Type: Size:

Sample Containers Collection Time

Tag No.	Type	Preservative	Analytical Method	QA Remarks
	☐ Poly (1 L)	–	EPA 160.2	
	☐ Poly (1 L)	–	EPA 160.1	
	☐ Poly (500 mL)	–	EPA 310.1	
	☐ Poly (500 mL)	–	120.1, 300.0	
	☐ Poly (500 mL)	H_2SO_4	415.1	
	☐ Poly (500 mL)	HNO_3	6010B, 200.8, 7470A	
	☐ Poly (500 mL)	HNO_3	6010B, 200.8, 7470A	Filtered
	☐ Poly (500 mL)	–	7196	
	☐ 2 VOA (40 mL vial)	HCL	TPH-Gx	
	☐ 2 VOA (40 mL vial)	HCL	VPH	
	☐ 2 Amber (500 mL)	HCL	TPH-Dx	
	☐ 1 Amber (500 mL)	HCL	EPH	
	☐ 2 Amber (500 mL)	–	8270C	
	☐ 2 Amber (500 mL)	–	8270-SIM	
	☐ 3 VOA (40 mL vial)	HCL	8260	
	☐ 2 Amber (1 L)	–	8082	
	☐ 2 Amber (500 mL)	–	8081A	
	☐			
	☐			

Samplers' Signature Date

integral consulting inc.

700 Larkspur Landing Circle, Suite 199
Larkspur, CA 94939
(415) 464-9452

GROUNDWATER SAMPLE COLLECTION FORM

Well ID: MW-2 Project Name: Allied Engineering
Sample ID: MW-2-GW Project Number: C1374
Date: 2/24/15 Field Staff: S. Sherman

Well Information

Monument Condition: ☒ Good ☐ Needs Repair
Well Cap Condition: ☐ Good ☐ Locked ☐ Replaced ☐ Needs Replacement
Elevation Mark: ☐ Yes ☐ Added ☒ other Sharpie mark on north
Well Diameter: ☒ 2-inch ☐ 4-inch ☐ 6-inch ☐ Other
Odor: ☐ Comments

Casing Volume

Total Well Depth: 18.91 ft TOC ☐ Clean Bottom ☐ Muddy Bottom ☐ Not Measured
Depth to Water: 5.11 ft TOC
Casing Volume: _____ ft (H20) X 0.163 gpf = _____ gallons
3/4 " = 0.02 gpf 1"= 0.04 gpf 2" = 0.16 gpf 4"=0.65 gpf 6"=1.47 gpf

Purge Data

Pump Type: Peripump Purge Start Time: 17:07
Tubing Type: 1/4" Teflon Purge Stop Time: 17:42 Purge Rate (gpm): _____
Sample Intake Depth: ~16 Total volume purged: 4.5 Sample Rate (gpm): _____

Field Parameters

	Time	Cumulative Vol. Purged (gallons)	pH	Temperature (°C)	Conductivity ~~(S/cm)~~ uS/cm	ORP (mV)	DO (mg/L)	Turbidty (NTU)	WL	Comments
Initial	17:07	<0.3	7.20	19.18	499	62	2.31	24	5.48	Clear
	17:12	0.5	7.00	19.23	499	54	2.02	—	5.73	
	17:17	1.0	6.95	19.31	520	16	1.64	—	5.98	
	17:22	1.8	6.92	19.37	539	-1.5	1.32	5.9	6.04	
	17:27	2.6	6.92	19.35	535	-10.0	1.28	—	6.08	
Sample	17:30	3.2	6.92	19.34	533	-12.0	1.31	4.0	6.11	
Final	17:42	4.5	—	—	—	—	—	—	6.25	+1.32 gal sampling

Sampling Device _____

Filter Type: Size:

Sample Containers Collection Time _____

Tag No.	Type	Preservative	Analytical Method	QA Remarks
	☐ Poly (1 L)	–	EPA 160.2	
	☐ Poly (1 L)	–	EPA 160.1	
	☐ Poly (500 mL)	–	EPA 310.1	
	☐ Poly (500 mL)	–	120.1, 300.0	
	☐ Poly (500 mL)	H_2SO_4	415 1	
	☐ Poly (500 mL)	HNO_3	6010B, 200.8, 7470A	
	☐ Poly (500 mL)	HNO_3	6010B, 200.8, 7470A	Filtered
	☐ Poly (500 mL)	–	7196	
	☐ 2 VOA (40 mL vial)	HCL	TPH-Gx	
	☐ 2 VOA (40 mL vial)	HCL	VPH	
	☐ 2 Amber (500 mL)	HCL	TPH-Dx	
	☐ 1 Amber (500 mL)	HCL	EPH	
	☐ 2 Amber (500 mL)	–	8270C	
	☐ 2 Amber (500 mL)	–	8270-SIM	
	☐ 3 VOA (40 mL vial)	HCL	8260	
	☐ 2 Amber (1 L)	–	8082	
	☐ 2 Amber (500 mL)	–	8081A	
	☐			
	☐			

Samplers' Signature _____ Date _____

integral consulting inc.

700 Larkspur Landing Circle, Suite 199
Larkspur, CA 94939
(415) 464-9452

GROUNDWATER SAMPLE COLLECTION FORM

Well ID: MW-3 Project Name: Allied Engineering
Sample ID: MW-3-GW Project Number: C1374
Date: 2/24/15 Field Staff: S. Sherman

Well Information

Monument Condition: ☒ Good ☐ Needs Repair
Well Cap Condition: ☐ Good ☐ Locked ☐ Replaced ☒ Needs Replacement
Elevation Mark: ☐ Yes ☐ Added ☒ other notch on casing
Well Diameter: ☒ 2-inch ☐ 4-inch ☐ 6-inch ☐ Other
Odor: ☐ Comments

Casing Volume

Total Well Depth: 19.78 ft TOC ☒ Clean Bottom ☐ Muddy Bottom ☐ Not Measured
Depth to Water: 10.0 ft TOC
Casing Volume: 9.78 ft (H20) X 1 gpf = 1.6 gallons
3/4 " = 0.02 gpf 1"= 0.04 gpf 2"= 0.16 gpf 4"=0.65 gpf 6"=1.47 gpf $(1/12)^2\pi(7.48) = 0.163$

Purge Data

Pump Type: Peripump Purge Start Time: 11:05
Tubing Type: 1/4" poly Purge Stop Time: 12:04 Purge Rate (gpm): ~0.1 gal/min
Sample Intake Depth: ~16 Total volume purged: 7.2 gal Sample Rate (gpm): 0.09 gal/min

Field Parameters

	Time	Cumulative Vol. Purged (gallons)	pH	Temperature (°C)	Conductivity ~~(S/cm)~~ uS/cm	ORP (mV)	DO (mg/L)	Turbidity (NTU)	WL	Comments
Initial	11:07	<0.3	7.06	16.77	30,402	94	0.00	3	10.5	Clear
	11:15	1.0	7.11	17.16	31,000	80	0.00	—	11.05	flow cell accidentally in sun. DO meter possibly broken
	11:24	2.8	7.11	17.35	31,300	70	0.00	1.2	11:22	Clear
	11:31	4.0	7.10	17.40	31,400	70	0.00	—	11.39	Clear
	11:40	5.0	7.07	17.41	30,754	75	-0.01	—	11.48	Clear
	11:43	5.3	7.07	17.44	30,320	74	-0.01	—	11.50	Clear
	11:46	5.6	7.06	17.45	29,856	77	0.00	1.3	11.50	Clear
Sample →	11:49	5.9	7.05	17.45	29,222	73	0.00	—	11.51	Clear
11:50 Final	12:04	7.2	—	—	—	—	—	—	11.28	Clear

Sampling Device

Filter Type: Size:

6-VOA (40mL) 2-500mL Amber 1-250mL Poly 3-1L Amber 1-500mL Poly ≈ 5 Liters 5x 0.264 = 1.32 gal

Sample Containers Collection Time

Tag No.	Type	Preservative	Analytical Method	QA Remarks
	☐ Poly (1 L)	--	EPA 160.2	
	☐ Poly (1 L)	--	EPA 160.1	
	☐ Poly (500 mL)	--	EPA 310.1	
	☐ Poly (500 mL)	--	120.1, 300.0	
	☐ Poly (500 mL)	H_2SO_4	415.1	
	☐ Poly (500 mL)	HNO_3	6010B, 200.8, 7470A	
	☐ Poly (500 mL)	HNO_3	6010B, 200.8, 7470A	Filtered
	☐ Poly (500 mL)	--	7196	
	☐ 2 VOA (40 mL vial)	HCL	TPH-Gx	
	☐ 2 VOA (40 mL vial)	HCL	VPH	
	☐ 2 Amber (500 mL)	HCL	TPH-Dx	
	☐ 1 Amber (500 mL)	HCL	EPH	
	☐ 2 Amber (500 mL)	--	8270C	
	☐ 2 Amber (500 mL)	--	8270-SIM	
	☐ 3 VOA (40 mL vial)	HCL	8260	
	☐ 2 Amber (1 L)	--	8082	
	☐ 2 Amber (500 mL)	--	8081A	
	☐			
	☐			

Samplers' Signature Date

integral consulting inc.

GROUNDWATER SAMPLE COLLECTION FORM

700 Larkspur Landing Circle, Suite 199
Larkspur, CA 94939
(415) 464-9452

Well ID: MW-4A
Sample ID: MW-4A-GW
Date: 3/19/15
Project Name: Allied Engineering
Project Number: 61374
Field Staff: C. Yeh / S. Shr...

Well Information

Monument Condition: ☒ Good ☐ Needs Repair MW-4A-GW (1650)
Well Cap Condition: ☒ Good ☐ Locked ☐ Replaced ☐ Needs Replacement
Elevation Mark: ☒ Yes ☐ Added ☐ other
Well Diameter: ☒ 2-inch ☐ 4-inch ☐ 6-inch ☐ Other
Odor: ☐ Comments No odor, tide is mid-low & dropping

* All measurements from TOC *

Casing Volume

Total Well Depth: 22.51 ft ☒ Clean Bottom ☐ Muddy Bottom ☐ Not Measured
Depth to Water: 5.64 ft
Casing Volume: _____ ft (H20) X _____ gpf = _____ gallons

3/4 " = 0.02 gpf 1"= 0.04 gpf 2" = 0.16 gpf 4"=0.65 gpf 6"=1.47 gpf

Purge Data

Pump Type: Geopump
Tubing Type: 1/4" teflon
Sample Intake Depth:
Purge Start Time: 1549
Purge Stop Time: 1650
Total volume purged: 7.26 gal
Purge Rate (gpm):
Sample Rate (gpm):

Field Parameters

DTW	Time	Cumulative Vol. Purged (gallons)	pH	Temperature (°C)	Conductivity ~~(S/cm)~~ uS/cm	ORP (mV)	DO (mg/L)	Turbidty (NTU)	Comments
5.96	1550	0.1	6.79	17.23	17804	393.6	0.53	72	Cloudy
6.12	1554	0.8	6.69	17.09	17974	396.2	0.44	31	Clear
6.25	1558	1.2	6.68	16.99	17804	389.0	0.39	32	Clear
6.30	1601	1.6	6.68	16.96	17926	383.8	0.34	21	Clear
6.35	1605	2.0	6.69	17.14	18000	385	0.31	27	Clear
6.45	1610	3.0	6.68	17.00	18432	382	0.28	28	Clear
6.50	1614	3.2	6.67	17.01	18597	384	0.27	31	Clear
	1650	SAMPLE	TIME						
6.91		7.26 END	SAMPLING						

Sampling Device _____

Filter Type: Size:

Sample Containers Collection Time_____

Tag No.	Type	Preservative	Analytical Method	QA Remarks
	☐ Poly (1 L)	--	EPA 160.2	
	☐ Poly (1 L)	--	EPA 160.1	
	☐ Poly (500 mL)	--	EPA 310.1	
	☐ Poly (500 mL)	--	120.1, 300.0	
	☐ Poly (500 mL)	H_2SO_4	415.1	
	☐ Poly (500 mL)	HNO_3	6010B, 200.8, 7470A	
	☐ Poly (500 mL)	HNO_3	6010B, 200.8, 7470A	Filtered
	☐ Poly (500 mL)	--	7196	
	☐ 2 VOA (40 mL vial)	HCL	TPH-Gx	
	☐ 2 VOA (40 mL vial)	HCL	VPH	
	☐ 2 Amber (500 mL)	HCL	TPH-Dx	
	☐ 1 Amber (500 mL)	HCL	EPH	
	☐ 2 Amber (500 mL)	--	8270C	
	☐ 2 Amber (500 mL)	--	8270-SIM	
	☐ 3 VOA (40 mL vial)	HCL	8260	
	☐ 2 Amber (1 L)	--	8082	
	☐ 2 Amber (500 mL)	--	8081A	
	☐			
	☐			

Samplers' Signature_____ Date _____

3 x volume collected for MS/MSD 3.96 gallons collected

integral consulting inc.

700 Larkspur Landing Circle, Suite 199
Larkspur, CA 94939
(415) 464-9452

GROUNDWATER SAMPLE COLLECTION FORM

Well ID: MW-4B Project Name: Allied Engineering
Sample ID: MW-4B-GW Project Number: C1274
Date: 3/19/15 Field Staff: C. Yee / S. Sh

Well Information

Monument Condition: ☒ Good ☐ Needs Repair MW-4B-GW (1445)
Well Cap Condition: ☒ Good ☐ Locked ☐ Replaced ☐ Needs Replacement
Elevation Mark: ☒ Yes ☐ Added ☐ other
Well Diameter: ☒ 2-inch ☐ 4-inch ☐ 6-inch ☐ Other
Odor: ☐ Comments No odor; tide is high but dropping

Casing Volume

* All measurements from TOC *
Total Well Depth: 36.74 ft ☒ Clean Bottom ☐ Muddy Bottom ☐ Not Measured
Depth to Water: 3.68 ft
Casing Volume: _____ ft (H20) X _____ gpf = _____ gallons
3/4 " = 0.02 gpf 1"= 0.04 gpf 2" = 0.16 gpf 4"=0.65 gpf 6"=1.47 gpf

Purge Data

Pump Type: Geopump Purge Start Time: 1424
Tubing Type: 1/4" teflon Purge Stop Time: 1427 Purge Rate (gpm): _____
Sample Intake Depth: 31.74 Total volume purged: 3.72 gal Sample Rate (gpm): _____

Field Parameters

DTW	Time	Cumulative Vol. Purged (gallons)	pH	Temperature (°C)	Conductivity ~~(S/cm)~~ uS/cm	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Comments
3.76	1425	0.1	7.56	17.46	598	342.7	1.81	142	Cloudy, no odor
3min 3.81	1428	0.4	6.82	17.40	596	391.5	0.66	114	Cloudy
3.85	1431	1.0	6.60	17.41	594	402.2	0.53	66	Cloudy
3.90	1434	1.3	6.62	17.43	590	399.7	0.42		
3.95	1437	1.7	6.70	17.37	584	393.3	0.38	25	Clear
4.00	1440	2.0	6.77	17.45	580	390.7	0.35	14	Clear
4.04	1443	2.4	6.85	17.42	577	386.3	0.33	9	Clear
	1445		Sample time						
4.25	1527	3.72	END SAMPLING						

Sampling Device _____

Filter Type: Size:

Sample Containers Collection Time _____

Tag No.	Type	Preservative	Analytical Method	QA Remarks
	☐ Poly (1 L)	–	EPA 160.2	
	☐ Poly (1 L)	–	EPA 160.1	
	☐ Poly (500 mL)	–	EPA 310.1	
	☐ Poly (500 mL)	CBB 3/19/15	120.1, 300.0	
	☐ Poly (500 mL)	H_2SO_4	415.1	
	☐ Poly (500 mL)	HNO_3	6010B, 200.8, 7470A	
	☐ Poly (500 mL)	HNO_3	6010B, 200.8, 7470A	Filtered
	☐ Poly (500 mL)	–	7196	
	☐ 2 VOA (40 mL vial)	HCL	TPH-Gx	
	☐ 2 VOA (40 mL vial)	HCL	VPH	
	☐ 2 Amber (500 mL)	HCL	TPH-Dx	
	☐ 1 Amber (500 mL)	HCL	EPH	
	☐ 2 Amber (500 mL)	–	8270C	
	☐ 2 Amber (500 mL)	–	8270-SIM	
	☐ 3 VOA (40 mL vial)	HCL	8260	
	☐ 2 Amber (1 L)	–	8082	
	☐ 2 Amber (500 mL)	–	8081A	
	☐			
	☐			

Samplers' Signature _____ Date _____

1.32 gallons of sample containers collected
(Same bottles as MW-5B)

integral consulting inc.

GROUNDWATER SAMPLE COLLECTION FORM

700 Larkspur Landing Circle, Suite 199
Larkspur, CA 94939
(415) 464-9452

Well ID: MW-5A
Sample ID: MW-5A-GW
Date: 3/19/15
Project Name: Allied Engineering
Project Number: C1374
Field Staff: C. Gyles / S. Sherman

Well Information

Monument Condition: ☒ Good ☐ Needs Repair DUP-GW-031915 (0000), MW-5A-GW (1302)
Well Cap Condition: ☒ Good ☐ Locked ☐ Replaced ☐ Needs Replacement
Elevation Mark: ☒ Yes ☐ Added ☐ other
Well Diameter: ☒ 2-inch ☐ 4-inch ☐ 6-inch ☐ Other
Odor: ☐ Comments No odor; Tide is quite high but dropping during sampling

Casing Volume

* All measurements from TOC

Total Well Depth: 24.2 ft ☒ Clean Bottom ☐ Muddy Bottom ☐ Not Measured
Depth to Water: 4.92 ft
Casing Volume: _____ ft (H20) X _____ gpf = _____ gallons

3/4 " = 0.02 gpf 1"= 0.04 gpf 2" = 0.16 gpf 4"=0.65 gpf 6"=1.47 gpf

Purge Data

Pump Type: Geopump
Tubing Type: 1/4" teflon
Sample Intake Depth: 19 ft below TOC
Purge Start Time: 1244
Purge Stop Time: 1321
Total volume purged: 5.64 gal
Purge Rate (gpm): _____
Sample Rate (gpm): _____

Field Parameters

DTW (ft bTOC)	Time	Cumulative Vol. Purged (gallons)	pH	Temperature (°C)	Conductivity (uS/cm) ~~(S/cm)~~	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Comments
5.34	1245	0.2	7.95	17.02	564	375.3	7.37	29	Clear, no odor
5.58	1248	0.6	7.46	16.80	562	383.8	7.23	24	Clear
5.67	1251	1.2	7.29	16.72	559	385.9	7.14	17	Clear
5.71 (3 mins)	1254	2.0	7.30	16.71	555	380.2	6.87	15	Clear
5.75	1257	2.5	7.40	16.79	560	372.0	6.43	11	Clear
5.76	1300	3.0	7.47	16.76	559	366.2	6.23	8	Clear
	1302	5.64	SAMPLE TIME						(2.64 gal collected for sample, double the volume as a duplicate was collected from this sample location)

Sampling Device _____

Filter Type: Size:

Sample Containers Collection Time _____

Tag No.	Type	Preservative	Analytical Method	QA Remarks
	☐ Poly (1 L)	–	EPA 160.2	
	☐ Poly (1 L)	–	EPA 160.1	
	☐ Poly (500 mL)	3/19/15 ~~cel~~	EPA 310.1	
	☐ Poly (500 mL)	–	120.1, 300.0	
	☐ Poly (500 mL)	H_2SO_4	415.1	
	☐ Poly (500 mL)	HNO_3	6010B, 200.8, 7470A	
	☐ Poly (500 mL)	HNO_3	6010B, 200.8, 7470A	Filtered
	☐ Poly (500 mL)	–	7196	
	☐ 2 VOA (40 mL vial)	HCL	TPH-Gx	
	☐ 2 VOA (40 mL vial)	HCL	VPH	
	☐ 2 Amber (500 mL)	HCL	TPH-Dx	
	☐ 1 Amber (500 mL)	HCL	EPH	
	☐ 2 Amber (500 mL)	–	8270C	
	☐ 2 Amber (500 mL)	–	8270-SIM	
	☐ 3 VOA (40 mL vial)	HCL	8260	
	☐ 2 Amber (1 L)	–	8082	
	☐ 2 Amber (500 mL)	–	8081A	
	☐			
	☐			

Samplers' Signature _____ Date _____

Same bottle ware as MW-5B x 2 = 2.64 gallons of sample collected

integral consulting inc.

GROUNDWATER SAMPLE COLLECTION FORM

700 Larkspur Landing Circle, Suite 199
Larkspur, CA 94939
(415) 464-9452

Well ID: MW-5B Project Name: Allied Engineering
Sample ID: MW-5B-GW Project Number: C1374
Date: 3/19/15 Field Staff: C. Uhler / S. Sherman

Well Information

MW-5B-GW (1140)

Monument Condition: ☒ Good ☐ Needs Repair
Well Cap Condition: ☒ Good ☐ Locked ☐ Replaced ☐ Needs Replacement
Elevation Mark: ☒ Yes ☐ Added ☐ other
Well Diameter: ☒ 2-inch ☐ 4-inch ☐ 6-inch ☐ Other
Odor: ☐ Comments No odor; tide now quite high

All measurements from TOC

Casing Volume

Total Well Depth: 43.05 ft ☒ Clean Bottom ☐ Muddy Bottom ☐ Not Measured
Depth to Water: 5.22 ft
Casing Volume: 37.83 ft (H20) X 0.16 gpf = 6.05 gallons
3/4 " = 0.02 gpf 1"= 0.04 gpf 2" = 0.16 gpf 4"=0.65 gpf 6"=1.47 gpf

Purge Data

Pump Type: Geopump Purge Start Time: 1110
Tubing Type: 1/4" teflon Purge Stop Time: 1154 Purge Rate (gpm): _____
Sample Intake Depth: 37 ft below TOC Total volume purged: 5.32 gal Sample Rate (gpm): _____

Field Parameters

DTW	Time	Cumulative Vol. Purged (gallons)	pH	Temperature (°C)	Conductivity ~~(S/cm)~~ uS/cm	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Comments
5.20	1115	0.5	7.98	17.17	774	343.3	1.50	242	Cloudy, no odor
5.16	1122	1.0	7.73	17.46	735	355.0	0.61	77	Clear
5.14	1126	2.0	7.71	17.33	726	342.5	0.42	41	Clear
5.11	1130	2.8	7.70	17.33	714	352.5	0.37	33	Clear
5.08	1134	3.5	7.69	17.26	710	349.1	0.34	19	Clear
5.05	1138	4.0	7.69	17.25	690	350.0	0.33	17	Clear
	1140	Sample time, parameters adequately stabilized (MW-5B-GW 1140)							
5.05	1154	5.32	End sampling (~5 L of water collected → 1.32 gallons)						
			Added water collected for sampling + purge volume						

Sampling Device _____

Filter Type: Size:

Sample Containers Collection Time _____

Tag No.	Type	Preservative	Analytical Method	QA Remarks
	☐ Poly (1 L)	–	EPA 160.2	
	☐ Poly (1 L)	–	EPA 160.1	
	☐ Poly (500 mL)	–	EPA 310.1	
	☐ Poly (500 mL)	–	120.1, 300.0	
	☐ Poly (500 mL)	3/19/15 H_2SO_4	415.1	
	☐ Poly (500 mL)	HNO_3	6010B, 200.8, 7470A	
	☐ Poly (500 mL)	CBC HNO_3	6010B, 200.8, 7470A	Filtered
	☐ Poly (500 mL)	–	7196	
	☐ 2 VOA (40 mL vial)	HCL	TPH-Gx	
	☐ 2 VOA (40 mL vial)	HCL	VPH	
	☐ 2 Amber (500 mL)	HCL	TPH-Dx	
	☐ 1 Amber (500 mL)	HCL	EPH	
	☐ 2 Amber (500 mL)	–	8270C	
	☐ 2 Amber (500 mL)	–	8270-SIM	
	☐ 3 VOA (40 mL vial)	HCL	8260	
	☐ 2 Amber (1 L)	–	8082	
	☐ 2 Amber (500 mL)	–	8081A	
	☐			
	☐			

Samplers' Signature _____ Date _____

3-1L ambers, 2-500 mL ambers, 1-500 mL unpres. poly, 1-250 mL unpres. poly, 6-HCL VOAs. 1.32 gallons of sample collected

integral consulting inc.

GROUNDWATER SAMPLE COLLECTION FORM

700 Larkspur Landing Circle, Suite 199
Larkspur, CA 94939
(415) 464-9452

Well ID: MW-6A Project Name: Allied Engineering
Sample ID: MW-6A-GW Project Number: C1374
Date: 2/25/15 Field Staff: Cyler / S Sherman

Well Information

Monument Condition: ☒ Good ☐ Needs Repair
Well Cap Condition: ☒ Good ☐ Locked ☐ Replaced ☐ Needs Replacement
Elevation Mark: ☒ Yes ☐ Added ☐ other
Well Diameter: ☒ 2-inch ☐ 4-inch ☐ 6-inch ☐ Other
Odor: ☐ Comments New well. Notch is generally facing north

Casing Volume

All measurements from TOC.

Total Well Depth: 24.44 ft ☒ Clean Bottom ☐ Muddy Bottom ☐ Not Measured
Depth to Water: 6.62 ft Hard bottom
Casing Volume: 17.82 ft (H20) X 0.16 gpf = 2.85 gallons
3/4 " = 0.02 gpf 1"= 0.04 gpf 2" = 0.16 gpf 4"=0.65 gpf 6"=1.47 gpf

Purge Data

Pump Type: Geopump Peri-Pump Purge Start Time: 1524
Tubing Type: 1/4" OD Poly. Purge Stop Time: Purge Rate (gpm):
Sample Intake Depth: 19 ft Total volume purged: Sample Rate (gpm):

Field Parameters

Time	Cumulative Vol. Purged (gallons)	pH	Temperature (°C)	Conductivity ~~mS~~ (S/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Comments	WL
1525	0	7.96	18.45	0.711	149.9	1.55	8.71	Clear	6.62
1528	0.5	7.66	18.36	0.681	130.7	0.24	7.23	Clear	7.10
1531	1	7.65	18.35	0.663	118.4	0.18	5.1	Clear	7.08
1534	1.5	7.63	18.34	0.648	108.7	0.15	4.73	Clear	7.09
1534	SAMPLE		COLLECTION						

Sampling Device

Filter Type: Size: 3-1L Amber 2"

Sample Containers Collection Time

Tag No.	Type	Preservative	Analytical Method	QA Remarks
	☐ Poly (1 L)	–	EPA 160.2	
	☐ Poly (1 L)	–	EPA 160.1	
	☐ Poly (500 mL)	–	EPA 310.1	
	☐ Poly (500 mL)	–	120.1, 300.0	
	☐ Poly (500 mL)	H_2SO_4	415.1	
	☐ Poly (500 mL)	HNO_3	6010B, 200.8, 7470A	
	☐ Poly (500 mL)	HNO_3	6010B, 200.8, 7470A	Filtered
	☐ Poly (500 mL)	–	7196	
	☐ 2 VOA (40 mL vial)	HCL	TPH-Gx	
	☐ 2 VOA (40 mL vial)	HCL	VPH	
	☐ 2 Amber (500 mL)	HCL	TPH-Dx	
	☐ 1 Amber (500 mL)	HCL	EPH	
	☐ 2 Amber (500 mL)	–	8270C	
	☐ 2 Amber (500 mL)	–	8270-SIM	
	☐ 3 VOA (40 mL vial)	HCL	8260	
	☐ 2 Amber (1 L)	–	8082	
	☐ 2 Amber (500 mL)	–	8081A	
	☐			
	☐			

Samplers' Signature Date

integral consulting inc.

700 Larkspur Landing Circle, Suite 199
Larkspur, CA 94939
(415) 464-9452

GROUNDWATER SAMPLE COLLECTION FORM

Well ID: MW-6B
Sample ID: MW-6B-GW
Date: 2/25/15
Project Name: Allied Engineering
Project Number: C1374
Field Staff: C. Lee / S. Sherman

Well Information

Monument Condition: ☒ Good ☐ Needs Repair
Well Cap Condition: ☒ Good ☐ Locked ☐ Replaced ☐ Needs Replacement
Elevation Mark: ☒ Yes ☐ Added ☐ other
Well Diameter: ☒ 2-inch ☐ 4-inch ☐ 6-inch ☐ Other
Odor: ☐ Comments Newly constructed well. Notch is generally facing N.

Casing Volume

* All measurements from TOC *
Total Well Depth: 32.9 ft ☒ Clean Bottom hard bottom ☐ Muddy Bottom ☐ Not Measured
Depth to Water: 7.98 ft
Casing Volume: 24.92 ft (H20) X 0.16 gpf = ~4 gallons
3/4 " = 0.02 gpf 1"= 0.04 gpf 2" = 0.16 gpf 4"=0.65 gpf 6"=1.47 gpf

Purge Data

Pump Type: Geopump Peri-pump
Tubing Type: 1/4"OD Poly
Approx. center of screen → Sample Intake Depth: 30 ft
Purge Start Time: 1412
Purge Stop Time: 1448
Total volume purged: 5.1
Purge Rate (gpm):
Sample Rate (gpm):

Field Parameters

Time	Cumulative Vol. Purged (gallons)	pH	Temperature (°C)	Conductivity ~~(S/cm)~~ mS/cm	ORP (mV)	DO (mg/L)	Turbidty (NTU)	Comments	Water Level (ft)
1415	0	8.40	18.67	0.550	125.6	1.46	278	Cloudy	8.45
1420	1	8.77	18.41	0.527	24.9	0.27	64.6	Cloudy	8.46
1425	2	8.81	18.39	0.525	1.5	0.12	26.5	Clear	8.43
1430	3	8.76	18.39	0.525	-8.6	0.09	3.8	Clear	8.39
1435	3.8	8.76	18.41	0.526	-26.2	0.09	1.78	Clear	8.26
1435	SAMPLE		COLLECTION						
1448	5.1	—	—	—	—	—	—	Clear	8.19

Sampling Device

Filter Type: Size:

3-1L amber 6-HCL VOAs 1-250 ml poly
2-500 ml amber 1-500 ml poly
= 5L = 1.32 gal

Sample Containers Collection Time

Tag No.	Type	Preservative	Analytical Method	QA Remarks
	☐ Poly (1 L)	–	EPA 160.2	
	☐ Poly (1 L)	–	EPA 160.1	
	☐ Poly (500 mL)	–	EPA 310.1	
	☐ Poly (500 mL)	–	120.1, 300.0	
	☐ Poly (500 mL)	H_2SO_4	415.1	
	☐ Poly (500 mL)	HNO_3	6010B, 200.8, 7470A	
	☐ Poly (500 mL)	HNO_3	6010B, 200.8, 7470A	Filtered
	☐ Poly (500 mL)	–	7196	
	☐ 2 VOA (40 mL vial)	HCL	TPH-Gx	
	☐ 2 VOA (40 mL vial)	HCL	VPH	
	☐ 2 Amber (500 mL)	HCL	TPH-Dx	
	☐ 1 Amber (500 mL)	HCL	EPH	
	☐ 2 Amber (500 mL)	--	8270C	
	☐ 2 Amber (500 mL)	–	8270-SIM	
	☐ 3 VOA (40 mL vial)	HCL	8260	
	☐ 2 Amber (1 L)	--	8082	
	☐ 2 Amber (500 mL)	–	8081A	
	☐			
	☐			

Samplers' Signature Date

APPENDIX E

STATE OF CALIFORNIA WELL COMPLETION REPORTS, RECENTLY INSTALLED WELLS MW-4A, MW-4B, MW-5A, MW-5B, MW-6A, AND MW-6B

*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e0262081

Page 1 of 1

Owner's Well Number MW-4A

Date Work Began 02/11/2015 Date Work Ended 2/12/2015

Local Permit Agency Alameda County Public Works Agency - Water Resources

Permit Number W2015-0091 Permit Date 2/5/15

DWR Use Only -- Do Not Fill In

State Well Number/Site Number

N Latitude W Longitude

APN/TRS/Other

Geologic Log

Orientation ⦿ Vertical ○ Horizontal ○ Angle Specify

Drilling Method Hollow Stem Auger Drilling Fluid

Depth from Surface Feet	to Feet	Description (Describe material, grain size, color, etc)
0	5	GRAVEL: very dark brown (7.5YR 2.5/3), moist,
		few metal debris.
		At 0.5 ft to 2.0 ft, black, slight odor, some metal
		shavings.
5	10	Sandy CLAY: greenish gray (5GY 6/1), moist,
		medium plasticity, no odor.
		At 8.0 ft, dark greenish gray (10Y 4/1).
10	11	Clayey SAND: greenish gray (5GY 6/1), moist,
		fine sand.
11	22.5	Poorly graded SAND: greenish gray (5GY 6/1),
		moist, fine sand.
		At 13.0 ft, wet.
		At 14.0 ft, light olive brown (2.5Y 5/3).
		At 21.0 ft, greenish gray (5GY 5/1).
22.5	25	Sandy CLAY: greenish gray (5GY 5/1), moist, low
		plasticity.
		At 23.5 ft, decreasing sand.
25	27	Well graded SAND with gravel: light olive brown
		(2.5Y 5/3), wet, rounded to subrounded fine gravel
		and fine to medium sand.
27	28	Sandy CLAY: grayish brown (2.5Y 5/2), moist, low
		plasticity, trace fine gravel.
28	31	Poorly graded SAND: light olive brown (2.5Y 5/3),
		wet, fine sand.
31	37.5	Well graded SAND: light olive brown (2.5Y 5/3),
		wet, rounded to subrounded fine gravel and fine
		to medium sand.
37.5	50	CLAY: light olive gray (5Y 6/2), moist, medium
		plasticity, trace fine sand.
		At 44.5 ft, abundant shells, increasing sand.

Total Depth of Boring 50 Feet

Total Depth of Completed Well 22.69 Feet

Well Owner

Name Allied Land Company

Mailing Address 2421 Blanding Ave

City Alameda State CA Zip 94501

Well Location

Address 2421 Blanding Ave

City Alameda County Alameda

Latitude 37 Deg. 46 Min. 14.234 Sec. N Longitude 122 Deg. 14 Min. 07.756 Sec. W

Datum NAD83 Dec. Lat. 37.77062063 Dec. Long. -122.2354879

APN Book 70 Page 195 Parcel 15

Township 2S Range 3W Section S7

Location Sketch

(Sketch must be drawn by hand after form is printed.)

North

See Attached Site Map

West East

South

Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.

Activity

⦿ New Well

○ Modification/Repair

○ Deepen

○ Other

○ Destroy

Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

○ Water Supply

☐ Domestic ☐ Public

☐ Irrigation ☐ Industrial

○ Cathodic Protection

○ Dewatering

○ Heat Exchange

○ Injection

⦿ Monitoring

○ Remediation

○ Sparging

○ Test Well

○ Vapor Extraction

○ Other

Water Level and Yield of Completed Well

Depth to first water 13 (Feet below surface)

Depth to Static Water Level 5.64 (Feet) Date Measured 03/19/2015

Estimated Yield * (GPM) Test Type

Test Length (Hours) Total Drawdown (Feet)

*May not be representative of a well's long term yield.

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
0	12.83	8	Blank	PVC Sch. 40	0.154	2		
12.83	22.25	8	Screen	PVC Sch. 40	0.154	2	Milled Slots	0.010

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	1	Concrete	
1	8	Cement	Type I/II Cement
8	10	Bentonite	Medium Chips Hyd
10	22.69	Filter Pack	#2/16 Sand
22.69	50	Bentonite	Medium Chips

Attachments

☐ Geologic Log

☐ Well Construction Diagram

☐ Geophysical Log(s)

☐ Soil/Water Chemical Analyses

☑ Other Site Map

Attach additional information, if it exists.

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name National EWP

Person, Firm or Corporation

1961 Meeker Avenue Richmond CA 94804

Address City State Zip

Signed 4/13/15

C-57 Licensed Water Well Contractor Date Signed

953646

C-57 License Number

DWR 188 REV 1/2006

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e0262084

Page 1 of 1

Owner's Well Number MW-4B

Date Work Began 02/13/2015 Date Work Ended 2/13/2015

Local Permit Agency Alameda County Public Works Agency - Water Resources

Permit Number W2015-0092 Permit Date 2/5/15

DWR Use Only – Do Not Fill In

State Well Number/Site Number

Latitude N Longitude W

APN/TRS/Other

Geologic Log

Orientation ⦿ Vertical ○ Horizontal ○ Angle Specify

Drilling Method Hollow Stem Auger Drilling Fluid

Depth from Surface Feet	to Feet	Description (Describe material, grain size, color, etc)
0	5	GRAVEL: very dark brown (7.5YR 2.5/3), moist,
		abundant organics (rooting), few metal debris.
		At 0.5 ft to 2.0 ft, black, slight odor, some metal
		shavings.
5	10	Sandy CLAY: greenish gray (5GY 6/1), moist,
		medium plasticity, no odor.
		At 8.0 ft, dark greenish gray (10Y 4/1).
10	11	Clayey SAND: greenish gray (5GY 6/1), moist, fine
		sand.
11	22.5	Poorly graded SAND: greenish gray (5GY 6/1),
		moist.
		At 13.0 ft, wet.
		At 14.0 ft, light olive brown (2.5Y 5/3).
		At 21.0 ft, greenish gray (5GY 5/1).
22.5	25	Sandy CLAY: greenish gray (5GY 5/1), moist, low
		plasticity.
		At 23.5 ft, decreasing sand.
25	27	Well graded SAND with gravel: light olive brown
		(2.5Y 5/3), wet, rounded to subrounded fine gravel
		and fine to medium sand.
27	28	Sandy CLAY: grayish brown (2.5Y 5/2), moist, low
		plasticity, trace fine gravel.
28	31	Poorly graded SAND: light olive brown (2.5Y 5/3),
		wet, fine sand.
31	36.78	Well graded SAND: light olive brown (2.5Y 5/3),
		wet, rounded to subrounded fine gravel and fine
		to medium sand.

Total Depth of Boring 36.78 Feet

Total Depth of Completed Well 36.78 Feet

Well Owner

Name Allied Land Company

Mailing Address 2421 Blanding Ave

City Alameda State CA Zip 94501

Well Location

Address 2421 Blanding Ave

City Alameda County Alameda

Latitude 37 Deg. 46 Min. 14.256 Sec. N Longitude 122 Deg. 14 Min. 07.806 Sec. W

Datum NAD83 Dec. Lat. 37.77062676 Dec. Long. -122.2355016

APN Book 70 Page 195 Parcel 15

Township 2S Range 3W Section S7

Location Sketch

(Sketch must be drawn by hand after form is printed.)

North

See Attached Site Map

West East

South

Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.

Activity

⦿ New Well
○ Modification/Repair
○ Deepen
○ Other
○ Destroy

Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

○ Water Supply
☐ Domestic ☐ Public
☐ Irrigation ☐ Industrial
○ Cathodic Protection
○ Dewatering
○ Heat Exchange
○ Injection
⦿ Monitoring
○ Remediation
○ Sparging
○ Test Well
○ Vapor Extraction
○ Other

Water Level and Yield of Completed Well

Depth to first water 13 (Feet below surface)

Depth to Static Water Level 3.68 (Feet) Date Measured 03/19/2015

Estimated Yield * (GPM) Test Type

Test Length (Hours) Total Drawdown (Feet)

*May not be representative of a well's long term yield.

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
0	26.92	8	Blank	PVC Sch. 40	0.154	2		
26.92	36.34	8	Screen	PVC Sch. 40	0.154	2	Milled Slots	0.010

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	1	Concrete	
1	25	Cement	Type I/II Cement
23	25	Bentonite	Medium Chips Hyd.
25	36.78	Filter Pack	#2/16 Sand

Attachments

☐ Geologic Log
☐ Well Construction Diagram
☐ Geophysical Log(s)
☐ Soil/Water Chemical Analyses
☑ Other Site Map

Attach additional information, if it exists.

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name National EWP
Person, Firm or Corporation

1961 Meeker Avenue Richmond CA 94804
Address City State Zip

Signed
C-57 Licensed Water Well Contractor

4/13/15
Date Signed

953646
C-57 License Number

DWR 188 REV 1/2006

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e0262090

Page 1 of 1

Owner's Well Number MW-6B

Date Work Began 02/12/2015 Date Work Ended 2/13/2015

Local Permit Agency Alameda County Public Works Agency - Water Resources

Permit Number W2015-0093 Permit Date 2/5/15

DWR Use Only – Do Not Fill In

State Well Number/Site Number

N W

Latitude Longitude

APN/TRS/Other

Geologic Log

Orientation ⦿ Vertical ○ Horizontal ○ Angle Specify

Drilling Method Hollow Stem Auger Drilling Fluid

Depth from Surface Feet	to Feet	Description Describe material, grain size, color, etc
0	2	Concrete
2	2.5	Gravelly SAND: dark olive gray (5Y 3/2), dry, low
		plasticity, fine to coarse sand, fine gravel.
2.5	4.5	SILT: black (5Y 2.5/1), moist, low plasticity.
4.5	10	CLAY with sand: olive gray (5Y 5/2), moist,
		medium plasticity.
		At 8.5 ft, orange mottling, increasing sand.
10	24.5	Poorly graded SAND: black (5Y 2.5/1), wet, fine
		sand.
		At 10.2 ft, light olive gray (5Y 6/2).
		At 15.0 ft, pale olive (5Y 6/3).
		At 17.0 ft, light olive brown (2.5Y 5/4).
24.5	27.5	Sandy CLAY: gray (5Y 5/1), moist, low plasticity.
		At 26.0 ft, increasing sand.
27.5	29.5	Clayey SAND with gravel: greenish gray
		(10Y 6/1), moist, subrounded fine to coarse sand
		and fine gravel.
29.5	45	CLAY: grayish brown (2.5Y 5/2), moist, low
		plasticity.
		At 31.0 ft, light olive brown (2.5Y 5/4), medium
		plasticity.
		At 34.0 ft, few subrounded fine gravels.
		At 39.0 ft to 42.0 ft, few shell fragments
45	50	No Recovery

Total Depth of Boring 50 Feet

Total Depth of Completed Well 33.17 Feet

Well Owner

Name Allied Land Company

Mailing Address 2421 Blanding Ave

City Alameda State CA Zip 94501

Well Location

Address 2421 Blanding Ave

City Alameda County Alameda

Latitude 37 Deg. 46 Min. 13.531 Sec. N Longitude 122 Deg. 14 Min. 08.406 Sec. W

Datum NAD83 Dec. Lat. 37.77042529 Dec. Long. -122.2356682

APN Book 70 Page 195 Parcel 15

Township 2S Range 3W Section S7

Location Sketch

(Sketch must be drawn by hand after form is printed.)

North

See Attached Site Map

West East

South

Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.

Activity

⦿ New Well

○ Modification/Repair

○ Deepen

○ Other

○ Destroy

Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

○ Water Supply

☐ Domestic ☐ Public

☐ Irrigation ☐ Industrial

○ Cathodic Protection

○ Dewatering

○ Heat Exchange

○ Injection

⦿ Monitoring

○ Remediation

○ Sparging

○ Test Well

○ Vapor Extraction

○ Other

Water Level and Yield of Completed Well

Depth to first water 10 (Feet below surface)

Depth to Static Water Level 7.50 (Feet) Date Measured 02/24/2015

Estimated Yield * (GPM) Test Type

Test Length (Hours) Total Drawdown (Feet)

*May not be representative of a well's long term yield.

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
0	28.06	8	Blank	PVC Sch. 40	0.154	2		
28.06	32.73	8	Screen	PVC Sch. 40	0.154	2	Milled Slots	0.010

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	1	Concrete	
1	25.0	Cement	Type I/II Cement
25.0	27.0	Bentonite	Medium Chips Hyd.
27.0	33.3	Filter Pack	#2/16 Sand
33.3	45.0	Bentonite	Medium Chips

Attachments

☐ Geologic Log

☐ Well Construction Diagram

☐ Geophysical Log(s)

☐ Soil/Water Chemical Analyses

☑ Other Site Map

Attach additional information, if it exists.

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name National EWP

Person, Firm or Corporation

1961 Meeker Avenue Richmond CA 94804

Address City State Zip

Signed 4/13/15 953646

C-57 Licensed Water Well Contractor Date Signed C-57 License Number

DWR 188 REV. 1/2006

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

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File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e0262604

Page 1 of 1

Owner's Well Number MW-5A

Date Work Began 02/18/2015 Date Work Ended 2/18/2015

Local Permit Agency Alameda County Public Works Agency - Water Resources

Permit Number W2015-0256 Permit Date 3/26/15

DWR Use Only – Do Not Fill In

State Well Number/Site Number

N Latitude W Longitude

APN/TRS/Other

Geologic Log

Orientation ◉ Vertical ○ Horizontal ○ Angle Specify

Drilling Method Hollow Stem Auger Drilling Fluid

Depth from Surface Feet	to Feet	Description (Describe material, grain size, color, etc)
0	9	Clayey Gravel with sand: yellowish brown (10YR 5/6), moist, angular fine to coarse sand and gravel. At 4.9 ft, wet.
9	11	Clayey SAND: grayish brown (2.5Y 5/2), fine sand, wet.
11	22.5	Poorly graded SAND: grayish brown (2.5Y 5/2), wet, rounded fine sand. At 14.0 ft, light olive brown (2.5Y 5/4). At 20.0 ft, greenish gray (10Y 6/1).
22.5	24.5	Clayey SAND: greenish gray (10Y 6/1), fine sand, wet.

Total Depth of Boring 24.4 Feet

Total Depth of Completed Well 24.4 Feet

Well Owner

Name Allied Land Company

Mailing Address 2421 Blanding Ave

City Alameda State CA Zip 94501

Well Location

Address 2421 Blanding Ave

City Alameda County Alameda

Latitude 37 Deg. 46 Min. 15.026 Sec. N Longitude 122 Deg 14 Min 09.386 Sec W

Datum NAD83 Dec. Lat 37.77084049 Dec Long -122.2359405

APN Book 70 Page 195 Parcel 15

Township 2S Range 3W Section S7

Location Sketch

(Sketch must be drawn by hand after form is printed.)

North

See Attached Site Map

West East

South

Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete

Activity

◉ New Well

○ Modification/Repair

○ Deepen

○ Other

○ Destroy

Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

○ Water Supply

☐ Domestic ☐ Public

☐ Irrigation ☐ Industrial

○ Cathodic Protection

○ Dewatering

○ Heat Exchange

○ Injection

◉ Monitoring

○ Remediation

○ Sparging

○ Test Well

○ Vapor Extraction

○ Other

Water Level and Yield of Completed Well

Depth to first water 4.9 (Feet below surface)

Depth to Static Water Level 4.92 (Feet) Date Measured 03/19/2015

Estimated Yield * (GPM) Test Type

Test Length (Hours) Total Drawdown (Feet)

*May not be representative of a well's long term yield

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size If Any (Inches)
0	14.54	8	Blank	PVC Sch. 40	0.154	2		
14.54	23.96	8	Screen	PVC Sch. 40	0.154	2	Milled Slots	0.010

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	1	Concrete	
1	10.5	Cement	Type I/II Cement
10.5	12.5	Bentonite	Medium Chips Hyd.
12.5	24.4	Filter Pack	#2/16 Sand

Attachments

☐ Geologic Log

☐ Well Construction Diagram

☐ Geophysical Log(s)

☐ Soil/Water Chemical Analyses

☑ Other Site Map

Attach additional information, if it exists.

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name National EWP

Drilling Company

1961 Meeker Avenue Richmond CA 94804

Address City State Zip

Signed 4/13/15

C-57 Licensed Water Well Contractor Date Signed

953646

C-57 License Number

DWR 188 REV 1/2006

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

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State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e0262608

Page 1 of 1

Owner's Well Number MW-5B

Date Work Began 02/17/2015 Date Work Ended 2/17/2015

Local Permit Agency Alameda County Public Works Agency - Water Resources

Permit Number W2015-0257 Permit Date 3/26/15

DWR Use Only – Do Not Fill In

State Well Number/Site Number

N W

Latitude Longitude

APN/TRS/Other

Geologic Log

Orientation ⦿ Vertical ○ Horizontal ○ Angle Specify

Drilling Method Hollow Stem Auger Drilling Fluid

Depth from Surface Feet	to Feet	Description Describe material, grain size, color, etc
0	9	Clayey Gravel with sand: yellowish brown
		(10YR 5/6), moist, angular fine to coarse sand and
		gravel. At 4.9 ft, wet.
9	11	Clayey SAND: grayish brown (2.5Y 5/2), fine sand,
		wet.
11	22.5	Poorly graded SAND: grayish brown (2.5Y 5/2),
		wet, rounded fine sand.
		At 14.0 ft, light olive brown (2.5Y 5/4).
		At 20.0 ft, greenish gray (10Y 6/1).
22.5	24.5	Clayey SAND: greenish gray (10Y 6/1), fine sand,
		wet.
24.5	30	Sandy CLAY: dark greenish gray (5GY 6/1), moist,
		medium plasticity, fine sand.
		At 25.0 ft, decreasing sand.
		At 29.0 ft, light greenish gray (10Y 7/1).
30	31	Clayey SAND: grayish brown (2.5Y 5/2), fine sand,
		moist.
31	31.5	Poorly graded SAND: grayish brown (2.5Y 5/2),
		fine sand, wet.
31.5	33	CLAY with sand: grayish brown (2.5Y 5/2), moist,
		low plasticity. At 32.0 ft, increasing fine gravel and
		fine to coarse sand.
33	43.3	Well graded SAND: grayish brown (2.5Y 5/2), wet,
		rounded fine to coarse sand, trace subangular
		gravel.
43.3	50	Sandy CLAY: grayish brown (2.5Y 5/2), moist,
		medium plasticity, fine sand.
		At 49 ft, abundant shells.

Total Depth of Boring 50 Feet

Total Depth of Completed Well 43.29 Feet

Well Owner

Name Allied Land Company

Mailing Address 2421 Blanding Ave

City Alameda State CA Zip 94501

Well Location

Address 2421 Blanding Ave

City Alameda County Alameda

Latitude 37 Deg 46 Min. 15.045 Sec. N Longitude 122 Deg. 14 Min. 09.439 Sec W

Datum NAD83 Dec. Lat. 37.77084587 Dec. Long. -122.2359553

APN Book 70 Page 195 Parcel 15

Township 2S Range 3W Section S7

Location Sketch

(Sketch must be drawn by hand after form is printed.)

North

See Attached Site Map

West East

South

Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.

Activity

⦿ New Well

○ Modification/Repair

○ Deepen

○ Other

○ Destroy

Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

○ Water Supply

☐ Domestic ☐ Public

☐ Irrigation ☐ Industrial

○ Cathodic Protection

○ Dewatering

○ Heat Exchange

○ Injection

⦿ Monitoring

○ Remediation

○ Sparging

○ Test Well

○ Vapor Extraction

○ Other

Water Level and Yield of Completed Well

Depth to first water 4.9 (Feet below surface)

Depth to Static Water Level 5.45 (Feet) Date Measured 02/27/2015

Estimated Yield * (GPM) Test Type

Test Length (Hours) Total Drawdown (Feet)

*May not be representative of a well's long term yield.

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size If Any (Inches)
0	30.55	8	Blank	PVC Sch. 40	0.154	2		
30.55	42.85	8	Screen	PVC Sch. 40	0.154	2	Milled Slots	0.010

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	1	Concrete	
1	27.0	Cement	Type I/II Cement
27.0	29.0	Bentonite	Medium Chips Hyd.
29.0	43.5	Filter Pack	#2/16 Sand
43.5	50	Bentonite	Medium Chips

Attachments

☐ Geologic Log

☐ Well Construction Diagram

☐ Geophysical Log(s)

☐ Soil/Water Chemical Analyses

☑ Other Site Map

Attach additional information, if it exists.

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name National EWP

Firm or Corporate Name

1961 Meeker Avenue Richmond CA 94804

Address City State Zip

Signed 4/13/15 953646

C-57 Licensed Water Well Contractor Date Signed C-57 License Number

DWR 188 REV 1/2006

IF ADDITIONAL SPACE IS NEEDED USE NEXT CONSECUTIVELY NUMBERED FORM

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File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e0262610

Page 1 of 1

Owner's Well Number MW-6A

Date Work Began 02/17/2015 Date Work Ended 2/17/2015

Local Permit Agency Alameda County Public Works Agency - Water Resources

Permit Number W2015-0258 Permit Date 3/26/15

DWR Use Only -- Do Not Fill In

State Well Number/Site Number

Latitude N Longitude W

APN/TRS/Other

Geologic Log

Orientation ⦿ Vertical ○ Horizontal ○ Angle Specify

Drilling Method Hollow Stem Auger Drilling Fluid

Depth from Surface Feet	to Feet	Description Describe material, grain size, color, etc
0	2	Concrete
2	2.5	Gravelly SAND: dark olive gray (5Y 3/2), dry, low
		plasticity, fine to coarse sand, fine gravel.
2.5	4.5	SILT: black (5Y 2.5/1), moist, low plasticity.
4.5	10	CLAY with sand: olive gray (5Y 5/2), moist,
		medium plasticity.
		At 8.5, orange mottling, increasing sand.
10	24.5	Poorly graded SAND: black (5Y 2.5/1), wet, fine
		sand.
		At 10.2 ft, light olive gray (5Y 6/2).
		At 15.0 ft, pale olive (5Y 6/3).
		At 17.0 ft, light olive brown (2.5Y 5/4).
24.5	24.64	Sandy CLAY: gray (5Y 5/1), moist, low plasticity.

Total Depth of Boring 50 Feet

Total Depth of Completed Well 24.64 Feet

Well Owner

Name Allied Land Company

Mailing Address 2421 Blanding Ave

City Alameda State CA Zip 94501

Well Location

Address 2421 Blanding Ave

City Alameda County Alameda

Latitude 37 Deg. 46 Min. 13.557 Sec. N Longitude 122 Deg. 14 Min. 08.454 Sec. W

Datum NAD83 Dec. Lat. 37.77043237 Dec. Long. -122.2356818

APN Book 70 Page 195 Parcel 15

Township 2S Range 3W Section S7

Location Sketch

(Sketch must be drawn by hand after form is printed.)

North

See Attached Site Map

West East

South

Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.

Activity

⦿ New Well

○ Modification/Repair

○ Deepen

○ Other

○ Destroy

Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

○ Water Supply

☐ Domestic ☐ Public

☐ Irrigation ☐ Industrial

○ Cathodic Protection

○ Dewatering

○ Heat Exchange

○ Injection

⦿ Monitoring

○ Remediation

○ Sparging

○ Test Well

○ Vapor Extraction

○ Other

Water Level and Yield of Completed Well

Depth to first water 10 (Feet below surface)

Depth to Static Water Level 6.62 (Feet) Date Measured 02/25/2015

Estimated Yield * (GPM) Test Type

Test Length (Hours) Total Drawdown (Feet)

*May not be representative of a well's long term yield.

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
0	14.78	8	Blank	PVC Sch. 40	0.154	2		
14.78	24.2	8	Screen	PVC Sch. 40	0.154	2	Milled Slots	0.010

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	1	Concrete	
1	10.5	Cement	Type I/II Cement
10.5	12.5	Bentonite	Medium Chips Hyd.
12.5	24.64	Filter Pack	#2/16 Sand

Attachments

☐ Geologic Log

☐ Well Construction Diagram

☐ Geophysical Log(s)

☐ Soil/Water Chemical Analyses

☑ Other Site Map

Attach additional information, if it exists.

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name National EWP

Person, Firm or Corporation

1961 Marker Avenue Richmond CA 94804

Address City State

Signed 4/13/15 953646

C-57 Licensed Water Well Contractor Date Signed C-57 License Number

DWR 188 REV 1/2006

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

APPENDIX F

WELL SURVEY REPORT

TABLE OF ELEVATIONS & COORDINATES
ON MONITORING WELLS
INTEGRAL CONSULTING, INC

2421 BLANDING AVENUE, ALAMEDA

WELL ID #	NORTHING (FT.) / LATITUDE (D.M.S.)	EASTING (FT.) / LONGITUDE (D.M.S.)	ELEVATION (FT.)	DESCRIPTION
MW4A	2107713.35	6060072.665	8.83	2" PVC NORTH SIDE
	N 37° 46' 14.234"	W 122° 14' 07.756"	9.27	RIM OF WELL
			9.01	GROUND 1' NORTH
MW4B	2107715.655	6060068.765	8.89	2" PVC NORTH SIDE
	N 37° 46' 14.256"	W 122° 14' 07.806"	9.19	RIM OF WELL
			8.93	GROUND 1' NORTH
MW5A	2107795.819	6059943.344	10.64	2" PVC NORTH SIDE
	N 37° 46' 15.026"	W 122° 14' 09.386"	11.17	RIM OF WELL
			10.84	GROUND 1' NORTH
MW5B	2107797.856	6059939.129	10.84	2" PVC NORTH SIDE
	N 37° 46' 15.045"	W 122° 14' 09.439"	11.27	RIM OF WELL
			11.08	GROUND 1' NORTH
MW6A	2107645.853	6060015.376	11.47	2" PVC NORTH SIDE
	N 37° 46' 13.557"	W 122° 14' 08.454"	11.69	RIM OF WELL
			11.67	GROUND 1' NORTH
MW6B	2107643.203	6060019.232	11.38	2" PVC NORTH SIDE
	N 37° 46' 13.531"	W 122° 14' 08.406"	11.68	RIM OF WELL
			11.65	GROUND 1' NORTH

BENCHMARK: NGS BENCHMARK PID HT0024
DESCRIBED BY COAST AND GEODETIC SURVEY 1951

AT OAKLAND, ABOUT 50 YARDS SOUTHWEST OF THE Y JUNCTION OF 29TH AND 23RD AVENUES, IN THE TOP OF THE SOUTHEAST SIDEWALK OF THE PARK STREET BRIDGE OVER THE CHANNEL, 9.4 FEET EAST OF THE EAST CORNER OF THE DRAW SPAN, AND 3.4 FEET NORTHWEST OF THE SOUTHEAST STEEL GUARD RAIL.

ELEVATION = 21.16 (NAVD 88 ADJUSTED)

HORIZONTAL CONTROL:
PID: HT2490: NORTHING: 2105020.64, EASTING: 6062655.51, EPOCH DATE: 1991.35
PID: HT2497: NORTHING: 2106340.65, EASTING: 6061005.86, EPOCH DATE: 1991.35
Coordinate values are based on the California Coordinate System, Zone III NAD 83 Datum.

3/4/15

JOE THOMPSON, LS 8121 — DATE
LICENSE EXPIRES: 12/31/2016

PROFESSIONAL LAND SURVEYOR
JOSEPH THOMPSON
No. 8121
Exp. 12-31-2016
STATE OF CALIFORNIA

KIER & WRIGHT
CIVIL ENGINEERS & SURVEYORS, INC.
2850 Collier Canyon Rd. Phone (925) 245-8788
Livermore, California 94551 Fax (925) 245-8796

Z:\2013\A13691-3\022515 A13691-3 WELL REPORT.xls

APPENDIX G

LABORATORY ANALYTICAL REPORTS FOR SOIL AND GROUNDWATER, EXISTING MONITORING WELL SAMPLING, AND PRODUCT SAMPLING, DATA GAPS RELATED SAMPLING

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 264606
ANALYTICAL REPORT

Integral Consulting, Inc. 115 Sansome Street San Francisco, CA 94104	Project : C1361 Location : Allied Engineering Level : II

Sample ID	Lab ID
MW-4-0.5-1.5	264606-001
SB-21-1.0-2.0	264606-002
TB-021115	264606-003

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Tracy Babjar Date: 02/19/2015

Tracy Babjar
Project Manager
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(510) 204-2226

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**264606**
Client:	**Integral Consulting, Inc.**
Project:	**C1361**
Location:	**Allied Engineering**
Request Date:	**02/11/15**
Samples Received:	**02/11/15**

This data package contains sample and QC results for two soil samples and one water sample, requested for the above referenced project on 02/11/15. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):
Low recovery was observed for gasoline C7-C12 in the MSD for batch 220360; the parent sample was not a project sample, the LCS was within limits, and the associated RPD was within limits. Low surrogate recovery was observed for bromofluorobenzene (FID) in SB-21-1.0-2.0 (lab # 264606-002). Gasoline C7-C12 was detected between the MDL and the RL in the method blank for batch 220534; this analyte was not detected in the sample at or above the RL. No other analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B) Water:
Methylene chloride was detected between the MDL and the RL in TB-021115 (lab # 264606-003); this analyte is a common laboratory contaminant. No other analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B) Soil:
MW-4-0.5-1.5 (lab # 264606-001) was diluted due to high hydrocarbons. No other analytical problems were encountered.

Semivolatile Organics by GC/MS (EPA 8270C):
No analytical problems were encountered.

PCBs (EPA 8082):
All samples underwent sulfuric acid cleanup using EPA Method 3665A. All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. High recoveries were observed for Aroclor-1016 in the MS/MSD of MW-4-0.5-1.5 (lab # 264606-001); the LCS was within limits, the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated samples. No other analytical problems were encountered.

Metals (EPA 6010B and EPA 7471A):
Low recoveries were observed for a number of analytes in the MS/MSD for batch 220541; the parent sample was not a project sample, the LCS was within limits, and the associated RPDs were within limits. Chromium and zinc were detected between the MDL and the RL in the method blank for batch 220541;

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**264606**
Client:	**Integral Consulting, Inc.**
Project:	**C1361**
Location:	**Allied Engineering**
Request Date:	**02/11/15**
Samples Received:	**02/11/15**

Metals (EPA 6010B and EPA 7471A):
these analytes were detected in samples at a level at least 10 times that of the blank. No other analytical problems were encountered.

Hexavalent Chromium (EPA 7196A):
Low recovery was observed for hexavalent chromium in the matrix spike for batch 220352; the parent sample was not a project sample, and the LCS was within limits. No other analytical problems were encountered.

Moisture (ASTM D2216/CLP):
No analytical problems were encountered.

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
in Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # 2604606

Chain of Custody # _____

Project No: C1361
Project Name: Allied Engineering
Project P. O. No: C1361 Task 3
EDD Format: Report Level ☐ II ☐ III ☐ IV
Turnaround Time: ☐ RUSH _____ ☒ Standard

Sampler: C. Lyles
Report To: B. Deshields
Company: Integral Consulting Inc.
Telephone: 301-706-0791 (Chris)
Email: bdeshields@integral-corp.com
707-953-8192 (Bridgette)

Lab No.	Sample ID.	Sampling: Date Collected	Sampling: Time Collected	Matrix: Water	Matrix: Solid	# of Containers	Chemical Preservative: HCl (Meoh)	H2SO4	HNO3	NaOH	None	TPH-g by 8015	TPH-d by 8015	TPH-mo by 8015	SVOCs by 8270	Full list of 8260 VOCs incl. 6 oxy.	Title 22 Metals by 6010/7471	Cr VI by 3060/7196	PCBs by 8082
	MW-4-0.5-1.5	2/11/15	1347		X	6	1				5	X	X	X	X	X	X	X	X
	SB-21-1.0-2.0	2/11/15	1508		X	6	1				5	X	X	X	X	X	X	X	X
	TB-021115	2/11/15	0000	X		1				1						X			

Notes:
- separate EDF + report.
- lab to homogenize.

SAMPLE RECEIPT
☒ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 2/11/15 TIME: 1524
DATE: 2/11/15 TIME: 1700
DATE: TIME:

RECEIVED BY:
DATE: 2/11/15 TIME: 1524
DATE: 2/11/15 TIME: 1700
DATE: TIME:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 2646606 Date Received 2/11/15 Number of coolers 1
Client Integral Project C1361

Date Opened 2/11 By (print) " PJ " (sign) " "
Date Logged in " " By (print) " " (sign) " "

1. Did cooler come with a shipping slip (airbill, etc) ____ YES NO
   Shipping info ____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many ____ Name ____ Date ____
2B. Were custody seals intact upon arrival? ____ YES NO N/A
3. Were custody papers dry and intact when received? ____ YES NO
4. Were custody papers filled out properly (ink, signed, etc)? ____ YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ____ YES NO
6. Indicate the packing in cooler: (if other, describe) ____

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 5-9

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ____ YES NO
   If YES, what time were they transferred to freezer? ____
9. Did all bottles arrive unbroken/unopened? ____ YES NO
10. Are there any missing / extra samples? ____ YES NO
11. Are samples in the appropriate containers for indicated tests? ____ YES NO
12. Are sample labels present, in good condition and complete? ____ YES NO
13. Do the sample labels agree with custody papers? ____ YES NO
14. Was sufficient amount of sample sent for tests requested? ____ YES NO
15. Are the samples appropriately preserved? ____ YES NO N/A
16. Did you check preservatives for all bottles for each sample? ____ YES NO N/A
17. Did you document your preservative check? ____ YES NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? ____ YES NO N/A
19. Did you change the hold time in LIMS for preserved terracores? ____ YES NO N/A
20. Are bubbles > 6mm absent in VOA samples? ____ YES NO N/A
21. Was the client contacted concerning this sample delivery? ____ YES NO
   If YES, Who was called? ____ By ____ Date: ____

COMMENTS

Rev 10, 9/12

Curtis & Tompkins, Ltd.

Detections Summary for 264606

Results for any subcontracted analyses are not included in this summary.

Client : Integral Consulting, Inc.
Project : C1361
Location : Allied Engineering

Client Sample ID : MW-4-0.5-1.5 Laboratory Sample ID : 264606-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.80	Y	0.17	0.013	mg/Kg	Dry	1.000	EPA 8015B	EPA 5035
Diesel C10-C24	14	Y	1.1	0.34	mg/Kg	Dry	1.000	EPA 8015B	EPA 3550B
Motor Oil C24-C36	140		5.6	1.7	mg/Kg	Dry	1.000	EPA 8015B	EPA 3550B
Acetone	500	J	770	130	ug/Kg	Dry	34.87	EPA 8260B	EPA 5035
Benzene	13	J	190	3.9	ug/Kg	Dry	34.87	EPA 8260B	EPA 5035
Ethylbenzene	46	J	190	3.9	ug/Kg	Dry	34.87	EPA 8260B	EPA 5035
m,p-Xylenes	28	J	190	3.9	ug/Kg	Dry	34.87	EPA 8260B	EPA 5035
o-Xylene	12	J	190	3.9	ug/Kg	Dry	34.87	EPA 8260B	EPA 5035
Isopropylbenzene	11	J	190	4.7	ug/Kg	Dry	34.87	EPA 8260B	EPA 5035
Propylbenzene	41	J	190	5.6	ug/Kg	Dry	34.87	EPA 8260B	EPA 5035
1,2,4-Trimethylbenzene	9.4	J	190	5.7	ug/Kg	Dry	34.87	EPA 8260B	EPA 5035
sec-Butylbenzene	11	J	190	5.9	ug/Kg	Dry	34.87	EPA 8260B	EPA 5035
n-Butylbenzene	37	J	190	7.3	ug/Kg	Dry	34.87	EPA 8260B	EPA 5035
bis(2-Ethylhexyl)phthalate	77	J	370	9.4	ug/Kg	Dry	1.000	EPA 8270C	EPA 3550B
Aroclor-1248	94		11	3.4	ug/Kg	Dry	1.000	EPA 8082	EPA 3550B
Aroclor-1260	14		11	1.7	ug/Kg	Dry	1.000	EPA 8082	EPA 3550B
Antimony	42		0.62	0.20	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Barium	36		0.31	0.060	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cadmium	19		0.31	0.020	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Chromium	2,500		31	2.6	mg/Kg	Dry	100.0	EPA 6010B	EPA 3050B
Cobalt	99		0.31	0.024	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Copper	640		32	11	mg/Kg	Dry	100.0	EPA 6010B	EPA 3050B
Lead	250		0.31	0.090	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Mercury	0.017	J	0.019	0.0011	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Molybdenum	170		0.31	0.069	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Nickel	1,100		31	8.4	mg/Kg	Dry	100.0	EPA 6010B	EPA 3050B
Vanadium	160		0.31	0.031	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Zinc	170		1.2	0.12	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Moisture, Percent	10		1		%	As Recd	1.000	ASTM D2216/CLP	METHOD

Curtis & Tompkins, Ltd.

Client Sample ID : SB-21-1.0-2.0 Laboratory Sample ID : 264606-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	4.3	Y	1.2	0.36	mg/Kg	Dry	1.000	EPA 8015B	EPA 3550B
Motor Oil C24-C36	39		5.9	1.8	mg/Kg	Dry	1.000	EPA 8015B	EPA 3550B
Acetone	4.0	J	23	3.8	ug/Kg	Dry	0.9881	EPA 8260B	EPA 5035
Trichloroethene	0.86	J	5.8	0.84	ug/Kg	Dry	0.9881	EPA 8260B	EPA 5035
Tetrachloroethene	1.2	J	5.8	0.74	ug/Kg	Dry	0.9881	EPA 8260B	EPA 5035
Phenanthrene	14	J	79	9.6	ug/Kg	Dry	1.000	EPA 8270C	EPA 3550B
Fluoranthene	29	J	79	11	ug/Kg	Dry	1.000	EPA 8270C	EPA 3550B
Pyrene	32	J	79	8.7	ug/Kg	Dry	1.000	EPA 8270C	EPA 3550B
Benzo(a)anthracene	15	J	79	8.0	ug/Kg	Dry	1.000	EPA 8270C	EPA 3550B
Chrysene	22	J	79	9.7	ug/Kg	Dry	1.000	EPA 8270C	EPA 3550B
bis(2-Ethylhexyl)phthalate	12	J	400	10	ug/Kg	Dry	1.000	EPA 8270C	EPA 3550B
Benzo(b)fluoranthene	29	J	79	6.9	ug/Kg	Dry	1.000	EPA 8270C	EPA 3550B
Benzo(k)fluoranthene	9.6	J	79	7.1	ug/Kg	Dry	1.000	EPA 8270C	EPA 3550B
Benzo(a)pyrene	19	J	79	7.0	ug/Kg	Dry	1.000	EPA 8270C	EPA 3550B
Indeno(1,2,3-cd)pyrene	25	J	79	9.1	ug/Kg	Dry	1.000	EPA 8270C	EPA 3550B
Benzo(g,h,i)perylene	36	J	79	9.8	ug/Kg	Dry	1.000	EPA 8270C	EPA 3550B
Aroclor-1260	6.7	J	11	1.8	ug/Kg	Dry	1.000	EPA 8082	EPA 3550B
Antimony	0.80		0.57	0.18	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Arsenic	2.2		0.28	0.094	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Barium	160		0.28	0.055	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Beryllium	0.25		0.11	0.022	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cadmium	0.41		0.28	0.018	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Chromium	32		0.28	0.024	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cobalt	5.1		0.28	0.022	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Copper	27		0.29	0.098	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Lead	220		0.28	0.083	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Mercury	0.30		0.021	0.0012	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Molybdenum	0.27	J	0.28	0.064	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Nickel	23		0.28	0.077	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Vanadium	24		0.28	0.028	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Zinc	100		1.1	0.11	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Moisture, Percent	15		1		%	As Recd	1.000	ASTM D2216/CLP	METHOD

Client Sample ID : TB-021115 Laboratory Sample ID : 264606-003

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
tert-Butyl Alcohol (TBA)	2.3	J	10	2.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Methylene Chloride	0.5	J	10	0.4	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Chloroform	0.1	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

J = Estimated value

Y = Sample exhibits chromatographic pattern which does not resemble standard

Curtis & Tompkins, Ltd.

Gasoline by GC/FID (5035 Prep)

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8015B
Matrix:	Soil	Diln Fac:	1.000
Units:	mg/Kg	Sampled:	02/11/15
Basis:	dry	Received:	02/11/15

Field ID:	MW-4-0.5-1.5	Moisture:	10%
Type:	SAMPLE	Batch#:	220360
Lab ID:	264606-001	Analyzed:	02/12/15

Analyte	Result	RL	MDL
Gasoline C7-C12	0.80 Y	0.17	0.013

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	109	78-138

Field ID:	SB-21-1.0-2.0	Moisture:	15%
Type:	SAMPLE	Batch#:	220534
Lab ID:	264606-002	Analyzed:	02/18/15

Analyte	Result	RL	MDL
Gasoline C7-C12	ND	0.20	0.015

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	8 *	78-138

Type:	BLANK	Batch#:	220360
Lab ID:	QC776949	Analyzed:	02/12/15

Analyte	Result	RL	MDL
Gasoline C7-C12	ND	0.20	0.015

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	99	78-138

Type:	BLANK	Batch#:	220534
Lab ID:	QC777633	Analyzed:	02/18/15

Analyte	Result	RL	MDL
Gasoline C7-C12	0.016 J	0.20	0.015

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	99	78-138

*= Value outside of QC limits; see narrative
J= Estimated value
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/FID (5035 Prep)

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC776948	Batch#:	220360
Matrix:	Soil	Analyzed:	02/12/15
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	1.024	102	80-121

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	101	78-138

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/FID (5035 Prep)

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	264578-002	Batch#:	220360
Matrix:	Soil	Sampled:	02/05/15
Units:	mg/Kg	Received:	02/11/15
Basis:	dry	Analyzed:	02/12/15

Type: MS Moisture: 20%
Lab ID: QC776971

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	5.854	13.30	14.84	68	50-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	101	78-138

Type: MSD Moisture: 20%
Lab ID: QC776972

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	12.76	11.97	48 *	50-120	19	31

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	101	78-138

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/FID (5035 Prep)

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC777632	Batch#:	220534
Matrix:	Soil	Analyzed:	02/18/15
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	1.006	101	80-121

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	96	78-138

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/FID (5035 Prep)

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	264629-007	Batch#:	220534
Matrix:	Soil	Sampled:	02/08/15
Units:	mg/Kg	Received:	02/12/15
Basis:	as received	Analyzed:	02/18/15

Type: MS Lab ID: QC777634

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<0.07656	9.524	8.131	85	50-120

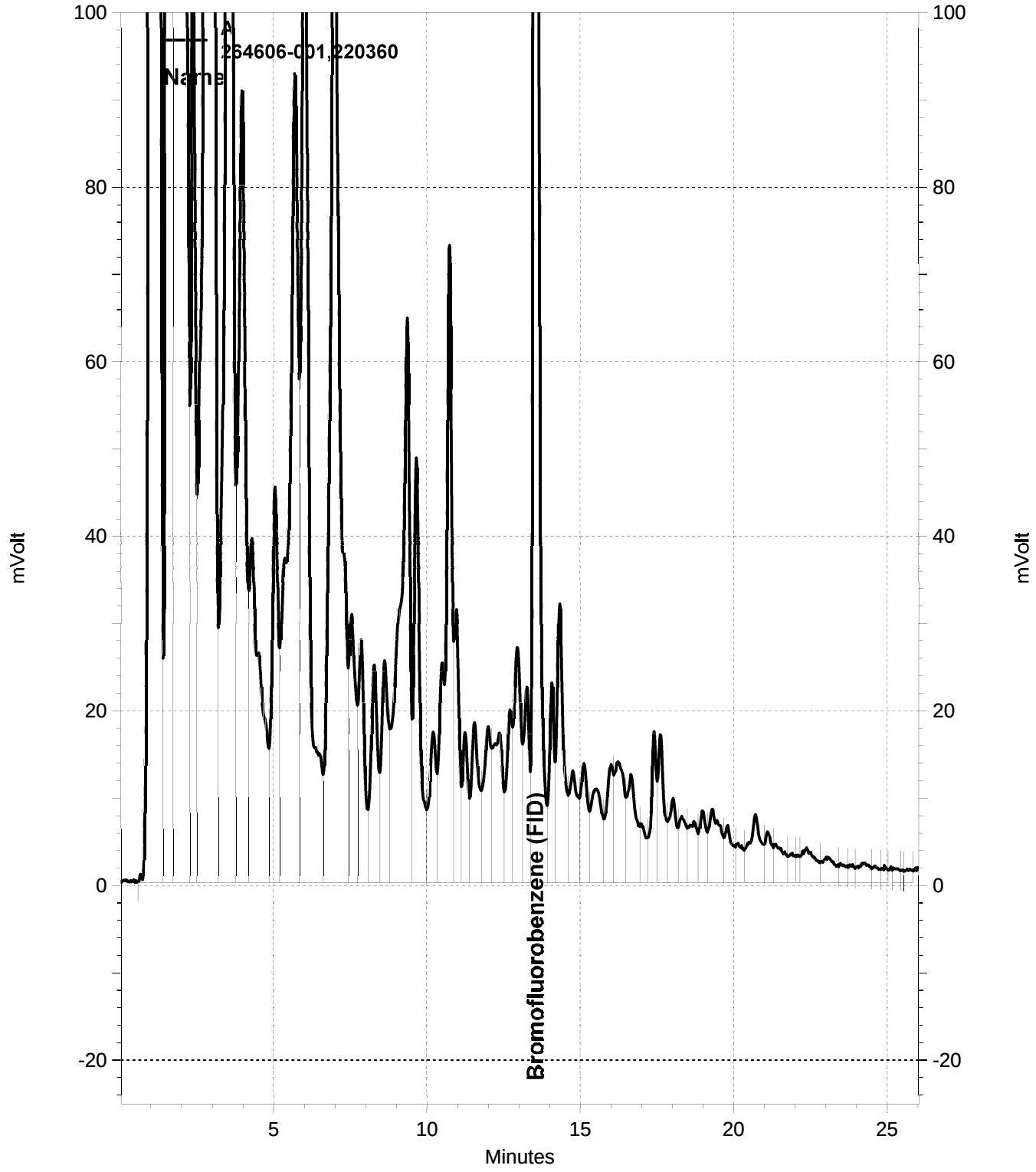
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	103	78-138

Type: MSD Lab ID: QC777635

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	9.709	8.392	86	50-120	1	31

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	104	78-138

RPD= Relative Percent Difference



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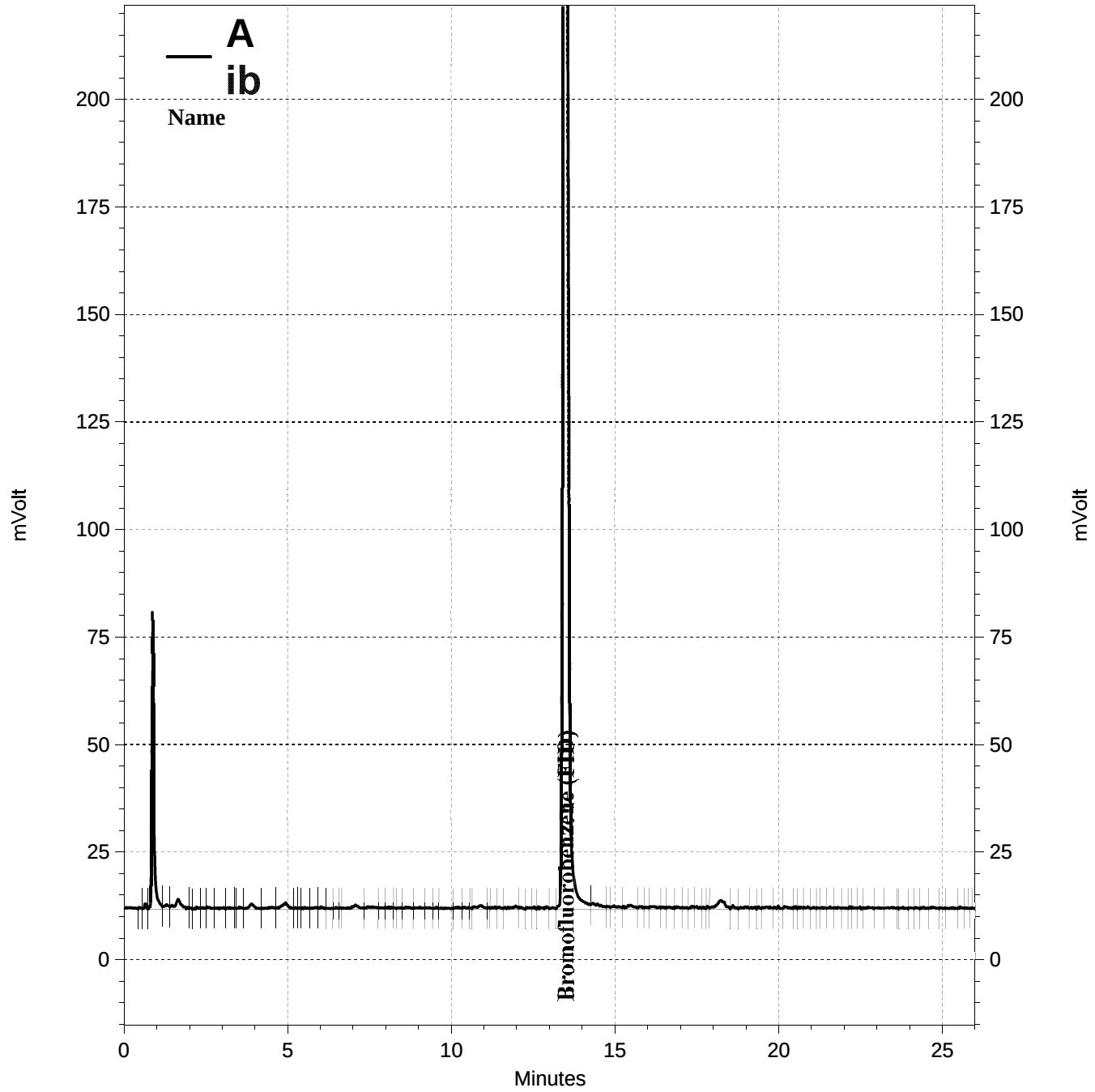

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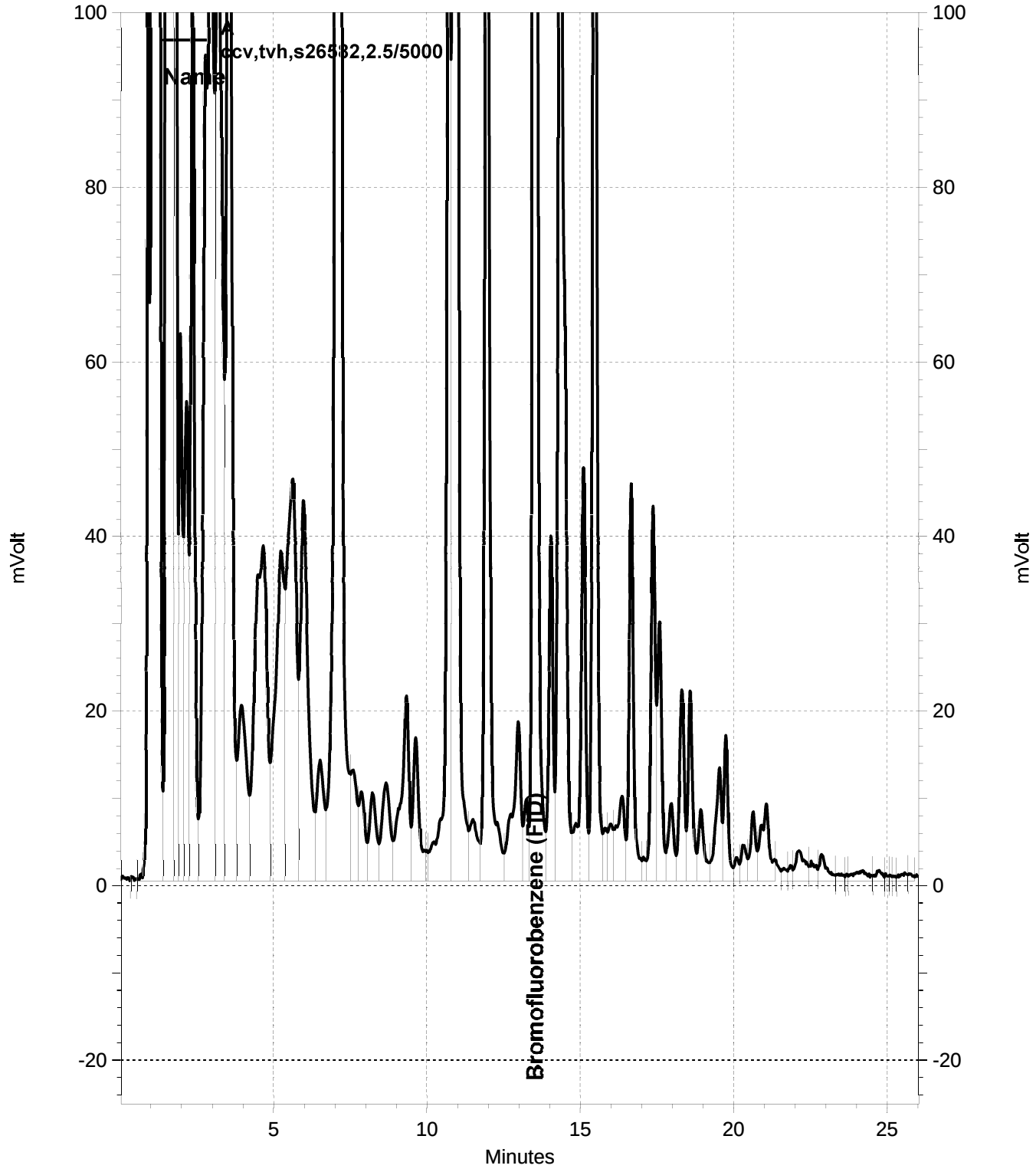

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Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	02/11/15
Units:	mg/Kg	Received:	02/11/15
Basis:	dry	Prepared:	02/17/15
Diln Fac:	1.000	Analyzed:	02/17/15
Batch#:	220474		

Field ID:	MW-4-0.5-1.5	Moisture:	10%
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	264606-001		

Analyte	Result	RL	MDL
Diesel C10-C24	14 Y	1.1	0.34
Motor Oil C24-C36	140	5.6	1.7

Surrogate	%REC	Limits
o-Terphenyl	86	59-140

Field ID:	SB-21-1.0-2.0	Moisture:	15%
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	264606-002		

Analyte	Result	RL	MDL
Diesel C10-C24	4.3 Y	1.2	0.36
Motor Oil C24-C36	39	5.9	1.8

Surrogate	%REC	Limits
o-Terphenyl	94	59-140

Type:	BLANK	Cleanup Method:	EPA 3630C
Lab ID:	QC777393		

Analyte	Result	RL	MDL
Diesel C10-C24	ND	1.0	0.31
Motor Oil C24-C36	ND	5.0	1.5

Surrogate	%REC	Limits
o-Terphenyl	106	59-140

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC777394	Batch#:	220474
Matrix:	Soil	Prepared:	02/17/15
Units:	mg/Kg	Analyzed:	02/17/15

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.42	55.57	110	58-137

Surrogate	%REC	Limits
o-Terphenyl	119	59-140

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	220474
MSS Lab ID:	264627-001	Sampled:	02/12/15
Matrix:	Soil	Received:	02/12/15
Units:	mg/Kg	Prepared:	02/17/15
Basis:	as received	Analyzed:	02/17/15
Diln Fac:	1.000		

Type: MS Lab ID: QC777395

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	4.985	50.02	64.93	120	46-154

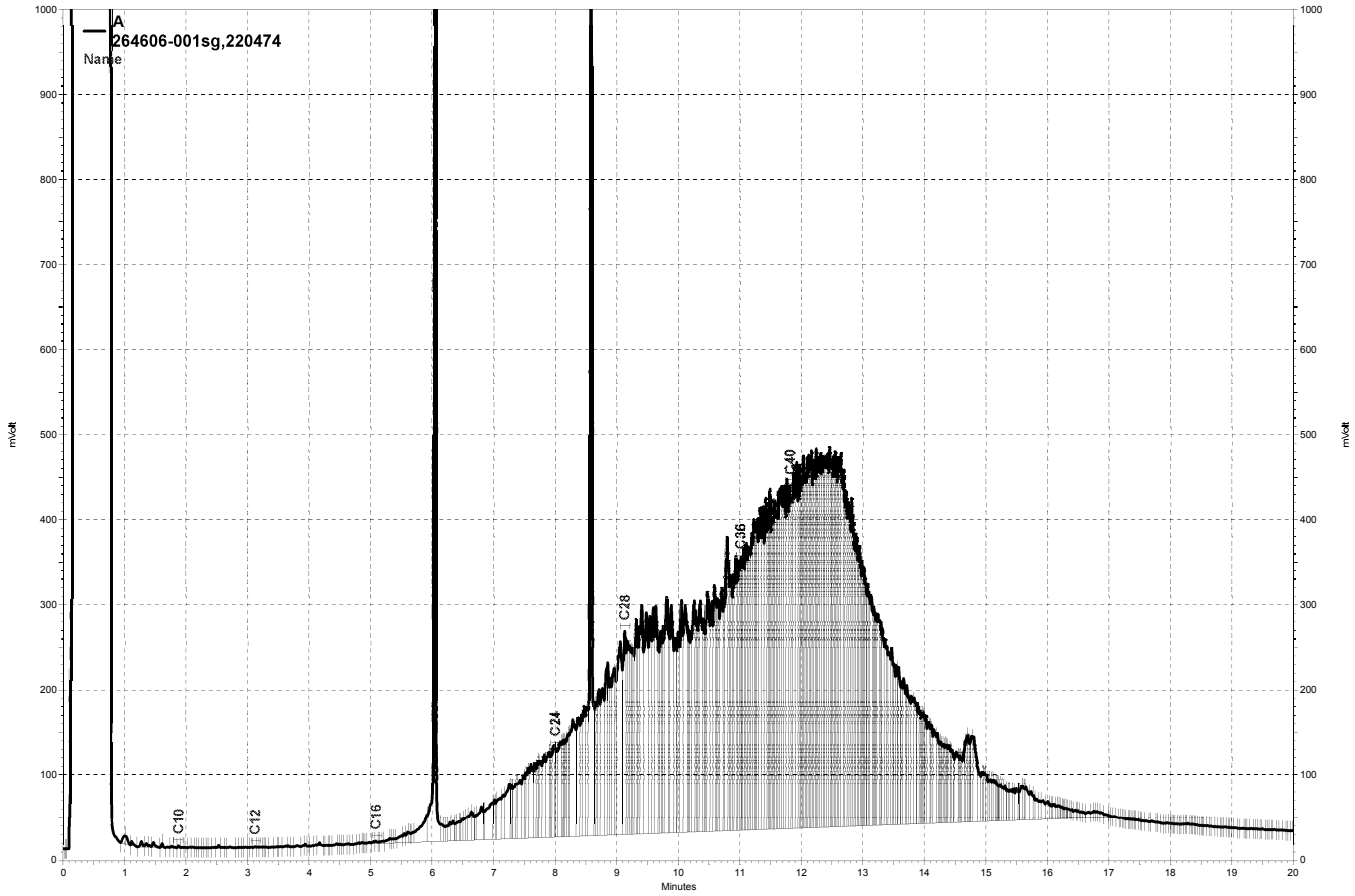
Surrogate	%REC	Limits
o-Terphenyl	116	59-140

Type: MSD Lab ID: QC777396

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	50.11	54.06	98	46-154	18	50

Surrogate	%REC	Limits
o-Terphenyl	105	59-140

RPD= Relative Percent Difference



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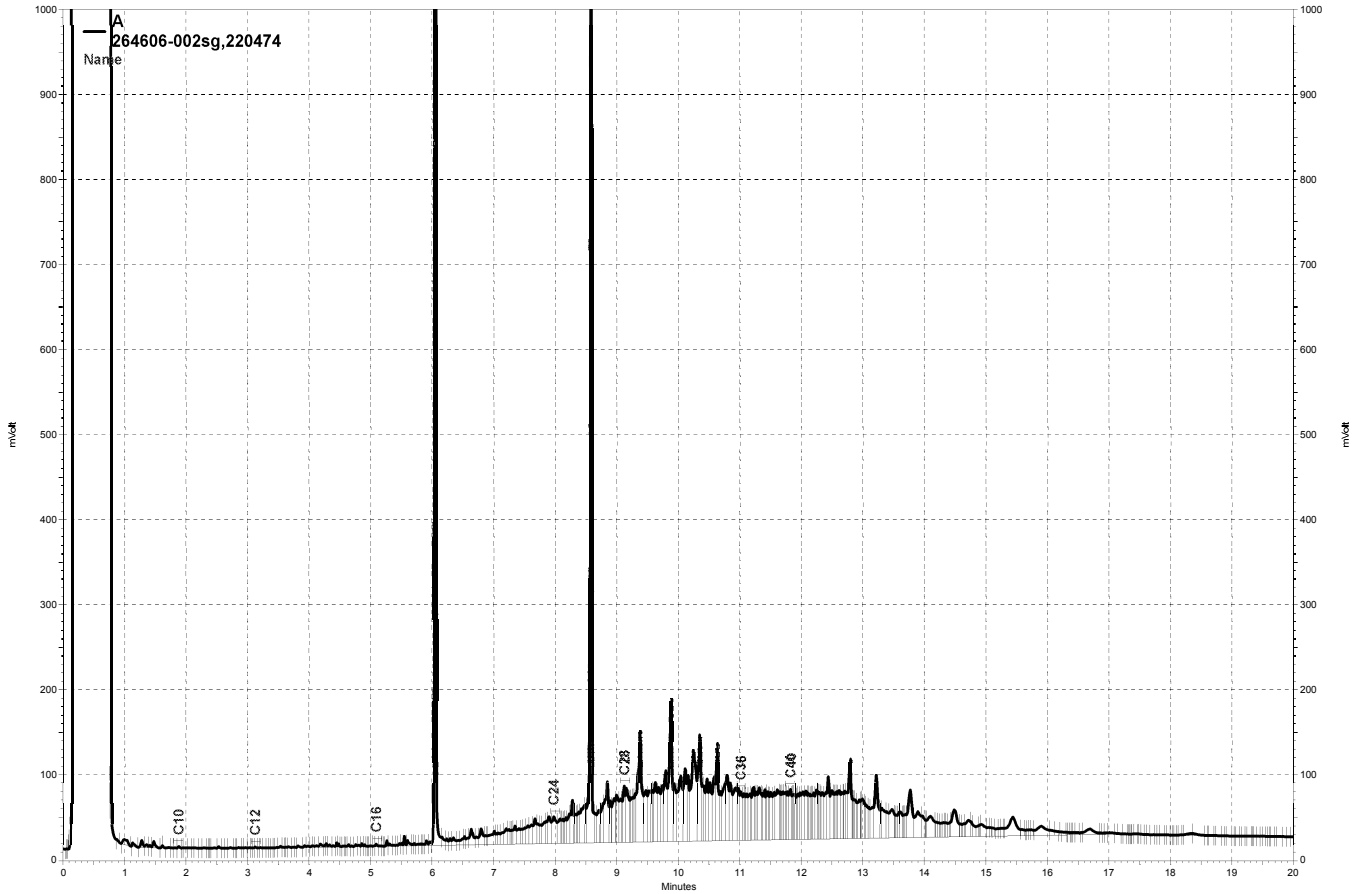

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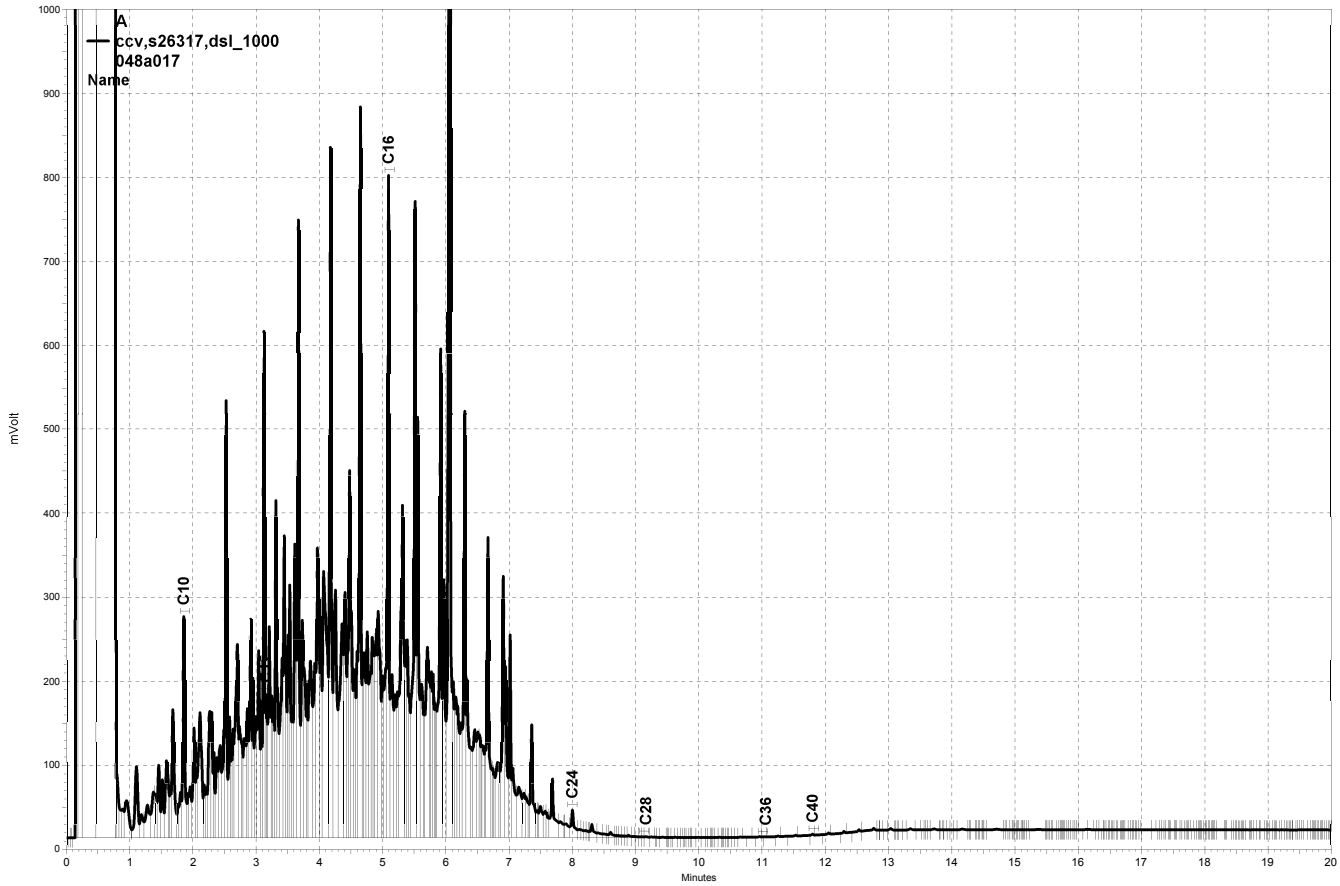

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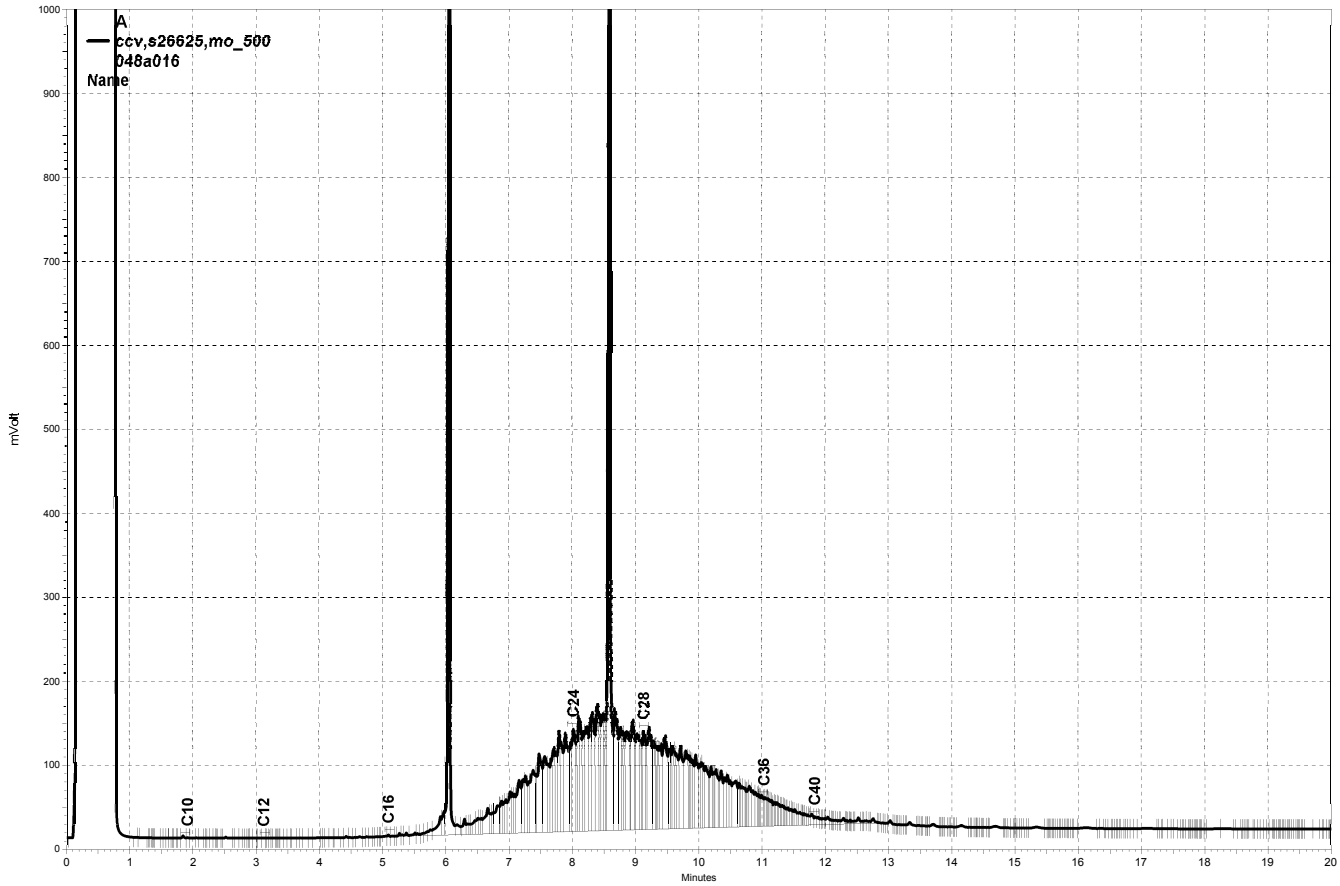

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Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8260B
Field ID:	TB-021115	Batch#:	220349
Lab ID:	264606-003	Sampled:	02/11/15
Matrix:	Water	Received:	02/11/15
Units:	ug/L	Analyzed:	02/12/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
tert-Butyl Alcohol (TBA)	2.3 J	10	2.1
Chloromethane	ND	1.0	0.1
Isopropyl Ether (DIPE)	ND	0.5	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Ethyl tert-Butyl Ether (ETBE)	ND	0.5	0.1
Chloroethane	ND	1.0	0.3
Methyl tert-Amyl Ether (TAME)	ND	0.5	0.1
Trichlorofluoromethane	ND	1.0	0.2
Acetone	ND	10	0.5
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	0.5 J	10	0.4
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.2
Vinyl Acetate	ND	10	1.0
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.5
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	0.1 J	0.5	0.1
Bromochloromethane	ND	0.5	0.2
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.5
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.5
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8260B
Field ID:	TB-021115	Batch#:	220349
Lab ID:	264606-003	Sampled:	02/11/15
Matrix:	Water	Received:	02/11/15
Units:	ug/L	Analyzed:	02/12/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.5
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.4
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-128
1,2-Dichloroethane-d4	106	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	104	80-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	220349
Units:	ug/L	Analyzed:	02/12/15
Diln Fac:	1.000		

Type: BS Lab ID: QC776913

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	62.50	58.83	94	32-155
Isopropyl Ether (DIPE)	12.50	12.72	102	57-128
Ethyl tert-Butyl Ether (ETBE)	12.50	12.33	99	62-120
Methyl tert-Amyl Ether (TAME)	12.50	11.83	95	69-120
1,1-Dichloroethene	12.50	13.99	112	66-135
Benzene	12.50	13.32	107	80-123
Trichloroethene	12.50	12.98	104	80-123
Toluene	12.50	13.21	106	80-121
Chlorobenzene	12.50	12.90	103	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-128
1,2-Dichloroethane-d4	106	75-139
Toluene-d8	100	80-120
Bromofluorobenzene	101	80-120

Type: BSD Lab ID: QC776914

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	62.50	52.18	83	32-155	12	33
Isopropyl Ether (DIPE)	12.50	12.74	102	57-128	0	20
Ethyl tert-Butyl Ether (ETBE)	12.50	12.36	99	62-120	0	20
Methyl tert-Amyl Ether (TAME)	12.50	11.78	94	69-120	0	20
1,1-Dichloroethene	12.50	13.48	108	66-135	4	24
Benzene	12.50	13.19	106	80-123	1	20
Trichloroethene	12.50	12.52	100	80-123	4	20
Toluene	12.50	13.02	104	80-121	1	20
Chlorobenzene	12.50	12.71	102	80-123	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-128
1,2-Dichloroethane-d4	104	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	103	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC776915	Batch#:	220349
Matrix:	Water	Analyzed:	02/12/15
Units:	ug/L		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
tert-Butyl Alcohol (TBA)	ND	10	2.1
Chloromethane	ND	1.0	0.1
Isopropyl Ether (DIPE)	ND	0.5	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Ethyl tert-Butyl Ether (ETBE)	ND	0.5	0.1
Chloroethane	ND	1.0	0.3
Methyl tert-Amyl Ether (TAME)	ND	0.5	0.1
Trichlorofluoromethane	ND	1.0	0.2
Acetone	ND	10	0.5
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.4
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.2
Vinyl Acetate	ND	10	1.0
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.5
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.2
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.5
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.5
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC776915	Batch#:	220349
Matrix:	Water	Analyzed:	02/12/15
Units:	ug/L		

Analyte	Result	RL	MDL
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.5
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.4
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-128
1,2-Dichloroethane-d4	107	75-139
Toluene-d8	99	80-120
Bromofluorobenzene	105	80-120

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8260B
Field ID:	MW-4-0.5-1.5	Diln Fac:	34.87
Lab ID:	264606-001	Batch#:	220347
Matrix:	Soil	Sampled:	02/11/15
Units:	ug/Kg	Received:	02/11/15
Basis:	dry	Analyzed:	02/12/15

Moisture: 10%

Analyte	Result	RL	MDL
Freon 12	ND	390	25
Chloromethane	ND	390	17
Vinyl Chloride	ND	390	14
Bromomethane	ND	390	3.9
Chloroethane	ND	390	24
Trichlorofluoromethane	ND	190	4.8
Acetone	500 J	770	130
Freon 113	ND	190	3.9
1,1-Dichloroethene	ND	190	5.2
Methylene Chloride	ND	770	110
Carbon Disulfide	ND	190	5.6
MTBE	ND	190	4.6
trans-1,2-Dichloroethene	ND	190	3.9
Vinyl Acetate	ND	1,900	11
1,1-Dichloroethane	ND	190	5.9
2-Butanone	ND	390	17
cis-1,2-Dichloroethene	ND	190	6.5
2,2-Dichloropropane	ND	190	11
Chloroform	ND	190	4.2
Bromochloromethane	ND	190	5.4
1,1,1-Trichloroethane	ND	190	5.0
1,1-Dichloropropene	ND	190	5.4
Carbon Tetrachloride	ND	190	3.9
1,2-Dichloroethane	ND	190	3.9
Benzene	13 J	190	3.9
Trichloroethene	ND	190	3.9
1,2-Dichloropropane	ND	190	3.9
Bromodichloromethane	ND	190	3.9
Dibromomethane	ND	190	3.9
4-Methyl-2-Pentanone	ND	390	8.0
cis-1,3-Dichloropropene	ND	190	4.6
Toluene	ND	190	39
trans-1,3-Dichloropropene	ND	190	3.9
1,1,2-Trichloroethane	ND	190	4.7
2-Hexanone	ND	390	8.1
1,3-Dichloropropane	ND	190	3.9
Tetrachloroethene	ND	190	3.9
Dibromochloromethane	ND	190	8.6
1,2-Dibromoethane	ND	190	3.9
Chlorobenzene	ND	190	4.4
1,1,1,2-Tetrachloroethane	ND	190	3.9
Ethylbenzene	46 J	190	3.9
m,p-Xylenes	28 J	190	3.9
o-Xylene	12 J	190	3.9
Styrene	ND	190	3.9
Bromoform	ND	190	7.3
Isopropylbenzene	11 J	190	4.7
1,1,2,2-Tetrachloroethane	ND	190	3.9
1,2,3-Trichloropropane	ND	190	6.9
Propylbenzene	41 J	190	5.6

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8260B
Field ID:	MW-4-0.5-1.5	Diln Fac:	34.87
Lab ID:	264606-001	Batch#:	220347
Matrix:	Soil	Sampled:	02/11/15
Units:	ug/Kg	Received:	02/11/15
Basis:	dry	Analyzed:	02/12/15

Analyte	Result	RL	MDL
Bromobenzene	ND	190	3.9
1,3,5-Trimethylbenzene	ND	190	3.9
2-Chlorotoluene	ND	190	4.4
4-Chlorotoluene	ND	190	4.7
tert-Butylbenzene	ND	190	3.9
1,2,4-Trimethylbenzene	9.4 J	190	5.7
sec-Butylbenzene	11 J	190	5.9
para-Isopropyl Toluene	ND	190	5.8
1,3-Dichlorobenzene	ND	190	5.1
1,4-Dichlorobenzene	ND	190	3.9
n-Butylbenzene	37 J	190	7.3
1,2-Dichlorobenzene	ND	190	3.9
1,2-Dibromo-3-Chloropropane	ND	190	16
1,2,4-Trichlorobenzene	ND	190	3.9
Hexachlorobutadiene	ND	190	3.9
Naphthalene	ND	190	7.2
1,2,3-Trichlorobenzene	ND	190	4.2

Surrogate	%REC	Limits
Dibromofluoromethane	103	78-134
1,2-Dichloroethane-d4	98	80-138
Toluene-d8	99	80-120
Bromofluorobenzene	104	78-123

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8260B
Field ID:	SB-21-1.0-2.0	Diln Fac:	0.9881
Lab ID:	264606-002	Batch#:	220347
Matrix:	Soil	Sampled:	02/11/15
Units:	ug/Kg	Received:	02/11/15
Basis:	dry	Analyzed:	02/12/15

Moisture: 15%

Analyte	Result	RL	MDL
Freon 12	ND	12	0.75
Chloromethane	ND	12	0.57
Vinyl Chloride	ND	12	0.48
Bromomethane	ND	12	0.42
Chloroethane	ND	12	0.46
Trichlorofluoromethane	ND	5.8	0.35
Acetone	4.0 J	23	3.8
Freon 113	ND	5.8	0.61
1,1-Dichloroethene	ND	5.8	0.70
Methylene Chloride	ND	23	1.3
Carbon Disulfide	ND	5.8	0.77
MTBE	ND	5.8	0.56
trans-1,2-Dichloroethene	ND	5.8	0.79
Vinyl Acetate	ND	58	0.61
1,1-Dichloroethane	ND	5.8	0.89
2-Butanone	ND	12	0.78
cis-1,2-Dichloroethene	ND	5.8	0.66
2,2-Dichloropropane	ND	5.8	0.69
Chloroform	ND	5.8	0.80
Bromochloromethane	ND	5.8	0.13
1,1,1-Trichloroethane	ND	5.8	0.76
1,1-Dichloropropene	ND	5.8	0.76
Carbon Tetrachloride	ND	5.8	0.69
1,2-Dichloroethane	ND	5.8	0.73
Benzene	ND	5.8	0.81
Trichloroethene	0.86 J	5.8	0.84
1,2-Dichloropropane	ND	5.8	0.68
Bromodichloromethane	ND	5.8	0.62
Dibromomethane	ND	5.8	0.26
4-Methyl-2-Pentanone	ND	12	0.69
cis-1,3-Dichloropropene	ND	5.8	0.47
Toluene	ND	5.8	0.89
trans-1,3-Dichloropropene	ND	5.8	0.49
1,1,2-Trichloroethane	ND	5.8	0.56
2-Hexanone	ND	12	0.72
1,3-Dichloropropane	ND	5.8	0.58
Tetrachloroethene	1.2 J	5.8	0.74
Dibromochloromethane	ND	5.8	0.57
1,2-Dibromoethane	ND	5.8	0.60
Chlorobenzene	ND	5.8	0.73
1,1,1,2-Tetrachloroethane	ND	5.8	0.61
Ethylbenzene	ND	5.8	0.83
m,p-Xylenes	ND	5.8	1.6
o-Xylene	ND	5.8	0.69
Styrene	ND	5.8	0.60
Bromoform	ND	5.8	0.26
Isopropylbenzene	ND	5.8	0.75
1,1,2,2-Tetrachloroethane	ND	5.8	0.60
1,2,3-Trichloropropane	ND	5.8	0.71
Propylbenzene	ND	5.8	0.77

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8260B
Field ID:	SB-21-1.0-2.0	Diln Fac:	0.9881
Lab ID:	264606-002	Batch#:	220347
Matrix:	Soil	Sampled:	02/11/15
Units:	ug/Kg	Received:	02/11/15
Basis:	dry	Analyzed:	02/12/15

Analyte	Result	RL	MDL
Bromobenzene	ND	5.8	0.26
1,3,5-Trimethylbenzene	ND	5.8	0.75
2-Chlorotoluene	ND	5.8	0.80
4-Chlorotoluene	ND	5.8	0.75
tert-Butylbenzene	ND	5.8	0.82
1,2,4-Trimethylbenzene	ND	5.8	0.72
sec-Butylbenzene	ND	5.8	0.71
para-Isopropyl Toluene	ND	5.8	0.72
1,3-Dichlorobenzene	ND	5.8	0.61
1,4-Dichlorobenzene	ND	5.8	0.55
n-Butylbenzene	ND	5.8	0.69
1,2-Dichlorobenzene	ND	5.8	0.55
1,2-Dibromo-3-Chloropropane	ND	5.8	0.90
1,2,4-Trichlorobenzene	ND	5.8	0.18
Hexachlorobutadiene	ND	5.8	0.74
Naphthalene	ND	5.8	1.1
1,2,3-Trichlorobenzene	ND	5.8	0.19

Surrogate	%REC	Limits
Dibromofluoromethane	111	78-134
1,2-Dichloroethane-d4	106	80-138
Toluene-d8	102	80-120
Bromofluorobenzene	110	78-123

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC776906	Batch#:	220347
Matrix:	Soil	Analyzed:	02/12/15
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	26.38	106	70-134
Benzene	25.00	29.73	119	80-123
Trichloroethene	25.00	27.48	110	80-128
Toluene	25.00	27.41	110	80-120
Chlorobenzene	25.00	26.32	105	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	108	78-134
1,2-Dichloroethane-d4	100	80-138
Toluene-d8	100	80-120
Bromofluorobenzene	102	78-123

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC776907	Batch#:	220347
Matrix:	Soil	Analyzed:	02/12/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.64
Chloromethane	ND	10	0.49
Vinyl Chloride	ND	10	0.41
Bromomethane	ND	10	0.36
Chloroethane	ND	10	0.40
Trichlorofluoromethane	ND	5.0	0.30
Acetone	ND	20	3.3
Freon 113	ND	5.0	0.52
1,1-Dichloroethene	ND	5.0	0.60
Methylene Chloride	ND	20	1.1
Carbon Disulfide	ND	5.0	0.67
MTBE	ND	5.0	0.48
trans-1,2-Dichloroethene	ND	5.0	0.68
Vinyl Acetate	ND	50	0.52
1,1-Dichloroethane	ND	5.0	0.76
2-Butanone	ND	10	0.67
cis-1,2-Dichloroethene	ND	5.0	0.57
2,2-Dichloropropane	ND	5.0	0.59
Chloroform	ND	5.0	0.69
Bromochloromethane	ND	5.0	0.11
1,1,1-Trichloroethane	ND	5.0	0.66
1,1-Dichloropropene	ND	5.0	0.65
Carbon Tetrachloride	ND	5.0	0.59
1,2-Dichloroethane	ND	5.0	0.62
Benzene	ND	5.0	0.70
Trichloroethene	ND	5.0	0.73
1,2-Dichloropropane	ND	5.0	0.59
Bromodichloromethane	ND	5.0	0.54
Dibromomethane	ND	5.0	0.22
4-Methyl-2-Pentanone	ND	10	0.59
cis-1,3-Dichloropropene	ND	5.0	0.40
Toluene	ND	5.0	0.76
trans-1,3-Dichloropropene	ND	5.0	0.42
1,1,2-Trichloroethane	ND	5.0	0.48
2-Hexanone	ND	10	0.62
1,3-Dichloropropane	ND	5.0	0.50
Tetrachloroethene	ND	5.0	0.64
Dibromochloromethane	ND	5.0	0.49
1,2-Dibromoethane	ND	5.0	0.51
Chlorobenzene	ND	5.0	0.63
1,1,1,2-Tetrachloroethane	ND	5.0	0.53
Ethylbenzene	ND	5.0	0.71
m,p-Xylenes	ND	5.0	1.4
o-Xylene	ND	5.0	0.60
Styrene	ND	5.0	0.51
Bromoform	ND	5.0	0.23
Isopropylbenzene	ND	5.0	0.65
1,1,2,2-Tetrachloroethane	ND	5.0	0.52
1,2,3-Trichloropropane	ND	5.0	0.61
Propylbenzene	ND	5.0	0.66
Bromobenzene	ND	5.0	0.22
1,3,5-Trimethylbenzene	ND	5.0	0.65
2-Chlorotoluene	ND	5.0	0.69

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC776907	Batch#:	220347
Matrix:	Soil	Analyzed:	02/12/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
4-Chlorotoluene	ND	5.0	0.65
tert-Butylbenzene	ND	5.0	0.70
1,2,4-Trimethylbenzene	ND	5.0	0.62
sec-Butylbenzene	ND	5.0	0.61
para-Isopropyl Toluene	ND	5.0	0.62
1,3-Dichlorobenzene	ND	5.0	0.53
1,4-Dichlorobenzene	ND	5.0	0.48
n-Butylbenzene	ND	5.0	0.59
1,2-Dichlorobenzene	ND	5.0	0.47
1,2-Dibromo-3-Chloropropane	ND	5.0	0.77
1,2,4-Trichlorobenzene	ND	5.0	0.15
Hexachlorobutadiene	ND	5.0	0.64
Naphthalene	ND	5.0	0.98
1,2,3-Trichlorobenzene	ND	5.0	0.16

Surrogate	%REC	Limits
Dibromofluoromethane	107	78-134
1,2-Dichloroethane-d4	98	80-138
Toluene-d8	101	80-120
Bromofluorobenzene	104	78-123

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	220347
MSS Lab ID:	264597-002	Sampled:	02/10/15
Matrix:	Soil	Received:	02/11/15
Units:	ug/Kg	Analyzed:	02/12/15
Basis:	as received		

Type: MS Diln Fac: 0.9747
Lab ID: QC776993

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.5669	48.73	45.39	93	56-133
Benzene	<0.6605	48.73	47.58	98	57-120
Trichloroethene	<0.6879	48.73	44.30	91	49-145
Toluene	<0.7235	48.73	42.80	88	51-120
Chlorobenzene	<0.5931	48.73	41.24	85	47-120

Surrogate	%REC	Limits
Dibromofluoromethane	106	78-134
1,2-Dichloroethane-d4	101	80-138
Toluene-d8	98	80-120
Bromofluorobenzene	103	78-123

Type: MSD Diln Fac: 0.9823
Lab ID: QC776994

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	49.12	47.50	97	56-133	4	46
Benzene	49.12	50.17	102	57-120	5	44
Trichloroethene	49.12	46.48	95	49-145	4	46
Toluene	49.12	45.32	92	51-120	5	47
Chlorobenzene	49.12	43.08	88	47-120	4	50

Surrogate	%REC	Limits
Dibromofluoromethane	105	78-134
1,2-Dichloroethane-d4	101	80-138
Toluene-d8	99	80-120
Bromofluorobenzene	102	78-123

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8270C
Field ID:	MW-4-0.5-1.5	Batch#:	220434
Lab ID:	264606-001	Sampled:	02/11/15
Matrix:	Soil	Received:	02/11/15
Units:	ug/Kg	Prepared:	02/13/15
Basis:	dry	Analyzed:	02/17/15
Diln Fac:	1.000		

Moisture: 10%

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	370	24
Phenol	ND	370	17
bis(2-Chloroethyl)ether	ND	370	18
2-Chlorophenol	ND	370	15
1,3-Dichlorobenzene	ND	370	15
1,4-Dichlorobenzene	ND	370	8.1
Benzyl alcohol	ND	370	18
1,2-Dichlorobenzene	ND	370	11
2-Methylphenol	ND	370	16
bis(2-Chloroisopropyl) ether	ND	370	18
4-Methylphenol	ND	370	18
N-Nitroso-di-n-propylamine	ND	370	17
Hexachloroethane	ND	370	12
Nitrobenzene	ND	370	9.9
Isophorone	ND	370	11
2-Nitrophenol	ND	730	43
2,4-Dimethylphenol	ND	370	21
Benzoic acid	ND	1,800	420
bis(2-Chloroethoxy)methane	ND	370	11
2,4-Dichlorophenol	ND	370	10
1,2,4-Trichlorobenzene	ND	370	9.4
Naphthalene	ND	73	14
4-Chloroaniline	ND	370	14
Hexachlorobutadiene	ND	370	9.2
4-Chloro-3-methylphenol	ND	370	9.6
2-Methylnaphthalene	ND	73	11
Hexachlorocyclopentadiene	ND	730	84
2,4,6-Trichlorophenol	ND	370	12
2,4,5-Trichlorophenol	ND	370	10
2-Chloronaphthalene	ND	370	8.6
2-Nitroaniline	ND	730	37
Dimethylphthalate	ND	370	7.9
Acenaphthylene	ND	73	9.2
2,6-Dinitrotoluene	ND	370	37
3-Nitroaniline	ND	730	8.0
Acenaphthene	ND	73	7.4
2,4-Dinitrophenol	ND	730	54
4-Nitrophenol	ND	730	7.8
Dibenzofuran	ND	370	9.3
2,4-Dinitrotoluene	ND	370	9.2
Diethylphthalate	ND	370	9.3
Fluorene	ND	73	8.8
4-Chlorophenyl-phenylether	ND	370	9.3
4-Nitroaniline	ND	730	12
4,6-Dinitro-2-methylphenol	ND	730	38
N-Nitrosodiphenylamine	ND	370	8.7
Azobenzene	ND	370	7.7
4-Bromophenyl-phenylether	ND	370	8.9
Hexachlorobenzene	ND	370	7.6

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8270C
Field ID:	MW-4-0.5-1.5	Batch#:	220434
Lab ID:	264606-001	Sampled:	02/11/15
Matrix:	Soil	Received:	02/11/15
Units:	ug/Kg	Prepared:	02/13/15
Basis:	dry	Analyzed:	02/17/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Pentachlorophenol	ND	730	110
Phenanthrene	ND	73	9.0
Anthracene	ND	73	9.9
Di-n-butylphthalate	ND	370	11
Fluoranthene	ND	73	10
Pyrene	ND	73	8.1
Butylbenzylphthalate	ND	370	11
3,3'-Dichlorobenzidine	ND	730	87
Benzo(a)anthracene	ND	73	7.4
Chrysene	ND	73	9.0
bis(2-Ethylhexyl)phthalate	77 J	370	9.4
Di-n-octylphthalate	ND	370	38
Benzo(b)fluoranthene	ND	73	6.4
Benzo(k)fluoranthene	ND	73	6.6
Benzo(a)pyrene	ND	73	6.5
Indeno(1,2,3-cd)pyrene	ND	73	8.4
Dibenz(a,h)anthracene	ND	73	8.1
Benzo(g,h,i)perylene	ND	73	9.1

Surrogate	%REC	Limits
2-Fluorophenol	67	25-120
Phenol-d5	72	36-120
2,4,6-Tribromophenol	67	27-120
Nitrobenzene-d5	69	44-120
2-Fluorobiphenyl	79	47-120
Terphenyl-d14	70	49-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8270C
Field ID:	SB-21-1.0-2.0	Batch#:	220434
Lab ID:	264606-002	Sampled:	02/11/15
Matrix:	Soil	Received:	02/11/15
Units:	ug/Kg	Prepared:	02/13/15
Basis:	dry	Analyzed:	02/17/15
Diln Fac:	1.000		

Moisture: 15%

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	400	26
Phenol	ND	400	18
bis(2-Chloroethyl)ether	ND	400	19
2-Chlorophenol	ND	400	17
1,3-Dichlorobenzene	ND	400	16
1,4-Dichlorobenzene	ND	400	8.7
Benzyl alcohol	ND	400	19
1,2-Dichlorobenzene	ND	400	12
2-Methylphenol	ND	400	17
bis(2-Chloroisopropyl) ether	ND	400	19
4-Methylphenol	ND	400	19
N-Nitroso-di-n-propylamine	ND	400	18
Hexachloroethane	ND	400	13
Nitrobenzene	ND	400	11
Isophorone	ND	400	12
2-Nitrophenol	ND	790	46
2,4-Dimethylphenol	ND	400	22
Benzoic acid	ND	2,000	450
bis(2-Chloroethoxy)methane	ND	400	12
2,4-Dichlorophenol	ND	400	11
1,2,4-Trichlorobenzene	ND	400	10
Naphthalene	ND	79	15
4-Chloroaniline	ND	400	15
Hexachlorobutadiene	ND	400	9.9
4-Chloro-3-methylphenol	ND	400	10
2-Methylnaphthalene	ND	79	12
Hexachlorocyclopentadiene	ND	790	90
2,4,6-Trichlorophenol	ND	400	13
2,4,5-Trichlorophenol	ND	400	11
2-Chloronaphthalene	ND	400	9.2
2-Nitroaniline	ND	790	40
Dimethylphthalate	ND	400	8.6
Acenaphthylene	ND	79	9.9
2,6-Dinitrotoluene	ND	400	40
3-Nitroaniline	ND	790	8.6
Acenaphthene	ND	79	8.0
2,4-Dinitrophenol	ND	790	58
4-Nitrophenol	ND	790	8.4
Dibenzofuran	ND	400	10
2,4-Dinitrotoluene	ND	400	9.9
Diethylphthalate	ND	400	10
Fluorene	ND	79	9.5
4-Chlorophenyl-phenylether	ND	400	10
4-Nitroaniline	ND	790	13
4,6-Dinitro-2-methylphenol	ND	790	41
N-Nitrosodiphenylamine	ND	400	9.3
Azobenzene	ND	400	8.3
4-Bromophenyl-phenylether	ND	400	9.6
Hexachlorobenzene	ND	400	8.1

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8270C
Field ID:	SB-21-1.0-2.0	Batch#:	220434
Lab ID:	264606-002	Sampled:	02/11/15
Matrix:	Soil	Received:	02/11/15
Units:	ug/Kg	Prepared:	02/13/15
Basis:	dry	Analyzed:	02/17/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Pentachlorophenol	ND	790	120
Phenanthrene	14 J	79	9.6
Anthracene	ND	79	11
Di-n-butylphthalate	ND	400	11
Fluoranthene	29 J	79	11
Pyrene	32 J	79	8.7
Butylbenzylphthalate	ND	400	11
3,3'-Dichlorobenzidine	ND	790	94
Benzo(a)anthracene	15 J	79	8.0
Chrysene	22 J	79	9.7
bis(2-Ethylhexyl)phthalate	12 J	400	10
Di-n-octylphthalate	ND	400	41
Benzo(b)fluoranthene	29 J	79	6.9
Benzo(k)fluoranthene	9.6 J	79	7.1
Benzo(a)pyrene	19 J	79	7.0
Indeno(1,2,3-cd)pyrene	25 J	79	9.1
Dibenz(a,h)anthracene	ND	79	8.8
Benzo(g,h,i)perylene	36 J	79	9.8

Surrogate	%REC	Limits
2-Fluorophenol	71	25-120
Phenol-d5	77	36-120
2,4,6-Tribromophenol	74	27-120
Nitrobenzene-d5	73	44-120
2-Fluorobiphenyl	81	47-120
Terphenyl-d14	73	49-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777242	Batch#:	220434
Matrix:	Soil	Prepared:	02/13/15
Units:	ug/Kg	Analyzed:	02/17/15

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	340	22
Phenol	ND	340	15
bis(2-Chloroethyl)ether	ND	340	16
2-Chlorophenol	ND	340	14
1,3-Dichlorobenzene	ND	340	13
1,4-Dichlorobenzene	ND	340	7.4
Benzyl alcohol	ND	340	17
1,2-Dichlorobenzene	ND	340	11
2-Methylphenol	ND	340	15
bis(2-Chloroisopropyl) ether	ND	340	16
4-Methylphenol	ND	340	16
N-Nitroso-di-n-propylamine	ND	340	15
Hexachloroethane	ND	340	11
Nitrobenzene	ND	340	9.1
Isophorone	ND	340	10
2-Nitrophenol	ND	680	39
2,4-Dimethylphenol	ND	340	19
Benzoic acid	ND	1,700	380
bis(2-Chloroethoxy)methane	ND	340	10
2,4-Dichlorophenol	ND	340	9.5
1,2,4-Trichlorobenzene	ND	340	8.6
Naphthalene	ND	68	13
4-Chloroaniline	ND	340	13
Hexachlorobutadiene	ND	340	8.5
4-Chloro-3-methylphenol	ND	340	8.8
2-Methylnaphthalene	ND	68	10
Hexachlorocyclopentadiene	ND	680	77
2,4,6-Trichlorophenol	ND	340	11
2,4,5-Trichlorophenol	ND	340	9.3
2-Chloronaphthalene	ND	340	7.9
2-Nitroaniline	ND	680	34
Dimethylphthalate	ND	340	7.3
Acenaphthylene	ND	68	8.4
2,6-Dinitrotoluene	ND	340	34
3-Nitroaniline	ND	680	7.3
Acenaphthene	ND	68	6.8
2,4-Dinitrophenol	ND	680	50
4-Nitrophenol	ND	680	7.2
Dibenzofuran	ND	340	8.5
2,4-Dinitrotoluene	ND	340	8.5
Diethylphthalate	ND	340	8.5
Fluorene	ND	68	8.1
4-Chlorophenyl-phenylether	ND	340	8.6
4-Nitroaniline	ND	680	11
4,6-Dinitro-2-methylphenol	ND	680	35
N-Nitrosodiphenylamine	ND	340	8.0
Azobenzene	ND	340	7.1
4-Bromophenyl-phenylether	ND	340	8.2
Hexachlorobenzene	ND	340	7.0
Pentachlorophenol	ND	680	100
Phenanthrene	ND	68	8.3
Anthracene	ND	68	9.1
Di-n-butylphthalate	ND	340	9.7

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777242	Batch#:	220434
Matrix:	Soil	Prepared:	02/13/15
Units:	ug/Kg	Analyzed:	02/17/15

Analyte	Result	RL	MDL
Fluoranthene	ND	68	9.5
Pyrene	ND	68	7.4
Butylbenzylphthalate	ND	340	9.8
3,3'-Dichlorobenzidine	ND	680	81
Benzo(a)anthracene	ND	68	6.8
Chrysene	ND	68	8.3
bis(2-Ethylhexyl)phthalate	ND	340	8.7
Di-n-octylphthalate	ND	340	35
Benzo(b)fluoranthene	ND	68	5.9
Benzo(k)fluoranthene	ND	68	6.1
Benzo(a)pyrene	ND	68	6.0
Indeno(1,2,3-cd)pyrene	ND	68	7.8
Dibenz(a,h)anthracene	ND	68	7.5
Benzo(g,h,i)perylene	ND	68	8.4

Surrogate	%REC	Limits
2-Fluorophenol	75	25-120
Phenol-d5	79	36-120
2,4,6-Tribromophenol	57	27-120
Nitrobenzene-d5	80	44-120
2-Fluorobiphenyl	89	47-120
Terphenyl-d14	78	49-120

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8270C
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC777243	Batch#:	220434
Matrix:	Soil	Prepared:	02/13/15
Units:	ug/Kg	Analyzed:	02/16/15

Analyte	Spiked	Result	%REC	Limits
Phenol	2,682	2,219	83	42-120
2-Chlorophenol	2,682	2,136	80	45-120
1,4-Dichlorobenzene	2,682	2,048	76	48-120
N-Nitroso-di-n-propylamine	2,682	1,993	74	27-123
1,2,4-Trichlorobenzene	2,682	1,941	72	50-120
4-Chloro-3-methylphenol	2,682	1,706	64	59-120
Acenaphthene	1,006	791.1	79	53-120
4-Nitrophenol	2,682	2,143	80	47-120
2,4-Dinitrotoluene	2,682	2,140	80	55-120
Pentachlorophenol	2,682	1,612	60	32-120
Pyrene	1,006	803.4	80	52-120

Surrogate	%REC	Limits
2-Fluorophenol	81	25-120
Phenol-d5	84	36-120
2,4,6-Tribromophenol	82	27-120
Nitrobenzene-d5	72	44-120
2-Fluorobiphenyl	72	47-120
Terphenyl-d14	75	49-120

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8270C
Field ID:	MW-4-0.5-1.5	Batch#:	220434
MSS Lab ID:	264606-001	Sampled:	02/11/15
Matrix:	Soil	Received:	02/11/15
Units:	ug/Kg	Prepared:	02/13/15
Basis:	dry	Analyzed:	02/17/15
Diln Fac:	1.000		

Type: MS Moisture: 10%
Lab ID: QC777244

Analyte	MSS Result	Spiked	Result	%REC	Limits
Phenol	<16.56	2,977	2,199	74	47-120
2-Chlorophenol	<15.38	2,977	1,823	61	44-120
1,4-Dichlorobenzene	<8.079	2,977	1,837	62	49-120
N-Nitroso-di-n-propylamine	<16.76	2,977	2,168	73	42-120
1,2,4-Trichlorobenzene	<9.357	2,977	1,830	61	54-120
4-Chloro-3-methylphenol	<9.562	2,977	2,174	73	55-120
Acenaphthene	<7.383	1,116	738.7	66	51-120
4-Nitrophenol	<7.817	2,977	1,938	65	36-120
2,4-Dinitrotoluene	<9.196	2,977	2,136	72	52-120
Pentachlorophenol	<113.2	2,977	1,462	49	14-120
Pyrene	<8.072	1,116	680.3	61	46-124

Surrogate	%REC	Limits
2-Fluorophenol	60	25-120
Phenol-d5	67	36-120
2,4,6-Tribromophenol	73	27-120
Nitrobenzene-d5	63	44-120
2-Fluorobiphenyl	65	47-120
Terphenyl-d14	62	49-120

Type: MSD Moisture: 10%
Lab ID: QC777245

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Phenol	2,926	2,436	83	47-120	12	39
2-Chlorophenol	2,926	2,021	69	44-120	12	38
1,4-Dichlorobenzene	2,926	2,180	75	49-120	19	45
N-Nitroso-di-n-propylamine	2,926	2,405	82	42-120	12	40
1,2,4-Trichlorobenzene	2,926	2,062	70	54-120	14	38
4-Chloro-3-methylphenol	2,926	2,248	77	55-120	5	41
Acenaphthene	1,097	772.3	70	51-120	6	47
4-Nitrophenol	2,926	2,036	70	36-120	7	41
2,4-Dinitrotoluene	2,926	2,221	76	52-120	6	40
Pentachlorophenol	2,926	1,549	53	14-120	8	53
Pyrene	1,097	709.5	65	46-124	6	50

Surrogate	%REC	Limits
2-Fluorophenol	69	25-120
Phenol-d5	76	36-120
2,4,6-Tribromophenol	75	27-120
Nitrobenzene-d5	72	44-120
2-Fluorobiphenyl	71	47-120
Terphenyl-d14	66	49-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8082
Matrix:	Soil	Batch#:	220386
Units:	ug/Kg	Sampled:	02/11/15
Basis:	dry	Received:	02/11/15
Diln Fac:	1.000	Prepared:	02/12/15

Field ID:	MW-4-0.5-1.5	Moisture:	10%
Type:	SAMPLE	Analyzed:	02/13/15
Lab ID:	264606-001		

Analyte	Result	RL	MDL
Aroclor-1016	ND	11	2.6
Aroclor-1221	ND	21	7.0
Aroclor-1232	ND	11	3.4
Aroclor-1242	ND	11	3.2
Aroclor-1248	94	11	3.4
Aroclor-1254	ND	11	2.7
Aroclor-1260	14	11	1.7

Surrogate	%REC	Limits
TCMX	101	46-141
Decachlorobiphenyl	97	25-135

Field ID:	SB-21-1.0-2.0	Moisture:	15%
Type:	SAMPLE	Analyzed:	02/14/15
Lab ID:	264606-002		

Analyte	Result	RL	MDL
Aroclor-1016	ND	11	2.8
Aroclor-1221	ND	23	7.5
Aroclor-1232	ND	11	3.7
Aroclor-1242	ND	11	3.4
Aroclor-1248	ND	11	3.6
Aroclor-1254	ND	11	2.9
Aroclor-1260	6.7 J	11	1.8

Surrogate	%REC	Limits
TCMX	89	46-141
Decachlorobiphenyl	90	25-135

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8082
Matrix:	Soil	Batch#:	220386
Units:	ug/Kg	Sampled:	02/11/15
Basis:	dry	Received:	02/11/15
Diln Fac:	1.000	Prepared:	02/12/15

Type:	BLANK	Analyzed:	02/13/15
Lab ID:	QC777054		

Analyte	Result	RL	MDL
Aroclor-1016	ND	9.7	2.4
Aroclor-1221	ND	19	6.4
Aroclor-1232	ND	9.7	3.1
Aroclor-1242	ND	9.7	2.9
Aroclor-1248	ND	9.7	3.1
Aroclor-1254	ND	9.7	2.5
Aroclor-1260	ND	9.7	1.6

Surrogate	%REC	Limits
TCMX	99	46-141
Decachlorobiphenyl	118	25-135

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC777055	Batch#:	220386
Matrix:	Soil	Prepared:	02/12/15
Units:	ug/Kg	Analyzed:	02/13/15

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	167.4	210.3	126	64-140
Aroclor-1260	167.4	206.0	123	65-146

Surrogate	%REC	Limits
TCMX	111	46-141
Decachlorobiphenyl	126	25-135

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8082
Field ID:	MW-4-0.5-1.5	Batch#:	220386
MSS Lab ID:	264606-001	Sampled:	02/11/15
Matrix:	Soil	Received:	02/11/15
Units:	ug/Kg	Prepared:	02/12/15
Basis:	dry	Analyzed:	02/13/15
Diln Fac:	1.000		

Type: MS Moisture: 10%
Lab ID: QC777056

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<2.602	183.0	341.8	187 *	60-161
Aroclor-1260	13.79	183.0	230.7	119	42-166

Surrogate	%REC	Limits
TCMX	114	46-141
Decachlorobiphenyl	119	25-135

Type: MSD Moisture: 10%
Lab ID: QC777057

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	182.3	342.3	188 *	60-161	1	43
Aroclor-1260	182.3	214.6	110	42-166	7	51

Surrogate	%REC	Limits
TCMX	103	46-141
Decachlorobiphenyl	107	25-135

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	264606	Project#:	C1361
Client:	Integral Consulting, Inc.	Location:	Allied Engineering
Field ID:	MW-4-0.5-1.5	Basis:	dry
Lab ID:	264606-001	Sampled:	02/11/15
Matrix:	Soil	Received:	02/11/15
Units:	mg/Kg		

Moisture: 10%

Analyte	Result	RL	MDL	Diln Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	42	0.62	0.20	1.000	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B
Arsenic	ND	0.31	0.10	1.000	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B
Barium	36	0.31	0.060	1.000	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B
Beryllium	ND	0.12	0.023	1.000	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B
Cadmium	19	0.31	0.020	1.000	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B
Chromium	2,500	31	2.6	100.0	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B
Cobalt	99	0.31	0.024	1.000	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B
Copper	640	32	11	100.0	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B
Lead	250	0.31	0.090	1.000	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B
Mercury	0.017 J	0.019	0.0011	1.000	220591	02/19/15	02/19/15	METHOD	EPA 7471A
Molybdenum	170	0.31	0.069	1.000	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B
Nickel	1,100	31	8.4	100.0	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B
Selenium	ND	0.62	0.18	1.000	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B
Silver	ND	0.31	0.092	1.000	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B
Thallium	ND	0.62	0.20	1.000	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B
Vanadium	160	0.31	0.031	1.000	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B
Zinc	170	1.2	0.12	1.000	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	264606	Project#:	C1361
Client:	Integral Consulting, Inc.	Location:	Allied Engineering
Field ID:	SB-21-1.0-2.0	Basis:	dry
Lab ID:	264606-002	Diln Fac:	1.000
Matrix:	Soil	Sampled:	02/11/15
Units:	mg/Kg	Received:	02/11/15

Moisture: 15%

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	0.80	0.57	0.18	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B
Arsenic	2.2	0.28	0.094	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B
Barium	160	0.28	0.055	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B
Beryllium	0.25	0.11	0.022	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B
Cadmium	0.41	0.28	0.018	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B
Chromium	32	0.28	0.024	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B
Cobalt	5.1	0.28	0.022	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B
Copper	27	0.29	0.098	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B
Lead	220	0.28	0.083	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B
Mercury	0.30	0.021	0.0012	220591	02/19/15	02/19/15	METHOD	EPA 7471A
Molybdenum	0.27 J	0.28	0.064	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B
Nickel	23	0.28	0.077	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B
Selenium	ND	0.57	0.17	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B
Silver	ND	0.28	0.085	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B
Thallium	ND	0.57	0.18	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B
Vanadium	24	0.28	0.028	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B
Zinc	100	1.1	0.11	220541	02/18/15	02/18/15	EPA 3050B	EPA 6010B

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3050B
Project#:	C1361	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777654	Batch#:	220541
Matrix:	Soil	Prepared:	02/18/15
Units:	mg/Kg	Analyzed:	02/18/15

Analyte	Result	RL	MDL
Antimony	ND	0.50	0.16
Arsenic	ND	0.25	0.083
Barium	ND	0.25	0.049
Beryllium	ND	0.10	0.019
Cadmium	ND	0.25	0.016
Chromium	0.037 J	0.25	0.021
Cobalt	ND	0.25	0.019
Copper	ND	0.26	0.086
Lead	ND	0.25	0.073
Molybdenum	ND	0.25	0.056
Nickel	ND	0.25	0.068
Selenium	ND	0.50	0.15
Silver	ND	0.25	0.075
Thallium	ND	0.50	0.16
Vanadium	ND	0.25	0.025
Zinc	0.28 J	1.0	0.098

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3050B
Project#:	C1361	Analysis:	EPA 6010B
Type:	LCS	Diln Fac:	5.000
Lab ID:	QC777655	Batch#:	220541
Matrix:	Soil	Prepared:	02/18/15
Units:	mg/Kg	Analyzed:	02/18/15

Analyte	Spiked	Result	%REC	Limits
Antimony	50.00	46.32	93	80-120
Arsenic	50.00	46.63	93	80-120
Barium	50.00	49.30	99	80-120
Beryllium	50.00	46.89	94	80-120
Cadmium	50.00	49.90	100	80-120
Chromium	50.00	49.53	99	80-120
Cobalt	50.00	47.66	95	80-120
Copper	50.00	41.33	83	80-120
Lead	50.00	44.93	90	80-120
Molybdenum	50.00	47.46	95	80-120
Nickel	50.00	47.90	96	80-120
Selenium	50.00	48.84	98	80-120
Silver	50.00	47.38	95	80-120
Thallium	50.00	47.40	95	80-120
Vanadium	50.00	51.12	102	80-120
Zinc	50.00	47.56	95	80-120

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3050B
Project#:	C1361	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	220541
MSS Lab ID:	264443-003	Sampled:	02/05/15
Matrix:	Soil	Received:	02/05/15
Units:	mg/Kg	Prepared:	02/18/15
Basis:	as received	Analyzed:	02/18/15
Diln Fac:	5.000		

Type: MS Lab ID: QC777656

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	91.28	50.51	104.3	26	15-120
Arsenic	230.3	50.51	232.1	4 NM	69-120
Barium	475.9	50.51	412.0	-126 NM	35-154
Beryllium	113.3	50.51	131.1	35 *	75-120
Cadmium	131.1	50.51	150.8	39 *	71-120
Chromium	73.66	50.51	111.3	74	57-133
Cobalt	208.2	50.51	205.9	-5 NM	56-125
Copper	78.22	50.51	108.9	61	54-144
Lead	68.47	50.51	105.8	74	53-125
Molybdenum	56.80	50.51	95.65	77	66-120
Nickel	141.5	50.51	192.8	102	44-141
Selenium	126.1	50.51	139.2	26 *	61-120
Silver	60.27	50.51	77.54	34 *	69-120
Thallium	162.6	50.51	168.1	11 *	59-120
Vanadium	152.7	50.51	185.5	65	52-144
Zinc	352.9	50.51	335.3	-35 NM	45-145

Type: MSD Lab ID: QC777657

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	45.45	102.7	25	15-120	2	41
Arsenic	45.45	239.3	20 NM	69-120	5	35
Barium	45.45	430.8	-99 NM	35-154	5	36
Beryllium	45.45	134.0	45 *	75-120	5	20
Cadmium	45.45	151.0	44 *	71-120	3	25
Chromium	45.45	114.4	90	57-133	7	33
Cobalt	45.45	208.0	-1 NM	56-125	3	36
Copper	45.45	110.9	72	54-144	6	38
Lead	45.45	107.6	86	53-125	6	42
Molybdenum	45.45	95.43	85	66-120	5	20
Nickel	45.45	195.7	119	44-141	4	39
Selenium	45.45	139.5	29 *	61-120	3	33
Silver	45.45	59.48	-2 *	69-120	22	22
Thallium	45.45	169.7	16 *	59-120	3	27
Vanadium	45.45	193.4	89	52-144	7	29
Zinc	45.45	346.8	-13 NM	45-145	5	39

*= Value outside of QC limits; see narrative
NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1361	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	220591
Lab ID:	QC777839	Prepared:	02/19/15
Matrix:	Soil	Analyzed:	02/19/15
Units:	mg/Kg		

Result	RL	MDL
ND	0.017	0.00093

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

41.0

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1361	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Type:	LCS	Batch#:	220591
Lab ID:	QC777840	Prepared:	02/19/15
Matrix:	Soil	Analyzed:	02/19/15
Units:	mg/Kg		

Spiked	Result	%REC	Limits
0.2083	0.2135	102	80-120

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1361	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	220591
MSS Lab ID:	264755-001	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	mg/Kg	Prepared:	02/19/15
Basis:	as received	Analyzed:	02/19/15

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC777841	0.01591	0.2049	0.2139	97	69-142		
MSD	QC777842		0.1894	0.1918	93	69-142	4	36

RPD= Relative Percent Difference

Hexavalent Chromium

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3060A
Project#:	C1361	Analysis:	EPA 7196A
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Matrix:	Soil	Batch#:	220352
Units:	mg/Kg	Received:	02/11/15
Basis:	dry		

Field ID	Type	Lab ID	Result	RL	Moisture	Sampled	Prepared	Analyzed
MW-4-0.5-1.5	SAMPLE	264606-001	ND	0.42	10%	02/11/15 13:47	02/12/15 10:30	02/12/15 14:20
SB-21-1.0-2.0	SAMPLE	264606-002	ND	0.46	15%	02/11/15 15:08	02/12/15 10:30	02/12/15 14:20
	BLANK	QC776923	ND	0.40			02/11/15 13:30	02/12/15 11:27

ND= Not Detected
RL= Reporting Limit

5.1

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Batch QC Report

Hexavalent Chromium

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3060A
Project#:	C1361	Analysis:	EPA 7196A
Analyte:	Hexavalent Chromium	Batch#:	220352
Field ID:	ZZZZZZZZZZ	Sampled:	02/05/15 12:40
MSS Lab ID:	264442-005	Received:	02/05/15
Matrix:	Soil	Prepared:	02/11/15 13:30
Units:	mg/Kg	Analyzed:	02/12/15 11:27
Basis:	dry		

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	Moisture	RPD	Lim	Diln Fac
LCS	QC776924		41.32	41.40		100	80-120				1.000
SDUP	QC776925	<0.4348		<0.4457	0.4457			8%	NC	30	1.000
SSPIKE	QC776926	<0.4348	43.83	37.08		85	85-115	8%			1.000
SSPIKE	QC776927	<0.4348	860.5	680.2		79 *	85-115	8%			47.50

*= Value outside of QC limits; see narrative
NC= Not Calculated
RL= Reporting Limit
RPD= Relative Percent Difference

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Moisture

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1361	Analysis:	ASTM D2216/CLP
Analyte:	Moisture, Percent	Batch#:	220396
Matrix:	Soil	Sampled:	02/11/15
Units:	%	Received:	02/11/15
Diln Fac:	1.000	Analyzed:	02/12/15

Field ID	Lab ID	Result	RL
MW-4-0.5-1.5	264606-001	10	1
SB-21-1.0-2.0	264606-002	15	1

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Moisture

Lab #:	264606	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1361	Analysis:	ASTM D2216/CLP
Analyte:	Moisture, Percent	Units:	%
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
Type:	SDUP	Batch#:	220396
MSS Lab ID:	264631-001	Sampled:	02/10/15
Lab ID:	QC777097	Received:	02/12/15
Matrix:	Soil	Analyzed:	02/12/15

MSS Result	Result	RL	RPD	Lim
13.69	14.11	1.000	3	26

RL= Reporting Limit
RPD= Relative Percent Difference

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Laboratory Job Number 264660
ANALYTICAL REPORT

Integral Consulting, Inc.	Project : C1374
115 Sansome Street	Location : Allied Engineering
San Francisco, CA 94104	Level : II

Sample ID	Lab ID
MW-6-2.5-3.5	264660-001
SB-19-5.5-6.5	264660-002
SB-19-8.5-9.5	264660-003
TB-021215	264660-004

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Tracy Babjar Date: 02/23/2015

Tracy Babjar
Project Manager
tracy.babjar@ctberk.com
(510) 204-2226

CA ELAP# 2896, NELAP# 4044-001

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CASE NARRATIVE

Laboratory number:	**264660**
Client:	**Integral Consulting, Inc.**
Project:	**C1374**
Location:	**Allied Engineering**
Request Date:	**02/12/15**
Samples Received:	**02/12/15**

This data package contains sample and QC results for three soil samples and one water sample, requested for the above referenced project on 02/12/15. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):
Gasoline C7-C12 was detected between the MDL and the RL in the method blank for batch 220548; this analyte was either not detected in samples at or above the RL, or detected at a level at least 10 times that of the blank. No other analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B) Water:
1,2,4-trichlorobenzene was detected between the MDL and the RL in the method blank for batch 220463; this analyte was not detected in the sample at or above the RL. No other analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B) Soil:
Matrix spikes were not performed for this analysis in batch 220545 because of clock limitations; 5030 rushes were added to a 5035 batch. Matrix spikes were not performed for this analysis in batch 220480 because of clock limitations; 5030 rushes were added to a 5035 batch. High surrogate recovery was observed for bromofluorobenzene in MW-6-2.5-3.5 (lab # 264660-001); no target analytes were detected at or above RL in the sample. Acetone, 1,2,3-trichlorobenzene, and 1,2,4-trichlorobenzene were detected between the MDL and the RL in the method blank for batch 220480; these analytes were not detected in the sample at or above the RL. 1,2,4-trichlorobenzene was detected between the MDL and the RL in the method blank for batch 220630; this analyte was not detected in the sample at or above the RL. No other analytical problems were encountered.

Semivolatile Organics by GC/MS (EPA 8270C):
SB-19-5.5-6.5 (lab # 264660-002) and SB-19-8.5-9.5 (lab # 264660-003) were diluted due to high non-target analytes. No other analytical problems were encountered.

PCBs (EPA 8082):
All samples underwent sulfuric acid cleanup using EPA Method 3665A. All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. No analytical problems were encountered.

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CASE NARRATIVE

Laboratory number:	**264660**
Client:	**Integral Consulting, Inc.**
Project:	**C1374**
Location:	**Allied Engineering**
Request Date:	**02/12/15**
Samples Received:	**02/12/15**

Metals (EPA 6010B and EPA 7471A):
High recovery was observed for nickel in the MSD for batch 220557; the parent sample was not a project sample, the BS/BSD were within limits, and the associated RPD was within limits. Zinc was detected between the MDL and the RL in the method blank for batch 220557; this analyte was detected in samples at a level at least 10 times that of the blank. Mercury was detected between the MDL and the RL in the method blank for batch 220649. No other analytical problems were encountered.

Hexavalent Chromium (EPA 7196A):
No analytical problems were encountered.

Moisture (ASTM D2216/CLP):
No analytical problems were encountered.

CHAIN OF CUSTODY

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Chain of Custody # _____

C&T LOGIN # 2044660

Project No: C1361
Project Name: Allied Engineering
Project P. O. No: C1361 Task 4
EDD Format: Report Level ☐ II ☐ III ☐ IV
Turnaround Time: ☐ RUSH _____ ☒ Standard

Sampler: C. Lyles
Report To: B. Deshields
Company: Integral Consulting Inc.
Telephone:
Email: bdeshields@integral-corp.com

Lab No.	Sample ID.	SAMPLING Date Collected	SAMPLING Time Collected	MATRIX Water	MATRIX Solid	# of Containers	CHEMICAL PRESERVATIVE ~~HCl/MeOH~~	H2SO4	HNO3	~~NaOH/HNO3~~	None	TPH-G by 8015	TPH-d by 8015	TPH mo by 8015	SVOCs by 8270	Title 22 Metals by 6010/7471	Cr VI by 3060/7196	PCBs by 8082	Full list of VOCs by 8260
	MW-6-2.5-3.5	2/12/15	0940		X	6	1				5	X	X	X	X	X	X	X	X
	SB-19-5.5-6.5	2/12/15	1535		X	6	1				5	↓	↓	↓	↓	↓	↓	↓	↓
	SB-19-8.5-9.5	2/12/15	1600		X	6	1				5	↓	↓	↓	↓	↓	↓	↓	↓
	TB-021215	—	—	X		1				1									X

Notes:
- Report sample results in dry weight w/ % moisture.
- Lab to homogenize samples
- Report to MDL

SAMPLE RECEIPT
☐ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 2/12/15 TIME: 1616
DATE: 2/12/15 TIME: 1830
DATE: TIME:

RECEIVED BY:
DATE: 2/12/15 TIME: 1616
DATE: 2/12/15 TIME: 1830
DATE: TIME:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 244660 Date Received 02/12/15 Number of coolers 1
Client Integral Consulting Project C1361

Date Opened 02/12 By (print) MC (sign) [illegible]
Date Logged in 2/13 By (print) [illegible] (sign) [illegible]

1. Did cooler come with a shipping slip (airbill, etc) _____ YES NO
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO N/A
3. Were custody papers dry and intact when received? _____ YES NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ___ YES NO
6. Indicate the packing in cooler: (if other, describe) _____

☒ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 2.7

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES NO
   If YES, what time were they transferred to freezer? 1335
9. Did all bottles arrive unbroken/unopened? _____ YES NO
10. Are there any missing / extra samples? _____ YES NO
11. Are samples in the appropriate containers for indicated tests? _____ YES NO
12. Are sample labels present, in good condition and complete? _____ YES NO
13. Do the sample labels agree with custody papers? _____ YES NO
14. Was sufficient amount of sample sent for tests requested? _____ YES NO
15. Are the samples appropriately preserved? _____ YES NO N/A
16. Did you check preservatives for all bottles for each sample? _____ YES NO N/A
17. Did you document your preservative check? _____ YES NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO N/A
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO N/A
20. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A
21. Was the client contacted concerning this sample delivery? _____ YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

Rev 10, 9/12

Curtis & Tompkins, Ltd.

Detections Summary for 264660

Results for any subcontracted analyses are not included in this summary.

Client : Integral Consulting, Inc.
Project : C1374
Location : Allied Engineering

Client Sample ID : MW-6-2.5-3.5 Laboratory Sample ID : 264660-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.038	J	0.21	0.016	mg/Kg	Dry	1.000	EPA 8015B	EPA 5035
Diesel C10-C24	1.8	Y	1.2	0.37	mg/Kg	Dry	1.000	EPA 8015B	EPA 3550B
Motor Oil C24-C36	12		6.0	1.8	mg/Kg	Dry	1.000	EPA 8015B	EPA 3550B
Trichloroethene	3.6	J	5.1	0.85	ug/Kg	Dry	0.8432	EPA 8260B	EPA 5035
Tetrachloroethene	3.5	J	5.1	0.53	ug/Kg	Dry	0.8432	EPA 8260B	EPA 5035
Antimony	0.89		0.63	0.19	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Arsenic	1.9		0.31	0.091	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Barium	130		0.31	0.067	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Beryllium	0.31		0.13	0.016	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cadmium	0.34		0.31	0.032	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Chromium	28		0.31	0.079	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cobalt	4.1		0.31	0.038	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Copper	12		0.31	0.10	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Lead	4.2		0.31	0.087	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Mercury	0.028		0.018	0.0010	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Molybdenum	0.16	J	0.31	0.061	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Nickel	27		0.31	0.083	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Vanadium	24		0.31	0.072	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Zinc	22		1.3	0.070	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Moisture, Percent	17		1		%	As Recd	1.000	ASTM D2216/CLP	METHOD

Curtis & Tompkins, Ltd.

Client Sample ID : SB-19-5.5-6.5 Laboratory Sample ID : 264660-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.94	Y	0.16	0.012	mg/Kg	Dry	1.000	EPA 8015B	EPA 5035
Diesel C10-C24	1,400	Y	60	18	mg/Kg	Dry	50.00	EPA 8015B	EPA 3550B
Motor Oil C24-C36	15,000		300	91	mg/Kg	Dry	50.00	EPA 8015B	EPA 3550B
Vinyl Chloride	50	J	410	15	ug/Kg	Dry	34.34	EPA 8260B	EPA 5035
trans-1,2-Dichloroethene	26	J	210	4.1	ug/Kg	Dry	34.34	EPA 8260B	EPA 5035
cis-1,2-Dichloroethene	80	J	210	7.0	ug/Kg	Dry	34.34	EPA 8260B	EPA 5035
Trichloroethene	110	J	210	4.1	ug/Kg	Dry	34.34	EPA 8260B	EPA 5035
Tetrachloroethene	500		210	4.1	ug/Kg	Dry	34.34	EPA 8260B	EPA 5035
bis(2-Ethylhexyl)phthalate	340	J	8,000	310	ug/Kg	Dry	20.00	EPA 8270C	EPA 3550B
Antimony	1.5		0.57	0.17	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Arsenic	2.5		0.28	0.083	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Barium	89		0.28	0.061	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Beryllium	0.31		0.11	0.014	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cadmium	0.57		0.28	0.029	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Chromium	40		0.28	0.072	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cobalt	6.4		0.28	0.034	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Copper	16		0.28	0.095	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Lead	34		0.28	0.079	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Mercury	0.11		0.019	0.0011	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Molybdenum	0.096	J	0.28	0.056	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Nickel	35		0.28	0.075	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Vanadium	25		0.28	0.065	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Zinc	46		1.1	0.064	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Moisture, Percent	17		1		%	As Recd	1.000	ASTM D2216/CLP	METHOD

Curtis & Tompkins, Ltd.

Client Sample ID : SB-19-8.5-9.5 Laboratory Sample ID : 264660-003

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.045	J	0.16	0.012	mg/Kg	Dry	1.000	EPA 8015B	EPA 5035
Diesel C10-C24	940	Y	23	7.1	mg/Kg	Dry	20.00	EPA 8015B	EPA 3550B
Motor Oil C24-C36	5,300		120	35	mg/Kg	Dry	20.00	EPA 8015B	EPA 3550B
Vinyl Chloride	9.9		8.1	0.33	ug/Kg	Dry	0.6974	EPA 8260B	EPA 5035
trans-1,2-Dichloroethene	0.94	J	4.1	0.55	ug/Kg	Dry	0.6974	EPA 8260B	EPA 5035
cis-1,2-Dichloroethene	1.5	J	4.1	0.46	ug/Kg	Dry	0.6974	EPA 8260B	EPA 5035
Tetrachloroethene	4.0	J	4.1	0.52	ug/Kg	Dry	0.6974	EPA 8260B	EPA 5035
Antimony	1.5		0.56	0.17	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Arsenic	2.9		0.28	0.081	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Barium	370		0.28	0.060	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Beryllium	0.29		0.11	0.014	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cadmium	0.61		0.28	0.029	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Chromium	46		0.28	0.070	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cobalt	8.8		0.28	0.033	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Copper	11		0.28	0.093	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Lead	2.7		0.28	0.078	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Mercury	0.045		0.019	0.0010	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Nickel	42		0.28	0.074	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Vanadium	30		0.28	0.064	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Zinc	28		1.1	0.063	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Moisture, Percent	14		1		%	As Recd	1.000	ASTM D2216/CLP	METHOD

Client Sample ID : TB-021215 Laboratory Sample ID : 264660-004

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Chloroform	0.2	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

J = Estimated value
Y = Sample exhibits chromatographic pattern which does not resemble standard

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Gasoline by GC/FID (5035 Prep)

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	220548
Units:	mg/Kg	Sampled:	02/12/15
Basis:	dry	Received:	02/12/15
Diln Fac:	1.000		

Field ID:	MW-6-2.5-3.5	Moisture:	17%
Type:	SAMPLE	Analyzed:	02/19/15
Lab ID:	264660-001		

Analyte	Result	RL	MDL
Gasoline C7-C12	0.038 J	0.21	0.016

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	101	78-138

Field ID:	SB-19-5.5-6.5	Moisture:	17%
Type:	SAMPLE	Analyzed:	02/19/15
Lab ID:	264660-002		

Analyte	Result	RL	MDL
Gasoline C7-C12	0.94 Y	0.16	0.012

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	83	78-138

Field ID:	SB-19-8.5-9.5	Moisture:	14%
Type:	SAMPLE	Analyzed:	02/19/15
Lab ID:	264660-003		

Analyte	Result	RL	MDL
Gasoline C7-C12	0.045 J	0.16	0.012

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	106	78-138

Type:	BLANK	Analyzed:	02/18/15
Lab ID:	QC777682		

Analyte	Result	RL	MDL
Gasoline C7-C12	0.026 J	0.20	0.015

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	108	78-138

J= Estimated value
Y= Sample exhibits chromatographic pattern which does not resemble standard
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/FID (5035 Prep)

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC777681	Batch#:	220548
Matrix:	Soil	Analyzed:	02/18/15
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	0.9935	99	80-121

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	117	78-138

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/FID (5035 Prep)

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	264630-009	Batch#:	220548
Matrix:	Soil	Sampled:	02/07/15
Units:	mg/Kg	Received:	02/12/15
Basis:	as received	Analyzed:	02/18/15

Type: MS Lab ID: QC777683

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.1286	9.804	8.462	85	50-120

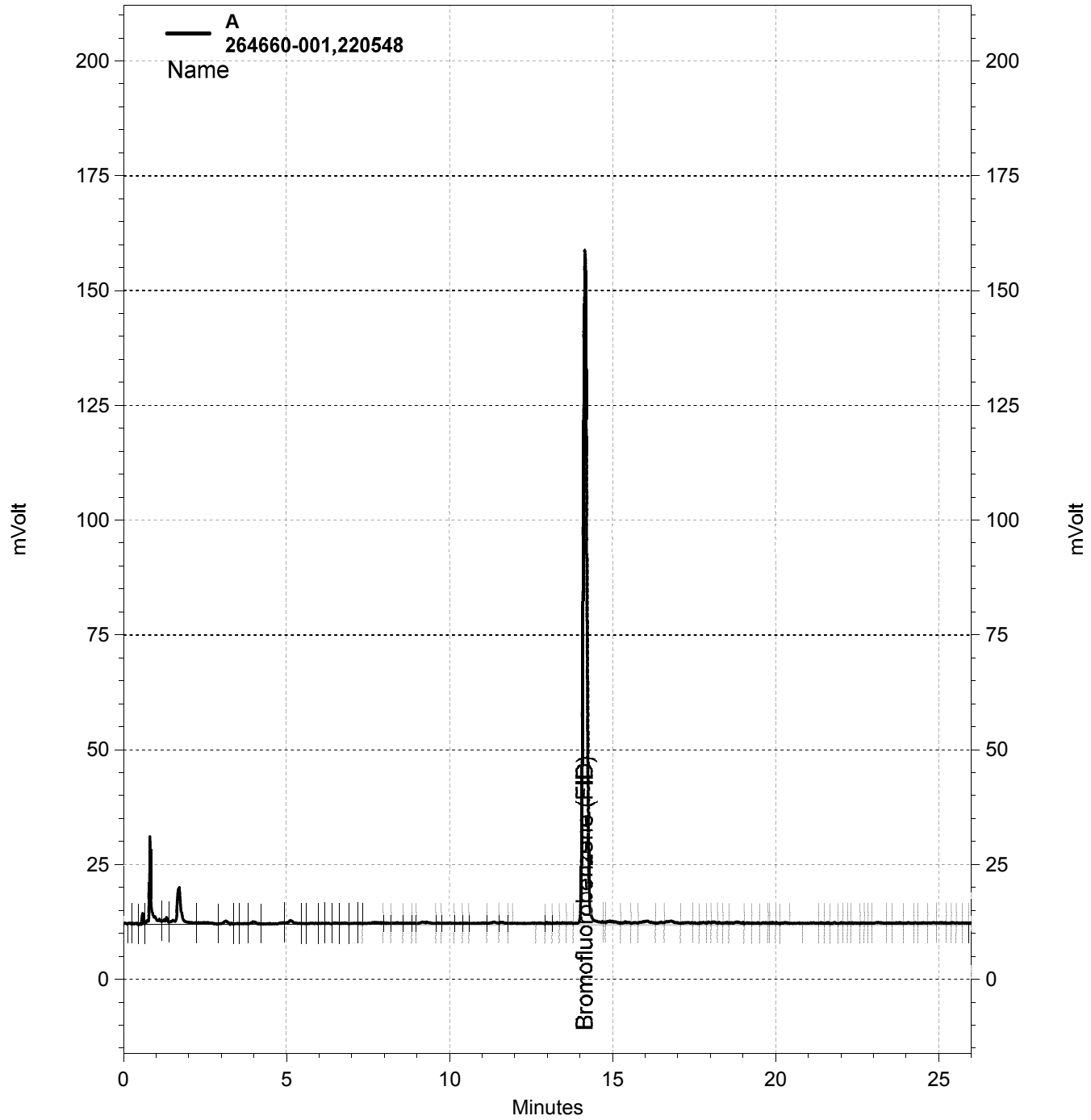
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	115	78-138

Type: MSD Lab ID: QC777684

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	9.259	7.254	77	50-120	10	31

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	108	78-138

RPD= Relative Percent Difference



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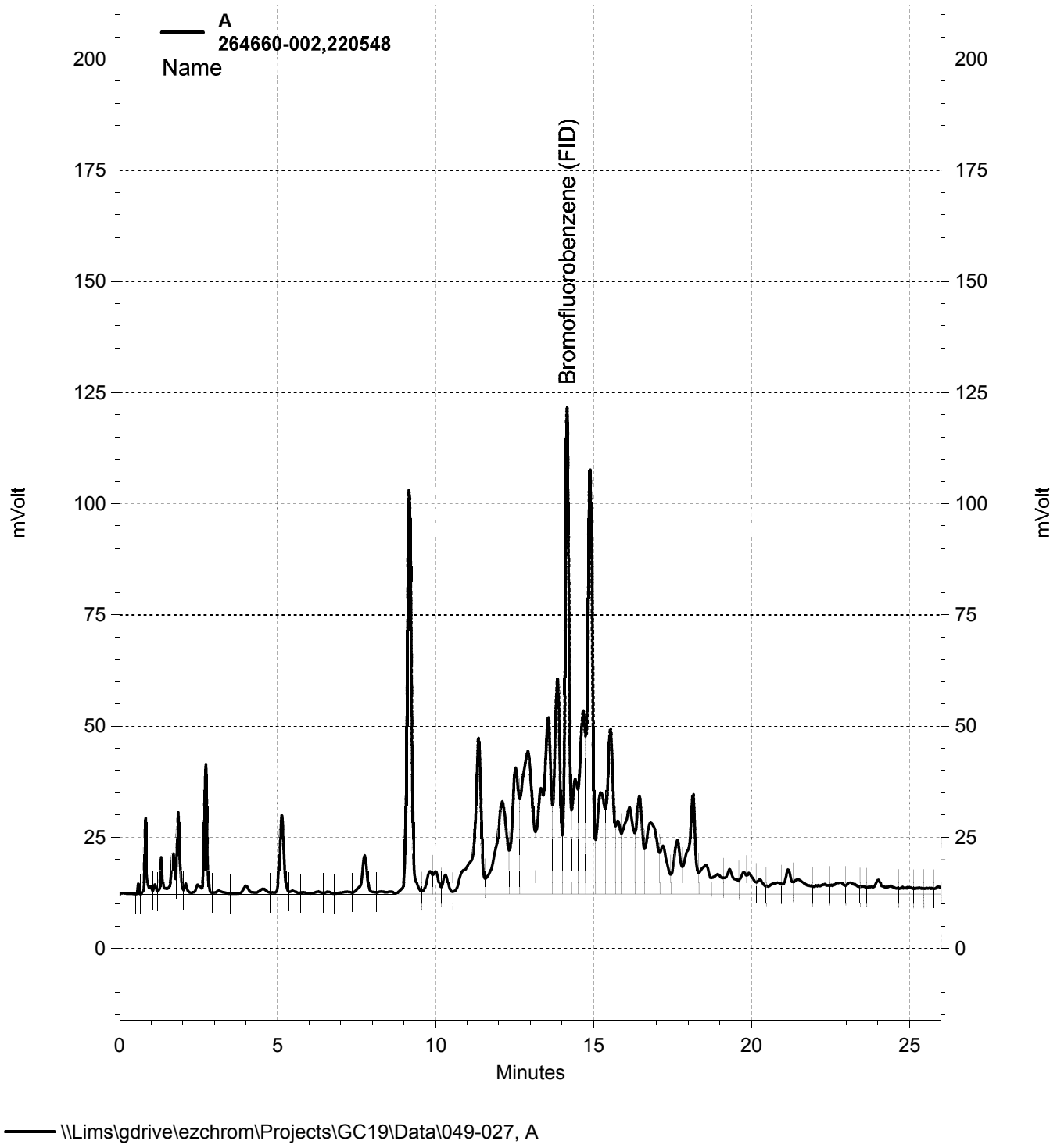

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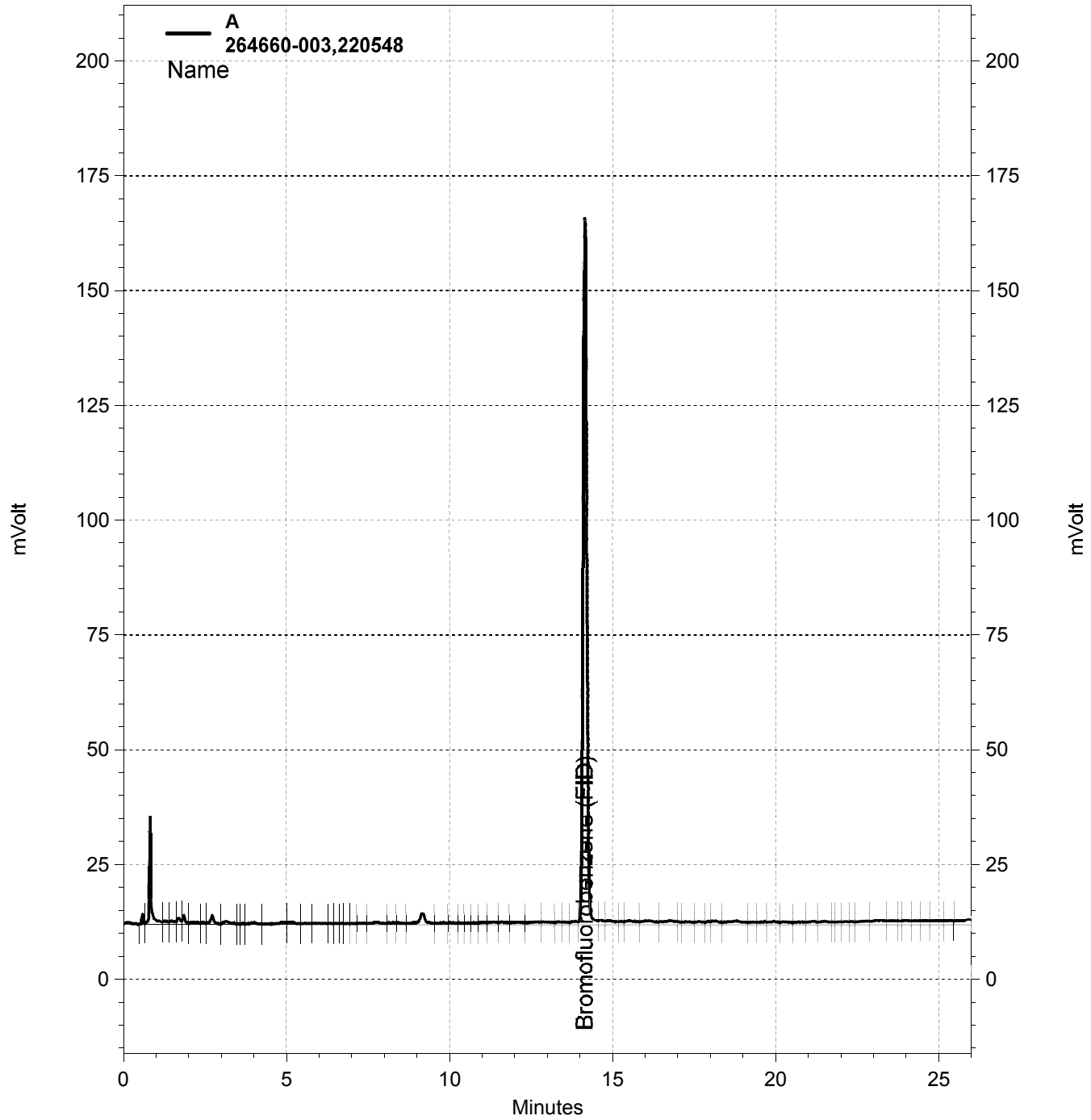

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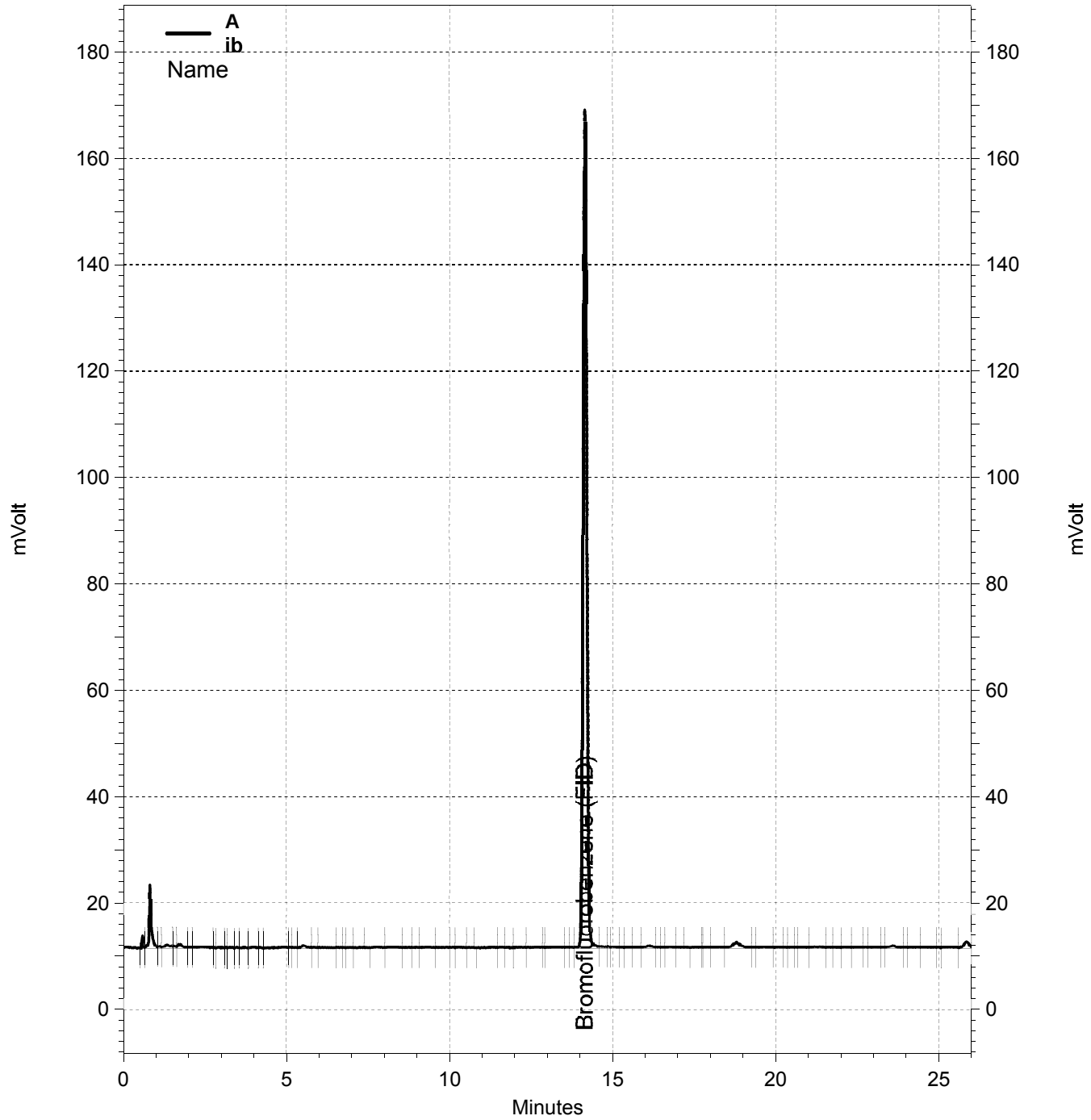

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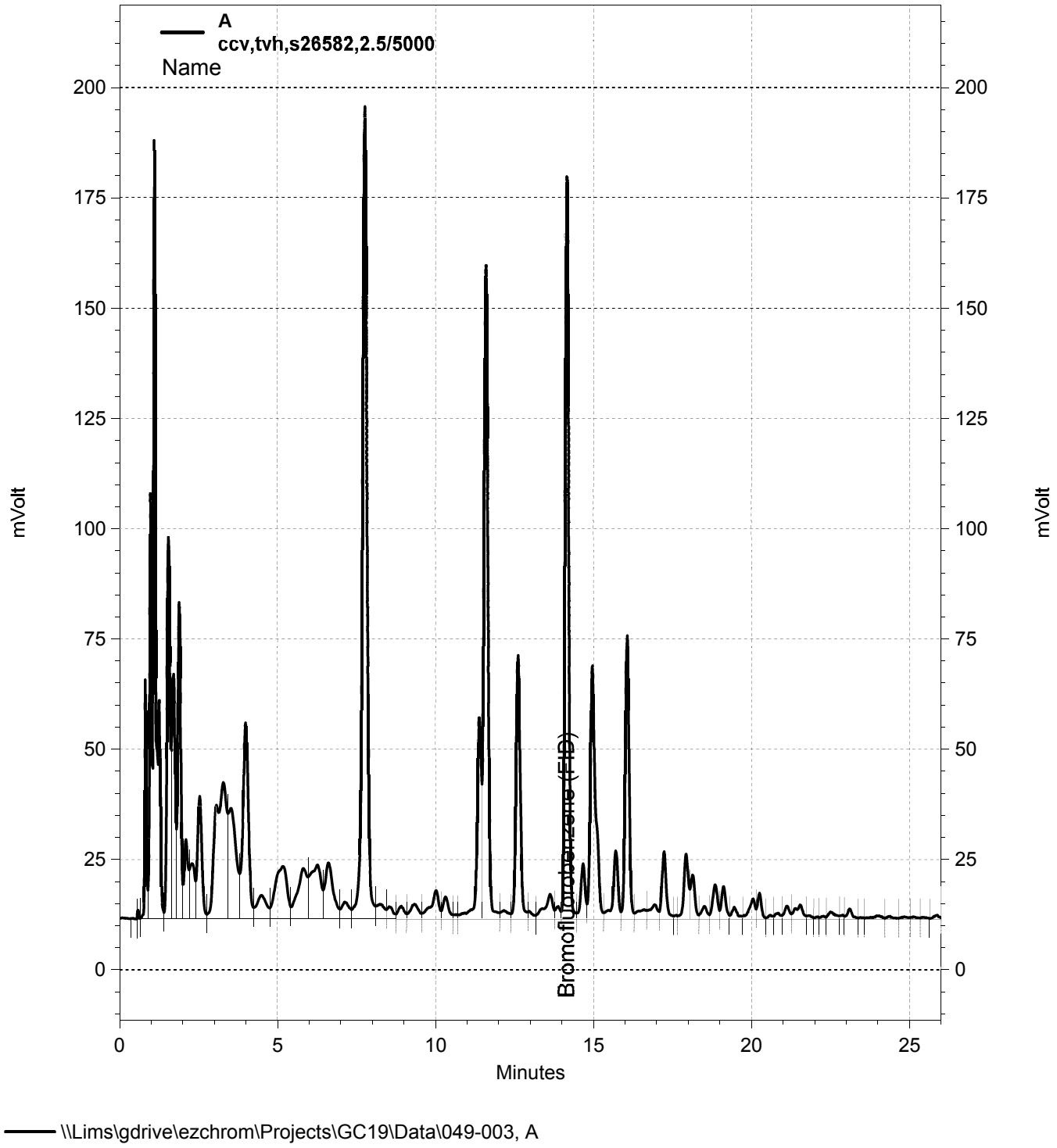

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Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	02/12/15
Units:	mg/Kg	Received:	02/12/15
Basis:	dry	Prepared:	02/17/15
Batch#:	220491		

Field ID:	MW-6-2.5-3.5	Moisture:	17%
Type:	SAMPLE	Diln Fac:	1.000
Lab ID:	264660-001	Analyzed:	02/19/15

Analyte	Result	RL	MDL
Diesel C10-C24	1.8 Y	1.2	0.37
Motor Oil C24-C36	12	6.0	1.8

Surrogate	%REC	Limits
o-Terphenyl	97	59-140

Field ID:	SB-19-5.5-6.5	Moisture:	17%
Type:	SAMPLE	Diln Fac:	50.00
Lab ID:	264660-002	Analyzed:	02/19/15

Analyte	Result	RL	MDL
Diesel C10-C24	1,400 Y	60	18
Motor Oil C24-C36	15,000	300	91

Surrogate	%REC	Limits
o-Terphenyl	DO	59-140

Field ID:	SB-19-8.5-9.5	Moisture:	14%
Type:	SAMPLE	Diln Fac:	20.00
Lab ID:	264660-003	Analyzed:	02/19/15

Analyte	Result	RL	MDL
Diesel C10-C24	940 Y	23	7.1
Motor Oil C24-C36	5,300	120	35

Surrogate	%REC	Limits
o-Terphenyl	DO	59-140

Type:	BLANK	Analyzed:	02/17/15
Lab ID:	QC777462	Cleanup Method:	EPA 3630C
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Diesel C10-C24	ND	1.0	0.31
Motor Oil C24-C36	ND	5.0	1.5

Surrogate	%REC	Limits
o-Terphenyl	95	59-140

Y= Sample exhibits chromatographic pattern which does not resemble standard
DO= Diluted Out
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC777463	Batch#:	220491
Matrix:	Soil	Prepared:	02/17/15
Units:	mg/Kg	Analyzed:	02/17/15

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	49.69	41.36	83	58-137

Surrogate	%REC	Limits
o-Terphenyl	92	59-140

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	220491
MSS Lab ID:	264640-034	Sampled:	02/12/15
Matrix:	Soil	Received:	02/12/15
Units:	mg/Kg	Prepared:	02/17/15
Basis:	as received	Analyzed:	02/17/15
Diln Fac:	5.000		

Type: MS Lab ID: QC777464

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	25.81	49.93	76.40	101	46-154

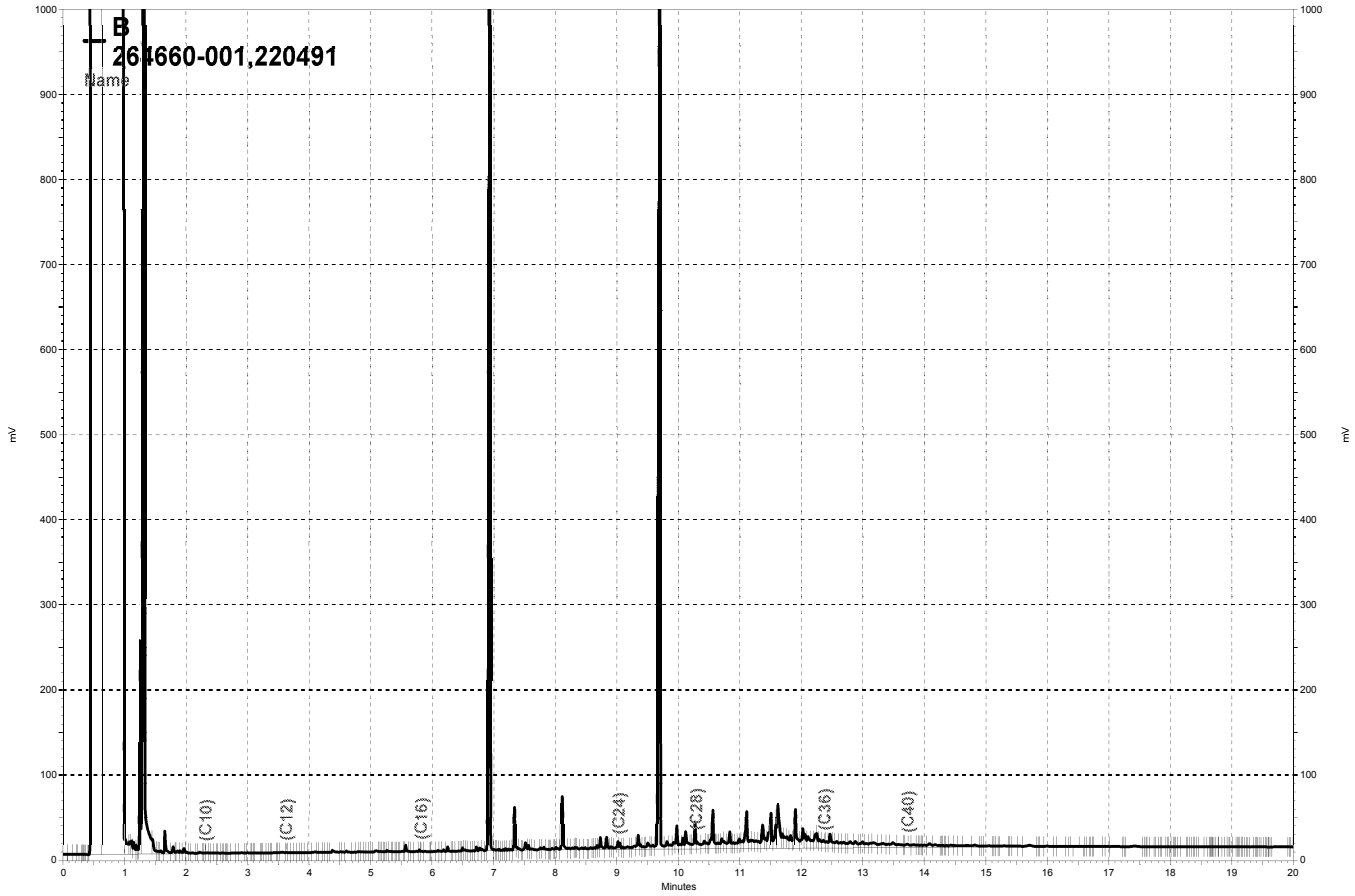
Surrogate	%REC	Limits
o-Terphenyl	113	59-140

Type: MSD Lab ID: QC777465

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	49.66	58.80	66	46-154	26	50

Surrogate	%REC	Limits
o-Terphenyl	91	59-140

RPD= Relative Percent Difference



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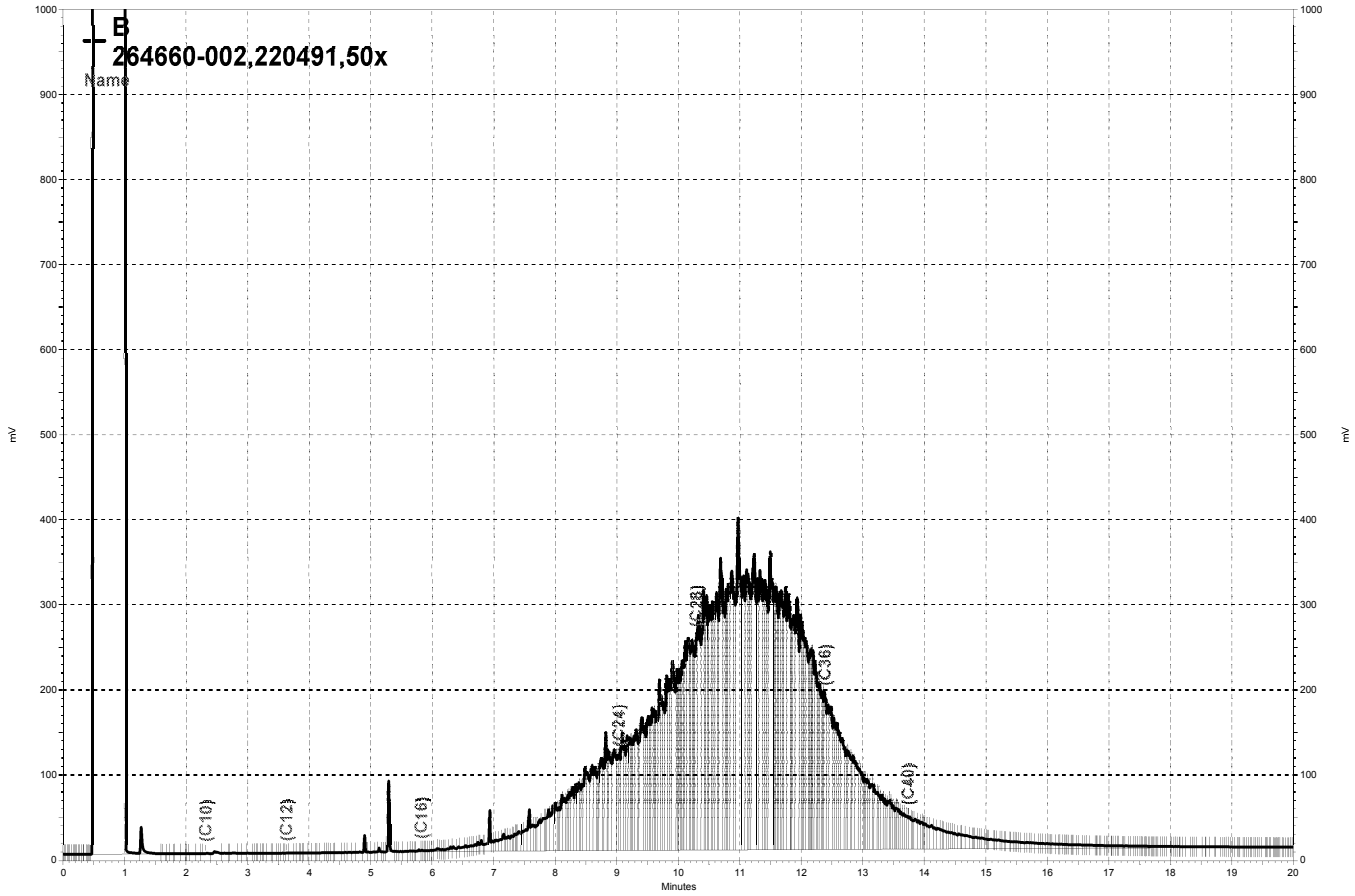

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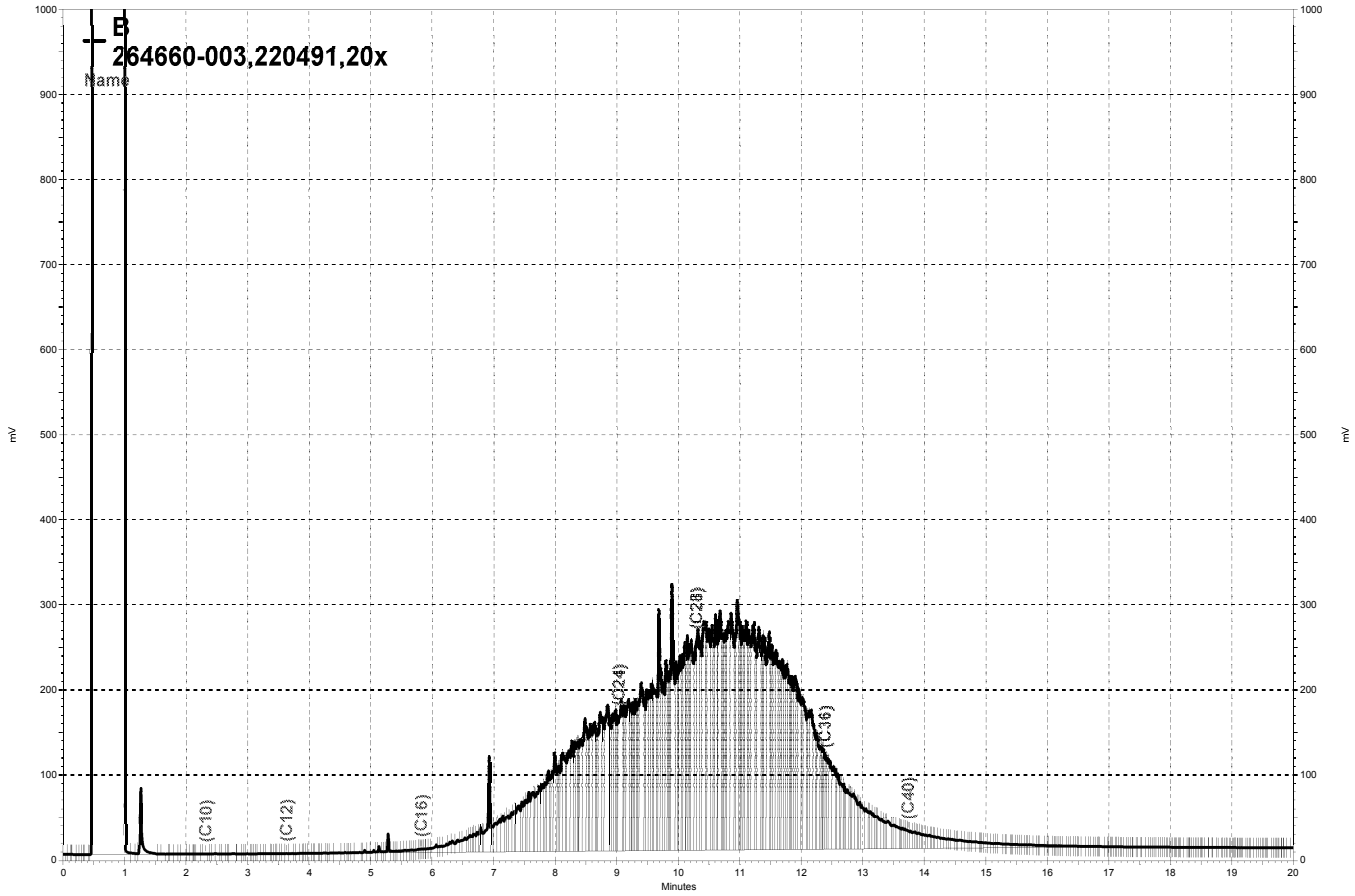

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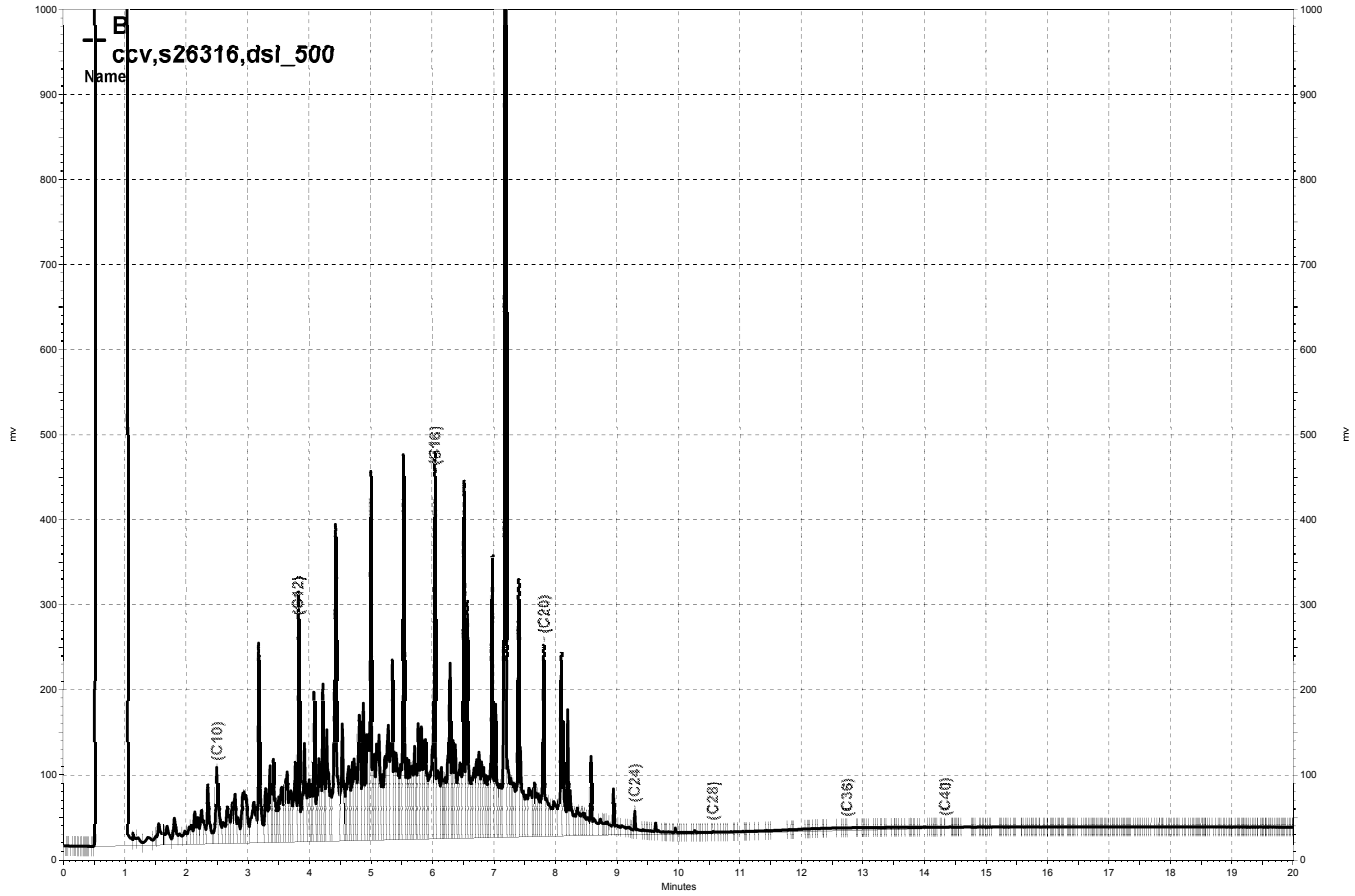

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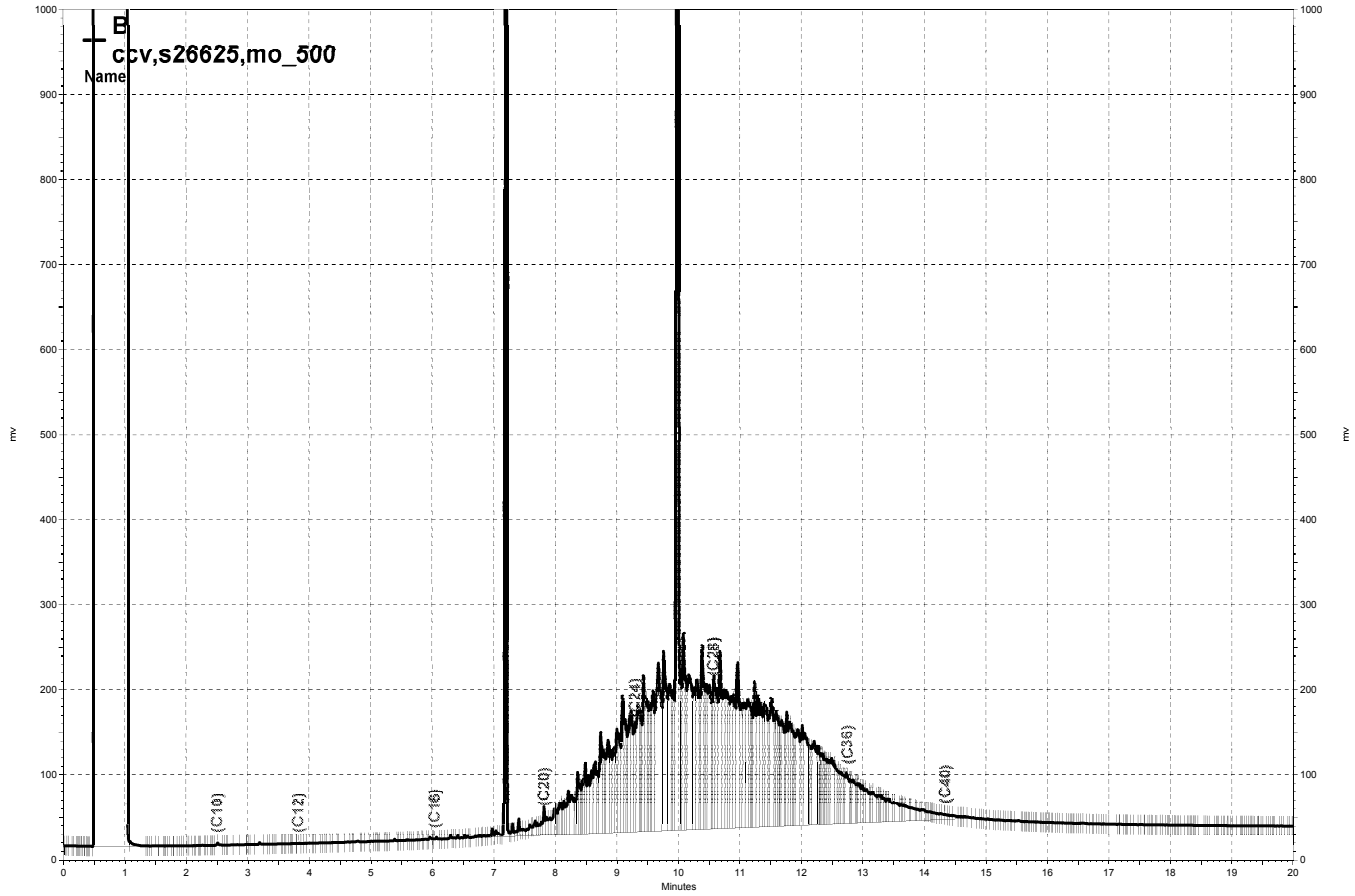

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Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8260B
Field ID:	TB-021215	Batch#:	220463
Lab ID:	264660-004	Sampled:	02/12/15
Matrix:	Water	Received:	02/12/15
Units:	ug/L	Analyzed:	02/15/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.1
Trichlorofluoromethane	ND	1.0	0.1
Acetone	ND	10	3.3
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.1
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.1
Vinyl Acetate	ND	10	0.2
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.2
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	0.2 J	0.5	0.1
Bromochloromethane	ND	0.5	0.2
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.2
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.2
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8260B
Field ID:	TB-021215	Batch#:	220463
Lab ID:	264660-004	Sampled:	02/12/15
Matrix:	Water	Received:	02/12/15
Units:	ug/L	Analyzed:	02/15/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.2
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.2
Naphthalene	ND	2.0	0.2
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	108	80-128
1,2-Dichloroethane-d4	99	75-139
Toluene-d8	91	80-120
Bromofluorobenzene	94	80-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777353	Batch#:	220463
Matrix:	Water	Analyzed:	02/15/15
Units:	ug/L		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.1
Trichlorofluoromethane	ND	1.0	0.1
Acetone	ND	10	3.3
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.1
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.1
Vinyl Acetate	ND	10	0.2
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.2
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.2
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.2
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.2
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777353	Batch#:	220463
Matrix:	Water	Analyzed:	02/15/15
Units:	ug/L		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.2
1,2,4-Trichlorobenzene	0.1 J	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.2
Naphthalene	ND	2.0	0.2
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-128
1,2-Dichloroethane-d4	95	75-139
Toluene-d8	92	80-120
Bromofluorobenzene	93	80-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	220463
Units:	ug/L	Analyzed:	02/15/15
Diln Fac:	1.000		

Type: BS Lab ID: QC777354

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	14.23	114	66-135
Benzene	12.50	12.84	103	80-123
Trichloroethene	12.50	12.83	103	80-123
Toluene	12.50	11.66	93	80-121
Chlorobenzene	12.50	11.75	94	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-128
1,2-Dichloroethane-d4	94	75-139
Toluene-d8	90	80-120
Bromofluorobenzene	91	80-120

Type: BSD Lab ID: QC777355

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	15.02	120	66-135	5	24
Benzene	12.50	13.40	107	80-123	4	20
Trichloroethene	12.50	13.51	108	80-123	5	20
Toluene	12.50	12.39	99	80-121	6	20
Chlorobenzene	12.50	12.74	102	80-123	8	20

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-128
1,2-Dichloroethane-d4	100	75-139
Toluene-d8	91	80-120
Bromofluorobenzene	90	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	220463
MSS Lab ID:	264633-004	Sampled:	02/12/15
Matrix:	Water	Received:	02/13/15
Units:	ug/L	Analyzed:	02/16/15
Diln Fac:	1.000		

Type: MS Lab ID: QC777360

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.1268	12.50	15.53	124	73-129
Benzene	<0.1000	12.50	14.22	114	80-120
Trichloroethene	20.59	12.50	34.03	108	73-123
Toluene	<0.1000	12.50	12.33	99	80-120
Chlorobenzene	<0.1000	12.50	12.87	103	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-128
1,2-Dichloroethane-d4	100	75-139
Toluene-d8	88	80-120
Bromofluorobenzene	87	80-120

Type: MSD Lab ID: QC777361

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	15.52	124	73-129	0	25
Benzene	12.50	14.08	113	80-120	1	20
Trichloroethene	12.50	33.08	100	73-123	3	20
Toluene	12.50	12.11	97	80-120	2	21
Chlorobenzene	12.50	12.56	100	80-120	2	24

Surrogate	%REC	Limits
Dibromofluoromethane	110	80-128
1,2-Dichloroethane-d4	100	75-139
Toluene-d8	88	80-120
Bromofluorobenzene	92	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8260B
Field ID:	MW-6-2.5-3.5	Diln Fac:	0.8432
Lab ID:	264660-001	Batch#:	220545
Matrix:	Soil	Sampled:	02/12/15
Units:	ug/Kg	Received:	02/12/15
Basis:	dry	Analyzed:	02/18/15

Moisture: 17%

Analyte	Result	RL	MDL
Freon 12	ND	10	0.41
Chloromethane	ND	10	1.1
Vinyl Chloride	ND	10	0.95
Bromomethane	ND	10	1.2
Chloroethane	ND	10	0.50
Trichlorofluoromethane	ND	5.1	0.71
Acetone	ND	20	1.9
Freon 113	ND	5.1	0.45
1,1-Dichloroethene	ND	5.1	0.95
Methylene Chloride	ND	20	1.1
Carbon Disulfide	ND	5.1	0.88
MTBE	ND	5.1	1.0
trans-1,2-Dichloroethene	ND	5.1	0.85
Vinyl Acetate	ND	51	0.73
1,1-Dichloroethane	ND	5.1	1.2
2-Butanone	ND	10	1.4
cis-1,2-Dichloroethene	ND	5.1	0.88
2,2-Dichloropropane	ND	5.1	1.1
Chloroform	ND	5.1	1.3
Bromochloromethane	ND	5.1	0.95
1,1,1-Trichloroethane	ND	5.1	0.82
1,1-Dichloropropene	ND	5.1	0.64
Carbon Tetrachloride	ND	5.1	0.48
1,2-Dichloroethane	ND	5.1	0.94
Benzene	ND	5.1	0.92
Trichloroethene	3.6 J	5.1	0.85
1,2-Dichloropropane	ND	5.1	0.79
Bromodichloromethane	ND	5.1	0.86
Dibromomethane	ND	5.1	0.78
4-Methyl-2-Pentanone	ND	10	1.0
cis-1,3-Dichloropropene	ND	5.1	0.62
Toluene	ND	5.1	0.72
trans-1,3-Dichloropropene	ND	5.1	0.66
1,1,2-Trichloroethane	ND	5.1	0.63
2-Hexanone	ND	10	0.89
1,3-Dichloropropane	ND	5.1	0.86
Tetrachloroethene	3.5 J	5.1	0.53
Dibromochloromethane	ND	5.1	0.52
1,2-Dibromoethane	ND	5.1	0.66
Chlorobenzene	ND	5.1	0.70
1,1,1,2-Tetrachloroethane	ND	5.1	0.63
Ethylbenzene	ND	5.1	0.69
m,p-Xylenes	ND	5.1	1.3
o-Xylene	ND	5.1	0.64
Styrene	ND	5.1	0.59
Bromoform	ND	5.1	0.40
Isopropylbenzene	ND	5.1	0.51
1,1,2,2-Tetrachloroethane	ND	5.1	0.42
1,2,3-Trichloropropane	ND	5.1	0.59

*= Value outside of QC limits; see narrative
J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8260B
Field ID:	MW-6-2.5-3.5	Diln Fac:	0.8432
Lab ID:	264660-001	Batch#:	220545
Matrix:	Soil	Sampled:	02/12/15
Units:	ug/Kg	Received:	02/12/15
Basis:	dry	Analyzed:	02/18/15

Analyte	Result	RL	MDL
Propylbenzene	ND	5.1	0.45
Bromobenzene	ND	5.1	0.54
1,3,5-Trimethylbenzene	ND	5.1	0.58
2-Chlorotoluene	ND	5.1	0.69
4-Chlorotoluene	ND	5.1	0.66
tert-Butylbenzene	ND	5.1	0.41
1,2,4-Trimethylbenzene	ND	5.1	0.61
sec-Butylbenzene	ND	5.1	0.43
para-Isopropyl Toluene	ND	5.1	0.43
1,3-Dichlorobenzene	ND	5.1	0.45
1,4-Dichlorobenzene	ND	5.1	0.55
n-Butylbenzene	ND	5.1	0.39
1,2-Dichlorobenzene	ND	5.1	0.54
1,2-Dibromo-3-Chloropropane	ND	5.1	0.95
1,2,4-Trichlorobenzene	ND	5.1	0.42
Hexachlorobutadiene	ND	5.1	0.30
Naphthalene	ND	5.1	0.31
1,2,3-Trichlorobenzene	ND	5.1	0.43

Surrogate	%REC	Limits
Dibromofluoromethane	108	78-134
1,2-Dichloroethane-d4	115	80-138
Toluene-d8	119	80-120
Bromofluorobenzene	137 *	78-123

*= Value outside of QC limits; see narrative
J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8260B
Field ID:	SB-19-5.5-6.5	Diln Fac:	34.34
Lab ID:	264660-002	Batch#:	220630
Matrix:	Soil	Sampled:	02/12/15
Units:	ug/Kg	Received:	02/12/15
Basis:	dry	Analyzed:	02/20/15

Moisture: 17%

Analyte	Result	RL	MDL
Freon 12	ND	410	27
Chloromethane	ND	410	18
Vinyl Chloride	50 J	410	15
Bromomethane	ND	410	4.1
Chloroethane	ND	410	26
Trichlorofluoromethane	ND	210	5.1
Acetone	ND	830	140
Freon 113	ND	210	4.1
1,1-Dichloroethene	ND	210	5.6
Methylene Chloride	ND	830	120
Carbon Disulfide	ND	210	6.0
MTBE	ND	210	4.9
trans-1,2-Dichloroethene	26 J	210	4.1
Vinyl Acetate	ND	2,100	12
1,1-Dichloroethane	ND	210	6.3
2-Butanone	ND	410	18
cis-1,2-Dichloroethene	80 J	210	7.0
2,2-Dichloropropane	ND	210	11
Chloroform	ND	210	4.5
Bromochloromethane	ND	210	5.8
1,1,1-Trichloroethane	ND	210	5.4
1,1-Dichloropropene	ND	210	5.7
Carbon Tetrachloride	ND	210	4.1
1,2-Dichloroethane	ND	210	4.1
Benzene	ND	210	4.1
Trichloroethene	110 J	210	4.1
1,2-Dichloropropane	ND	210	4.1
Bromodichloromethane	ND	210	4.1
Dibromomethane	ND	210	4.2
4-Methyl-2-Pentanone	ND	410	8.5
cis-1,3-Dichloropropene	ND	210	5.0
Toluene	ND	210	42
trans-1,3-Dichloropropene	ND	210	4.1
1,1,2-Trichloroethane	ND	210	5.0
2-Hexanone	ND	410	8.6
1,3-Dichloropropane	ND	210	4.1
Tetrachloroethene	500	210	4.1
Dibromochloromethane	ND	210	9.2
1,2-Dibromoethane	ND	210	4.1
Chlorobenzene	ND	210	4.7
1,1,1,2-Tetrachloroethane	ND	210	4.1
Ethylbenzene	ND	210	4.1
m,p-Xylenes	ND	210	4.1
o-Xylene	ND	210	4.1
Styrene	ND	210	4.1
Bromoform	ND	210	7.8
Isopropylbenzene	ND	210	5.0
1,1,2,2-Tetrachloroethane	ND	210	4.1
1,2,3-Trichloropropane	ND	210	7.4
Propylbenzene	ND	210	5.9

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8260B
Field ID:	SB-19-5.5-6.5	Diln Fac:	34.34
Lab ID:	264660-002	Batch#:	220630
Matrix:	Soil	Sampled:	02/12/15
Units:	ug/Kg	Received:	02/12/15
Basis:	dry	Analyzed:	02/20/15

Analyte	Result	RL	MDL
Bromobenzene	ND	210	4.1
1,3,5-Trimethylbenzene	ND	210	4.1
2-Chlorotoluene	ND	210	4.7
4-Chlorotoluene	ND	210	5.0
tert-Butylbenzene	ND	210	4.1
1,2,4-Trimethylbenzene	ND	210	6.1
sec-Butylbenzene	ND	210	6.3
para-Isopropyl Toluene	ND	210	6.2
1,3-Dichlorobenzene	ND	210	5.5
1,4-Dichlorobenzene	ND	210	4.1
n-Butylbenzene	ND	210	7.8
1,2-Dichlorobenzene	ND	210	4.1
1,2-Dibromo-3-Chloropropane	ND	210	17
1,2,4-Trichlorobenzene	ND	210	4.1
Hexachlorobutadiene	ND	210	4.1
Naphthalene	ND	210	7.7
1,2,3-Trichlorobenzene	ND	210	4.5

Surrogate	%REC	Limits
Dibromofluoromethane	103	78-134
1,2-Dichloroethane-d4	92	80-138
Toluene-d8	99	80-120
Bromofluorobenzene	97	78-123

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8260B
Field ID:	SB-19-8.5-9.5	Diln Fac:	0.6974
Lab ID:	264660-003	Batch#:	220480
Matrix:	Soil	Sampled:	02/12/15
Units:	ug/Kg	Received:	02/12/15
Basis:	dry	Analyzed:	02/17/15

Moisture: 14%

Analyte	Result	RL	MDL
Freon 12	ND	8.1	0.52
Chloromethane	ND	8.1	0.40
Vinyl Chloride	9.9	8.1	0.33
Bromomethane	ND	8.1	0.29
Chloroethane	ND	8.1	0.32
Trichlorofluoromethane	ND	4.1	0.24
Acetone	ND	16	2.7
Freon 113	ND	4.1	0.42
1,1-Dichloroethene	ND	4.1	0.49
Methylene Chloride	ND	16	0.87
Carbon Disulfide	ND	4.1	0.54
MTBE	ND	4.1	0.39
trans-1,2-Dichloroethene	0.94 J	4.1	0.55
Vinyl Acetate	ND	41	0.42
1,1-Dichloroethane	ND	4.1	0.62
2-Butanone	ND	8.1	0.55
cis-1,2-Dichloroethene	1.5 J	4.1	0.46
2,2-Dichloropropane	ND	4.1	0.48
Chloroform	ND	4.1	0.56
Bromochloromethane	ND	4.1	0.090
1,1,1-Trichloroethane	ND	4.1	0.53
1,1-Dichloropropene	ND	4.1	0.53
Carbon Tetrachloride	ND	4.1	0.48
1,2-Dichloroethane	ND	4.1	0.51
Benzene	ND	4.1	0.57
Trichloroethene	ND	4.1	0.59
1,2-Dichloropropane	ND	4.1	0.47
Bromodichloromethane	ND	4.1	0.44
Dibromomethane	ND	4.1	0.18
4-Methyl-2-Pentanone	ND	8.1	0.48
cis-1,3-Dichloropropene	ND	4.1	0.33
Toluene	ND	4.1	0.62
trans-1,3-Dichloropropene	ND	4.1	0.34
1,1,2-Trichloroethane	ND	4.1	0.39
2-Hexanone	ND	8.1	0.50
1,3-Dichloropropane	ND	4.1	0.41
Tetrachloroethene	4.0 J	4.1	0.52
Dibromochloromethane	ND	4.1	0.40
1,2-Dibromoethane	ND	4.1	0.42
Chlorobenzene	ND	4.1	0.51
1,1,1,2-Tetrachloroethane	ND	4.1	0.43
Ethylbenzene	ND	4.1	0.58
m,p-Xylenes	ND	4.1	1.1
o-Xylene	ND	4.1	0.48
Styrene	ND	4.1	0.42
Bromoform	ND	4.1	0.18
Isopropylbenzene	ND	4.1	0.53
1,1,2,2-Tetrachloroethane	ND	4.1	0.42
1,2,3-Trichloropropane	ND	4.1	0.49
Propylbenzene	ND	4.1	0.54

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8260B
Field ID:	SB-19-8.5-9.5	Diln Fac:	0.6974
Lab ID:	264660-003	Batch#:	220480
Matrix:	Soil	Sampled:	02/12/15
Units:	ug/Kg	Received:	02/12/15
Basis:	dry	Analyzed:	02/17/15

Analyte	Result	RL	MDL
Bromobenzene	ND	4.1	0.18
1,3,5-Trimethylbenzene	ND	4.1	0.53
2-Chlorotoluene	ND	4.1	0.56
4-Chlorotoluene	ND	4.1	0.52
tert-Butylbenzene	ND	4.1	0.57
1,2,4-Trimethylbenzene	ND	4.1	0.50
sec-Butylbenzene	ND	4.1	0.50
para-Isopropyl Toluene	ND	4.1	0.50
1,3-Dichlorobenzene	ND	4.1	0.43
1,4-Dichlorobenzene	ND	4.1	0.39
n-Butylbenzene	ND	4.1	0.48
1,2-Dichlorobenzene	ND	4.1	0.38
1,2-Dibromo-3-Chloropropane	ND	4.1	0.63
1,2,4-Trichlorobenzene	ND	4.1	0.12
Hexachlorobutadiene	ND	4.1	0.52
Naphthalene	ND	4.1	0.80
1,2,3-Trichlorobenzene	ND	4.1	0.13

Surrogate	%REC	Limits
Dibromofluoromethane	108	78-134
1,2-Dichloroethane-d4	95	80-138
Toluene-d8	97	80-120
Bromofluorobenzene	101	78-123

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8260B
Matrix:	Soil	Batch#:	220480
Units:	ug/Kg	Analyzed:	02/17/15
Diln Fac:	1.000		

Type: BS Lab ID: QC777415

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	24.85	99	70-134
Benzene	25.00	29.20	117	80-123
Trichloroethene	25.00	26.87	107	80-128
Toluene	25.00	26.27	105	80-120
Chlorobenzene	25.00	25.67	103	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	105	78-134
1,2-Dichloroethane-d4	93	80-138
Toluene-d8	97	80-120
Bromofluorobenzene	100	78-123

Type: BSD Lab ID: QC777416

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	24.82	99	70-134	0	22
Benzene	25.00	28.77	115	80-123	1	21
Trichloroethene	25.00	26.00	104	80-128	3	23
Toluene	25.00	25.55	102	80-120	3	20
Chlorobenzene	25.00	25.25	101	80-123	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	105	78-134
1,2-Dichloroethane-d4	93	80-138
Toluene-d8	97	80-120
Bromofluorobenzene	100	78-123

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777417	Batch#:	220480
Matrix:	Soil	Analyzed:	02/17/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.64
Chloromethane	ND	10	0.49
Vinyl Chloride	ND	10	0.41
Bromomethane	ND	10	0.36
Chloroethane	ND	10	0.40
Trichlorofluoromethane	ND	5.0	0.30
Acetone	5.7 J	20	3.3
Freon 113	ND	5.0	0.52
1,1-Dichloroethene	ND	5.0	0.60
Methylene Chloride	ND	20	1.1
Carbon Disulfide	ND	5.0	0.67
MTBE	ND	5.0	0.48
trans-1,2-Dichloroethene	ND	5.0	0.68
Vinyl Acetate	ND	50	0.52
1,1-Dichloroethane	ND	5.0	0.76
2-Butanone	ND	10	0.67
cis-1,2-Dichloroethene	ND	5.0	0.57
2,2-Dichloropropane	ND	5.0	0.59
Chloroform	ND	5.0	0.69
Bromochloromethane	ND	5.0	0.11
1,1,1-Trichloroethane	ND	5.0	0.66
1,1-Dichloropropene	ND	5.0	0.65
Carbon Tetrachloride	ND	5.0	0.59
1,2-Dichloroethane	ND	5.0	0.62
Benzene	ND	5.0	0.70
Trichloroethene	ND	5.0	0.73
1,2-Dichloropropane	ND	5.0	0.59
Bromodichloromethane	ND	5.0	0.54
Dibromomethane	ND	5.0	0.22
4-Methyl-2-Pentanone	ND	10	0.59
cis-1,3-Dichloropropene	ND	5.0	0.40
Toluene	ND	5.0	0.76
trans-1,3-Dichloropropene	ND	5.0	0.42
1,1,2-Trichloroethane	ND	5.0	0.48
2-Hexanone	ND	10	0.62
1,3-Dichloropropane	ND	5.0	0.50
Tetrachloroethene	ND	5.0	0.64
Dibromochloromethane	ND	5.0	0.49
1,2-Dibromoethane	ND	5.0	0.51
Chlorobenzene	ND	5.0	0.63
1,1,1,2-Tetrachloroethane	ND	5.0	0.53
Ethylbenzene	ND	5.0	0.71
m,p-Xylenes	ND	5.0	1.4
o-Xylene	ND	5.0	0.60
Styrene	ND	5.0	0.51
Bromoform	ND	5.0	0.23
Isopropylbenzene	ND	5.0	0.65
1,1,2,2-Tetrachloroethane	ND	5.0	0.52
1,2,3-Trichloropropane	ND	5.0	0.61
Propylbenzene	ND	5.0	0.66
Bromobenzene	ND	5.0	0.22
1,3,5-Trimethylbenzene	ND	5.0	0.65

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777417	Batch#:	220480
Matrix:	Soil	Analyzed:	02/17/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	5.0	0.69
4-Chlorotoluene	ND	5.0	0.65
tert-Butylbenzene	ND	5.0	0.70
1,2,4-Trimethylbenzene	ND	5.0	0.62
sec-Butylbenzene	ND	5.0	0.61
para-Isopropyl Toluene	ND	5.0	0.62
1,3-Dichlorobenzene	ND	5.0	0.53
1,4-Dichlorobenzene	ND	5.0	0.48
n-Butylbenzene	ND	5.0	0.59
1,2-Dichlorobenzene	ND	5.0	0.47
1,2-Dibromo-3-Chloropropane	ND	5.0	0.77
1,2,4-Trichlorobenzene	0.17 J	5.0	0.15
Hexachlorobutadiene	ND	5.0	0.64
Naphthalene	ND	5.0	0.98
1,2,3-Trichlorobenzene	0.19 J	5.0	0.16

Surrogate	%REC	Limits
Dibromofluoromethane	107	78-134
1,2-Dichloroethane-d4	92	80-138
Toluene-d8	97	80-120
Bromofluorobenzene	99	78-123

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777668	Batch#:	220545
Matrix:	Soil	Analyzed:	02/18/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.40
Chloromethane	ND	10	1.0
Vinyl Chloride	ND	10	0.93
Bromomethane	ND	10	1.2
Chloroethane	ND	10	0.50
Trichlorofluoromethane	ND	5.0	0.70
Acetone	ND	20	1.8
Freon 113	ND	5.0	0.44
1,1-Dichloroethene	ND	5.0	0.94
Methylene Chloride	ND	20	1.1
Carbon Disulfide	ND	5.0	0.87
MTBE	ND	5.0	1.0
trans-1,2-Dichloroethene	ND	5.0	0.84
Vinyl Acetate	ND	50	0.72
1,1-Dichloroethane	ND	5.0	1.2
2-Butanone	ND	10	1.3
cis-1,2-Dichloroethene	ND	5.0	0.87
2,2-Dichloropropane	ND	5.0	1.1
Chloroform	ND	5.0	1.3
Bromochloromethane	ND	5.0	0.93
1,1,1-Trichloroethane	ND	5.0	0.81
1,1-Dichloropropene	ND	5.0	0.63
Carbon Tetrachloride	ND	5.0	0.48
1,2-Dichloroethane	ND	5.0	0.93
Benzene	ND	5.0	0.90
Trichloroethene	ND	5.0	0.84
1,2-Dichloropropane	ND	5.0	0.78
Bromodichloromethane	ND	5.0	0.85
Dibromomethane	ND	5.0	0.77
4-Methyl-2-Pentanone	ND	10	1.0
cis-1,3-Dichloropropene	ND	5.0	0.61
Toluene	ND	5.0	0.71
trans-1,3-Dichloropropene	ND	5.0	0.65
1,1,2-Trichloroethane	ND	5.0	0.62
2-Hexanone	ND	10	0.88
1,3-Dichloropropane	ND	5.0	0.84
Tetrachloroethene	ND	5.0	0.52
Dibromochloromethane	ND	5.0	0.51
1,2-Dibromoethane	ND	5.0	0.65
Chlorobenzene	ND	5.0	0.69
1,1,1,2-Tetrachloroethane	ND	5.0	0.62
Ethylbenzene	ND	5.0	0.68
m,p-Xylenes	ND	5.0	1.3
o-Xylene	ND	5.0	0.63
Styrene	ND	5.0	0.58
Bromoform	ND	5.0	0.39
Isopropylbenzene	ND	5.0	0.50
1,1,2,2-Tetrachloroethane	ND	5.0	0.41
1,2,3-Trichloropropane	ND	5.0	0.58
Propylbenzene	ND	5.0	0.45
Bromobenzene	ND	5.0	0.53
1,3,5-Trimethylbenzene	ND	5.0	0.57
2-Chlorotoluene	ND	5.0	0.68

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777668	Batch#:	220545
Matrix:	Soil	Analyzed:	02/18/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
4-Chlorotoluene	ND	5.0	0.65
tert-Butylbenzene	ND	5.0	0.40
1,2,4-Trimethylbenzene	ND	5.0	0.60
sec-Butylbenzene	ND	5.0	0.42
para-Isopropyl Toluene	ND	5.0	0.42
1,3-Dichlorobenzene	ND	5.0	0.44
1,4-Dichlorobenzene	ND	5.0	0.54
n-Butylbenzene	ND	5.0	0.38
1,2-Dichlorobenzene	ND	5.0	0.53
1,2-Dibromo-3-Chloropropane	ND	5.0	0.94
1,2,4-Trichlorobenzene	ND	5.0	0.42
Hexachlorobutadiene	ND	5.0	0.30
Naphthalene	ND	5.0	0.31
1,2,3-Trichlorobenzene	ND	5.0	0.43

Surrogate	%REC	Limits
Dibromofluoromethane	98	78-134
1,2-Dichloroethane-d4	97	80-138
Toluene-d8	104	80-120
Bromofluorobenzene	110	78-123

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8260B
Matrix:	Soil	Batch#:	220545
Units:	ug/Kg	Analyzed:	02/18/15
Diln Fac:	1.000		

Type: BS Lab ID: QC777669

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	19.83	99	70-134
Benzene	20.00	19.86	99	80-123
Trichloroethene	20.00	21.41	107	80-128
Toluene	20.00	21.40	107	80-120
Chlorobenzene	20.00	20.47	102	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	96	78-134
1,2-Dichloroethane-d4	100	80-138
Toluene-d8	103	80-120
Bromofluorobenzene	100	78-123

Type: BSD Lab ID: QC777670

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	20.00	19.01	95	70-134	4	22
Benzene	20.00	19.90	99	80-123	0	21
Trichloroethene	20.00	20.50	102	80-128	4	23
Toluene	20.00	20.28	101	80-120	5	20
Chlorobenzene	20.00	19.72	99	80-123	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	98	78-134
1,2-Dichloroethane-d4	102	80-138
Toluene-d8	103	80-120
Bromofluorobenzene	100	78-123

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC778011	Batch#:	220630
Matrix:	Soil	Analyzed:	02/20/15
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	24.70	99	70-134
Benzene	25.00	27.96	112	80-123
Trichloroethene	25.00	25.51	102	80-128
Toluene	25.00	26.08	104	80-120
Chlorobenzene	25.00	25.80	103	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	102	78-134
1,2-Dichloroethane-d4	90	80-138
Toluene-d8	100	80-120
Bromofluorobenzene	98	78-123

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778012	Batch#:	220630
Matrix:	Soil	Analyzed:	02/20/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.64
Chloromethane	ND	10	0.49
Vinyl Chloride	ND	10	0.41
Bromomethane	ND	10	0.36
Chloroethane	ND	10	0.40
Trichlorofluoromethane	ND	5.0	0.30
Acetone	ND	20	3.3
Freon 113	ND	5.0	0.52
1,1-Dichloroethene	ND	5.0	0.60
Methylene Chloride	ND	20	1.1
Carbon Disulfide	ND	5.0	0.67
MTBE	ND	5.0	0.48
trans-1,2-Dichloroethene	ND	5.0	0.68
Vinyl Acetate	ND	50	0.52
1,1-Dichloroethane	ND	5.0	0.76
2-Butanone	ND	10	0.67
cis-1,2-Dichloroethene	ND	5.0	0.57
2,2-Dichloropropane	ND	5.0	0.59
Chloroform	ND	5.0	0.69
Bromochloromethane	ND	5.0	0.11
1,1,1-Trichloroethane	ND	5.0	0.66
1,1-Dichloropropene	ND	5.0	0.65
Carbon Tetrachloride	ND	5.0	0.59
1,2-Dichloroethane	ND	5.0	0.62
Benzene	ND	5.0	0.70
Trichloroethene	ND	5.0	0.73
1,2-Dichloropropane	ND	5.0	0.59
Bromodichloromethane	ND	5.0	0.54
Dibromomethane	ND	5.0	0.22
4-Methyl-2-Pentanone	ND	10	0.59
cis-1,3-Dichloropropene	ND	5.0	0.40
Toluene	ND	5.0	0.76
trans-1,3-Dichloropropene	ND	5.0	0.42
1,1,2-Trichloroethane	ND	5.0	0.48
2-Hexanone	ND	10	0.62
1,3-Dichloropropane	ND	5.0	0.50
Tetrachloroethene	ND	5.0	0.64
Dibromochloromethane	ND	5.0	0.49
1,2-Dibromoethane	ND	5.0	0.51
Chlorobenzene	ND	5.0	0.63
1,1,1,2-Tetrachloroethane	ND	5.0	0.53
Ethylbenzene	ND	5.0	0.71
m,p-Xylenes	ND	5.0	1.4
o-Xylene	ND	5.0	0.60
Styrene	ND	5.0	0.51
Bromoform	ND	5.0	0.23
Isopropylbenzene	ND	5.0	0.65
1,1,2,2-Tetrachloroethane	ND	5.0	0.52
1,2,3-Trichloropropane	ND	5.0	0.61
Propylbenzene	ND	5.0	0.66
Bromobenzene	ND	5.0	0.22
1,3,5-Trimethylbenzene	ND	5.0	0.65

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778012	Batch#:	220630
Matrix:	Soil	Analyzed:	02/20/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	5.0	0.69
4-Chlorotoluene	ND	5.0	0.65
tert-Butylbenzene	ND	5.0	0.70
1,2,4-Trimethylbenzene	ND	5.0	0.62
sec-Butylbenzene	ND	5.0	0.61
para-Isopropyl Toluene	ND	5.0	0.62
1,3-Dichlorobenzene	ND	5.0	0.53
1,4-Dichlorobenzene	ND	5.0	0.48
n-Butylbenzene	ND	5.0	0.59
1,2-Dichlorobenzene	ND	5.0	0.47
1,2-Dibromo-3-Chloropropane	ND	5.0	0.77
1,2,4-Trichlorobenzene	0.19 J	5.0	0.15
Hexachlorobutadiene	ND	5.0	0.64
Naphthalene	ND	5.0	0.98
1,2,3-Trichlorobenzene	ND	5.0	0.16

Surrogate	%REC	Limits
Dibromofluoromethane	107	78-134
1,2-Dichloroethane-d4	91	80-138
Toluene-d8	99	80-120
Bromofluorobenzene	97	78-123

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	220630
MSS Lab ID:	264783-002	Sampled:	02/19/15
Matrix:	Soil	Received:	02/19/15
Units:	ug/Kg	Analyzed:	02/20/15
Basis:	as received		

Type: MS Diln Fac: 0.7022
Lab ID: QC778142

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.4899	35.11	33.10	94	56-133
Benzene	<0.5708	35.11	35.26	100	57-120
Trichloroethene	26.21	35.11	67.62	118	49-145
Toluene	<0.6252	35.11	32.25	92	51-120
Chlorobenzene	<0.5125	35.11	32.03	91	47-120

Surrogate	%REC	Limits
Dibromofluoromethane	100	78-134
1,2-Dichloroethane-d4	95	80-138
Toluene-d8	97	80-120
Bromofluorobenzene	95	78-123

Type: MSD Diln Fac: 0.6974
Lab ID: QC778143

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	34.87	33.24	95	56-133	1	46
Benzene	34.87	34.82	100	57-120	1	44
Trichloroethene	34.87	68.47	121	49-145	2	46
Toluene	34.87	32.37	93	51-120	1	47
Chlorobenzene	34.87	31.95	92	47-120	0	50

Surrogate	%REC	Limits
Dibromofluoromethane	99	78-134
1,2-Dichloroethane-d4	92	80-138
Toluene-d8	98	80-120
Bromofluorobenzene	98	78-123

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8270C
Field ID:	MW-6-2.5-3.5	Batch#:	220582
Lab ID:	264660-001	Sampled:	02/12/15
Matrix:	Soil	Received:	02/12/15
Units:	ug/Kg	Prepared:	02/19/15
Basis:	dry	Analyzed:	02/20/15
Diln Fac:	1.000		

Moisture: 17%

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	400	57
Phenol	ND	400	8.6
bis(2-Chloroethyl)ether	ND	400	72
2-Chlorophenol	ND	400	8.9
1,3-Dichlorobenzene	ND	400	69
1,4-Dichlorobenzene	ND	400	9.3
Benzyl alcohol	ND	400	13
1,2-Dichlorobenzene	ND	400	9.3
2-Methylphenol	ND	400	16
bis(2-Chloroisopropyl) ether	ND	400	8.5
4-Methylphenol	ND	400	8.8
N-Nitroso-di-n-propylamine	ND	400	9.5
Hexachloroethane	ND	400	8.3
Nitrobenzene	ND	400	13
Isophorone	ND	400	8.2
2-Nitrophenol	ND	810	9.3
2,4-Dimethylphenol	ND	400	17
Benzoic acid	ND	2,000	530
bis(2-Chloroethoxy)methane	ND	400	9.1
2,4-Dichlorophenol	ND	400	9.9
1,2,4-Trichlorobenzene	ND	400	9.6
Naphthalene	ND	81	9.3
4-Chloroaniline	ND	400	11
Hexachlorobutadiene	ND	400	11
4-Chloro-3-methylphenol	ND	400	10
2-Methylnaphthalene	ND	81	7.7
Hexachlorocyclopentadiene	ND	810	16
2,4,6-Trichlorophenol	ND	400	15
2,4,5-Trichlorophenol	ND	400	10
2-Chloronaphthalene	ND	400	11
2-Nitroaniline	ND	810	13
Dimethylphthalate	ND	400	12
Acenaphthylene	ND	81	11
2,6-Dinitrotoluene	ND	400	11
3-Nitroaniline	ND	810	9.1
Acenaphthene	ND	81	9.9
2,4-Dinitrophenol	ND	810	78
4-Nitrophenol	ND	810	86
Dibenzofuran	ND	400	13
2,4-Dinitrotoluene	ND	400	12
Diethylphthalate	ND	400	14
Fluorene	ND	81	12
4-Chlorophenyl-phenylether	ND	400	12
4-Nitroaniline	ND	810	9.7
4,6-Dinitro-2-methylphenol	ND	810	93
N-Nitrosodiphenylamine	ND	400	13
Azobenzene	ND	400	10
4-Bromophenyl-phenylether	ND	400	13
Hexachlorobenzene	ND	400	13
Pentachlorophenol	ND	810	150

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8270C
Field ID:	MW-6-2.5-3.5	Batch#:	220582
Lab ID:	264660-001	Sampled:	02/12/15
Matrix:	Soil	Received:	02/12/15
Units:	ug/Kg	Prepared:	02/19/15
Basis:	dry	Analyzed:	02/20/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Phenanthrene	ND	81	13
Anthracene	ND	81	14
Di-n-butylphthalate	ND	400	15
Fluoranthene	ND	81	12
Pyrene	ND	81	13
Butylbenzylphthalate	ND	400	12
3,3'-Dichlorobenzidine	ND	810	8.4
Benzo(a)anthracene	ND	81	12
Chrysene	ND	81	14
bis(2-Ethylhexyl)phthalate	ND	400	16
Di-n-octylphthalate	ND	400	8.8
Benzo(b)fluoranthene	ND	81	11
Benzo(k)fluoranthene	ND	81	11
Benzo(a)pyrene	ND	81	11
Indeno(1,2,3-cd)pyrene	ND	81	11
Dibenz(a,h)anthracene	ND	81	11
Benzo(g,h,i)perylene	ND	81	12

Surrogate	%REC	Limits
2-Fluorophenol	78	25-120
Phenol-d5	75	36-120
2,4,6-Tribromophenol	79	27-120
Nitrobenzene-d5	68	44-120
2-Fluorobiphenyl	79	47-120
Terphenyl-d14	75	49-120

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8270C
Field ID:	SB-19-5.5-6.5	Batch#:	220582
Lab ID:	264660-002	Sampled:	02/12/15
Matrix:	Soil	Received:	02/12/15
Units:	ug/Kg	Prepared:	02/19/15
Basis:	dry	Analyzed:	02/20/15
Diln Fac:	20.00		

Moisture: 17%

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	8,000	1,100
Phenol	ND	8,000	170
bis(2-Chloroethyl)ether	ND	8,000	1,400
2-Chlorophenol	ND	8,000	180
1,3-Dichlorobenzene	ND	8,000	1,400
1,4-Dichlorobenzene	ND	8,000	180
Benzyl alcohol	ND	8,000	260
1,2-Dichlorobenzene	ND	8,000	180
2-Methylphenol	ND	8,000	330
bis(2-Chloroisopropyl) ether	ND	8,000	170
4-Methylphenol	ND	8,000	170
N-Nitroso-di-n-propylamine	ND	8,000	190
Hexachloroethane	ND	8,000	160
Nitrobenzene	ND	8,000	260
Isophorone	ND	8,000	160
2-Nitrophenol	ND	16,000	180
2,4-Dimethylphenol	ND	8,000	330
Benzoic acid	ND	40,000	10,000
bis(2-Chloroethoxy)methane	ND	8,000	180
2,4-Dichlorophenol	ND	8,000	200
1,2,4-Trichlorobenzene	ND	8,000	190
Naphthalene	ND	1,600	180
4-Chloroaniline	ND	8,000	220
Hexachlorobutadiene	ND	8,000	210
4-Chloro-3-methylphenol	ND	8,000	200
2-Methylnaphthalene	ND	1,600	150
Hexachlorocyclopentadiene	ND	16,000	330
2,4,6-Trichlorophenol	ND	8,000	300
2,4,5-Trichlorophenol	ND	8,000	200
2-Chloronaphthalene	ND	8,000	210
2-Nitroaniline	ND	16,000	260
Dimethylphthalate	ND	8,000	240
Acenaphthylene	ND	1,600	210
2,6-Dinitrotoluene	ND	8,000	210
3-Nitroaniline	ND	16,000	180
Acenaphthene	ND	1,600	200
2,4-Dinitrophenol	ND	16,000	1,500
4-Nitrophenol	ND	16,000	1,700
Dibenzofuran	ND	8,000	250
2,4-Dinitrotoluene	ND	8,000	230
Diethylphthalate	ND	8,000	270
Fluorene	ND	1,600	240
4-Chlorophenyl-phenylether	ND	8,000	230
4-Nitroaniline	ND	16,000	190
4,6-Dinitro-2-methylphenol	ND	16,000	1,800
N-Nitrosodiphenylamine	ND	8,000	250
Azobenzene	ND	8,000	200
4-Bromophenyl-phenylether	ND	8,000	250

J= Estimated value
DO= Diluted Out
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8270C
Field ID:	SB-19-5.5-6.5	Batch#:	220582
Lab ID:	264660-002	Sampled:	02/12/15
Matrix:	Soil	Received:	02/12/15
Units:	ug/Kg	Prepared:	02/19/15
Basis:	dry	Analyzed:	02/20/15
Diln Fac:	20.00		

Analyte	Result	RL	MDL
Hexachlorobenzene	ND	8,000	260
Pentachlorophenol	ND	16,000	3,100
Phenanthrene	ND	1,600	250
Anthracene	ND	1,600	270
Di-n-butylphthalate	ND	8,000	290
Fluoranthene	ND	1,600	250
Pyrene	ND	1,600	260
Butylbenzylphthalate	ND	8,000	240
3,3'-Dichlorobenzidine	ND	16,000	170
Benzo(a)anthracene	ND	1,600	240
Chrysene	ND	1,600	270
bis(2-Ethylhexyl)phthalate	340 J	8,000	310
Di-n-octylphthalate	ND	8,000	170
Benzo(b)fluoranthene	ND	1,600	210
Benzo(k)fluoranthene	ND	1,600	230
Benzo(a)pyrene	ND	1,600	210
Indeno(1,2,3-cd)pyrene	ND	1,600	210
Dibenz(a,h)anthracene	ND	1,600	220
Benzo(g,h,i)perylene	ND	1,600	240

Surrogate	%REC	Limits
2-Fluorophenol	DO	25-120
Phenol-d5	DO	36-120
2,4,6-Tribromophenol	DO	27-120
Nitrobenzene-d5	DO	44-120
2-Fluorobiphenyl	DO	47-120
Terphenyl-d14	DO	49-120

J= Estimated value
DO= Diluted Out
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8270C
Field ID:	SB-19-8.5-9.5	Batch#:	220582
Lab ID:	264660-003	Sampled:	02/12/15
Matrix:	Soil	Received:	02/12/15
Units:	ug/Kg	Prepared:	02/19/15
Basis:	dry	Analyzed:	02/20/15
Diln Fac:	20.00		

Moisture: 14%

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	7,800	1,100
Phenol	ND	7,800	160
bis(2-Chloroethyl)ether	ND	7,800	1,400
2-Chlorophenol	ND	7,800	170
1,3-Dichlorobenzene	ND	7,800	1,300
1,4-Dichlorobenzene	ND	7,800	180
Benzyl alcohol	ND	7,800	250
1,2-Dichlorobenzene	ND	7,800	180
2-Methylphenol	ND	7,800	320
bis(2-Chloroisopropyl) ether	ND	7,800	160
4-Methylphenol	ND	7,800	170
N-Nitroso-di-n-propylamine	ND	7,800	180
Hexachloroethane	ND	7,800	160
Nitrobenzene	ND	7,800	250
Isophorone	ND	7,800	160
2-Nitrophenol	ND	16,000	180
2,4-Dimethylphenol	ND	7,800	330
Benzoic acid	ND	39,000	10,000
bis(2-Chloroethoxy)methane	ND	7,800	180
2,4-Dichlorophenol	ND	7,800	190
1,2,4-Trichlorobenzene	ND	7,800	180
Naphthalene	ND	1,600	180
4-Chloroaniline	ND	7,800	220
Hexachlorobutadiene	ND	7,800	210
4-Chloro-3-methylphenol	ND	7,800	190
2-Methylnaphthalene	ND	1,600	150
Hexachlorocyclopentadiene	ND	16,000	320
2,4,6-Trichlorophenol	ND	7,800	290
2,4,5-Trichlorophenol	ND	7,800	200
2-Chloronaphthalene	ND	7,800	210
2-Nitroaniline	ND	16,000	250
Dimethylphthalate	ND	7,800	230
Acenaphthylene	ND	1,600	210
2,6-Dinitrotoluene	ND	7,800	210
3-Nitroaniline	ND	16,000	180
Acenaphthene	ND	1,600	190
2,4-Dinitrophenol	ND	16,000	1,500
4-Nitrophenol	ND	16,000	1,700
Dibenzofuran	ND	7,800	240
2,4-Dinitrotoluene	ND	7,800	220
Diethylphthalate	ND	7,800	260
Fluorene	ND	1,600	230
4-Chlorophenyl-phenylether	ND	7,800	220
4-Nitroaniline	ND	16,000	190
4,6-Dinitro-2-methylphenol	ND	16,000	1,800
N-Nitrosodiphenylamine	ND	7,800	250
Azobenzene	ND	7,800	200
4-Bromophenyl-phenylether	ND	7,800	250
Hexachlorobenzene	ND	7,800	250

DO= Diluted Out
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8270C
Field ID:	SB-19-8.5-9.5	Batch#:	220582
Lab ID:	264660-003	Sampled:	02/12/15
Matrix:	Soil	Received:	02/12/15
Units:	ug/Kg	Prepared:	02/19/15
Basis:	dry	Analyzed:	02/20/15
Diln Fac:	20.00		

Analyte	Result	RL	MDL
Pentachlorophenol	ND	16,000	3,000
Phenanthrene	ND	1,600	250
Anthracene	ND	1,600	260
Di-n-butylphthalate	ND	7,800	280
Fluoranthene	ND	1,600	240
Pyrene	ND	1,600	250
Butylbenzylphthalate	ND	7,800	230
3,3'-Dichlorobenzidine	ND	16,000	160
Benzo(a)anthracene	ND	1,600	240
Chrysene	ND	1,600	260
bis(2-Ethylhexyl)phthalate	ND	7,800	300
Di-n-octylphthalate	ND	7,800	170
Benzo(b)fluoranthene	ND	1,600	210
Benzo(k)fluoranthene	ND	1,600	220
Benzo(a)pyrene	ND	1,600	200
Indeno(1,2,3-cd)pyrene	ND	1,600	210
Dibenz(a,h)anthracene	ND	1,600	220
Benzo(g,h,i)perylene	ND	1,600	240

Surrogate	%REC	Limits
2-Fluorophenol	DO	25-120
Phenol-d5	DO	36-120
2,4,6-Tribromophenol	DO	27-120
Nitrobenzene-d5	DO	44-120
2-Fluorobiphenyl	DO	47-120
Terphenyl-d14	DO	49-120

DO= Diluted Out
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777813	Batch#:	220582
Matrix:	Soil	Prepared:	02/19/15
Units:	ug/Kg	Analyzed:	02/19/15

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	340	13
Phenol	ND	340	17
bis(2-Chloroethyl)ether	ND	340	13
2-Chlorophenol	ND	340	17
1,3-Dichlorobenzene	ND	340	7.6
1,4-Dichlorobenzene	ND	340	10
Benzyl alcohol	ND	340	16
1,2-Dichlorobenzene	ND	340	9.5
2-Methylphenol	ND	340	15
bis(2-Chloroisopropyl) ether	ND	340	18
4-Methylphenol	ND	340	18
N-Nitroso-di-n-propylamine	ND	340	11
Hexachloroethane	ND	340	8.3
Nitrobenzene	ND	340	7.8
Isophorone	ND	340	11
2-Nitrophenol	ND	670	10
2,4-Dimethylphenol	ND	340	14
Benzoic acid	ND	1,700	310
bis(2-Chloroethoxy)methane	ND	340	12
2,4-Dichlorophenol	ND	340	13
1,2,4-Trichlorobenzene	ND	340	9.7
Naphthalene	ND	67	8.8
4-Chloroaniline	ND	340	17
Hexachlorobutadiene	ND	340	61
4-Chloro-3-methylphenol	ND	340	15
2-Methylnaphthalene	ND	67	9.9
Hexachlorocyclopentadiene	ND	670	61
2,4,6-Trichlorophenol	ND	340	14
2,4,5-Trichlorophenol	ND	340	8.8
2-Chloronaphthalene	ND	340	56
2-Nitroaniline	ND	670	8.1
Dimethylphthalate	ND	340	9.4
Acenaphthylene	ND	67	8.6
2,6-Dinitrotoluene	ND	340	8.8
3-Nitroaniline	ND	670	11
Acenaphthene	ND	67	7.0
2,4-Dinitrophenol	ND	670	42
4-Nitrophenol	ND	670	69
Dibenzofuran	ND	340	8.8
2,4-Dinitrotoluene	ND	340	9.7
Diethylphthalate	ND	340	8.6
Fluorene	ND	67	9.0
4-Chlorophenyl-phenylether	ND	340	9.8
4-Nitroaniline	ND	670	8.0
4,6-Dinitro-2-methylphenol	ND	670	42
N-Nitrosodiphenylamine	ND	340	56
Azobenzene	ND	340	7.2
4-Bromophenyl-phenylether	ND	340	59
Hexachlorobenzene	ND	340	7.3
Pentachlorophenol	ND	670	150
Phenanthrene	ND	67	9.6
Anthracene	ND	67	7.0
Di-n-butylphthalate	ND	340	8.4

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777813	Batch#:	220582
Matrix:	Soil	Prepared:	02/19/15
Units:	ug/Kg	Analyzed:	02/19/15

Analyte	Result	RL	MDL
Fluoranthene	ND	67	8.7
Pyrene	ND	67	9.4
Butylbenzylphthalate	ND	340	8.4
3,3'-Dichlorobenzidine	ND	670	43
Benzo(a)anthracene	ND	67	8.7
Chrysene	ND	67	6.8
bis(2-Ethylhexyl)phthalate	ND	340	8.8
Di-n-octylphthalate	ND	340	8.5
Benzo(b)fluoranthene	ND	67	8.3
Benzo(k)fluoranthene	ND	67	8.7
Benzo(a)pyrene	ND	67	8.7
Indeno(1,2,3-cd)pyrene	ND	67	8.2
Dibenz(a,h)anthracene	ND	67	6.9
Benzo(g,h,i)perylene	ND	67	8.7

Surrogate	%REC	Limits
2-Fluorophenol	76	25-120
Phenol-d5	90	36-120
2,4,6-Tribromophenol	52	27-120
Nitrobenzene-d5	58	44-120
2-Fluorobiphenyl	62	47-120
Terphenyl-d14	75	49-120

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8270C
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC777814	Batch#:	220582
Matrix:	Soil	Prepared:	02/19/15
Units:	ug/Kg	Analyzed:	02/19/15

Analyte	Spiked	Result	%REC	Limits
Phenol	2,671	2,961	111	42-120
2-Chlorophenol	2,671	2,683	100	45-120
1,4-Dichlorobenzene	2,671	2,128	80	48-120
N-Nitroso-di-n-propylamine	2,671	2,667	100	27-123
1,2,4-Trichlorobenzene	2,671	2,048	77	50-120
4-Chloro-3-methylphenol	2,671	1,836	69	59-120
Acenaphthene	1,002	798.7	80	53-120
4-Nitrophenol	2,671	2,044	77	47-120
2,4-Dinitrotoluene	2,671	2,188	82	55-120
Pentachlorophenol	2,671	1,067	40	32-120
Pyrene	1,002	801.0	80	52-120

Surrogate	%REC	Limits
2-Fluorophenol	98	25-120
Phenol-d5	108	36-120
2,4,6-Tribromophenol	74	27-120
Nitrobenzene-d5	75	44-120
2-Fluorobiphenyl	72	47-120
Terphenyl-d14	73	49-120

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8270C
Field ID:	ZZZZZZZZZZ	Batch#:	220582
MSS Lab ID:	264640-046	Sampled:	02/12/15
Matrix:	Soil	Received:	02/12/15
Units:	ug/Kg	Prepared:	02/19/15
Basis:	as received	Analyzed:	02/20/15
Diln Fac:	1.000		

Type: MS Lab ID: QC777815

Analyte	MSS Result	Spiked	Result	%REC	Limits
Phenol	<15.10	2,640	2,958	112	47-120
2-Chlorophenol	<14.03	2,640	2,699	102	44-120
1,4-Dichlorobenzene	<7.366	2,640	1,878	71	49-120
N-Nitroso-di-n-propylamine	<15.28	2,640	2,669	101	42-120
1,2,4-Trichlorobenzene	<8.531	2,640	1,901	72	54-120
4-Chloro-3-methylphenol	<8.718	2,640	1,802	68	55-120
Acenaphthene	<6.732	990.1	777.1	78	51-120
4-Nitrophenol	<7.127	2,640	2,150	81	36-120
2,4-Dinitrotoluene	<8.384	2,640	2,146	81	52-120
Pentachlorophenol	<103.2	2,640	1,655	63	14-120
Pyrene	<7.360	990.1	821.8	83	46-124

Surrogate	%REC	Limits
2-Fluorophenol	99	25-120
Phenol-d5	110	36-120
2,4,6-Tribromophenol	70	27-120
Nitrobenzene-d5	73	44-120
2-Fluorobiphenyl	72	47-120
Terphenyl-d14	77	49-120

Type: MSD Lab ID: QC777816

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Phenol	2,631	3,074	117	47-120	4	39
2-Chlorophenol	2,631	2,877	109	44-120	7	38
1,4-Dichlorobenzene	2,631	2,095	80	49-120	11	45
N-Nitroso-di-n-propylamine	2,631	2,701	103	42-120	2	40
1,2,4-Trichlorobenzene	2,631	2,062	78	54-120	8	38
4-Chloro-3-methylphenol	2,631	1,884	72	55-120	5	41
Acenaphthene	986.5	854.9	87	51-120	10	47
4-Nitrophenol	2,631	2,241	85	36-120	5	41
2,4-Dinitrotoluene	2,631	2,315	88	52-120	8	40
Pentachlorophenol	2,631	1,481	56	14-120	11	53
Pyrene	986.5	871.6	88	46-124	6	50

Surrogate	%REC	Limits
2-Fluorophenol	106	25-120
Phenol-d5	115	36-120
2,4,6-Tribromophenol	73	27-120
Nitrobenzene-d5	80	44-120
2-Fluorobiphenyl	77	47-120
Terphenyl-d14	81	49-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	02/12/15
Units:	ug/Kg	Received:	02/12/15
Basis:	dry	Prepared:	02/17/15
Diln Fac:	1.000	Analyzed:	02/18/15
Batch#:	220512		

Field ID: MW-6-2.5-3.5 Lab ID: 264660-001
Type: SAMPLE Moisture: 17%

Analyte	Result	RL	MDL
Aroclor-1016	ND	11	2.8
Aroclor-1221	ND	23	7.6
Aroclor-1232	ND	11	3.7
Aroclor-1242	ND	11	3.4
Aroclor-1248	ND	11	3.6
Aroclor-1254	ND	11	2.9
Aroclor-1260	ND	11	1.8

Surrogate	%REC	Limits
TCMX	94	46-141
Decachlorobiphenyl	107	25-135

Field ID: SB-19-5.5-6.5 Lab ID: 264660-002
Type: SAMPLE Moisture: 17%

Analyte	Result	RL	MDL
Aroclor-1016	ND	11	2.8
Aroclor-1221	ND	23	7.6
Aroclor-1232	ND	11	3.7
Aroclor-1242	ND	11	3.4
Aroclor-1248	ND	11	3.7
Aroclor-1254	ND	11	2.9
Aroclor-1260	ND	11	1.9

Surrogate	%REC	Limits
TCMX	106	46-141
Decachlorobiphenyl	65	25-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	02/12/15
Units:	ug/Kg	Received:	02/12/15
Basis:	dry	Prepared:	02/17/15
Diln Fac:	1.000	Analyzed:	02/18/15
Batch#:	220512		

Field ID: SB-19-8.5-9.5 Lab ID: 264660-003
Type: SAMPLE Moisture: 14%

Analyte	Result	RL	MDL
Aroclor-1016	ND	11	2.8
Aroclor-1221	ND	22	7.5
Aroclor-1232	ND	11	3.6
Aroclor-1242	ND	11	3.4
Aroclor-1248	ND	11	3.6
Aroclor-1254	ND	11	2.9
Aroclor-1260	ND	11	1.8

Surrogate	%REC	Limits
TCMX	94	46-141
Decachlorobiphenyl	87	25-135

Type: BLANK Lab ID: QC777540

Analyte	Result	RL	MDL
Aroclor-1016	ND	9.7	2.4
Aroclor-1221	ND	19	6.4
Aroclor-1232	ND	9.7	3.1
Aroclor-1242	ND	9.7	2.9
Aroclor-1248	ND	9.7	3.1
Aroclor-1254	ND	9.7	2.5
Aroclor-1260	ND	9.7	1.6

Surrogate	%REC	Limits
TCMX	104	46-141
Decachlorobiphenyl	109	25-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC777541	Batch#:	220512
Matrix:	Soil	Prepared:	02/17/15
Units:	ug/Kg	Analyzed:	02/18/15

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	167.7	176.1	105	64-140
Aroclor-1260	167.7	173.2	103	65-146

Surrogate	%REC	Limits
TCMX	85	46-141
Decachlorobiphenyl	107	25-135

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Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1361	Analysis:	EPA 8082
Field ID:	MW-6-2.5-3.5	Batch#:	220512
MSS Lab ID:	264660-001	Sampled:	02/12/15
Matrix:	Soil	Received:	02/12/15
Units:	ug/Kg	Prepared:	02/17/15
Basis:	dry	Analyzed:	02/18/15
Diln Fac:	1.000		

Type: MS Moisture: 17%
Lab ID: QC777542

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<2.820	198.0	203.2	103	60-161
Aroclor-1260	<1.844	198.0	214.5	108	42-166

Surrogate	%REC	Limits
TCMX	96	46-141
Decachlorobiphenyl	107	25-135

Type: MSD Moisture: 17%
Lab ID: QC777543

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	201.5	203.0	101	60-161	2	43
Aroclor-1260	201.5	216.6	108	42-166	1	51

Surrogate	%REC	Limits
TCMX	92	46-141
Decachlorobiphenyl	103	25-135

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	264660	Project#:	C1361
Client:	Integral Consulting, Inc.	Location:	Allied Engineering
Field ID:	MW-6-2.5-3.5	Basis:	dry
Lab ID:	264660-001	Diln Fac:	1.000
Matrix:	Soil	Sampled:	02/12/15
Units:	mg/Kg	Received:	02/12/15

Moisture: 17%

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	0.89	0.63	0.19	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Arsenic	1.9	0.31	0.091	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Barium	130	0.31	0.067	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Beryllium	0.31	0.13	0.016	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Cadmium	0.34	0.31	0.032	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Chromium	28	0.31	0.079	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Cobalt	4.1	0.31	0.038	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Copper	12	0.31	0.10	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Lead	4.2	0.31	0.087	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Mercury	0.028	0.018	0.0010	220649	02/20/15	02/20/15	METHOD	EPA 7471A
Molybdenum	0.16 J	0.31	0.061	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Nickel	27	0.31	0.083	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Selenium	ND	0.63	0.20	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Silver	ND	0.31	0.050	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Thallium	ND	0.63	0.18	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Vanadium	24	0.31	0.072	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Zinc	22	1.3	0.070	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	264660	Project#:	C1361
Client:	Integral Consulting, Inc.	Location:	Allied Engineering
Field ID:	SB-19-5.5-6.5	Basis:	dry
Lab ID:	264660-002	Diln Fac:	1.000
Matrix:	Soil	Sampled:	02/12/15
Units:	mg/Kg	Received:	02/12/15

Moisture: 17%

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	1.5	0.57	0.17	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Arsenic	2.5	0.28	0.083	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Barium	89	0.28	0.061	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Beryllium	0.31	0.11	0.014	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Cadmium	0.57	0.28	0.029	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Chromium	40	0.28	0.072	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Cobalt	6.4	0.28	0.034	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Copper	16	0.28	0.095	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Lead	34	0.28	0.079	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Mercury	0.11	0.019	0.0011	220649	02/20/15	02/20/15	METHOD	EPA 7471A
Molybdenum	0.096 J	0.28	0.056	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Nickel	35	0.28	0.075	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Selenium	ND	0.57	0.18	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Silver	ND	0.28	0.045	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Thallium	ND	0.57	0.16	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Vanadium	25	0.28	0.065	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Zinc	46	1.1	0.064	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	264660	Project#:	C1361
Client:	Integral Consulting, Inc.	Location:	Allied Engineering
Field ID:	SB-19-8.5-9.5	Basis:	dry
Lab ID:	264660-003	Diln Fac:	1.000
Matrix:	Soil	Sampled:	02/12/15
Units:	mg/Kg	Received:	02/12/15

Moisture: 14%

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	1.5	0.56	0.17	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Arsenic	2.9	0.28	0.081	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Barium	370	0.28	0.060	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Beryllium	0.29	0.11	0.014	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Cadmium	0.61	0.28	0.029	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Chromium	46	0.28	0.070	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Cobalt	8.8	0.28	0.033	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Copper	11	0.28	0.093	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Lead	2.7	0.28	0.078	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Mercury	0.045	0.019	0.0010	220649	02/20/15	02/20/15	METHOD	EPA 7471A
Molybdenum	ND	0.28	0.055	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Nickel	42	0.28	0.074	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Selenium	ND	0.56	0.18	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Silver	ND	0.28	0.045	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Thallium	ND	0.56	0.16	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Vanadium	30	0.28	0.064	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B
Zinc	28	1.1	0.063	220557	02/18/15	02/19/15	EPA 3050B	EPA 6010B

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3050B
Project#:	C1361	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777719	Batch#:	220557
Matrix:	Soil	Prepared:	02/18/15
Units:	mg/Kg	Analyzed:	02/19/15

Analyte	Result	RL	MDL
Antimony	ND	0.50	0.15
Arsenic	ND	0.25	0.073
Barium	ND	0.25	0.054
Beryllium	ND	0.10	0.012
Cadmium	ND	0.25	0.026
Chromium	ND	0.25	0.063
Cobalt	ND	0.25	0.030
Copper	ND	0.25	0.083
Lead	ND	0.25	0.070
Molybdenum	ND	0.25	0.049
Nickel	ND	0.25	0.066
Selenium	ND	0.50	0.16
Silver	ND	0.25	0.040
Thallium	ND	0.50	0.14
Vanadium	ND	0.25	0.057
Zinc	0.67 J	1.0	0.056

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3050B
Project#:	C1361	Analysis:	EPA 6010B
Matrix:	Soil	Batch#:	220557
Units:	mg/Kg	Prepared:	02/18/15
Diln Fac:	5.000	Analyzed:	02/19/15

Type: BS Lab ID: QC777720

Analyte	Spiked	Result	%REC	Limits
Antimony	50.00	47.12	94	80-120
Arsenic	50.00	47.71	95	80-120
Barium	50.00	49.01	98	80-120
Beryllium	50.00	50.36	101	80-120
Cadmium	50.00	51.34	103	80-120
Chromium	50.00	49.23	98	80-120
Cobalt	50.00	47.16	94	80-120
Copper	50.00	47.34	95	80-120
Lead	50.00	45.25	91	80-120
Molybdenum	50.00	47.47	95	80-120
Nickel	50.00	48.60	97	80-120
Selenium	50.00	47.32	95	80-120
Silver	50.00	47.41	95	80-120
Thallium	50.00	46.63	93	80-120
Vanadium	50.00	50.98	102	80-120
Zinc	50.00	49.81	100	80-120

Type: BSD Lab ID: QC777721

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	50.00	49.55	99	80-120	5	20
Arsenic	50.00	50.19	100	80-120	5	20
Barium	50.00	50.58	101	80-120	3	20
Beryllium	50.00	52.62	105	80-120	4	20
Cadmium	50.00	53.12	106	80-120	3	20
Chromium	50.00	50.55	101	80-120	3	20
Cobalt	50.00	48.44	97	80-120	3	20
Copper	50.00	48.63	97	80-120	3	20
Lead	50.00	47.36	95	80-120	5	20
Molybdenum	50.00	49.94	100	80-120	5	20
Nickel	50.00	49.95	100	80-120	3	20
Selenium	50.00	49.13	98	80-120	4	20
Silver	50.00	48.86	98	80-120	3	20
Thallium	50.00	50.56	101	80-120	8	20
Vanadium	50.00	52.48	105	80-120	3	20
Zinc	50.00	51.28	103	80-120	3	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3050B
Project#:	C1361	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	220557
MSS Lab ID:	264629-007	Sampled:	02/08/15
Matrix:	Soil	Received:	02/12/15
Units:	mg/Kg	Prepared:	02/18/15
Basis:	dry	Analyzed:	02/19/15
Diln Fac:	5.000		

Type: MS Moisture: 19%
Lab ID: QC777722

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	2.131	64.98	23.21	32	15-120
Arsenic	1.780	64.98	56.71	85	69-120
Barium	75.89	64.98	128.0	80	35-154
Beryllium	0.4587	64.98	62.72	96	75-120
Cadmium	0.8321	64.98	62.53	95	71-120
Chromium	50.58	64.98	112.3	95	57-133
Cobalt	13.25	64.98	69.22	86	56-125
Copper	17.08	64.98	77.35	93	54-144
Lead	3.837	64.98	58.88	85	53-125
Molybdenum	0.3370	64.98	54.51	83	66-120
Nickel	73.90	64.98	142.2	105	44-141
Selenium	<0.1809	64.98	52.65	81	61-120
Silver	<0.04516	64.98	57.96	89	69-120
Thallium	<0.1591	64.98	56.47	87	59-120
Vanadium	38.89	64.98	99.09	93	52-144
Zinc	66.77	64.98	123.2	87	45-145

Type: MSD Moisture: 19%
Lab ID: QC777723

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	62.99	21.57	31	15-120	4	41
Arsenic	62.99	63.04	97	69-120	14	35
Barium	62.99	133.2	91	35-154	5	36
Beryllium	62.99	61.45	97	75-120	1	20
Cadmium	62.99	61.05	96	71-120	1	25
Chromium	62.99	112.6	98	57-133	2	33
Cobalt	62.99	79.20	105	56-125	16	36
Copper	62.99	75.37	93	54-144	0	38
Lead	62.99	58.95	87	53-125	3	42
Molybdenum	62.99	54.10	85	66-120	2	20
Nickel	62.99	164.6	144 *	44-141	16	39
Selenium	62.99	51.69	82	61-120	1	33
Silver	62.99	56.49	90	69-120	1	22
Thallium	62.99	54.56	87	59-120	0	27
Vanadium	62.99	97.82	94	52-144	1	29
Zinc	62.99	125.3	93	45-145	3	39

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1361	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	220649
Lab ID:	QC778086	Prepared:	02/20/15
Matrix:	Soil	Analyzed:	02/20/15
Units:	mg/Kg		

Result	RL	MDL
0.0032 J	0.017	0.00093

J= Estimated value
RL= Reporting Limit
MDL= Method Detection Limit

38.0

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1361	Analysis:	EPA 7471A
Analyte:	Mercury	Batch#:	220649
Matrix:	Soil	Prepared:	02/20/15
Units:	mg/Kg	Analyzed:	02/20/15
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC778087	0.2083	0.2184	105	80-120		
BSD	QC778088	0.2083	0.2148	103	80-120	2	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1361	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Field ID:	SB-13-3.0-4.0	Batch#:	220649
MSS Lab ID:	264701-001	Sampled:	02/13/15
Matrix:	Soil	Received:	02/13/15
Units:	mg/Kg	Prepared:	02/20/15
Basis:	dry	Analyzed:	02/20/15

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	Moisture	RPD	Lim
MS	QC778089	0.07150	0.2716	0.3442	100	69-142	22%		
MSD	QC778090		0.3024	0.3698	99	69-142	22%	1	36

RPD= Relative Percent Difference

40.0

Curtis & Tompkins, Ltd.

Hexavalent Chromium

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3060A
Project#:	C1361	Analysis:	EPA 7196A
Analyte:	Hexavalent Chromium	Batch#:	220578
Matrix:	Soil	Received:	02/12/15
Units:	mg/Kg	Prepared:	02/19/15 11:40
Basis:	dry	Analyzed:	02/19/15 16:04
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Moisture	Sampled
MW-6-2.5-3.5	SAMPLE	264660-001	ND	0.48	17%	02/12/15 09:40
SB-19-5.5-6.5	SAMPLE	264660-002	ND	0.49	17%	02/12/15 15:35
SB-19-8.5-9.5	SAMPLE	264660-003	ND	0.47	14%	02/12/15 16:00
	BLANK	QC777798	ND	0.41		

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Hexavalent Chromium

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3060A
Project#:	C1361	Analysis:	EPA 7196A
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	220578
MSS Lab ID:	264757-011	Sampled:	02/18/15 16:00
Matrix:	Soil	Received:	02/18/15
Units:	mg/Kg	Prepared:	02/19/15 11:40
Basis:	dry	Analyzed:	02/19/15 16:04

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	Moisture	RPD	Lim
LCS	QC777799		39.06	38.40		98	80-120			
SDUP	QC777800	0.6353		0.8353	0.4941			15%	26	30
SSPIKE	QC777801	0.6353	45.95	40.02		86	85-115	15%		

RL= Reporting Limit
RPD= Relative Percent Difference

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Moisture

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	ASTM D2216/CLP
Analyte:	Moisture, Percent	Batch#:	220519
Matrix:	Soil	Sampled:	02/12/15
Units:	%	Received:	02/12/15
Diln Fac:	1.000	Analyzed:	02/17/15

Field ID	Lab ID	Result	RL
MW-6-2.5-3.5	264660-001	17	1
SB-19-5.5-6.5	264660-002	17	1
SB-19-8.5-9.5	264660-003	14	1

RL= Reporting Limit

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Batch QC Report

Moisture

Lab #:	264660	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	ASTM D2216/CLP
Analyte:	Moisture, Percent	Units:	%
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
Type:	SDUP	Batch#:	220519
MSS Lab ID:	264662-008	Sampled:	02/13/15
Lab ID:	QC777587	Received:	02/13/15
Matrix:	Soil	Analyzed:	02/17/15

MSS Result	Result	RL	RPD	Lim
14.78	16.42	1.000	11	26

RL= Reporting Limit
RPD= Relative Percent Difference

54.0

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2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 264673
ANALYTICAL REPORT

Integral Consulting, Inc.	Project : C1374
115 Sansome Street	Location : Allied Engineering
San Francisco, CA 94104	Level : II

Sample ID	Lab ID
SB-12-GW	264673-001
SB-13-GW	264673-002
TRIP BLANK	264673-003

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Tracy Babjar Date: 02/24/2015

Tracy Babjar
Project Manager
tracy.babjar@ctberk.com
(510) 204-2226

CA ELAP# 2896, NELAP# 4044-001

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CASE NARRATIVE

Laboratory number:	**264673**
Client:	**Integral Consulting, Inc.**
Project:	**C1374**
Location:	**Allied Engineering**
Request Date:	**02/13/15**
Samples Received:	**02/13/15**

This data package contains sample and QC results for three water samples, requested for the above referenced project on 02/13/15. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):
Gasoline C7-C12 was detected between the MDL and the RL in the method blank for batch 220602; this analyte was not detected in samples at or above the RL. No other analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
Bromomethane was detected between the MDL and the RL in the method blank for batch 220538; this analyte was not detected in samples at or above the RL. No other analytical problems were encountered.

Semivolatile Organics by GC/MS (EPA 8270C):
No analytical problems were encountered.

PCBs (EPA 8082):
All samples underwent sulfuric acid cleanup using EPA Method 3665A. All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. No analytical problems were encountered.

Metals (EPA 6010B and EPA 7470A):
Low recoveries were observed for copper, molybdenum, and lead in the MS/MSD for batch 220663; the parent sample was not a project sample, the BS/BSD were within limits, and the associated RPDs were within limits. High recoveries were observed for chromium and selenium in the MSD for batch 220663; the BS/BSD were within limits, the associated RPDs were within limits, and these analytes were not detected at or above the RL in the associated samples. Copper and antimony were detected between the MDL and the RL in the method blank for batch 220663; these analytes were not detected in samples at or above the RL. Zinc was detected between the MDL and the RL in the method blank for batch 220663; this analyte was not detected in samples at or above the RL. No other analytical problems were encountered.

Hexavalent Chromium (EPA 7196A):
No analytical problems were encountered.

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
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Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # 264673

Chain of Custody # _____

Project No: C1361
Project Name: Allied Engineering
Project P. O. No: C1361 Task 4
EDD Format: Report Level ☐ II ☐ III ☐ IV
Turnaround Time: ☐ RUSH _____ ☒ Standard

Sampler: C. Cyler / B. Wishnuff
Report To: Bordgette DeShields
Company: Integral Consulting Inc.
Telephone:
Email: bdeshields@integral-corp.com

Lab No.	Sample ID.	Sampling: Date Collected	Sampling: Time Collected	Matrix: Water	Matrix: Solid	# of Containers	Chemical Preservative: HCl	H2SO4	HNO3	NaOH	None	TPH-g by 8015	TPH-d by 8015	TPH-mo by 8015	Full list of VOCs by 8260	SVOCs by 8270	Dissolved Title 22 metals (lab filtered)	Cr VI by 7196	PCBs by 8082
	SB-12-GW	2/13/15	1530	X		13	6				7	X	→	→	→	→	→	→	→
	SB-13-GW	2/13/15	1500	X		13	6				7	X	→	→	→	→	→	→	→

Notes:
- Dissolved metals to be lab filtered
- Report to MDL
- EDF required

SAMPLE RECEIPT
☒ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:	DATE:	TIME:
[signature]	2/13/15	1635	[signature]	2/13/15	1635
[signature]	2/13/15	1707	[signature]	2/13	1707

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 204673 Date Received 02/13/15 Number of coolers 1
Client Integral Project C1361

Date Opened 02/13 By (print) MC (sign) [illegible]
Date Logged in _____ By (print) _____ (sign) _____

1. Did cooler come with a shipping slip (airbill, etc) _____ YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO (N/A)
3. Were custody papers dry and intact when received? _____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ___ (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☒ Foam blocks ☐ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 3.9

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ (YES) NO
10. Are there any missing / extra samples? _____ (YES) NO
11. Are samples in the appropriate containers for indicated tests? _____ (YES) NO
12. Are sample labels present, in good condition and complete? _____ (YES) NO
13. Do the sample labels agree with custody papers? _____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
15. Are the samples appropriately preserved? _____ (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? _____ YES NO (N/A)
17. Did you document your preservative check? _____ YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? _____ (YES) NO N/A
21. Was the client contacted concerning this sample delivery? _____ YES (NO)
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS
10) Received 1 trip blank VOA - not listed on COC.

Rev 10, 9/12

Curtis & Tompkins, Ltd.

Detections Summary for 264673

Results for any subcontracted analyses are not included in this summary.

Client : Integral Consulting, Inc.
Project : C1374
Location : Allied Engineering

Client Sample ID : SB-12-GW Laboratory Sample ID : 264673-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	21	J	50	11	ug/L	As Recd	1.000	EPA 8015B	EPA 5030B
Bromomethane	0.6	J	1.0	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Acetone	1.7	J	10	0.6	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Barium	120		5.0	1.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Chromium	0.93	J	5.0	0.57	ug/L	DISS.	1.000	EPA 6010B	METHOD
Cobalt	2.0	J	5.0	0.32	ug/L	DISS.	1.000	EPA 6010B	METHOD
Molybdenum	17		5.0	0.40	ug/L	DISS.	1.000	EPA 6010B	METHOD
Nickel	6.4		5.0	0.71	ug/L	DISS.	1.000	EPA 6010B	METHOD
Vanadium	9.9		5.0	0.67	ug/L	DISS.	1.000	EPA 6010B	METHOD

Client Sample ID : SB-13-GW Laboratory Sample ID : 264673-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	33	J	50	11	ug/L	As Recd	1.000	EPA 8015B	EPA 5030B
Diesel C10-C24	210	Y	50	16	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
Motor Oil C24-C36	430		300	96	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
Bromomethane	0.7	J	1.0	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Acetone	1.9	J	10	0.6	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
MTBE	0.8		0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Trichloroethene	0.2	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Toluene	0.2	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
m,p-Xylenes	0.2	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
o-Xylene	0.4	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Isopropylbenzene	0.2	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Propylbenzene	0.3	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,3,5-Trimethylbenzene	0.5	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,2,4-Trimethylbenzene	1.7		0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
sec-Butylbenzene	0.1	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
para-Isopropyl Toluene	0.2	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
n-Butylbenzene	0.2	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Naphthalene	0.2	J	2.0	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
4-Chloro-3-methylphenol	310		100	10	ug/L	As Recd	10.00	EPA 8270C	EPA 3520C
Barium	190		5.0	1.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Chromium	1.3	J	5.0	0.57	ug/L	DISS.	1.000	EPA 6010B	METHOD
Cobalt	1.3	J	5.0	0.32	ug/L	DISS.	1.000	EPA 6010B	METHOD
Molybdenum	35		5.0	0.40	ug/L	DISS.	1.000	EPA 6010B	METHOD
Nickel	21		5.0	0.71	ug/L	DISS.	1.000	EPA 6010B	METHOD
Selenium	4.6	J	10	2.3	ug/L	DISS.	1.000	EPA 6010B	METHOD
Vanadium	150		5.0	0.67	ug/L	DISS.	1.000	EPA 6010B	METHOD

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Client Sample ID : TRIP BLANK Laboratory Sample ID : 264673-003

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Chloroform	0.2	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

J = Estimated value
Y = Sample exhibits chromatographic pattern which does not resemble standard

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	02/13/15
Units:	ug/L	Received:	02/13/15
Diln Fac:	1.000	Analyzed:	02/19/15
Batch#:	220602		

Field ID: SB-12-GW Lab ID: 264673-001
Type: SAMPLE

Analyte	Result	RL	MDL
Gasoline C7-C12	21 J	50	11

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	92	80-132

Field ID: SB-13-GW Lab ID: 264673-002
Type: SAMPLE

Analyte	Result	RL	MDL
Gasoline C7-C12	33 J	50	11

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	97	80-132

Type: BLANK Lab ID: QC777879

Analyte	Result	RL	MDL
Gasoline C7-C12	13 J	50	11

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	93	80-132

J= Estimated value
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC777878	Batch#:	220602
Matrix:	Water	Analyzed:	02/19/15
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	981.9	98	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	91	80-132

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	220602
MSS Lab ID:	264703-002	Sampled:	02/16/15
Matrix:	Water	Received:	02/17/15
Units:	ug/L	Analyzed:	02/19/15
Diln Fac:	1.000		

Type: MS Lab ID: QC777880

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	18.30	2,000	2,077	103	76-120

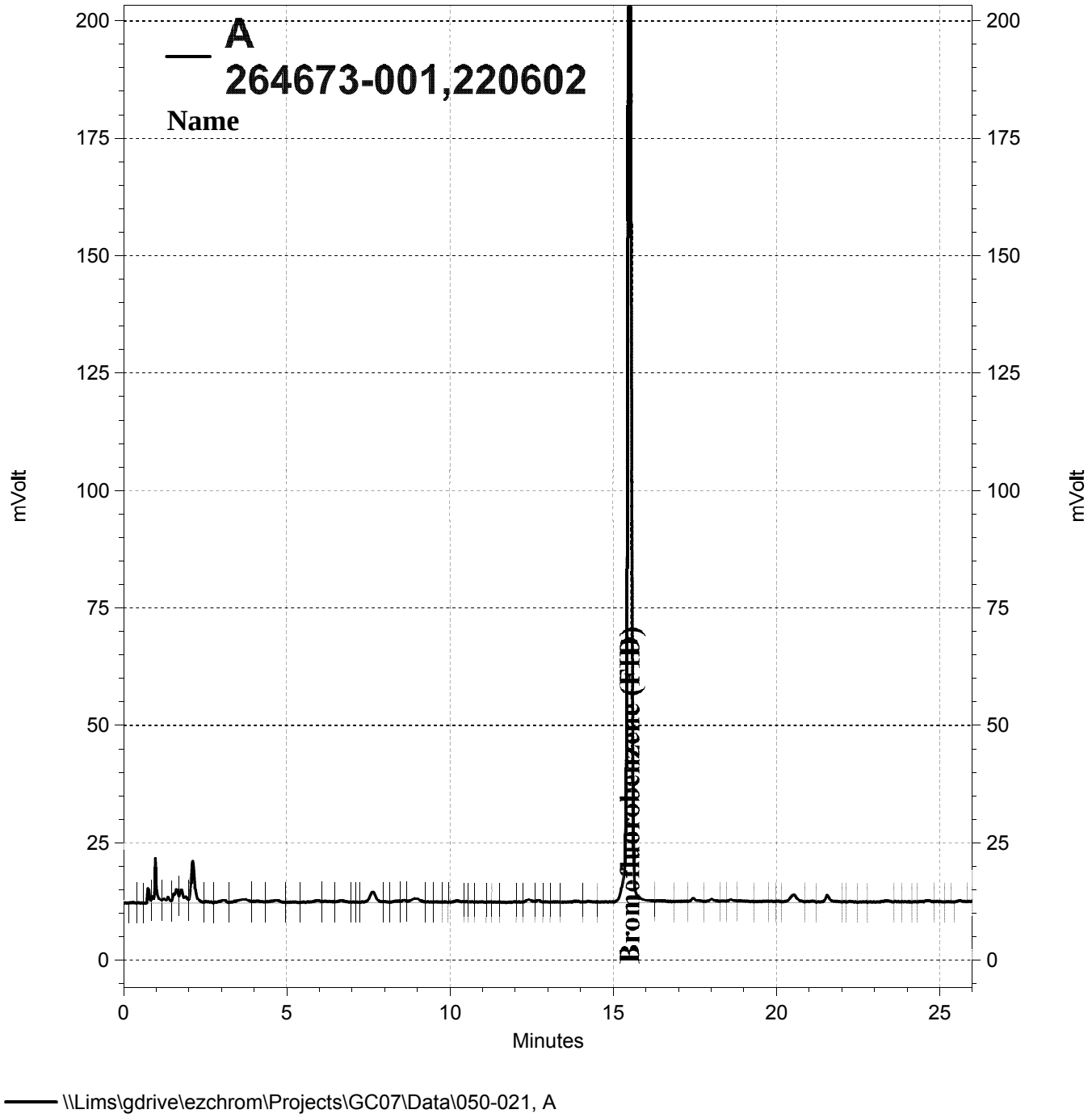
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	98	80-132

Type: MSD Lab ID: QC777881

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,030	101	76-120	2	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	98	80-132

RPD= Relative Percent Difference



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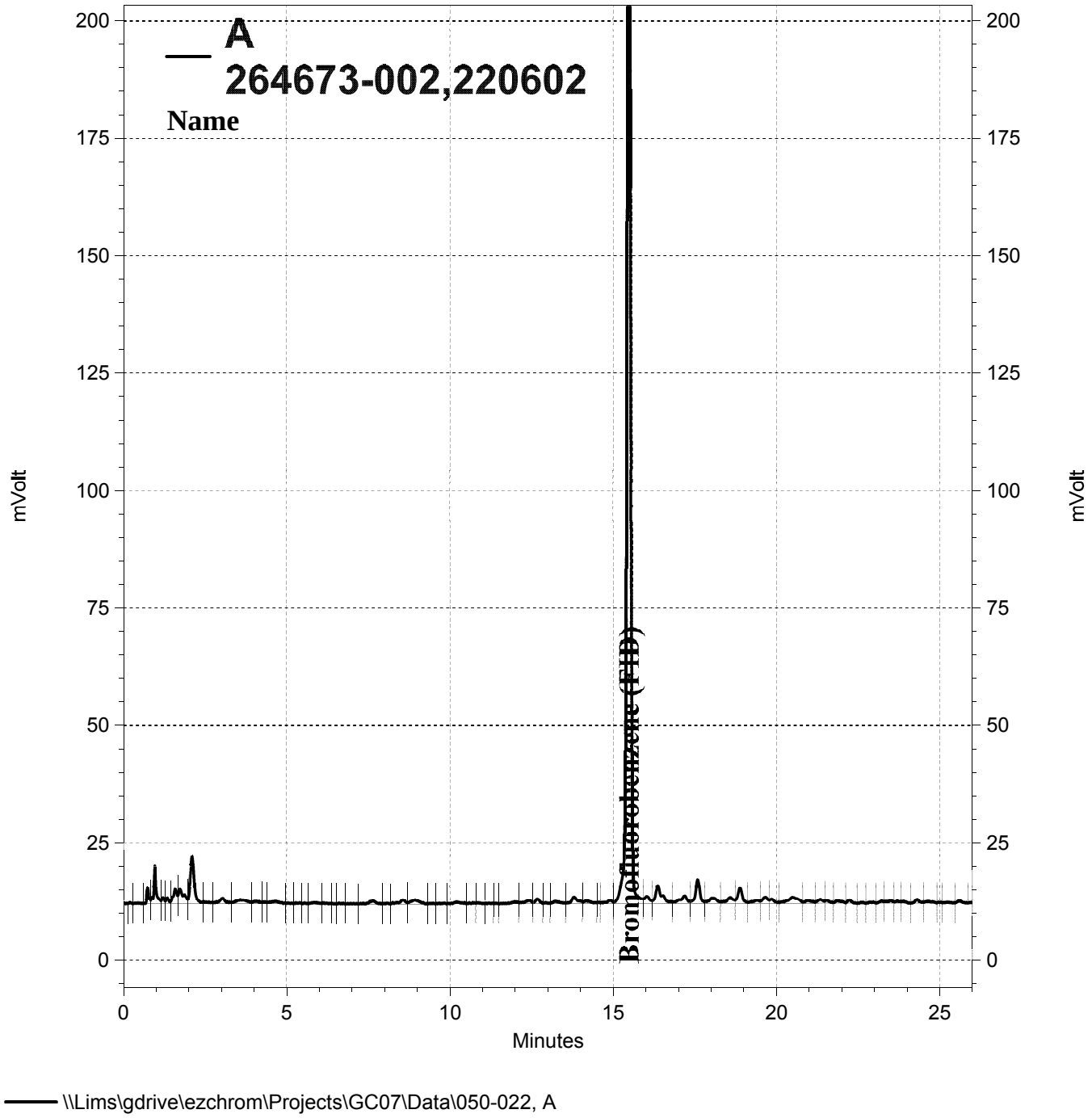

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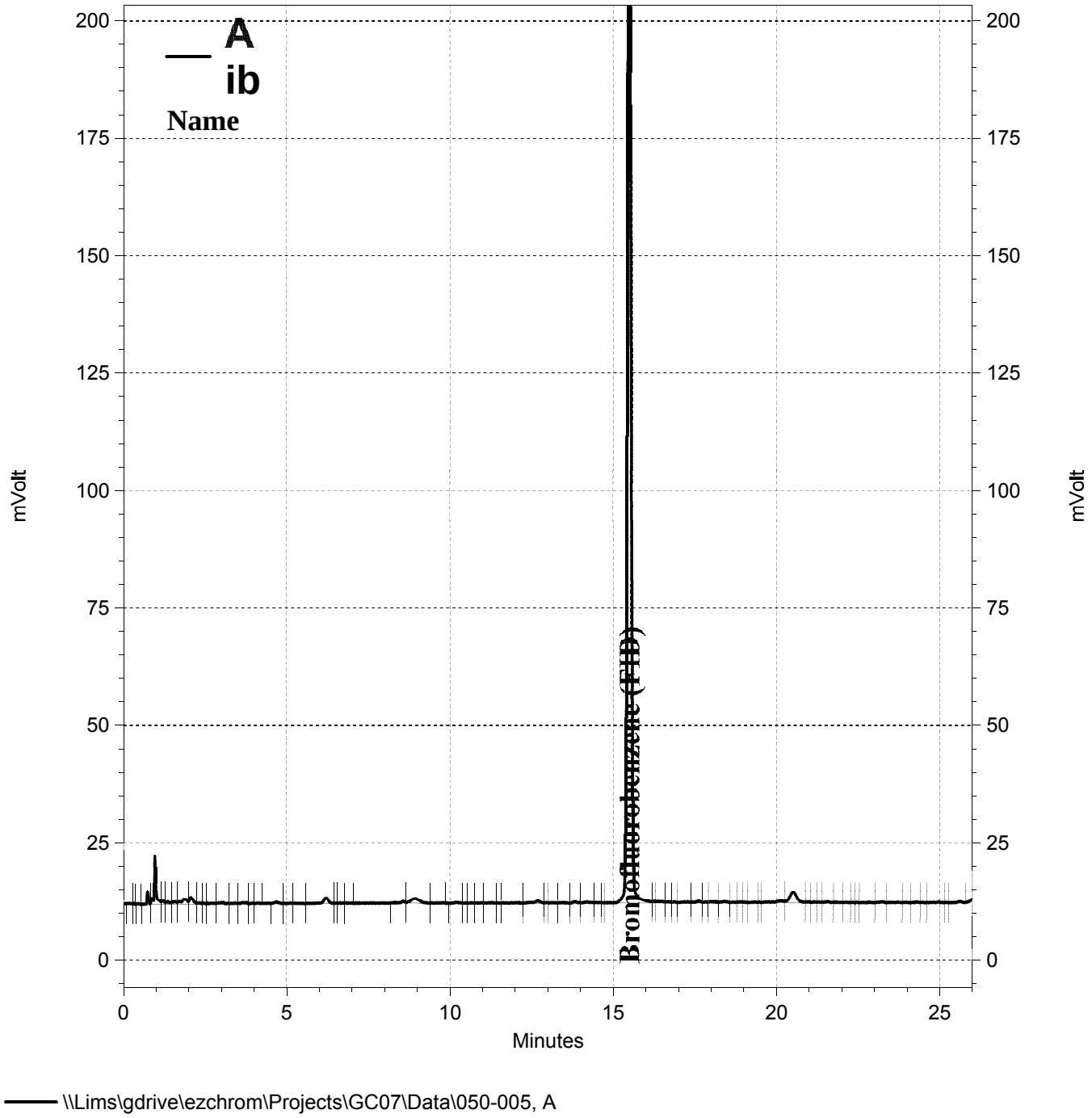

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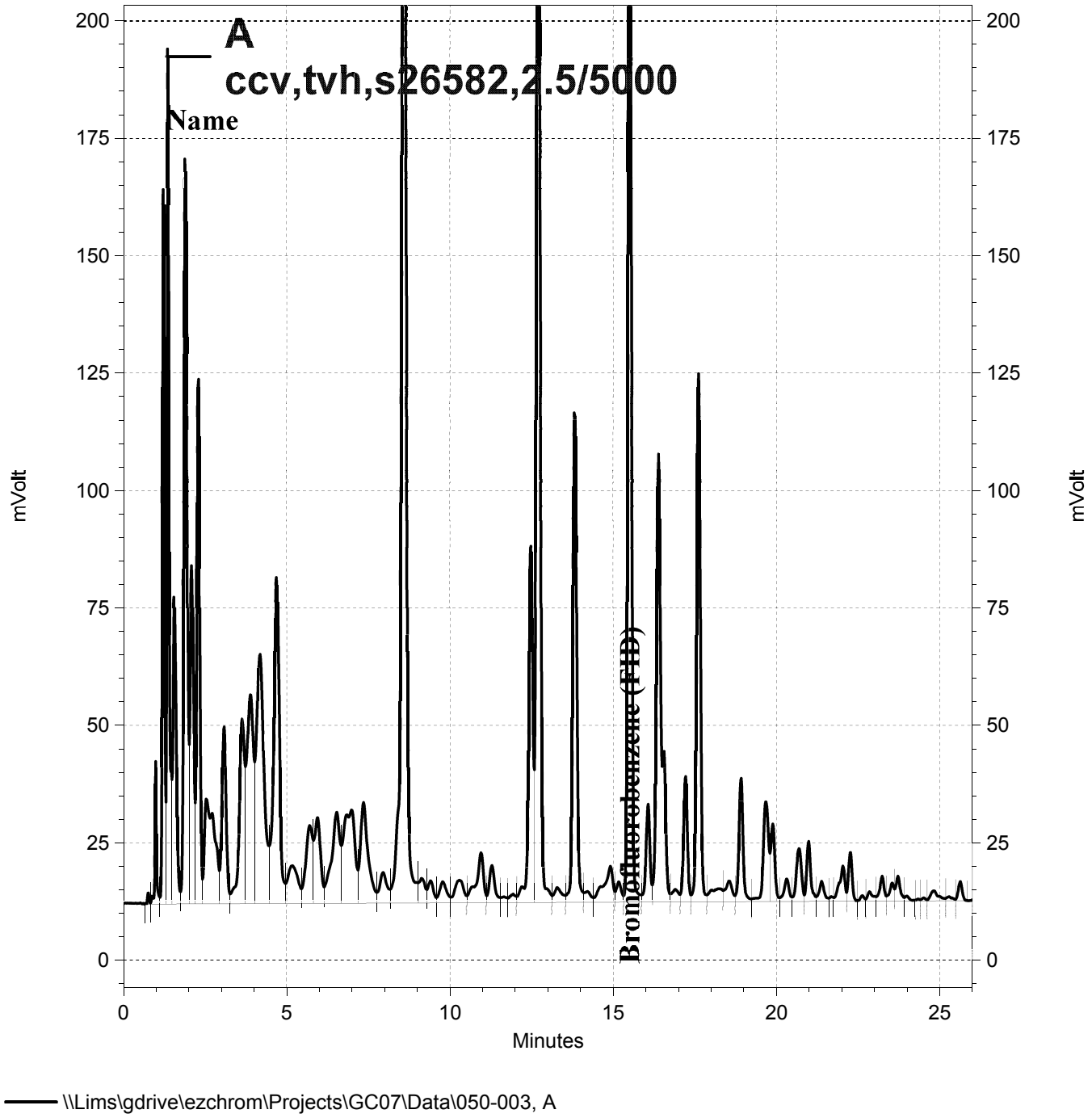

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Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1361	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	02/13/15
Units:	ug/L	Received:	02/13/15
Diln Fac:	1.000	Prepared:	02/17/15
Batch#:	220504	Analyzed:	02/18/15

Field ID: SB-12-GW Lab ID: 264673-001
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL	MDL
Diesel C10-C24	ND	50	16
Motor Oil C24-C36	ND	300	96

Surrogate	%REC	Limits
o-Terphenyl	85	67-136

Field ID: SB-13-GW Lab ID: 264673-002
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL	MDL
Diesel C10-C24	210 Y	50	16
Motor Oil C24-C36	430	300	96

Surrogate	%REC	Limits
o-Terphenyl	90	67-136

Type: BLANK Cleanup Method: EPA 3630C
Lab ID: QC777518

Analyte	Result	RL	MDL
Diesel C10-C24	ND	50	16
Motor Oil C24-C36	ND	300	96

Surrogate	%REC	Limits
o-Terphenyl	118	67-136

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1361	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	220504
Units:	ug/L	Prepared:	02/17/15
Diln Fac:	1.000	Analyzed:	02/18/15

Type: BS Cleanup Method: EPA 3630C
Lab ID: QC777519

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,468	99	60-121

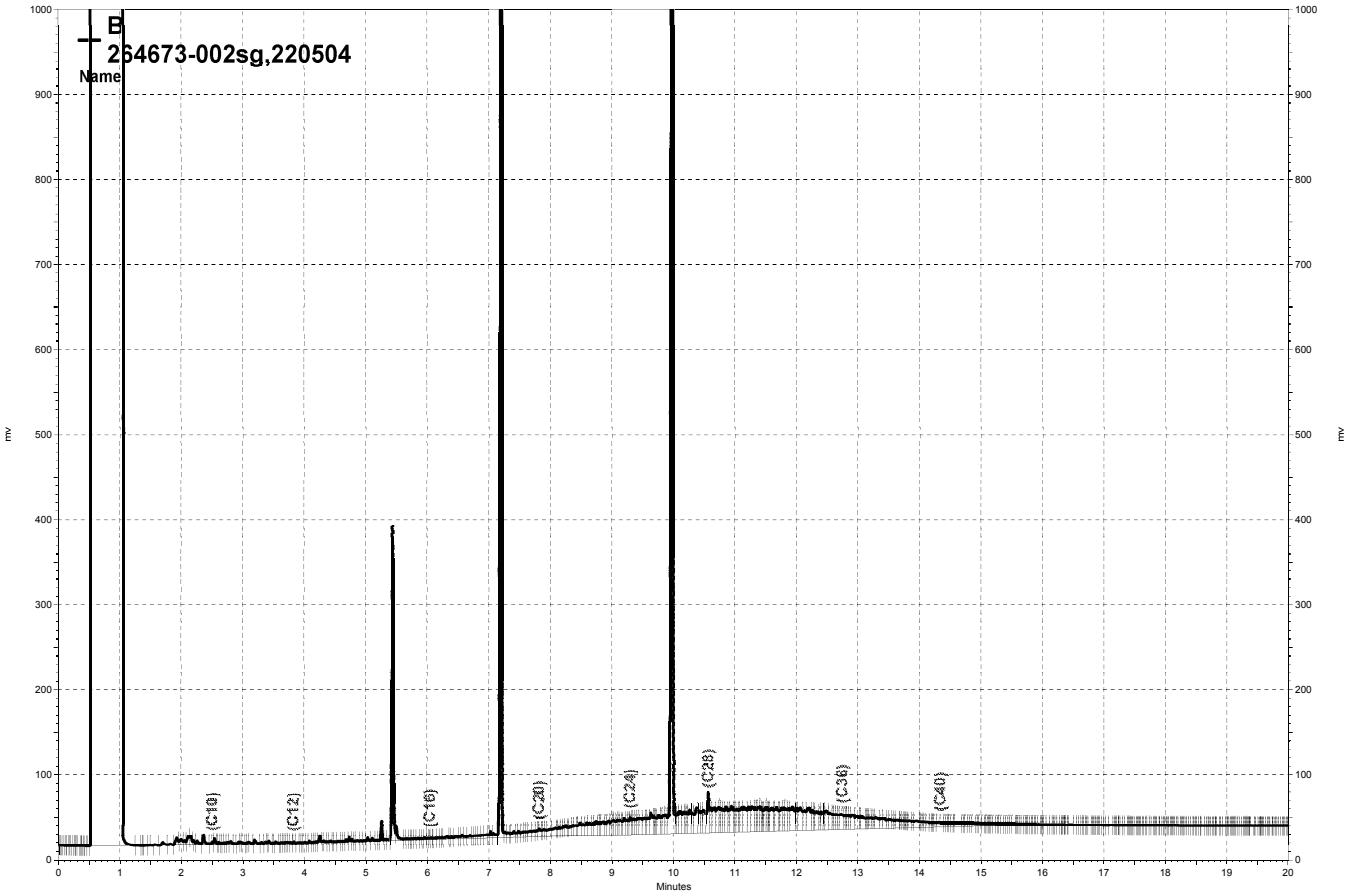
Surrogate	%REC	Limits
o-Terphenyl	104	67-136

Type: BSD Cleanup Method: EPA 3630C
Lab ID: QC777520

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,305	92	60-121	7	32

Surrogate	%REC	Limits
o-Terphenyl	99	67-136

RPD= Relative Percent Difference



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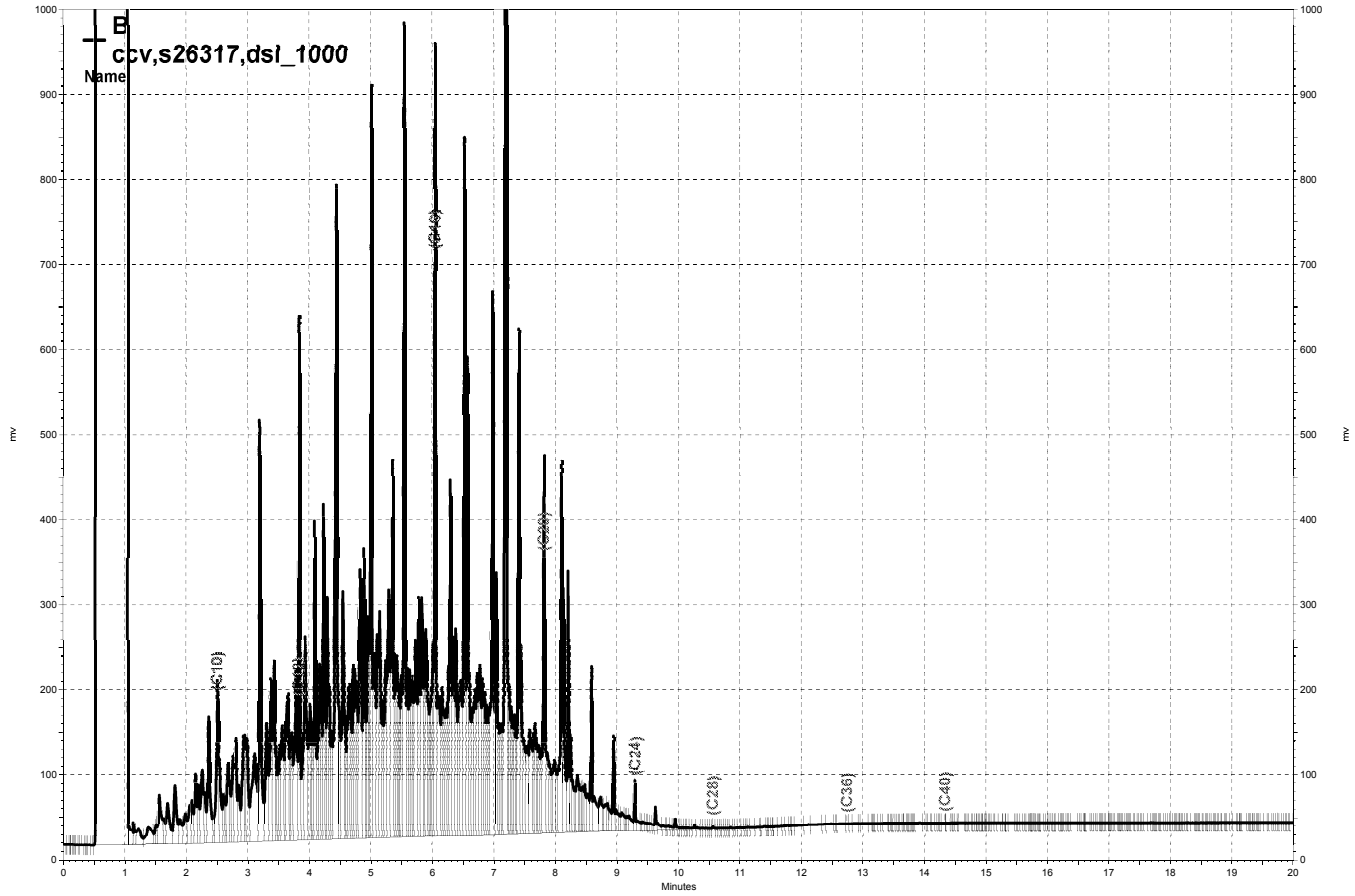

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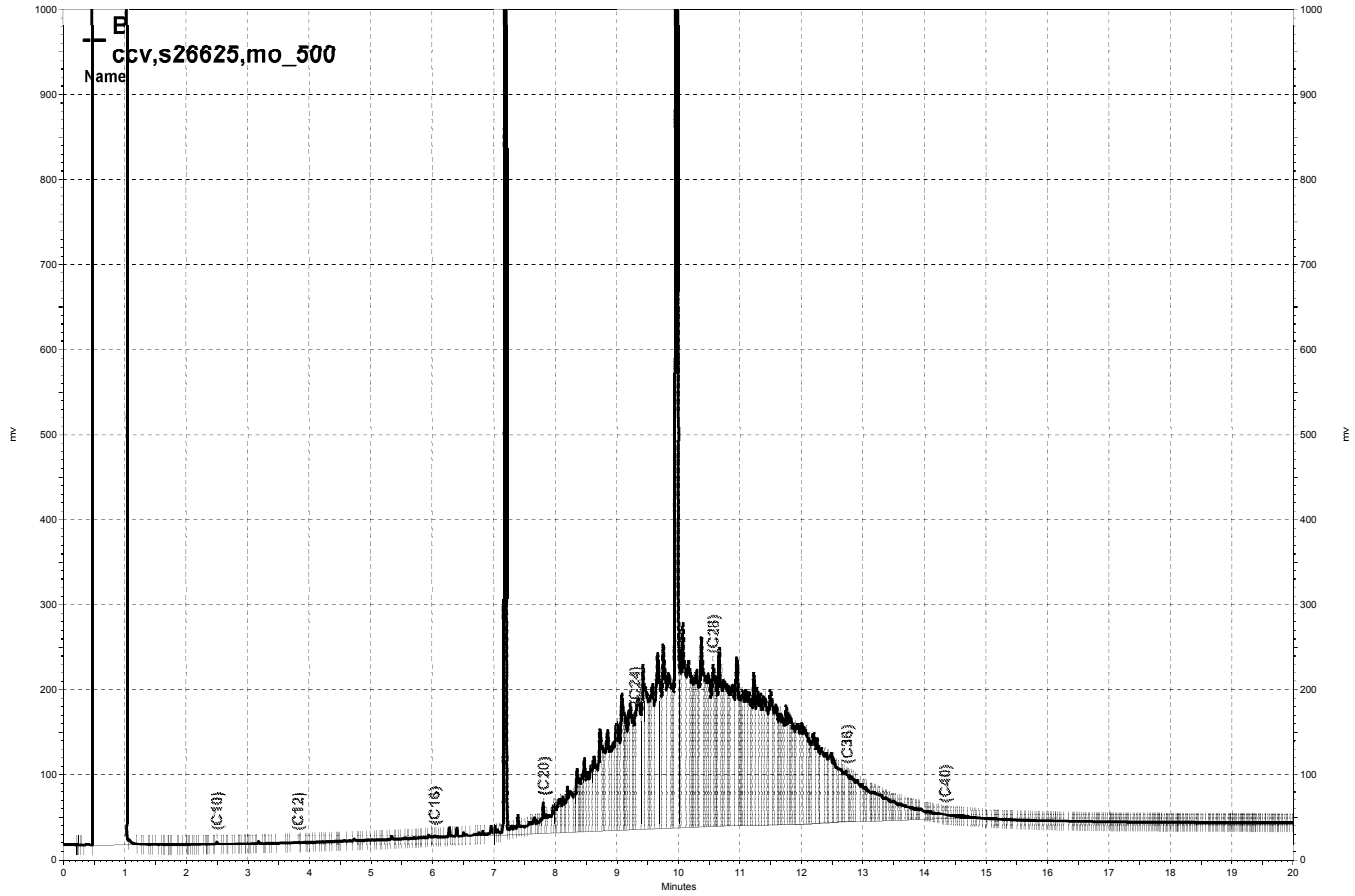

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Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-12-GW	Batch#:	220538
Lab ID:	264673-001	Sampled:	02/13/15
Matrix:	Water	Received:	02/13/15
Units:	ug/L	Analyzed:	02/18/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.2
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	0.6 J	1.0	0.1
Chloroethane	ND	1.0	0.1
Trichlorofluoromethane	ND	1.0	0.2
Acetone	1.7 J	10	0.6
Freon 113	ND	2.0	0.2
1,1-Dichloroethene	ND	0.5	0.2
Methylene Chloride	ND	10	0.1
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.2
Vinyl Acetate	ND	10	0.5
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.4
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.2
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.1
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.1
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-12-GW	Batch#:	220538
Lab ID:	264673-001	Sampled:	02/13/15
Matrix:	Water	Received:	02/13/15
Units:	ug/L	Analyzed:	02/18/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.3
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.1
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-128
1,2-Dichloroethane-d4	102	75-139
Toluene-d8	99	80-120
Bromofluorobenzene	94	80-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-13-GW	Batch#:	220538
Lab ID:	264673-002	Sampled:	02/13/15
Matrix:	Water	Received:	02/13/15
Units:	ug/L	Analyzed:	02/18/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.2
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	0.7 J	1.0	0.1
Chloroethane	ND	1.0	0.1
Trichlorofluoromethane	ND	1.0	0.2
Acetone	1.9 J	10	0.6
Freon 113	ND	2.0	0.2
1,1-Dichloroethene	ND	0.5	0.2
Methylene Chloride	ND	10	0.1
Carbon Disulfide	ND	0.5	0.1
MTBE	0.8	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.2
Vinyl Acetate	ND	10	0.5
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.4
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.2
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.1
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	0.2 J	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.1
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	0.2 J	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	0.2 J	0.5	0.1
o-Xylene	0.4 J	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	0.2 J	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	0.3 J	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	0.5 J	0.5	0.1

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-13-GW	Batch#:	220538
Lab ID:	264673-002	Sampled:	02/13/15
Matrix:	Water	Received:	02/13/15
Units:	ug/L	Analyzed:	02/18/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	1.7	0.5	0.1
sec-Butylbenzene	0.1 J	0.5	0.1
para-Isopropyl Toluene	0.2 J	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	0.2 J	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.3
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.1
Naphthalene	0.2 J	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-128
1,2-Dichloroethane-d4	103	75-139
Toluene-d8	99	80-120
Bromofluorobenzene	95	80-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	TRIP BLANK	Batch#:	220634
Lab ID:	264673-003	Sampled:	02/13/15
Matrix:	Water	Received:	02/13/15
Units:	ug/L	Analyzed:	02/20/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.1
Trichlorofluoromethane	ND	1.0	0.1
Acetone	ND	10	3.3
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.1
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.1
Vinyl Acetate	ND	10	0.2
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.2
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	0.2 J	0.5	0.1
Bromochloromethane	ND	0.5	0.2
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.2
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.2
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	TRIP BLANK	Batch#:	220634
Lab ID:	264673-003	Sampled:	02/13/15
Matrix:	Water	Received:	02/13/15
Units:	ug/L	Analyzed:	02/20/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.2
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.2
Naphthalene	ND	2.0	0.2
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-128
1,2-Dichloroethane-d4	92	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	94	80-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	220538
Units:	ug/L	Analyzed:	02/18/15
Diln Fac:	1.000		

Type: BS Lab ID: QC777647

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	12.78	102	66-135
Benzene	12.50	13.14	105	80-123
Trichloroethene	12.50	13.09	105	80-123
Toluene	12.50	13.80	110	80-121
Chlorobenzene	12.50	13.22	106	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-128
1,2-Dichloroethane-d4	98	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	93	80-120

Type: BSD Lab ID: QC777648

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	11.66	93	66-135	9	24
Benzene	12.50	11.99	96	80-123	9	20
Trichloroethene	12.50	12.04	96	80-123	8	20
Toluene	12.50	12.55	100	80-121	9	20
Chlorobenzene	12.50	12.13	97	80-123	9	20

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-128
1,2-Dichloroethane-d4	97	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	94	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777649	Batch#:	220538
Matrix:	Water	Analyzed:	02/18/15
Units:	ug/L		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.2
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	0.4 J	1.0	0.1
Chloroethane	ND	1.0	0.1
Trichlorofluoromethane	ND	1.0	0.2
Acetone	ND	10	0.6
Freon 113	ND	2.0	0.2
1,1-Dichloroethene	ND	0.5	0.2
Methylene Chloride	ND	10	0.1
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.2
Vinyl Acetate	ND	10	0.5
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.4
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.2
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.1
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.1
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777649	Batch#:	220538
Matrix:	Water	Analyzed:	02/18/15
Units:	ug/L		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.3
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.1
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-128
1,2-Dichloroethane-d4	99	75-139
Toluene-d8	99	80-120
Bromofluorobenzene	94	80-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	220634
Units:	ug/L	Analyzed:	02/20/15
Diln Fac:	1.000		

Type: BS Lab ID: QC778027

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	10.90	87	66-135
Benzene	12.50	11.71	94	80-123
Trichloroethene	12.50	10.84	87	80-123
Toluene	12.50	12.68	101	80-121
Chlorobenzene	12.50	12.24	98	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-128
1,2-Dichloroethane-d4	95	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	88	80-120

Type: BSD Lab ID: QC778028

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.38	11.03	89	66-135	2	24
Benzene	12.38	11.97	97	80-123	3	20
Trichloroethene	12.38	12.01	97	80-123	11	20
Toluene	12.38	13.31	108	80-121	6	20
Chlorobenzene	12.38	12.58	102	80-123	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-128
1,2-Dichloroethane-d4	94	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	91	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778029	Batch#:	220634
Matrix:	Water	Analyzed:	02/20/15
Units:	ug/L		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.1
Trichlorofluoromethane	ND	1.0	0.1
Acetone	ND	10	3.3
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.1
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.1
Vinyl Acetate	ND	10	0.2
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.2
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.2
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.2
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.2
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1
2-Chlorotoluene	ND	0.5	0.1

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778029	Batch#:	220634
Matrix:	Water	Analyzed:	02/20/15
Units:	ug/L		

Analyte	Result	RL	MDL
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.2
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.2
Naphthalene	ND	2.0	0.2
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-128
1,2-Dichloroethane-d4	94	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	94	80-120

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-12-GW	Batch#:	220613
Lab ID:	264673-001	Sampled:	02/13/15
Matrix:	Water	Received:	02/13/15
Units:	ug/L	Prepared:	02/19/15
Diln Fac:	1.000	Analyzed:	02/20/15

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	10	0.76
Phenol	ND	10	0.98
bis(2-Chloroethyl)ether	ND	10	1.8
2-Chlorophenol	ND	10	1.0
1,3-Dichlorobenzene	ND	10	0.67
1,4-Dichlorobenzene	ND	10	0.65
Benzyl alcohol	ND	10	0.59
1,2-Dichlorobenzene	ND	10	0.69
2-Methylphenol	ND	10	0.63
bis(2-Chloroisopropyl) ether	ND	10	0.81
4-Methylphenol	ND	10	0.60
N-Nitroso-di-n-propylamine	ND	10	0.84
Hexachloroethane	ND	10	0.69
Nitrobenzene	ND	10	0.60
Isophorone	ND	10	0.67
2-Nitrophenol	ND	20	3.1
2,4-Dimethylphenol	ND	10	0.69
Benzoic acid	ND	50	15
bis(2-Chloroethoxy)methane	ND	10	0.56
2,4-Dichlorophenol	ND	10	0.73
1,2,4-Trichlorobenzene	ND	10	0.61
Naphthalene	ND	10	0.58
4-Chloroaniline	ND	10	0.65
Hexachlorobutadiene	ND	10	0.54
4-Chloro-3-methylphenol	ND	10	0.82
2-Methylnaphthalene	ND	10	0.53
Hexachlorocyclopentadiene	ND	20	0.18
2,4,6-Trichlorophenol	ND	10	1.1
2,4,5-Trichlorophenol	ND	10	1.1
2-Chloronaphthalene	ND	10	0.55
2-Nitroaniline	ND	20	2.6
Dimethylphthalate	ND	10	0.66
Acenaphthylene	ND	10	0.58
2,6-Dinitrotoluene	ND	10	0.67
3-Nitroaniline	ND	20	0.84
Acenaphthene	ND	10	0.49
2,4-Dinitrophenol	ND	20	2.3
4-Nitrophenol	ND	20	1.2
Dibenzofuran	ND	10	0.57
2,4-Dinitrotoluene	ND	10	0.65
Diethylphthalate	ND	10	0.68
Fluorene	ND	10	0.57
4-Chlorophenyl-phenylether	ND	10	0.53
4-Nitroaniline	ND	20	3.3
4,6-Dinitro-2-methylphenol	ND	20	2.5
N-Nitrosodiphenylamine	ND	10	1.9
Azobenzene	ND	10	0.65
4-Bromophenyl-phenylether	ND	10	0.56
Hexachlorobenzene	ND	10	0.68
Pentachlorophenol	ND	20	1.7
Phenanthrene	ND	10	0.71
Anthracene	ND	10	0.62
Di-n-butylphthalate	ND	10	1.4

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-12-GW	Batch#:	220613
Lab ID:	264673-001	Sampled:	02/13/15
Matrix:	Water	Received:	02/13/15
Units:	ug/L	Prepared:	02/19/15
Diln Fac:	1.000	Analyzed:	02/20/15

Analyte	Result	RL	MDL
Fluoranthene	ND	10	0.77
Pyrene	ND	10	0.74
Butylbenzylphthalate	ND	10	0.82
3,3'-Dichlorobenzidine	ND	20	2.5
Benzo(a)anthracene	ND	10	0.75
Chrysene	ND	10	0.70
bis(2-Ethylhexyl)phthalate	ND	10	1.6
Di-n-octylphthalate	ND	10	0.63
Benzo(b)fluoranthene	ND	10	0.71
Benzo(k)fluoranthene	ND	10	0.66
Benzo(a)pyrene	ND	10	0.57
Indeno(1,2,3-cd)pyrene	ND	10	0.77
Dibenz(a,h)anthracene	ND	10	0.79
Benzo(g,h,i)perylene	ND	10	0.87

Surrogate	%REC	Limits
2-Fluorophenol	70	38-120
Phenol-d5	75	38-120
2,4,6-Tribromophenol	82	46-120
Nitrobenzene-d5	75	51-120
2-Fluorobiphenyl	83	54-120
Terphenyl-d14	61	21-120

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-13-GW	Sampled:	02/13/15
Lab ID:	264673-002	Received:	02/13/15
Matrix:	Water	Prepared:	02/19/15
Units:	ug/L	Analyzed:	02/20/15
Batch#:	220613		

Analyte	Result	RL	MDL	Diln Fac
N-Nitrosodimethylamine	ND	10	0.76	1.000
Phenol	ND	10	0.98	1.000
bis(2-Chloroethyl)ether	ND	10	1.8	1.000
2-Chlorophenol	ND	10	1.0	1.000
1,3-Dichlorobenzene	ND	10	0.67	1.000
1,4-Dichlorobenzene	ND	10	0.65	1.000
Benzyl alcohol	ND	10	0.59	1.000
1,2-Dichlorobenzene	ND	10	0.69	1.000
2-Methylphenol	ND	10	0.63	1.000
bis(2-Chloroisopropyl) ether	ND	10	0.81	1.000
4-Methylphenol	ND	10	0.60	1.000
N-Nitroso-di-n-propylamine	ND	10	0.84	1.000
Hexachloroethane	ND	10	0.69	1.000
Nitrobenzene	ND	10	0.60	1.000
Isophorone	ND	10	0.67	1.000
2-Nitrophenol	ND	20	3.1	1.000
2,4-Dimethylphenol	ND	10	0.69	1.000
Benzoic acid	ND	50	15	1.000
bis(2-Chloroethoxy)methane	ND	10	0.56	1.000
2,4-Dichlorophenol	ND	10	0.73	1.000
1,2,4-Trichlorobenzene	ND	10	0.61	1.000
Naphthalene	ND	10	0.58	1.000
4-Chloroaniline	ND	10	0.65	1.000
Hexachlorobutadiene	ND	10	0.54	1.000
4-Chloro-3-methylphenol	310	100	10	10.00
2-Methylnaphthalene	ND	10	0.53	1.000
Hexachlorocyclopentadiene	ND	20	0.18	1.000
2,4,6-Trichlorophenol	ND	10	1.1	1.000
2,4,5-Trichlorophenol	ND	10	1.1	1.000
2-Chloronaphthalene	ND	10	0.55	1.000
2-Nitroaniline	ND	20	2.6	1.000
Dimethylphthalate	ND	10	0.66	1.000
Acenaphthylene	ND	10	0.58	1.000
2,6-Dinitrotoluene	ND	10	0.67	1.000
3-Nitroaniline	ND	20	0.84	1.000
Acenaphthene	ND	10	0.49	1.000
2,4-Dinitrophenol	ND	20	2.3	1.000
4-Nitrophenol	ND	20	1.2	1.000
Dibenzofuran	ND	10	0.57	1.000
2,4-Dinitrotoluene	ND	10	0.65	1.000
Diethylphthalate	ND	10	0.68	1.000
Fluorene	ND	10	0.57	1.000
4-Chlorophenyl-phenylether	ND	10	0.53	1.000
4-Nitroaniline	ND	20	3.3	1.000
4,6-Dinitro-2-methylphenol	ND	20	2.5	1.000
N-Nitrosodiphenylamine	ND	10	1.9	1.000
Azobenzene	ND	10	0.65	1.000
4-Bromophenyl-phenylether	ND	10	0.56	1.000
Hexachlorobenzene	ND	10	0.68	1.000
Pentachlorophenol	ND	20	1.7	1.000
Phenanthrene	ND	10	0.71	1.000
Anthracene	ND	10	0.62	1.000
Di-n-butylphthalate	ND	10	1.4	1.000

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-13-GW	Sampled:	02/13/15
Lab ID:	264673-002	Received:	02/13/15
Matrix:	Water	Prepared:	02/19/15
Units:	ug/L	Analyzed:	02/20/15
Batch#:	220613		

Analyte	Result	RL	MDL	Diln Fac
Fluoranthene	ND	10	0.77	1.000
Pyrene	ND	10	0.74	1.000
Butylbenzylphthalate	ND	10	0.82	1.000
3,3'-Dichlorobenzidine	ND	20	2.5	1.000
Benzo(a)anthracene	ND	10	0.75	1.000
Chrysene	ND	10	0.70	1.000
bis(2-Ethylhexyl)phthalate	ND	10	1.6	1.000
Di-n-octylphthalate	ND	10	0.63	1.000
Benzo(b)fluoranthene	ND	10	0.71	1.000
Benzo(k)fluoranthene	ND	10	0.66	1.000
Benzo(a)pyrene	ND	10	0.57	1.000
Indeno(1,2,3-cd)pyrene	ND	10	0.77	1.000
Dibenz(a,h)anthracene	ND	10	0.79	1.000
Benzo(g,h,i)perylene	ND	10	0.87	1.000

Surrogate	%REC	Limits	Diln Fac
2-Fluorophenol	65	38-120	1.000
Phenol-d5	71	38-120	1.000
2,4,6-Tribromophenol	83	46-120	1.000
Nitrobenzene-d5	72	51-120	1.000
2-Fluorobiphenyl	73	54-120	1.000
Terphenyl-d14	22	21-120	1.000

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777931	Batch#:	220613
Matrix:	Water	Prepared:	02/19/15
Units:	ug/L	Analyzed:	02/20/15

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	10	2.2
Phenol	ND	10	0.80
bis(2-Chloroethyl)ether	ND	10	1.5
2-Chlorophenol	ND	10	0.91
1,3-Dichlorobenzene	ND	10	1.5
1,4-Dichlorobenzene	ND	10	1.5
Benzyl alcohol	ND	10	1.5
1,2-Dichlorobenzene	ND	10	1.5
2-Methylphenol	ND	10	0.70
bis(2-Chloroisopropyl) ether	ND	10	1.5
4-Methylphenol	ND	10	1.2
N-Nitroso-di-n-propylamine	ND	10	1.3
Hexachloroethane	ND	10	1.5
Nitrobenzene	ND	10	1.3
Isophorone	ND	10	1.7
2-Nitrophenol	ND	20	2.0
2,4-Dimethylphenol	ND	10	0.58
Benzoic acid	ND	50	6.9
bis(2-Chloroethoxy)methane	ND	10	1.3
2,4-Dichlorophenol	ND	10	0.80
1,2,4-Trichlorobenzene	ND	10	1.4
Naphthalene	ND	10	1.4
4-Chloroaniline	ND	10	1.4
Hexachlorobutadiene	ND	10	1.4
4-Chloro-3-methylphenol	ND	10	1.5
2-Methylnaphthalene	ND	10	1.3
Hexachlorocyclopentadiene	ND	20	1.7
2,4,6-Trichlorophenol	ND	10	0.94
2,4,5-Trichlorophenol	ND	10	1.1
2-Chloronaphthalene	ND	10	1.3
2-Nitroaniline	ND	20	1.6
Dimethylphthalate	ND	10	1.6
Acenaphthylene	ND	10	1.3
2,6-Dinitrotoluene	ND	10	1.7
3-Nitroaniline	ND	20	3.8
Acenaphthene	ND	10	1.4
2,4-Dinitrophenol	ND	20	2.6
4-Nitrophenol	ND	20	1.4
Dibenzofuran	ND	10	1.5
2,4-Dinitrotoluene	ND	10	1.4
Diethylphthalate	ND	10	1.5
Fluorene	ND	10	1.4
4-Chlorophenyl-phenylether	ND	10	1.4
4-Nitroaniline	ND	20	2.2
4,6-Dinitro-2-methylphenol	ND	20	1.6
N-Nitrosodiphenylamine	ND	10	1.3
Azobenzene	ND	10	1.4
4-Bromophenyl-phenylether	ND	10	1.3
Hexachlorobenzene	ND	10	1.4
Pentachlorophenol	ND	20	1.4
Phenanthrene	ND	10	1.4
Anthracene	ND	10	1.3
Di-n-butylphthalate	ND	10	1.3

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777931	Batch#:	220613
Matrix:	Water	Prepared:	02/19/15
Units:	ug/L	Analyzed:	02/20/15

Analyte	Result	RL	MDL
Fluoranthene	ND	10	1.4
Pyrene	ND	10	1.3
Butylbenzylphthalate	ND	10	1.3
3,3'-Dichlorobenzidine	ND	20	1.5
Benzo(a)anthracene	ND	10	1.3
Chrysene	ND	10	1.3
bis(2-Ethylhexyl)phthalate	ND	10	1.9
Di-n-octylphthalate	ND	10	1.4
Benzo(b)fluoranthene	ND	10	1.4
Benzo(k)fluoranthene	ND	10	1.5
Benzo(a)pyrene	ND	10	1.1
Indeno(1,2,3-cd)pyrene	ND	10	1.3
Dibenz(a,h)anthracene	ND	10	1.4
Benzo(g,h,i)perylene	ND	10	1.3

Surrogate	%REC	Limits
2-Fluorophenol	75	38-120
Phenol-d5	67	38-120
2,4,6-Tribromophenol	76	46-120
Nitrobenzene-d5	77	51-120
2-Fluorobiphenyl	79	54-120
Terphenyl-d14	70	21-120

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8270C
Matrix:	Water	Batch#:	220613
Units:	ug/L	Prepared:	02/19/15
Diln Fac:	1.000	Analyzed:	02/20/15

Type: BS Lab ID: QC777932

Analyte	Spiked	Result	%REC	Limits
Phenol	80.00	67.80	85	46-120
2-Chlorophenol	80.00	65.44	82	48-120
1,4-Dichlorobenzene	80.00	48.90	61	52-120
N-Nitroso-di-n-propylamine	80.00	63.58	79	46-120
1,2,4-Trichlorobenzene	80.00	51.79	65	53-120
4-Chloro-3-methylphenol	80.00	62.28	78	40-120
Acenaphthene	30.00	24.41	81	61-120
4-Nitrophenol	80.00	72.44	91	40-120
2,4-Dinitrotoluene	80.00	73.63	92	64-120
Pentachlorophenol	80.00	66.80	83	47-120
Pyrene	30.00	24.69	82	62-120

Surrogate	%REC	Limits
2-Fluorophenol	75	38-120
Phenol-d5	84	38-120
2,4,6-Tribromophenol	92	46-120
Nitrobenzene-d5	78	51-120
2-Fluorobiphenyl	78	54-120
Terphenyl-d14	82	21-120

Type: BSD Lab ID: QC777933

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Phenol	80.00	60.96	76	46-120	11	55
2-Chlorophenol	80.00	58.98	74	48-120	10	54
1,4-Dichlorobenzene	80.00	46.15	58	52-120	6	30
N-Nitroso-di-n-propylamine	80.00	56.69	71	46-120	11	25
1,2,4-Trichlorobenzene	80.00	46.55	58	53-120	11	26
4-Chloro-3-methylphenol	80.00	53.98	67	40-120	14	54
Acenaphthene	30.00	21.36	71	61-120	13	25
4-Nitrophenol	80.00	64.49	81	40-120	12	45
2,4-Dinitrotoluene	80.00	63.42	79	64-120	15	32
Pentachlorophenol	80.00	60.84	76	47-120	9	48
Pyrene	30.00	23.00	77	62-120	7	26

Surrogate	%REC	Limits
2-Fluorophenol	70	38-120
Phenol-d5	76	38-120
2,4,6-Tribromophenol	79	46-120
Nitrobenzene-d5	69	51-120
2-Fluorobiphenyl	68	54-120
Terphenyl-d14	72	21-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1361	Analysis:	EPA 8082
Matrix:	Water	Sampled:	02/13/15
Units:	ug/L	Received:	02/13/15
Diln Fac:	1.000	Prepared:	02/17/15
Batch#:	220501	Analyzed:	02/19/15

Field ID: SB-12-GW Lab ID: 264673-001
Type: SAMPLE

Analyte	Result	RL	MDL
Aroclor-1016	ND	0.50	0.16
Aroclor-1221	ND	1.0	0.32
Aroclor-1232	ND	0.50	0.14
Aroclor-1242	ND	0.50	0.16
Aroclor-1248	ND	0.50	0.16
Aroclor-1254	ND	0.50	0.16
Aroclor-1260	ND	0.50	0.13

Surrogate	%REC	Limits
TCMX	74	39-120
Decachlorobiphenyl	87	28-120

Field ID: SB-13-GW Lab ID: 264673-002
Type: SAMPLE

Analyte	Result	RL	MDL
Aroclor-1016	ND	0.50	0.16
Aroclor-1221	ND	1.0	0.32
Aroclor-1232	ND	0.50	0.14
Aroclor-1242	ND	0.50	0.16
Aroclor-1248	ND	0.50	0.16
Aroclor-1254	ND	0.50	0.16
Aroclor-1260	ND	0.50	0.13

Surrogate	%REC	Limits
TCMX	80	39-120
Decachlorobiphenyl	86	28-120

Type: BLANK Lab ID: QC777507

Analyte	Result	RL	MDL
Aroclor-1016	ND	0.50	0.16
Aroclor-1221	ND	1.0	0.32
Aroclor-1232	ND	0.50	0.14
Aroclor-1242	ND	0.50	0.16
Aroclor-1248	ND	0.50	0.16
Aroclor-1254	ND	0.50	0.16
Aroclor-1260	ND	0.50	0.13

Surrogate	%REC	Limits
TCMX	62	39-120
Decachlorobiphenyl	88	28-120

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1361	Analysis:	EPA 8082
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Batch#:	220501

Type:	BS	Prepared:	02/17/15
Lab ID:	QC777508	Analyzed:	02/19/15

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	5.000	3.822	76	62-127
Aroclor-1260	5.000	3.483	70	60-135

Surrogate	%REC	Limits
TCMX	61	39-120
Decachlorobiphenyl	72	28-120

Type:	BSD	Prepared:	02/18/15
Lab ID:	QC777509	Analyzed:	02/20/15

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	5.000	5.028	101	62-127	27	29
Aroclor-1260	5.000	4.141	83	60-135	17	40

Surrogate	%REC	Limits
TCMX	89	39-120
Decachlorobiphenyl	95	28-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved California Title 22 Metals

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374		
Field ID:	SB-12-GW	Diln Fac:	1.000
Lab ID:	264673-001	Sampled:	02/13/15
Matrix:	Filtrate	Received:	02/13/15
Units:	ug/L		

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Analysis
Antimony	ND	10	0.65	220663	02/20/15	02/20/15	EPA 6010B
Arsenic	ND	5.0	1.3	220663	02/20/15	02/20/15	EPA 6010B
Barium	120	5.0	1.0	220663	02/20/15	02/20/15	EPA 6010B
Beryllium	ND	2.0	0.30	220663	02/20/15	02/20/15	EPA 6010B
Cadmium	ND	5.0	0.58	220663	02/20/15	02/20/15	EPA 6010B
Chromium	0.93 J	5.0	0.57	220663	02/20/15	02/20/15	EPA 6010B
Cobalt	2.0 J	5.0	0.32	220663	02/20/15	02/20/15	EPA 6010B
Copper	ND	5.0	0.99	220663	02/20/15	02/20/15	EPA 6010B
Lead	ND	5.0	0.91	220663	02/20/15	02/20/15	EPA 6010B
Mercury	ND	0.20	0.040	220695	02/22/15	02/23/15	EPA 7470A
Molybdenum	17	5.0	0.40	220663	02/20/15	02/20/15	EPA 6010B
Nickel	6.4	5.0	0.71	220663	02/20/15	02/20/15	EPA 6010B
Selenium	ND	10	2.3	220663	02/20/15	02/20/15	EPA 6010B
Silver	ND	5.0	0.66	220663	02/20/15	02/20/15	EPA 6010B
Thallium	ND	10	2.0	220663	02/20/15	02/20/15	EPA 6010B
Vanadium	9.9	5.0	0.67	220663	02/20/15	02/20/15	EPA 6010B
Zinc	ND	20	3.0	220663	02/20/15	02/20/15	EPA 6010B

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Dissolved California Title 22 Metals

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374		
Field ID:	SB-13-GW	Diln Fac:	1.000
Lab ID:	264673-002	Sampled:	02/13/15
Matrix:	Filtrate	Received:	02/13/15
Units:	ug/L		

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Analysis
Antimony	ND	10	0.65	220663	02/20/15	02/20/15	EPA 6010B
Arsenic	ND	5.0	1.3	220663	02/20/15	02/20/15	EPA 6010B
Barium	190	5.0	1.0	220663	02/20/15	02/20/15	EPA 6010B
Beryllium	ND	2.0	0.30	220663	02/20/15	02/20/15	EPA 6010B
Cadmium	ND	5.0	0.58	220663	02/20/15	02/20/15	EPA 6010B
Chromium	1.3 J	5.0	0.57	220663	02/20/15	02/20/15	EPA 6010B
Cobalt	1.3 J	5.0	0.32	220663	02/20/15	02/20/15	EPA 6010B
Copper	ND	5.0	0.99	220663	02/20/15	02/20/15	EPA 6010B
Lead	ND	5.0	0.91	220663	02/20/15	02/20/15	EPA 6010B
Mercury	ND	0.20	0.040	220695	02/22/15	02/23/15	EPA 7470A
Molybdenum	35	5.0	0.40	220663	02/20/15	02/20/15	EPA 6010B
Nickel	21	5.0	0.71	220663	02/20/15	02/20/15	EPA 6010B
Selenium	4.6 J	10	2.3	220663	02/20/15	02/20/15	EPA 6010B
Silver	ND	5.0	0.66	220663	02/20/15	02/20/15	EPA 6010B
Thallium	ND	10	2.0	220663	02/20/15	02/20/15	EPA 6010B
Vanadium	150	5.0	0.67	220663	02/20/15	02/20/15	EPA 6010B
Zinc	ND	20	3.0	220663	02/20/15	02/20/15	EPA 6010B

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778145	Batch#:	220663
Matrix:	Filtrate	Prepared:	02/20/15
Units:	ug/L	Analyzed:	02/20/15

Analyte	Result	RL	MDL
Antimony	0.99 J	10	0.65
Arsenic	ND	5.0	1.3
Barium	ND	5.0	1.0
Beryllium	ND	2.0	0.30
Cadmium	ND	5.0	0.58
Chromium	ND	5.0	0.57
Cobalt	ND	5.0	0.32
Copper	1.3 J	5.0	0.99
Lead	ND	5.0	0.91
Molybdenum	ND	5.0	0.40
Nickel	ND	5.0	0.71
Selenium	ND	10	2.3
Silver	ND	5.0	0.66
Thallium	ND	10	2.0
Vanadium	ND	5.0	0.67
Zinc	ND	20	3.0

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778146	Batch#:	220663
Matrix:	Filtrate	Prepared:	02/20/15
Units:	ug/L	Analyzed:	02/20/15

Analyte	Result	RL	MDL
Antimony	ND	10	0.65
Arsenic	ND	5.0	1.3
Barium	ND	5.0	1.0
Beryllium	ND	2.0	0.30
Cadmium	ND	5.0	0.58
Chromium	ND	5.0	0.57
Cobalt	ND	5.0	0.32
Copper	ND	5.0	0.99
Lead	ND	5.0	0.91
Molybdenum	ND	5.0	0.40
Nickel	ND	5.0	0.71
Selenium	ND	10	2.3
Silver	ND	5.0	0.66
Thallium	ND	10	2.0
Vanadium	ND	5.0	0.67
Zinc	ND	20	3.0

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778147	Batch#:	220663
Matrix:	Filtrate	Prepared:	02/20/15
Units:	ug/L	Analyzed:	02/20/15

Analyte	Result	RL	MDL
Antimony	ND	10	0.65
Arsenic	ND	5.0	1.3
Barium	ND	5.0	1.0
Beryllium	ND	2.0	0.30
Cadmium	ND	5.0	0.58
Chromium	ND	5.0	0.57
Cobalt	ND	5.0	0.32
Copper	ND	5.0	0.99
Lead	ND	5.0	0.91
Molybdenum	ND	5.0	0.40
Nickel	ND	5.0	0.71
Selenium	ND	10	2.3
Silver	ND	5.0	0.66
Thallium	ND	10	2.0
Vanadium	ND	5.0	0.67
Zinc	3.8 J	20	3.0

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 6010B
Matrix:	Filtrate	Batch#:	220663
Units:	ug/L	Prepared:	02/20/15
Diln Fac:	1.000	Analyzed:	02/20/15

Type: BS Lab ID: QC778148

Analyte	Spiked	Result	%REC	Limits
Antimony	100.0	97.64	98	79-120
Arsenic	100.0	96.06	96	80-120
Barium	100.0	99.87	100	80-120
Beryllium	100.0	96.97	97	80-120
Cadmium	100.0	103.4	103	80-120
Chromium	100.0	98.15	98	80-120
Cobalt	100.0	96.55	97	80-120
Copper	100.0	82.40	82	80-120
Lead	100.0	94.34	94	80-120
Molybdenum	100.0	98.09	98	80-120
Nickel	100.0	95.79	96	80-120
Selenium	100.0	106.0	106	80-120
Silver	100.0	98.51	99	77-120
Thallium	50.00	53.02	106	80-121
Vanadium	100.0	99.42	99	80-120
Zinc	100.0	98.76	99	80-120

Type: BSD Lab ID: QC778149

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	100.0	102.8	103	79-120	5	20
Arsenic	100.0	98.34	98	80-120	2	20
Barium	100.0	105.8	106	80-120	6	20
Beryllium	100.0	100.3	100	80-120	3	20
Cadmium	100.0	108.5	108	80-120	5	20
Chromium	100.0	104.4	104	80-120	6	20
Cobalt	100.0	100.9	101	80-120	4	20
Copper	100.0	88.73	89	80-120	7	20
Lead	100.0	98.63	99	80-120	4	20
Molybdenum	100.0	103.1	103	80-120	5	20
Nickel	100.0	99.32	99	80-120	4	20
Selenium	100.0	109.3	109	80-120	3	20
Silver	100.0	103.8	104	77-120	5	20
Thallium	50.00	52.23	104	80-121	1	20
Vanadium	100.0	104.7	105	80-120	5	20
Zinc	100.0	100.9	101	80-120	2	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	220663
MSS Lab ID:	264784-002	Sampled:	02/18/15
Matrix:	Filtrate	Received:	02/19/15
Units:	ug/L	Prepared:	02/20/15
Diln Fac:	10.00	Analyzed:	02/23/15

Type: MS Lab ID: QC778150

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	<23.48	100.0	77.72	78	74-120
Arsenic	<10.28	100.0	88.52	89	80-127
Barium	169.7	100.0	259.4	90	80-120
Beryllium	<1.463	100.0	87.61	88	80-120
Cadmium	<2.822	100.0	89.90	90	80-120
Chromium	261.3	100.0	367.7	106	80-120
Cobalt	<8.861	100.0	87.51	88	80-120
Copper	7.481	100.0	80.65	73 *	80-120
Lead	<13.06	100.0	60.03	60 *	67-120
Molybdenum	<5.528	100.0	23.16	23 *	80-120
Nickel	<7.500	100.0	80.26	80	80-120
Selenium	<23.08	100.0	127.4	127	73-132
Silver	<11.26	100.0	91.03	91	67-120
Thallium	<27.77	50.00	58.77	DO	76-121
Vanadium	<7.199	100.0	88.43	88	80-120
Zinc	<28.30	100.0	78.58	DO	80-122

Type: MSD Lab ID: QC778151

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	100.0	93.36	93	74-120	18	24
Arsenic	100.0	94.55	95	80-127	7	25
Barium	100.0	281.4	112	80-120	8	20
Beryllium	100.0	96.58	97	80-120	10	20
Cadmium	100.0	97.63	98	80-120	8	20
Chromium	100.0	385.3	124 *	80-120	5	20
Cobalt	100.0	96.96	97	80-120	10	20
Copper	100.0	90.51	83	80-120	12	20
Lead	100.0	72.97	73	67-120	19	23
Molybdenum	100.0	27.48	27 *	80-120	17	20
Nickel	100.0	92.90	93	80-120	15	20
Selenium	100.0	139.7	140 *	73-132	9	30
Silver	100.0	98.04	98	67-120	7	22
Thallium	50.00	54.39	DO	76-121	NC	20
Vanadium	100.0	97.83	98	80-120	10	20
Zinc	100.0	87.42	DO	80-122	NC	20

*= Value outside of QC limits; see narrative
DO= Diluted Out
NC= Not Calculated
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	220695
Lab ID:	QC778259	Prepared:	02/22/15
Matrix:	Filtrate	Analyzed:	02/23/15
Units:	ug/L		

Result	RL	MDL
ND	0.20	0.040

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	220695
Matrix:	Water	Prepared:	02/22/15
Units:	ug/L	Analyzed:	02/23/15
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC778260	2.500	2.526	101	80-120		
BSD	QC778261	2.500	2.526	101	80-120	0	24

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	220695
Field ID:	SB-19-GW	Sampled:	02/17/15
MSS Lab ID:	264721-001	Received:	02/17/15
Matrix:	Filtrate	Prepared:	02/22/15
Units:	ug/L	Analyzed:	02/23/15
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC778262	<0.04000	2.500	2.602	104	60-130		
MSD	QC778263		2.500	2.513	101	60-130	3	34

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	220695
Lab ID:	QC778296	Prepared:	02/22/15
Matrix:	Filtrate	Analyzed:	02/23/15
Units:	ug/L		

Result	RL	MDL
ND	0.20	0.040

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Hexavalent Chromium

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7196A
Analyte:	Hexavalent Chromium	Batch#:	220443
Matrix:	Water	Received:	02/13/15
Units:	mg/L	Analyzed:	02/13/15 18:51
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Sampled
SB-12-GW	SAMPLE	264673-001	ND	0.01	02/13/15 15:30
SB-13-GW	SAMPLE	264673-002	ND	0.01	02/13/15 15:00
	BLANK	QC777286	ND	0.01	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Hexavalent Chromium

Lab #:	264673	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7196A
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Field ID:	SB-12-GW	Batch#:	220443
MSS Lab ID:	264673-001	Sampled:	02/13/15 15:30
Matrix:	Water	Received:	02/13/15
Units:	mg/L	Analyzed:	02/13/15 18:51

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC777287		1.000	0.9460	95	90-110		
MS	QC777288	<0.01000	1.000	0.9550	95	85-115		
MSD	QC777289		1.000	1.013	101	85-115	6	23

RPD= Relative Percent Difference

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Analytical Laboratories, Since 1878

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2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 264701
ANALYTICAL REPORT

Integral Consulting, Inc.	Project : C1374
115 Sansome Street	Location : Allied Engineering
San Francisco, CA 94104	Level : II

Sample ID	Lab ID
SB-13-3.0-4.0	264701-001
SB-13-12.0-13.0	264701-002
SB-12-2.5-3.5	264701-003
SB-12-11.0-12.0	264701-004
SB-22-4.0-5.0	264701-005
SB-22-11.0-12.0	264701-006
SB-20-6.0-7.0	264701-007
SB-20-10.5-11.5	264701-008
TB-021315	264701-009
WR-6-CHAR	264701-010

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Tracy Babjar Date: 02/27/2015

Tracy Babjar
Project Manager
tracy.babjar@ctberk.com
(510) 204-2226

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**264701**
Client:	**Integral Consulting, Inc.**
Project:	**C1374**
Location:	**Allied Engineering**
Request Date:	**02/13/15**
Samples Received:	**02/13/15**

This data package contains sample and QC results for eight soil samples and one water sample, requested for the above referenced project on 02/13/15. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):
Gasoline C7-C12 was detected between the MDL and the RL in the method blank for batch 220534; this analyte was detected in the sample at a level at least 10 times that of the blank. Gasoline C7-C12 was detected between the MDL and the RL in the method blank for batch 220548; this analyte was not detected in samples at or above the RL. No other analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B) Water:
Bromomethane was detected between the MDL and the RL in the method blank for batch 220538; this analyte was not detected in the sample at or above the RL. No other analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B) Soil:
High response was observed for acetone in the CCV analyzed 02/23/15 11:59; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b". Matrix spikes were not performed for this analysis in batch 220597 due to insufficient sample amount. Matrix spikes were not performed for this analysis in batch 220545 because of clock limitations; 5030 rushes were added to a 5035 batch. Matrix spikes QC778224,QC778225 (batch 220687) were not reported because the autosampler had an error that stopped the sequence. Low surrogate recovery was observed for 1,2-dichloroethane-d4 in the method blank for batch 220687. Acetone was detected between the MDL and the RL in the method blank for batch 220716; this analyte was not detected in the sample at or above the RL. Methylene chloride was detected between the MDL and the RL in SB-22-11.0-12.0 (lab # 264701-006) and SB-20-10.5-11.5 (lab # 264701-008); this analyte is a common laboratory contaminant. SB-13-12.0-13.0 (lab # 264701-002), SB-12-2.5-3.5 (lab # 264701-003), and SB-20-6.0-7.0 (lab # 264701-007) were diluted due to high non-target analytes. SB-13-3.0-4.0 (lab # 264701-001) and SB-13-12.0-13.0 (lab # 264701-002) were diluted due to high hydrocarbons. No other analytical problems were encountered.

Semivolatile Organics by GC/MS (EPA 8270C):
A number of samples were diluted due to high non-target analytes.

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**264701**
Client:	**Integral Consulting, Inc.**
Project:	**C1374**
Location:	**Allied Engineering**
Request Date:	**02/13/15**
Samples Received:	**02/13/15**

Semivolatile Organics by GC/MS (EPA 8270C):
SB-22-4.0-5.0 (lab # 264701-005) was diluted due to the viscous nature of the sample extract. SB-12-2.5-3.5 (lab # 264701-003) was diluted due to the dark and viscous nature of the sample extract. No other analytical problems were encountered.

PCBs (EPA 8082):
All samples underwent sulfuric acid cleanup using EPA Method 3665A. All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. Matrix spikes QC778063,QC778064 (batch 220643) were not reported because the parent sample required a dilution that would have diluted out the spikes. No other analytical problems were encountered.

Metals (EPA 6010B and EPA 7471A):
High recovery was observed for lead in the MSD of SB-13-3.0-4.0 (lab # 264701-001); the BS/BSD were within limits. High RPD was also observed for lead in the MS/MSD of SB-13-3.0-4.0 (lab # 264701-001); the RPD was acceptable in the BS/BSD. Zinc was detected between the MDL and the RL in the method blank for batch 220569; this analyte was detected in samples at a level at least 10 times that of the blank. Mercury was detected between the MDL and the RL in the method blank for batch 220649. No other analytical problems were encountered.

Hexavalent Chromium (EPA 7196A):
Low recovery was observed for hexavalent chromium in the matrix spike for batch 220802; the parent sample was not a project sample, and the LCS was within limits. No other analytical problems were encountered.

Moisture (ASTM D2216/CLP):
No analytical problems were encountered.

CHAIN OF CUSTODY

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Chain of Custody # _____

C&T LOGIN # 264701

Project No: C1361
Project Name: Allied Engineering
Project P. O. No: C1361 Task 4
EDD Format: Report Level ☐ II ☐ III ☐ IV
Turnaround Time: ☐ RUSH _____ ☐ Standard

Sampler: B. Wishoff / C Lyles
Report To: B. DeShields
Company: Integral Consulting Inc.
Telephone:
Email: bdeshields@integral-corp.com

Lab No.	Sample ID.	SAMPLING Date Collected	SAMPLING Time Collected	MATRIX Water	MATRIX Solid	# of Containers	CHEMICAL PRESERVATIVE ~~HCl~~ ~~Meoh~~	H2SO4	HNO3	~~NaOH~~	None	TPH g 8015	TPH d 8015	TPH mo 8015	SVOCs 8270	Title 22 metals 6010/7471	CrVI 3060/7196	PCBs 8082	Full list VOCs 8260
1	SB-13-3.0-4.0	02/13/15	0845		X	6	1				5	X	X	X	X	X	X	X	X
2	SB-13-12.0-13.0		0905		X	6	1				5	↓	↓	↓	↓	↓	↓	↓	↓
3	SB-12-2.5-3.5		1000		X	6	1				5	↓	↓	↓	↓	↓	↓	↓	↓
4	SB-12-11.0-12.0		1015		X	6	1				5	↓	↓	↓	↓	↓	↓	↓	↓
5	SB-22-4.0-5.0		1120		X	6	1				5	↓	↓	↓	↓	↓	↓	↓	↓
6	SB-22-11.0-12.0		1125		X	6	1				5	↓	↓	↓	↓	↓	↓	↓	↓
7	SB-20-6.0-7.0		1220		X	6	1				5	↓	↓	↓	↓	↓	↓	↓	↓
8	SB-20-10.5-11.5		1225		X	6	1				5	↓	↓	↓	↓	↓	↓	↓	↓
9	TB-021315									1									X

Notes:
- Report sample results in dry weight w/ % moisture
- Report to MDL
- Lab to homogenize sample
- EDF required

SAMPLE RECEIPT
☑ Intact
☑ Cold
☑ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 2/13/15 TIME: 1635
DATE: 2/13/15 TIME: 1707
DATE: TIME:

RECEIVED BY:
DATE: 2/13/15 TIME: 1635
DATE: 2/13/15 TIME: 1707
DATE: TIME:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 264701 Date Received 2/13/15 Number of coolers 1
Client Integral Project Allied Engineering

Date Opened 2/17 By (print) BJ (sign) [illegible]
Date Logged in 2/17 By (print) [illegible] (sign) [illegible]

1. Did cooler come with a shipping slip (airbill, etc) _____ YES NO
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO N/A
3. Were custody papers dry and intact when received? _____ YES NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) _____ YES NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) _____

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES NO
   If YES, what time were they transferred to freezer? 2040
9. Did all bottles arrive unbroken/unopened? _____ YES NO
10. Are there any missing / extra samples? _____ YES NO
11. Are samples in the appropriate containers for indicated tests? _____ YES NO
12. Are sample labels present, in good condition and complete? _____ YES NO
13. Do the sample labels agree with custody papers? _____ YES NO
14. Was sufficient amount of sample sent for tests requested? _____ YES NO
15. Are the samples appropriately preserved? _____ YES NO N/A
16. Did you check preservatives for all bottles for each sample? _____ YES NO N/A
17. Did you document your preservative check? _____ YES NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO N/A
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO N/A
20. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A
21. Was the client contacted concerning this sample delivery? _____ YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS
10. -010. extra soil sample 'WR-6-Char'

Rev 10, 9/12

Curtis & Tompkins, Ltd.

Detections Summary for 264701

Results for any subcontracted analyses are not included in this summary.

Client : Integral Consulting, Inc.
Project : C1374
Location : Allied Engineering

Client Sample ID : SB-13-3.0-4.0 Laboratory Sample ID : 264701-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	15	Y	1.2	0.092	mg/Kg	Dry	1.000	EPA 8015B	EPA 5035
Diesel C10-C24	1,900	Y	26	7.8	mg/Kg	Dry	20.00	EPA 8015B	EPA 3550B
Motor Oil C24-C36	3,400		130	39	mg/Kg	Dry	20.00	EPA 8015B	EPA 3550B
Acetone	4,200		2,700	8.9	ug/Kg	Dry	105.5	EPA 8260B	EPA 5035
o-Xylene	73	J	680	62	ug/Kg	Dry	105.5	EPA 8260B	EPA 5035
Isopropylbenzene	92	J	680	71	ug/Kg	Dry	105.5	EPA 8260B	EPA 5035
Propylbenzene	270	J	680	61	ug/Kg	Dry	105.5	EPA 8260B	EPA 5035
1,3,5-Trimethylbenzene	470	J	680	81	ug/Kg	Dry	105.5	EPA 8260B	EPA 5035
1,2,4-Trimethylbenzene	1,400		680	49	ug/Kg	Dry	105.5	EPA 8260B	EPA 5035
sec-Butylbenzene	210	J	680	76	ug/Kg	Dry	105.5	EPA 8260B	EPA 5035
para-Isopropyl Toluene	170	J	680	70	ug/Kg	Dry	105.5	EPA 8260B	EPA 5035
n-Butylbenzene	300	J	680	80	ug/Kg	Dry	105.5	EPA 8260B	EPA 5035
Naphthalene	120	J	680	60	ug/Kg	Dry	105.5	EPA 8260B	EPA 5035
4-Chloro-3-methylphenol	480	J	8,600	360	ug/Kg	Dry	20.00	EPA 8270C	EPA 3550B
bis(2-Ethylhexyl)phthalate	620	J	8,600	380	ug/Kg	Dry	20.00	EPA 8270C	EPA 3550B
Antimony	1.1		0.63	0.20	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Arsenic	3.0		0.32	0.11	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Barium	170		0.32	0.062	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Beryllium	0.40		0.13	0.024	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cadmium	0.20	J	0.32	0.020	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Chromium	34		0.32	0.027	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cobalt	7.4		0.32	0.025	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Copper	17		0.33	0.11	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Lead	12		0.32	0.093	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Mercury	0.072		0.020	0.0011	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Molybdenum	0.089	J	0.32	0.071	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Nickel	39		0.32	0.086	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Vanadium	40		0.32	0.031	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Zinc	30		1.3	0.12	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Moisture, Percent	22		1		%	As Recd	1.000	ASTM D2216/CLP	METHOD

Curtis & Tompkins, Ltd.

Client Sample ID : SB-13-12.0-13.0 Laboratory Sample ID : 264701-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	12	Y	1.1	0.081	mg/Kg	Dry	1.000	EPA 8015B	EPA 5035
Diesel C10-C24	760	Y	23	7.0	mg/Kg	Dry	20.00	EPA 8015B	EPA 3550B
Motor Oil C24-C36	2,600		110	34	mg/Kg	Dry	20.00	EPA 8015B	EPA 3550B
o-Xylene	43	J	250	23	ug/Kg	Dry	44.02	EPA 8260B	EPA 5035
Isopropylbenzene	35	J	250	26	ug/Kg	Dry	44.02	EPA 8260B	EPA 5035
Propylbenzene	42	J	250	23	ug/Kg	Dry	44.02	EPA 8260B	EPA 5035
1,3,5-Trimethylbenzene	120	J	250	30	ug/Kg	Dry	44.02	EPA 8260B	EPA 5035
sec-Butylbenzene	55	J	250	28	ug/Kg	Dry	44.02	EPA 8260B	EPA 5035
para-Isopropyl Toluene	74	J	250	26	ug/Kg	Dry	44.02	EPA 8260B	EPA 5035
n-Butylbenzene	64	J	250	30	ug/Kg	Dry	44.02	EPA 8260B	EPA 5035
Naphthalene	26	J	250	22	ug/Kg	Dry	44.02	EPA 8260B	EPA 5035
4-Chloro-3-methylphenol	930	J	7,700	190	ug/Kg	Dry	20.00	EPA 8270C	EPA 3550B
Di-n-butylphthalate	450	J	7,700	280	ug/Kg	Dry	20.00	EPA 8270C	EPA 3550B
bis(2-Ethylhexyl)phthalate	520	J	7,700	300	ug/Kg	Dry	20.00	EPA 8270C	EPA 3550B
Antimony	3.3		0.61	0.18	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Arsenic	1.4		0.31	0.10	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Barium	58		0.31	0.060	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Beryllium	0.28		0.12	0.015	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cadmium	0.22	J	0.31	0.020	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Chromium	59		0.31	0.026	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cobalt	3.5		0.31	0.024	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Copper	12		0.32	0.11	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Lead	3.7		0.31	0.089	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Mercury	0.045		0.018	0.0010	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Nickel	32		0.31	0.083	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Vanadium	26		0.31	0.030	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Zinc	25		1.2	0.12	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Hexavalent Chromium	1.1		0.47	0.15	mg/Kg	Dry	1.000	EPA 7196A	EPA 3060A
Moisture, Percent	13		1		%	As Recd	1.000	ASTM D2216/CLP	METHOD

Curtis & Tompkins, Ltd.

Client Sample ID : SB-12-2.5-3.5 Laboratory Sample ID : 264701-003

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.54	J	1.1	0.082	mg/Kg	Dry	1.000	EPA 8015B	EPA 5035
Diesel C10-C24	23	Y	1.2	0.37	mg/Kg	Dry	1.000	EPA 8015B	EPA 3550B
Motor Oil C24-C36	110		6.1	1.8	mg/Kg	Dry	1.000	EPA 8015B	EPA 3550B
Phenanthrene	28	J	160	20	ug/Kg	Dry	2.000	EPA 8270C	EPA 3550B
Fluoranthene	36	J	160	23	ug/Kg	Dry	2.000	EPA 8270C	EPA 3550B
Pyrene	37	J	160	18	ug/Kg	Dry	2.000	EPA 8270C	EPA 3550B
Benzo(a)anthracene	19	J	160	16	ug/Kg	Dry	2.000	EPA 8270C	EPA 3550B
Chrysene	31	J	160	20	ug/Kg	Dry	2.000	EPA 8270C	EPA 3550B
Benzo(b)fluoranthene	34	J	160	14	ug/Kg	Dry	2.000	EPA 8270C	EPA 3550B
Benzo(a)pyrene	21	J	160	14	ug/Kg	Dry	2.000	EPA 8270C	EPA 3550B
Indeno(1,2,3-cd)pyrene	20	J	160	19	ug/Kg	Dry	2.000	EPA 8270C	EPA 3550B
Benzo(g,h,i)perylene	27	J	160	20	ug/Kg	Dry	2.000	EPA 8270C	EPA 3550B
Antimony	6.0		0.57	0.17	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Arsenic	6.0		0.28	0.095	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Barium	200		0.28	0.056	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Beryllium	0.51		0.11	0.014	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cadmium	0.65		0.28	0.018	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Chromium	52		0.28	0.024	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cobalt	9.9		0.28	0.022	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Copper	38		0.30	0.099	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Lead	95		0.28	0.083	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Mercury	0.39		0.020	0.0011	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Molybdenum	0.54		0.28	0.056	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Nickel	70		0.28	0.077	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Vanadium	40		0.28	0.028	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Zinc	98		1.1	0.11	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Moisture, Percent	18		1		%	As Recd	1.000	ASTM D2216/CLP	METHOD

Curtis & Tompkins, Ltd.

Client Sample ID : SB-12-11.0-12.0 Laboratory Sample ID : 264701-004

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.11	J	1.1	0.083	mg/Kg	Dry	1.000	EPA 8015B	EPA 5035
Diesel C10-C24	15	Y	1.1	0.34	mg/Kg	Dry	1.000	EPA 8015B	EPA 3550B
Motor Oil C24-C36	31		5.6	1.7	mg/Kg	Dry	1.000	EPA 8015B	EPA 3550B
Antimony	2.2		0.59	0.19	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Arsenic	19		0.30	0.098	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Barium	100		0.30	0.058	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Beryllium	0.33		0.12	0.015	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cadmium	0.64		0.30	0.019	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Chromium	61		0.30	0.025	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cobalt	13		0.30	0.023	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Copper	23		0.31	0.10	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Lead	4.8		0.30	0.086	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Mercury	0.031		0.018	0.0010	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Molybdenum	0.11	J	0.30	0.066	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Nickel	49		0.30	0.080	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Vanadium	67		0.30	0.029	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Zinc	30		1.2	0.12	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Hexavalent Chromium	1.0		0.45	0.15	mg/Kg	Dry	1.000	EPA 7196A	EPA 3060A
Moisture, Percent	11		1		%	As Recd	1.000	ASTM D2216/CLP	METHOD

Curtis & Tompkins, Ltd.

Client Sample ID : SB-22-4.0-5.0 Laboratory Sample ID : 264701-005

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.0	J	1.4	0.10	mg/Kg	Dry	1.000	EPA 8015B	EPA 5035
Diesel C10-C24	4,500	Y	25	7.5	mg/Kg	Dry	20.00	EPA 8015B	EPA 3550B
Motor Oil C24-C36	5,900		120	37	mg/Kg	Dry	20.00	EPA 8015B	EPA 3550B
Acetone	1,000		990	3.3	ug/Kg	Dry	40.26	EPA 8260B	EPA 5035
2-Butanone	71	J	500	71	ug/Kg	Dry	40.26	EPA 8260B	EPA 5035
4-Methyl-2-Pentanone	3,700		500	47	ug/Kg	Dry	40.26	EPA 8260B	EPA 5035
Tetrachloroethene	68	J	250	21	ug/Kg	Dry	40.26	EPA 8260B	EPA 5035
1,2,4-Trimethylbenzene	26	J	250	18	ug/Kg	Dry	40.26	EPA 8260B	EPA 5035
4-Chloro-3-methylphenol	1,100	J	20,000	530	ug/Kg	Dry	50.00	EPA 8270C	EPA 3550B
bis(2-Ethylhexyl)phthalate	2,300	J	20,000	520	ug/Kg	Dry	50.00	EPA 8270C	EPA 3550B
Antimony	4.4		0.62	0.18	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Arsenic	4.0		0.31	0.10	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Barium	130		0.31	0.060	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Beryllium	0.33		0.12	0.015	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cadmium	0.40		0.31	0.020	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Chromium	41		0.31	0.026	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cobalt	19		0.31	0.024	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Copper	26		0.32	0.11	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Lead	57		0.31	0.090	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Mercury	0.041		0.021	0.0012	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Molybdenum	0.75		0.31	0.069	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Nickel	40		0.31	0.084	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Selenium	0.37	J	0.62	0.18	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Vanadium	30		0.31	0.031	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Zinc	53		1.2	0.12	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Moisture, Percent	19		1		%	As Recd	1.000	ASTM D2216/CLP	METHOD

Curtis & Tompkins, Ltd.

Client Sample ID : SB-22-11.0-12.0 Laboratory Sample ID : 264701-006

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.68	J	1.1	0.084	mg/Kg	Dry	1.000	EPA 8015B	EPA 5035
Diesel C10-C24	890	Y	12	3.7	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550B
Motor Oil C24-C36	1,300		60	18	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550B
Acetone	34		19	1.7	ug/Kg	Dry	0.7825	EPA 8260B	EPA 5035
Methylene Chloride	0.81	J	19	0.42	ug/Kg	Dry	0.7728	EPA 8260B	EPA 5035
4-Methyl-2-Pentanone	29		9.3	0.45	ug/Kg	Dry	0.7728	EPA 8260B	EPA 5035
Tetrachloroethene	3.5	J	4.7	0.22	ug/Kg	Dry	0.7728	EPA 8260B	EPA 5035
1,3,5-Trimethylbenzene	0.45	J	4.7	0.30	ug/Kg	Dry	0.7728	EPA 8260B	EPA 5035
1,2,4-Trimethylbenzene	1.4	J	4.7	0.26	ug/Kg	Dry	0.7728	EPA 8260B	EPA 5035
para-Isopropyl Toluene	0.45	J	4.7	0.33	ug/Kg	Dry	0.7728	EPA 8260B	EPA 5035
Antimony	4.6		0.58	0.17	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Arsenic	1.9		0.29	0.096	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Barium	61		0.29	0.056	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Beryllium	0.31		0.12	0.014	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cadmium	0.36		0.29	0.019	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Chromium	52		0.29	0.024	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cobalt	5.9		0.29	0.022	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Copper	14		0.30	0.10	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Lead	4.7		0.29	0.085	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Mercury	0.057		0.019	0.0011	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Nickel	39		0.29	0.078	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Vanadium	34		0.29	0.029	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Zinc	31		1.2	0.11	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Moisture, Percent	17		1		%	As Recd	1.000	ASTM D2216/CLP	METHOD

Curtis & Tompkins, Ltd.

Client Sample ID : SB-20-6.0-7.0 Laboratory Sample ID : 264701-007

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.96	J	1.3	0.097	mg/Kg	Dry	1.000	EPA 8015B	EPA 5035
Diesel C10-C24	440	Y	6.0	1.8	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550B
Motor Oil C24-C36	860		30	9.0	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550B
Acetone	1,500		800	2.7	ug/Kg	Dry	33.74	EPA 8260B	EPA 5035
4-Methyl-2-Pentanone	1,500		400	38	ug/Kg	Dry	33.74	EPA 8260B	EPA 5035
4-Chloro-3-methylphenol	420	J	2,000	89	ug/Kg	Dry	5.000	EPA 8270C	EPA 3550B
Di-n-butylphthalate	670	J	2,000	50	ug/Kg	Dry	5.000	EPA 8270C	EPA 3550B
bis(2-Ethylhexyl)phthalate	410	J	2,000	53	ug/Kg	Dry	5.000	EPA 8270C	EPA 3550B
Antimony	0.39	J	0.64	0.20	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Arsenic	0.14	J	0.32	0.093	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Barium	52		0.32	0.062	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Beryllium	0.38		0.13	0.016	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cadmium	0.37		0.32	0.020	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Chromium	51		0.32	0.027	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cobalt	3.9		0.32	0.025	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Copper	14		0.33	0.11	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Lead	3.6		0.32	0.093	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Mercury	0.029		0.022	0.0012	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Nickel	42		0.32	0.087	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Vanadium	24		0.32	0.032	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Zinc	33		1.3	0.12	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Moisture, Percent	16		1		%	As Recd	1.000	ASTM D2216/CLP	METHOD

Client Sample ID : SB-20-10.5-11.5 Laboratory Sample ID : 264701-008

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	0.36	J	1.1	0.35	mg/Kg	Dry	1.000	EPA 8015B	EPA 3550B
Acetone	3.5	J,b	19	3.2	ug/Kg	Dry	0.8333	EPA 8260B	EPA 5035
Methylene Chloride	1.3	J	19	0.43	ug/Kg	Dry	0.8333	EPA 8260B	EPA 5035
cis-1,2-Dichloroethene	0.85	J	4.8	0.29	ug/Kg	Dry	0.8333	EPA 8260B	EPA 5035
Trichloroethene	1.4	J	4.8	0.40	ug/Kg	Dry	0.8333	EPA 8260B	EPA 5035
Antimony	0.43	J	0.62	0.20	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Arsenic	1.1		0.31	0.10	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Barium	59		0.31	0.060	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Beryllium	0.33		0.12	0.015	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cadmium	0.43		0.31	0.020	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Chromium	57		0.31	0.026	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cobalt	8.7		0.31	0.024	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Copper	18		0.32	0.11	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Lead	4.2		0.31	0.090	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Mercury	0.041		0.017	0.00096	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Nickel	54		0.31	0.084	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Vanadium	38		0.31	0.031	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Zinc	37		1.2	0.12	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Hexavalent Chromium	0.57		0.47	0.15	mg/Kg	Dry	1.000	EPA 7196A	EPA 3060A
Moisture, Percent	13		1		%	As Recd	1.000	ASTM D2216/CLP	METHOD

Curtis & Tompkins, Ltd.

Client Sample ID : TB-021315 Laboratory Sample ID : 264701-009

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Bromomethane	0.3	J	1.0	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Chloroform	0.2	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

J = Estimated value
Y = Sample exhibits chromatographic pattern which does not resemble standard
b = See narrative

Curtis & Tompkins, Ltd.

Gasoline by GC/FID (5035 Prep)

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8015B
Matrix:	Soil	Diln Fac:	1.000
Units:	mg/Kg	Sampled:	02/13/15
Basis:	dry	Received:	02/13/15

Field ID:	SB-13-3.0-4.0	Moisture:	22%
Type:	SAMPLE	Batch#:	220534
Lab ID:	264701-001	Analyzed:	02/19/15

Analyte	Result	RL	MDL
Gasoline C7-C12	15 Y	1.2	0.092

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	128	78-138

Field ID:	SB-13-12.0-13.0	Moisture:	13%
Type:	SAMPLE	Batch#:	220585
Lab ID:	264701-002	Analyzed:	02/19/15

Analyte	Result	RL	MDL
Gasoline C7-C12	12 Y	1.1	0.081

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	98	78-138

Field ID:	SB-12-2.5-3.5	Moisture:	18%
Type:	SAMPLE	Batch#:	220548
Lab ID:	264701-003	Analyzed:	02/19/15

Analyte	Result	RL	MDL
Gasoline C7-C12	0.54 J	1.1	0.082

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	109	78-138

Field ID:	SB-12-11.0-12.0	Moisture:	11%
Type:	SAMPLE	Batch#:	220548
Lab ID:	264701-004	Analyzed:	02/19/15

Analyte	Result	RL	MDL
Gasoline C7-C12	0.11 J	1.1	0.083

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	103	78-138

J= Estimated value
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/FID (5035 Prep)

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8015B
Matrix:	Soil	Diln Fac:	1.000
Units:	mg/Kg	Sampled:	02/13/15
Basis:	dry	Received:	02/13/15

Field ID:	SB-22-4.0-5.0	Moisture:	19%
Type:	SAMPLE	Batch#:	220548
Lab ID:	264701-005	Analyzed:	02/19/15

Analyte	Result	RL	MDL
Gasoline C7-C12	1.0 J	1.4	0.10

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	101	78-138

Field ID:	SB-22-11.0-12.0	Moisture:	17%
Type:	SAMPLE	Batch#:	220585
Lab ID:	264701-006	Analyzed:	02/19/15

Analyte	Result	RL	MDL
Gasoline C7-C12	0.68 J	1.1	0.084

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	93	78-138

Field ID:	SB-20-6.0-7.0	Moisture:	16%
Type:	SAMPLE	Batch#:	220585
Lab ID:	264701-007	Analyzed:	02/19/15

Analyte	Result	RL	MDL
Gasoline C7-C12	0.96 J	1.3	0.097

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	95	78-138

Field ID:	SB-20-10.5-11.5	Moisture:	13%
Type:	SAMPLE	Batch#:	220585
Lab ID:	264701-008	Analyzed:	02/19/15

Analyte	Result	RL	MDL
Gasoline C7-C12	ND	1.1	0.088

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	98	78-138

J= Estimated value
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/FID (5035 Prep)

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8015B
Matrix:	Soil	Diln Fac:	1.000
Units:	mg/Kg	Sampled:	02/13/15
Basis:	dry	Received:	02/13/15

Type:	BLANK	Batch#:	220534
Lab ID:	QC777633	Analyzed:	02/18/15

Analyte	Result	RL	MDL
Gasoline C7-C12	0.016 J	0.20	0.015

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	99	78-138

Type:	BLANK	Batch#:	220548
Lab ID:	QC777682	Analyzed:	02/18/15

Analyte	Result	RL	MDL
Gasoline C7-C12	0.026 J	0.20	0.015

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	108	78-138

Type:	BLANK	Batch#:	220585
Lab ID:	QC777823	Analyzed:	02/19/15

Analyte	Result	RL	MDL
Gasoline C7-C12	ND	1.0	0.077

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	99	78-138

J= Estimated value
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/FID (5035 Prep)

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC777632	Batch#:	220534
Matrix:	Soil	Analyzed:	02/18/15
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	1.006	101	80-121

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	96	78-138

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/FID (5035 Prep)

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	264629-007	Batch#:	220534
Matrix:	Soil	Sampled:	02/08/15
Units:	mg/Kg	Received:	02/12/15
Basis:	dry	Analyzed:	02/18/15

Type: MS Moisture: 19%
Lab ID: QC777634

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<0.09451	11.76	10.04	85	50-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	103	78-138

Type: MSD Moisture: 19%
Lab ID: QC777635

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	11.99	10.36	86	50-120	1	31

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	104	78-138

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/FID (5035 Prep)

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC777681	Batch#:	220548
Matrix:	Soil	Analyzed:	02/18/15
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	0.9935	99	80-121

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	117	78-138

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/FID (5035 Prep)

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	264630-009	Batch#:	220548
Matrix:	Soil	Sampled:	02/07/15
Units:	mg/Kg	Received:	02/12/15
Basis:	dry	Analyzed:	02/18/15

Type: MS Moisture: 14%
Lab ID: QC777683

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.1495	11.40	9.839	85	50-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	115	78-138

Type: MSD Moisture: 14%
Lab ID: QC777684

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	10.77	8.435	77	50-120	10	31

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	108	78-138

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/FID (5035 Prep)

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1361	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC777822	Batch#:	220585
Matrix:	Soil	Analyzed:	02/19/15
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	1.065	106	80-121

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	94	78-138

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/FID (5035 Prep)

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	264663-004	Batch#:	220585
Matrix:	Soil	Sampled:	02/12/15
Units:	mg/Kg	Received:	02/12/15
Basis:	as received	Analyzed:	02/19/15

Type: MS Lab ID: QC777937

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.08997	9.901	6.755	67	50-120

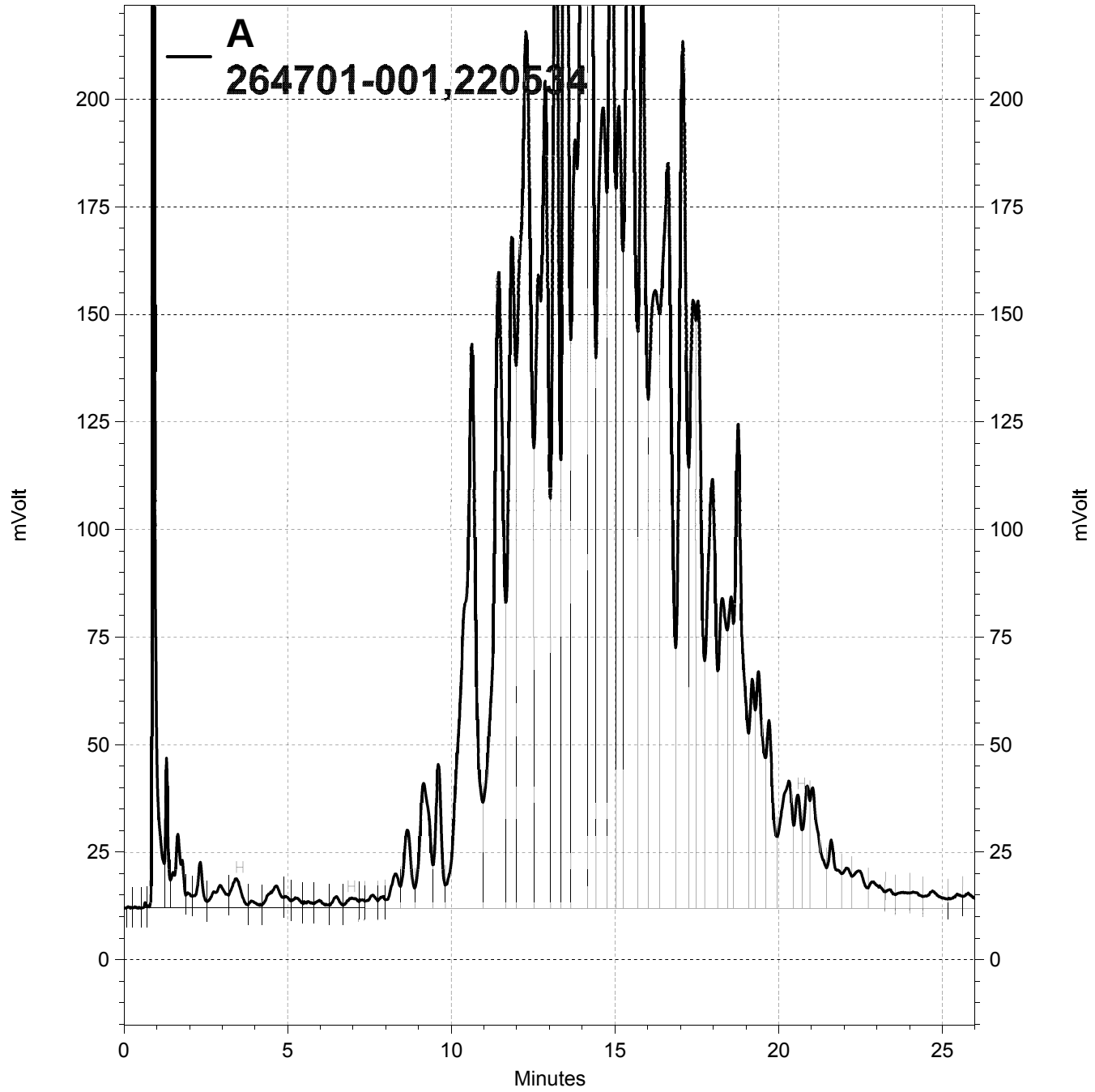
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	94	78-138

Type: MSD Lab ID: QC777938

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	9.434	5.400	56	50-120	18	31

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	100	78-138

RPD= Relative Percent Difference



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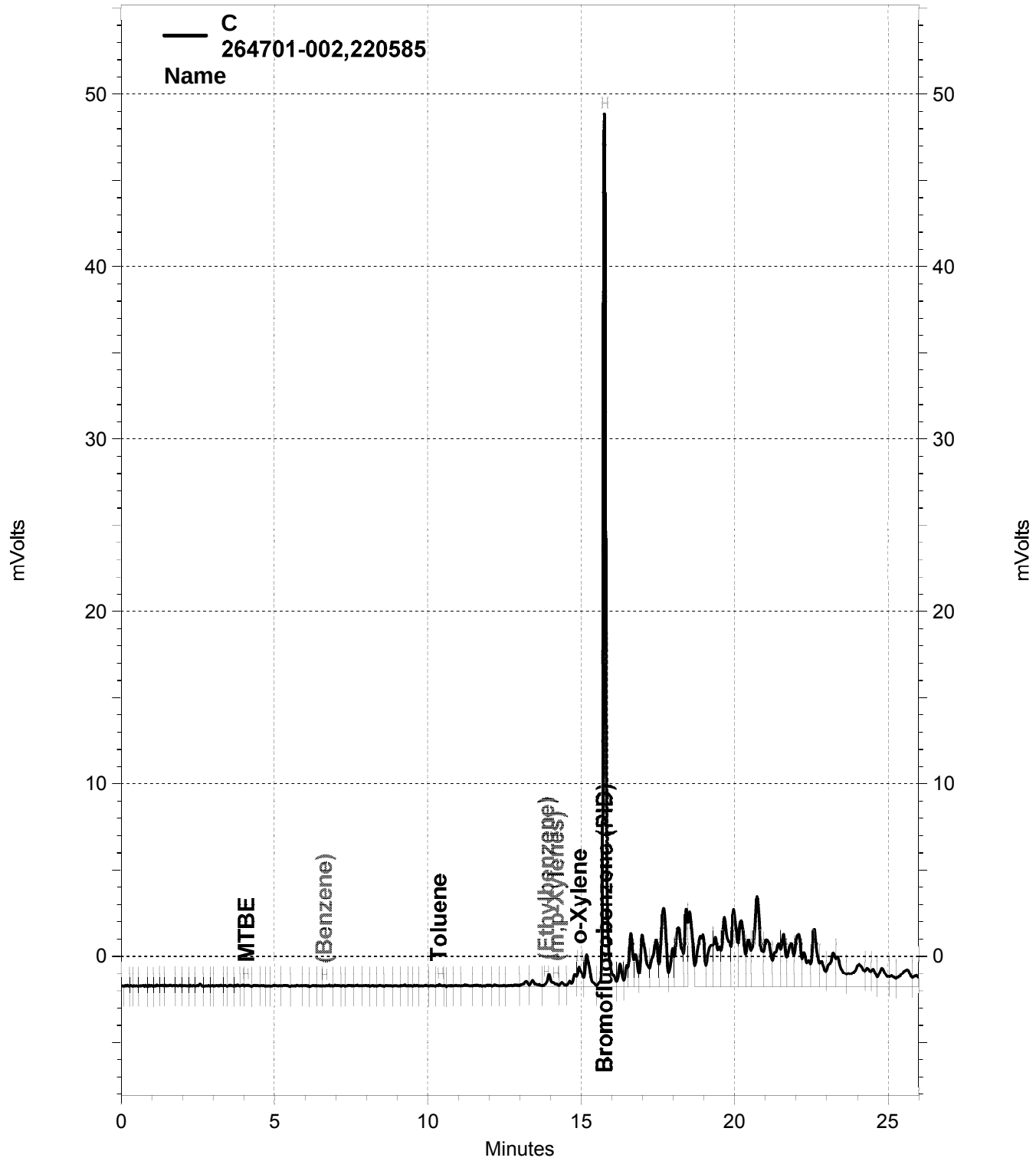

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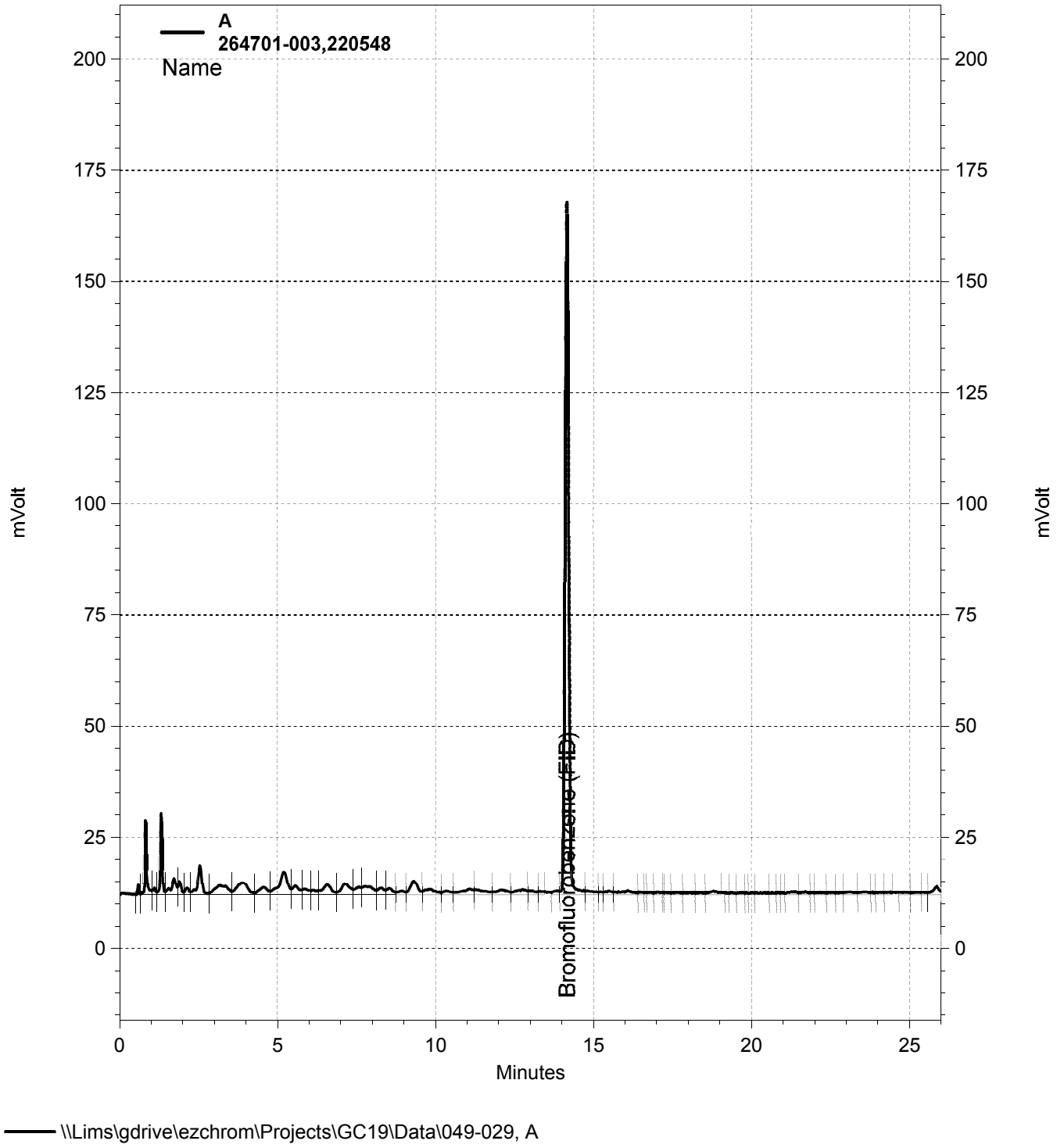
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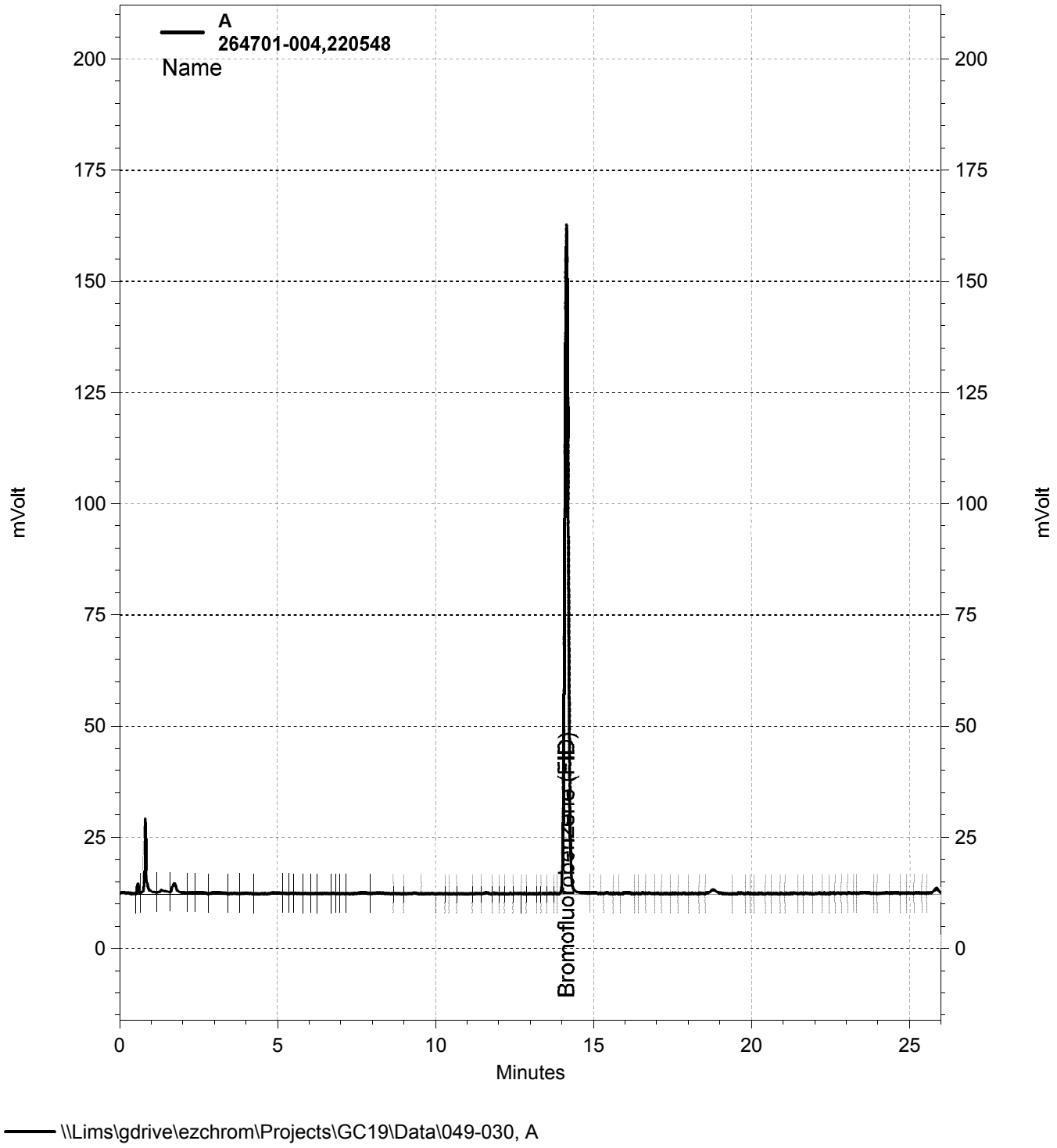
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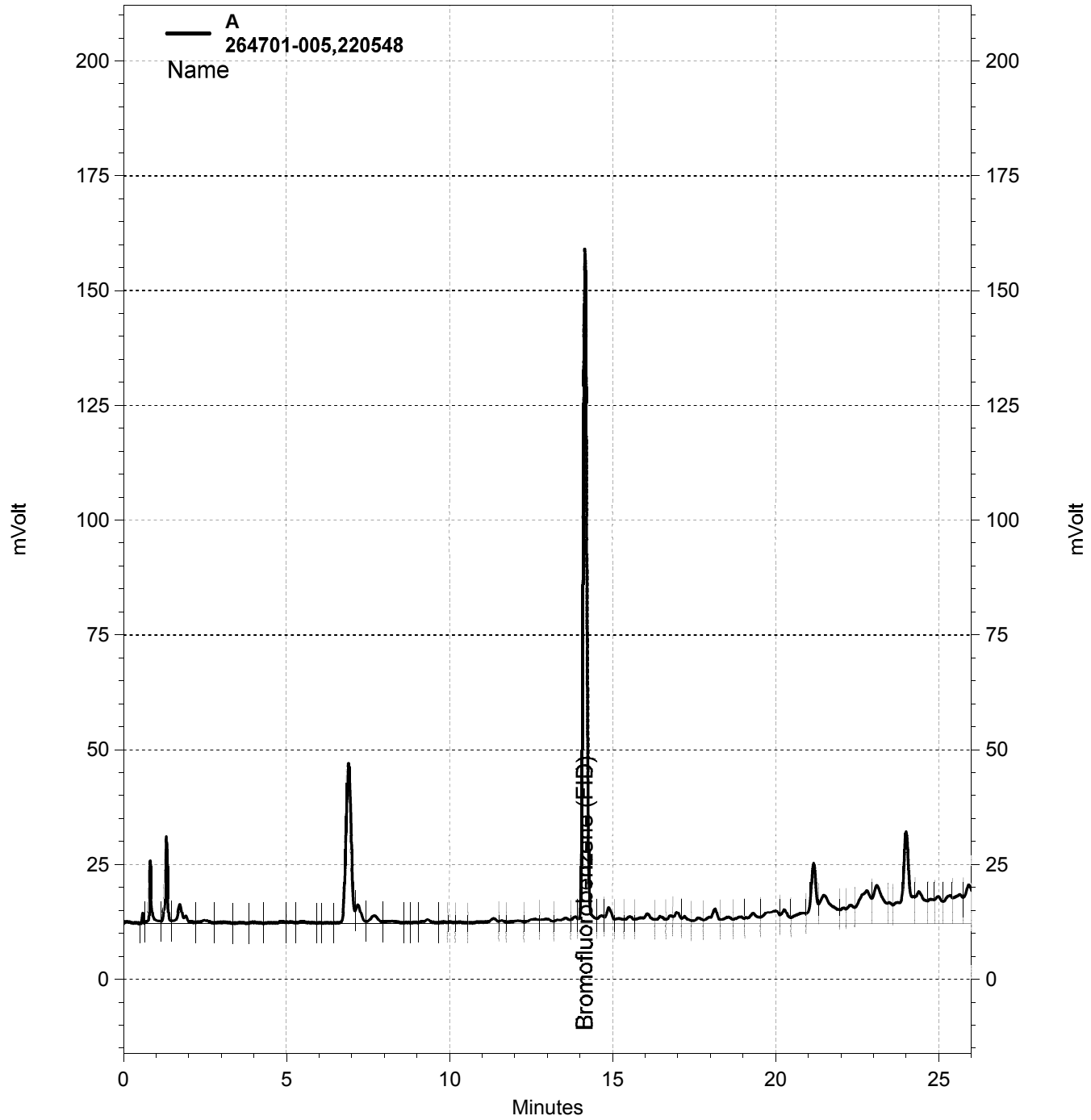

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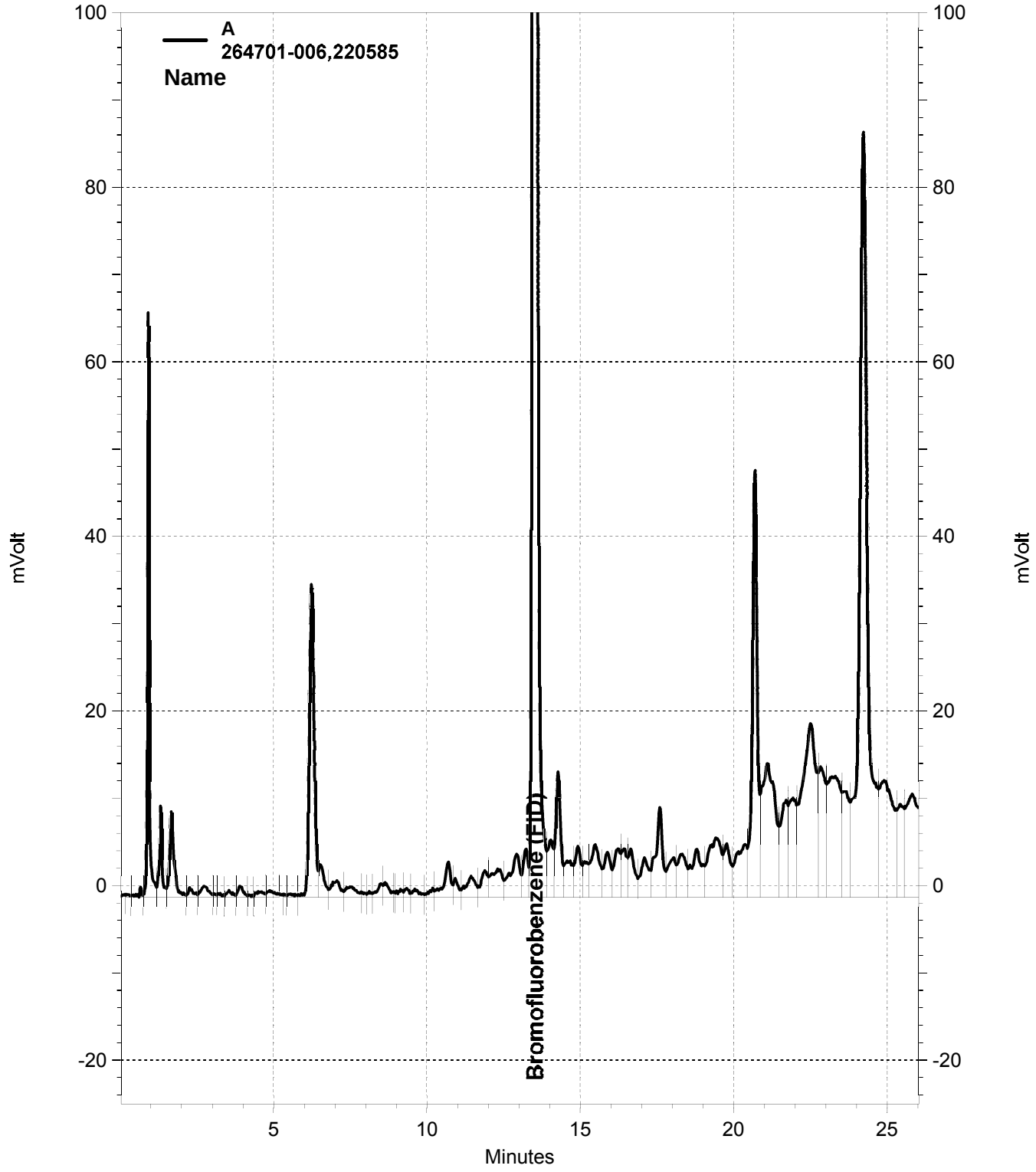

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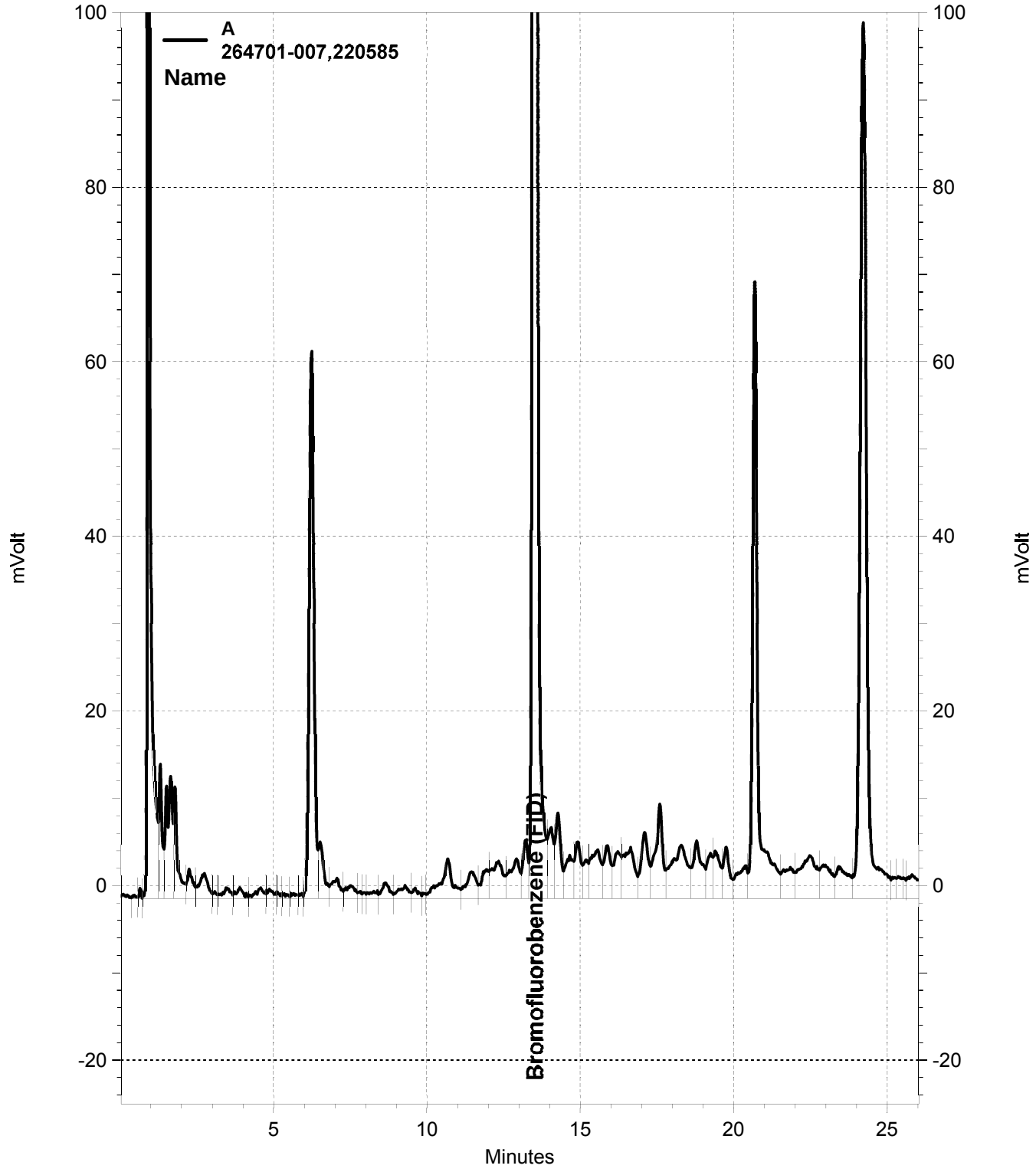

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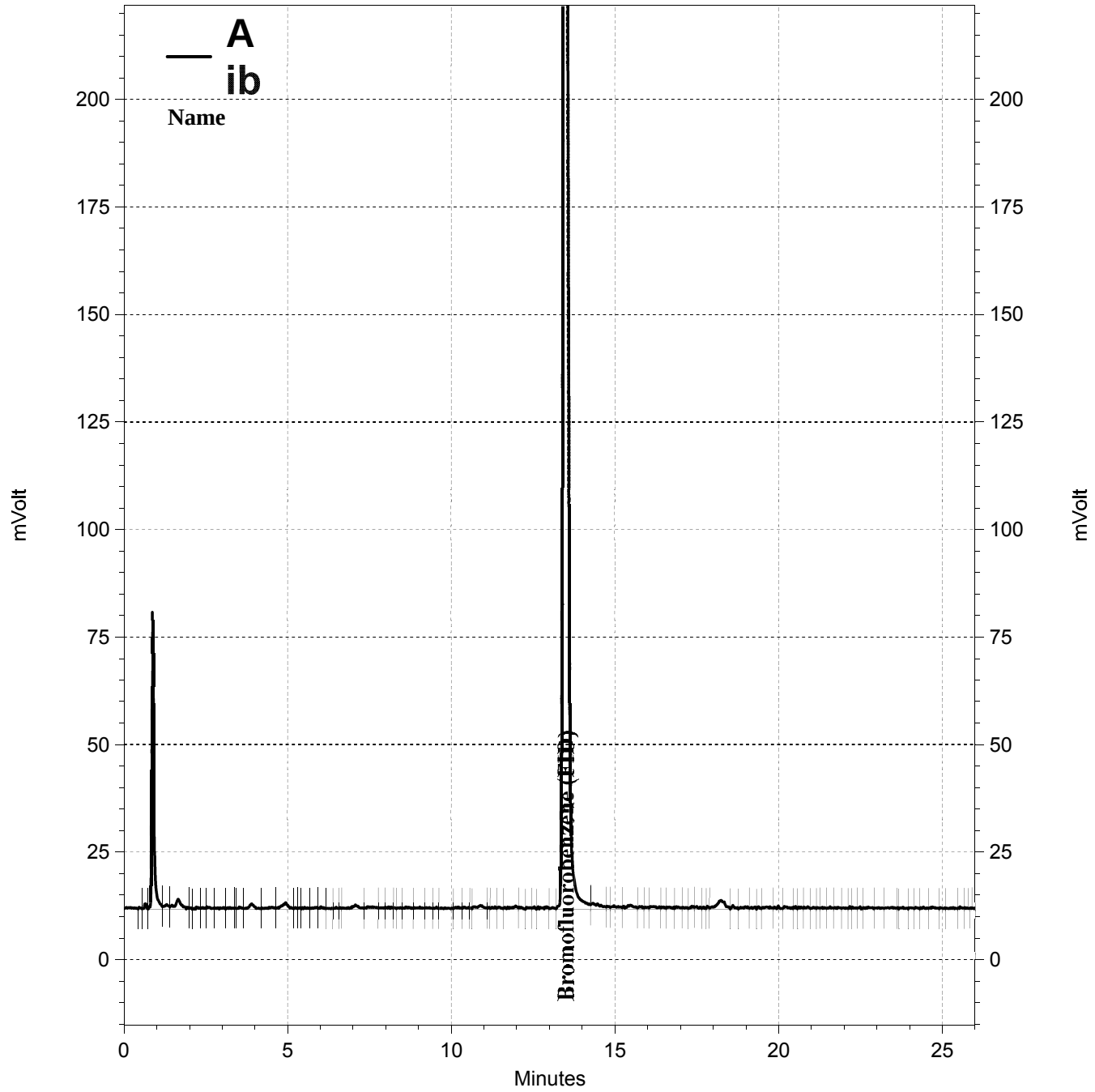

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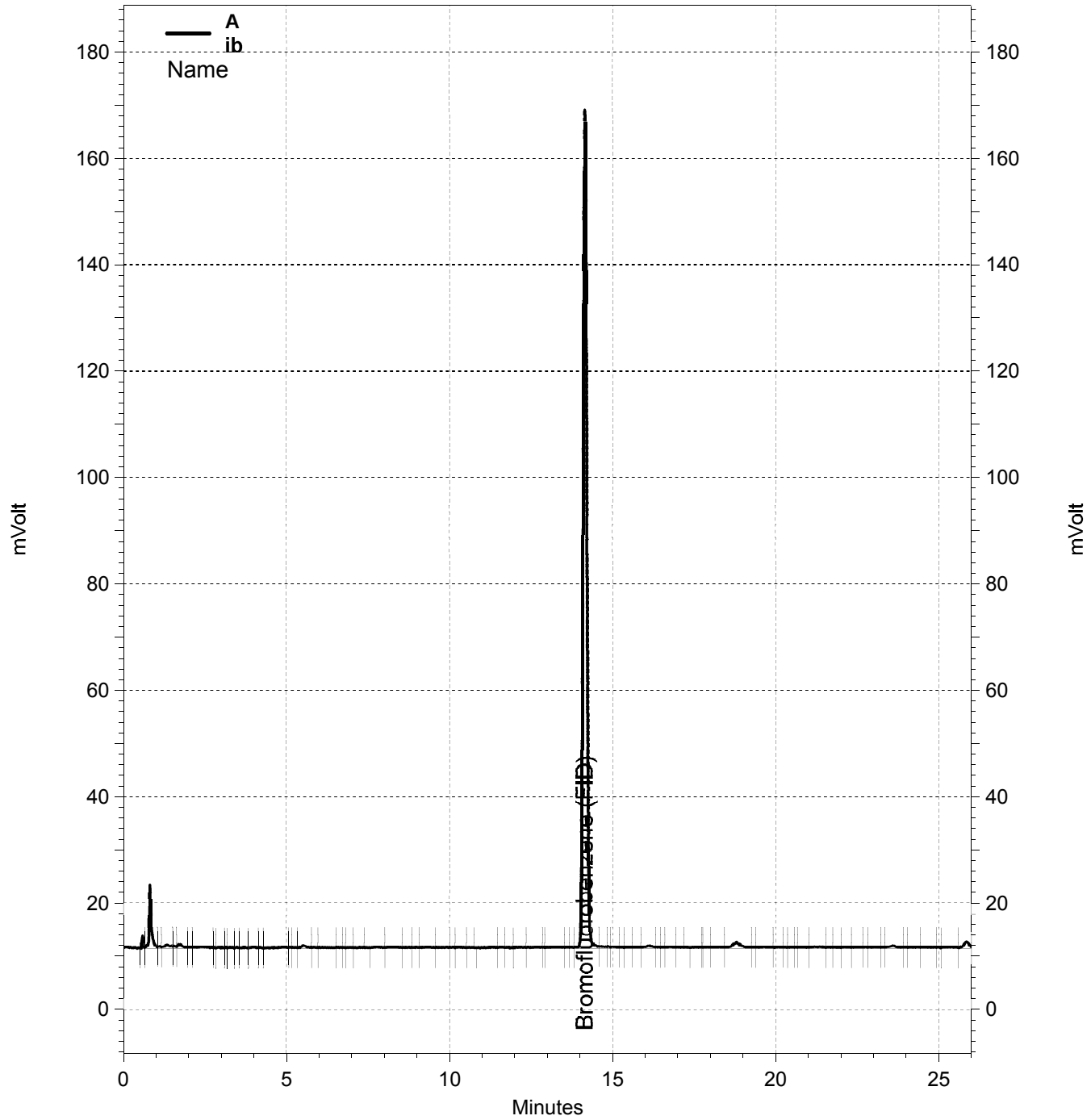

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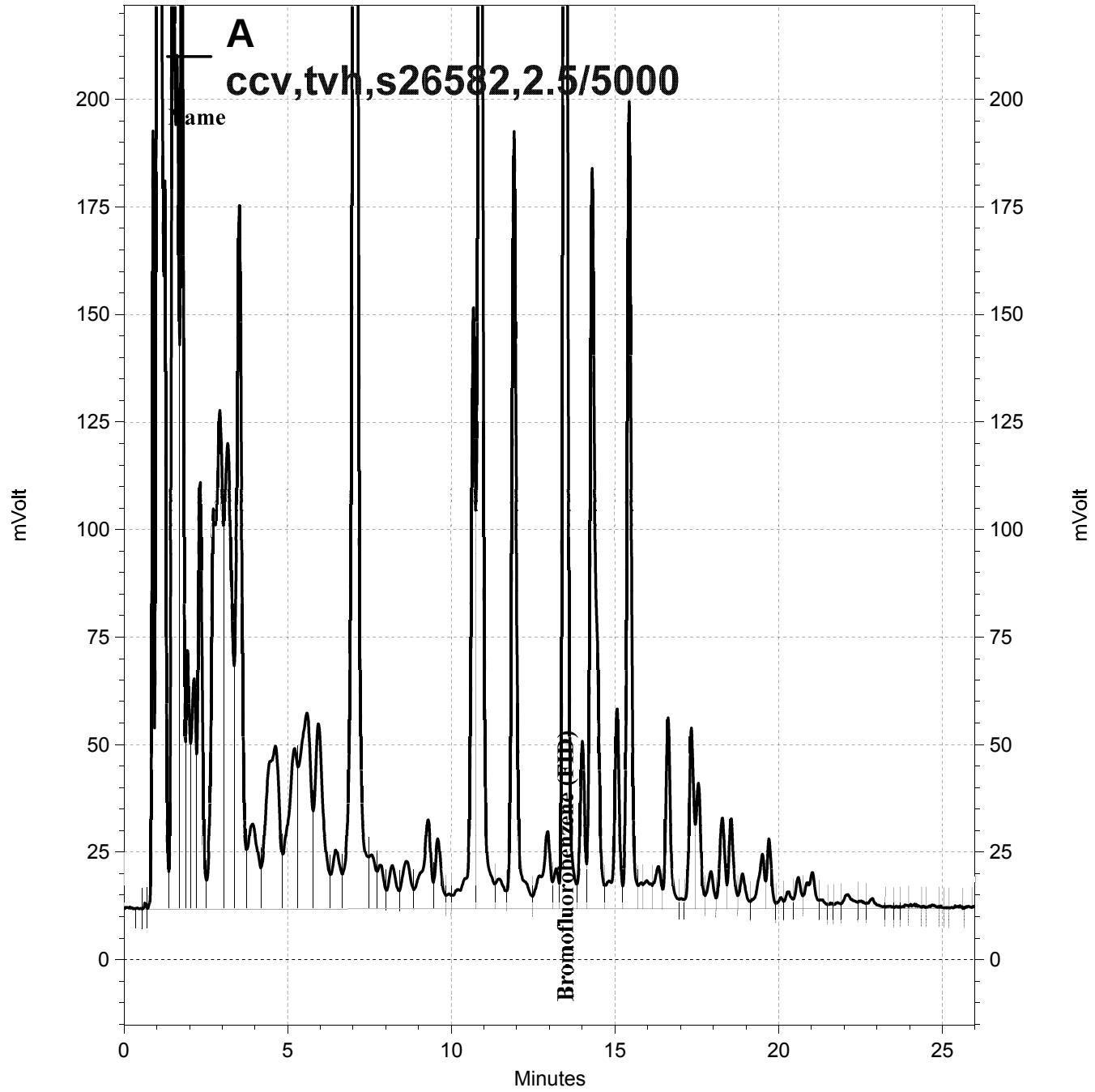

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Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	02/13/15
Units:	mg/Kg	Received:	02/13/15
Basis:	dry		

Field ID:	SB-13-3.0-4.0	Diln Fac:	20.00
Type:	SAMPLE	Batch#:	220620
Lab ID:	264701-001	Prepared:	02/19/15
Moisture:	22%	Analyzed:	02/23/15

Analyte	Result	RL	MDL
Diesel C10-C24	1,900 Y	26	7.8
Motor Oil C24-C36	3,400	130	39

Surrogate	%REC	Limits
o-Terphenyl	DO	59-140

Field ID:	SB-13-12.0-13.0	Diln Fac:	20.00
Type:	SAMPLE	Batch#:	220620
Lab ID:	264701-002	Prepared:	02/19/15
Moisture:	13%	Analyzed:	02/23/15

Analyte	Result	RL	MDL
Diesel C10-C24	760 Y	23	7.0
Motor Oil C24-C36	2,600	110	34

Surrogate	%REC	Limits
o-Terphenyl	DO	59-140

Field ID:	SB-12-2.5-3.5	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	220620
Lab ID:	264701-003	Prepared:	02/19/15
Moisture:	18%	Analyzed:	02/20/15

Analyte	Result	RL	MDL
Diesel C10-C24	23 Y	1.2	0.37
Motor Oil C24-C36	110	6.1	1.8

Surrogate	%REC	Limits
o-Terphenyl	122	59-140

J= Estimated value
Y= Sample exhibits chromatographic pattern which does not resemble standard
DO= Diluted Out
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	02/13/15
Units:	mg/Kg	Received:	02/13/15
Basis:	dry		

Field ID:	SB-12-11.0-12.0	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	220620
Lab ID:	264701-004	Prepared:	02/19/15
Moisture:	11%	Analyzed:	02/20/15

Analyte	Result	RL	MDL
Diesel C10-C24	15 Y	1.1	0.34
Motor Oil C24-C36	31	5.6	1.7

Surrogate	%REC	Limits
o-Terphenyl	137	59-140

Field ID:	SB-22-4.0-5.0	Diln Fac:	20.00
Type:	SAMPLE	Batch#:	220620
Lab ID:	264701-005	Prepared:	02/19/15
Moisture:	19%	Analyzed:	02/23/15

Analyte	Result	RL	MDL
Diesel C10-C24	4,500 Y	25	7.5
Motor Oil C24-C36	5,900	120	37

Surrogate	%REC	Limits
o-Terphenyl	DO	59-140

Field ID:	SB-22-11.0-12.0	Diln Fac:	10.00
Type:	SAMPLE	Batch#:	220620
Lab ID:	264701-006	Prepared:	02/19/15
Moisture:	17%	Analyzed:	02/23/15

Analyte	Result	RL	MDL
Diesel C10-C24	890 Y	12	3.7
Motor Oil C24-C36	1,300	60	18

Surrogate	%REC	Limits
o-Terphenyl	DO	59-140

J= Estimated value
Y= Sample exhibits chromatographic pattern which does not resemble standard
DO= Diluted Out
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	02/13/15
Units:	mg/Kg	Received:	02/13/15
Basis:	dry		

Field ID:	SB-20-6.0-7.0	Diln Fac:	5.000
Type:	SAMPLE	Batch#:	220620
Lab ID:	264701-007	Prepared:	02/19/15
Moisture:	16%	Analyzed:	02/23/15

Analyte	Result	RL	MDL
Diesel C10-C24	440 Y	6.0	1.8
Motor Oil C24-C36	860	30	9.0

Surrogate	%REC	Limits
o-Terphenyl	93	59-140

Field ID:	SB-20-10.5-11.5	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	220642
Lab ID:	264701-008	Prepared:	02/20/15
Moisture:	13%	Analyzed:	02/23/15

Analyte	Result	RL	MDL
Diesel C10-C24	0.36 J	1.1	0.35
Motor Oil C24-C36	ND	5.7	1.7

Surrogate	%REC	Limits
o-Terphenyl	125	59-140

Type:	BLANK	Batch#:	220620
Lab ID:	QC777959	Prepared:	02/19/15
Diln Fac:	1.000	Analyzed:	02/20/15

Analyte	Result	RL	MDL
Diesel C10-C24	ND	1.0	0.31
Motor Oil C24-C36	ND	5.0	1.5

Surrogate	%REC	Limits
o-Terphenyl	110	59-140

Type:	BLANK	Batch#:	220642
Lab ID:	QC778057	Prepared:	02/20/15
Diln Fac:	1.000	Analyzed:	02/23/15

Analyte	Result	RL	MDL
Diesel C10-C24	ND	1.0	0.31
Motor Oil C24-C36	ND	5.0	1.5

Surrogate	%REC	Limits
o-Terphenyl	112	59-140

J= Estimated value
Y= Sample exhibits chromatographic pattern which does not resemble standard
DO= Diluted Out
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC777960	Batch#:	220620
Matrix:	Soil	Prepared:	02/19/15
Units:	mg/Kg	Analyzed:	02/20/15

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	49.77	46.70	94	58-137

Surrogate	%REC	Limits
o-Terphenyl	95	59-140

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	220620
MSS Lab ID:	264733-001	Sampled:	02/17/15
Matrix:	Soil	Received:	02/18/15
Units:	mg/Kg	Prepared:	02/19/15
Basis:	as received	Analyzed:	02/20/15
Diln Fac:	1.000		

Type: MS Lab ID: QC777961

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	20.66	50.34	44.44	47	46-154

Surrogate	%REC	Limits
o-Terphenyl	89	59-140

Type: MSD Lab ID: QC777962

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	49.52	56.47	72	46-154	25	50

Surrogate	%REC	Limits
o-Terphenyl	89	59-140

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC778058	Batch#:	220642
Matrix:	Soil	Prepared:	02/20/15
Units:	mg/Kg	Analyzed:	02/23/15

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.39	57.32	114	58-137

Surrogate	%REC	Limits
o-Terphenyl	123	59-140

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8015B
Field ID:	SB-20-10.5-11.5	Batch#:	220642
MSS Lab ID:	264701-008	Sampled:	02/13/15
Matrix:	Soil	Received:	02/13/15
Units:	mg/Kg	Prepared:	02/20/15
Basis:	dry	Analyzed:	02/23/15
Diln Fac:	1.000		

Type: MS Moisture: 13%
Lab ID: QC778059

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	0.3591	57.81	54.19	93	46-154

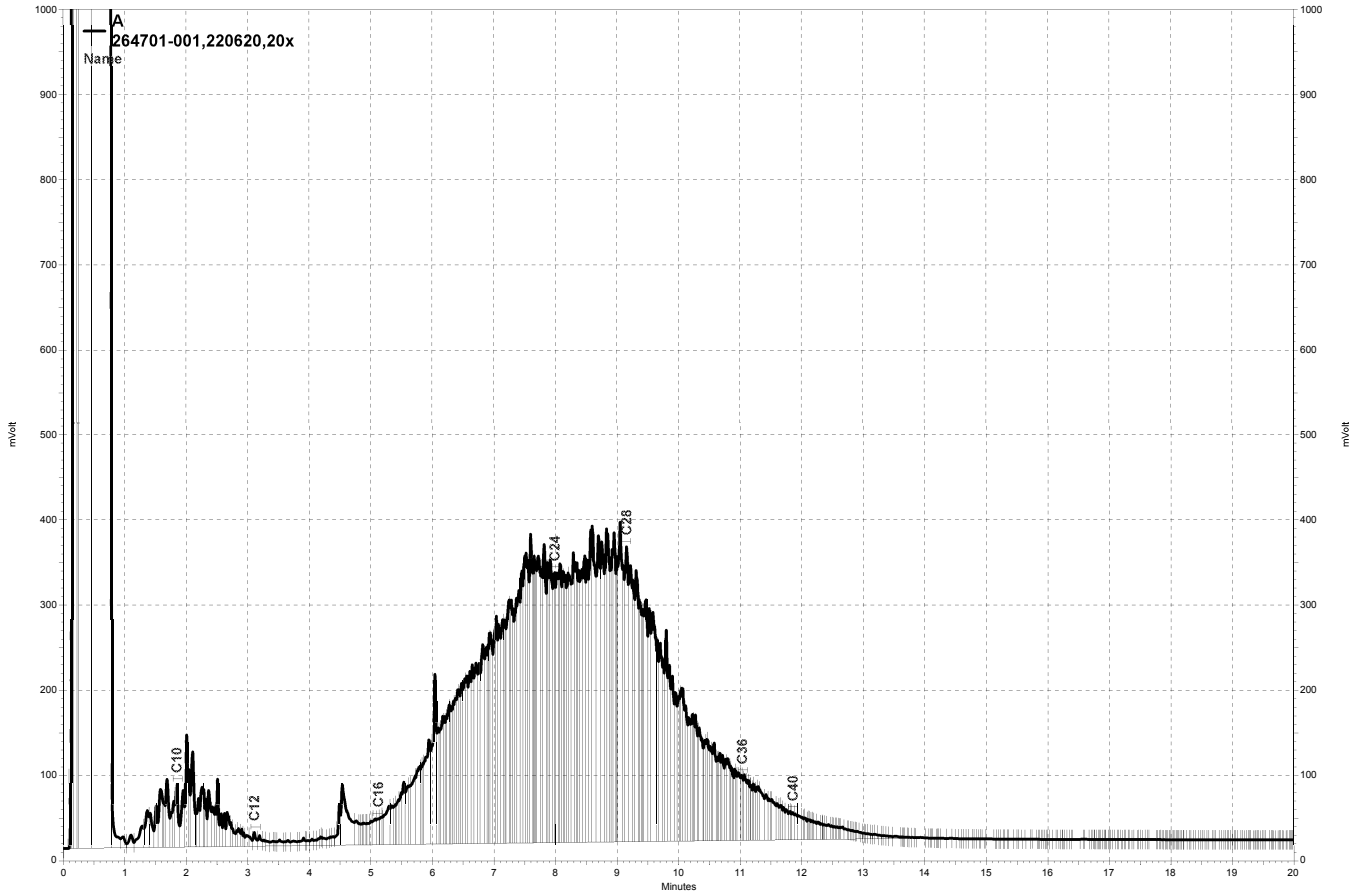
Surrogate	%REC	Limits
o-Terphenyl	114	59-140

Type: MSD Moisture: 13%
Lab ID: QC778060

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	57.44	56.81	98	46-154	5	50

Surrogate	%REC	Limits
o-Terphenyl	110	59-140

RPD= Relative Percent Difference



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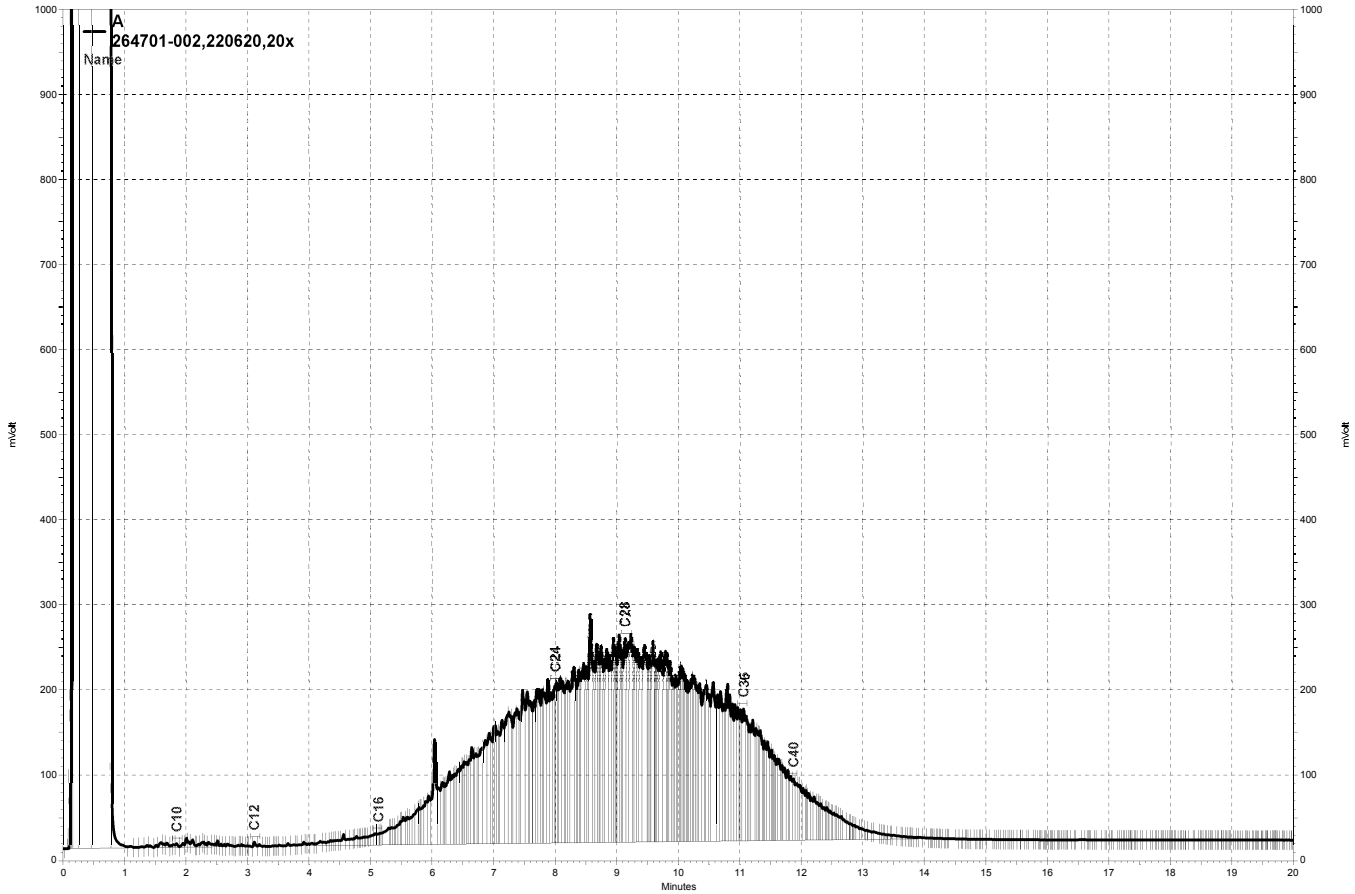

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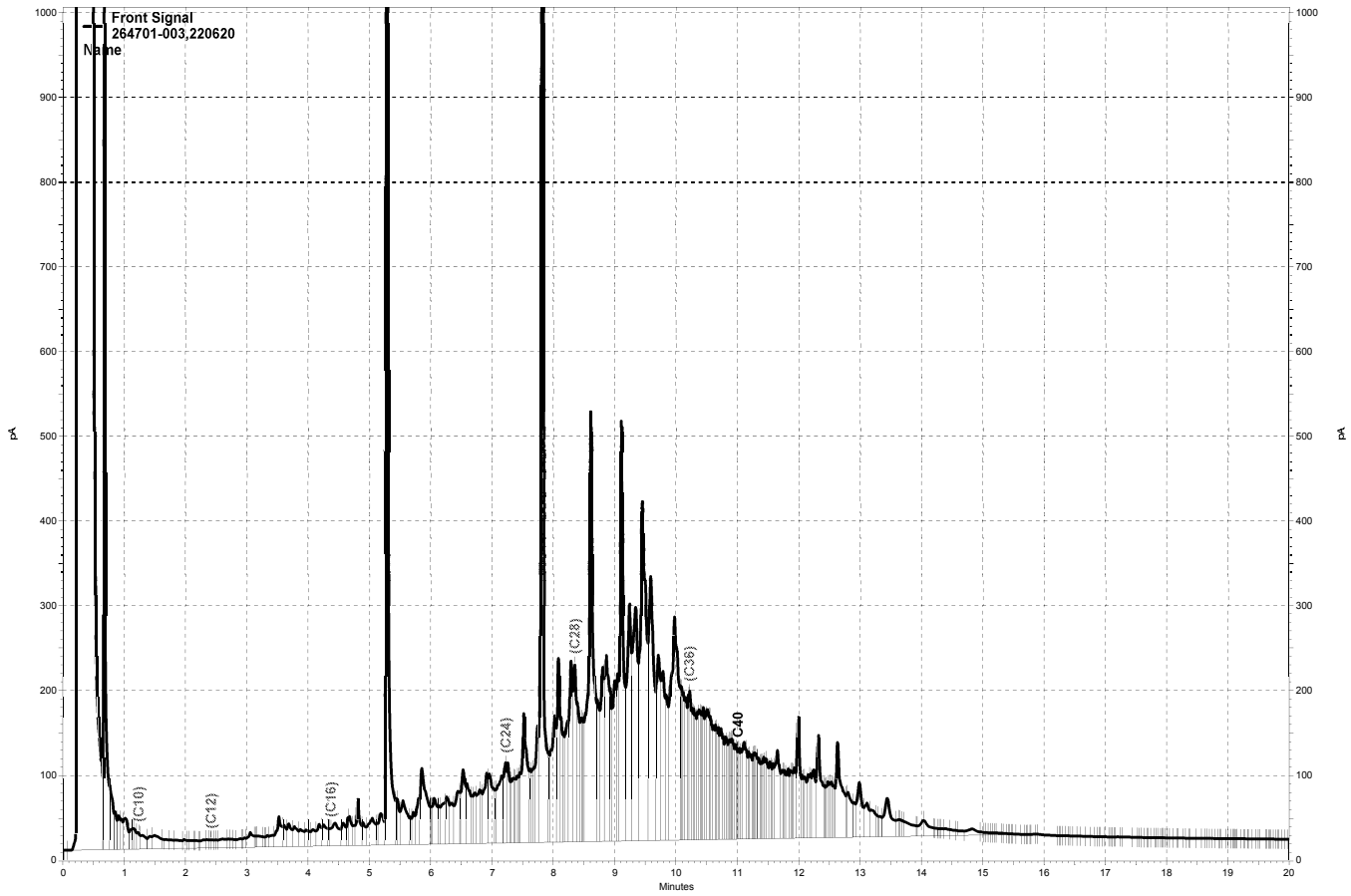

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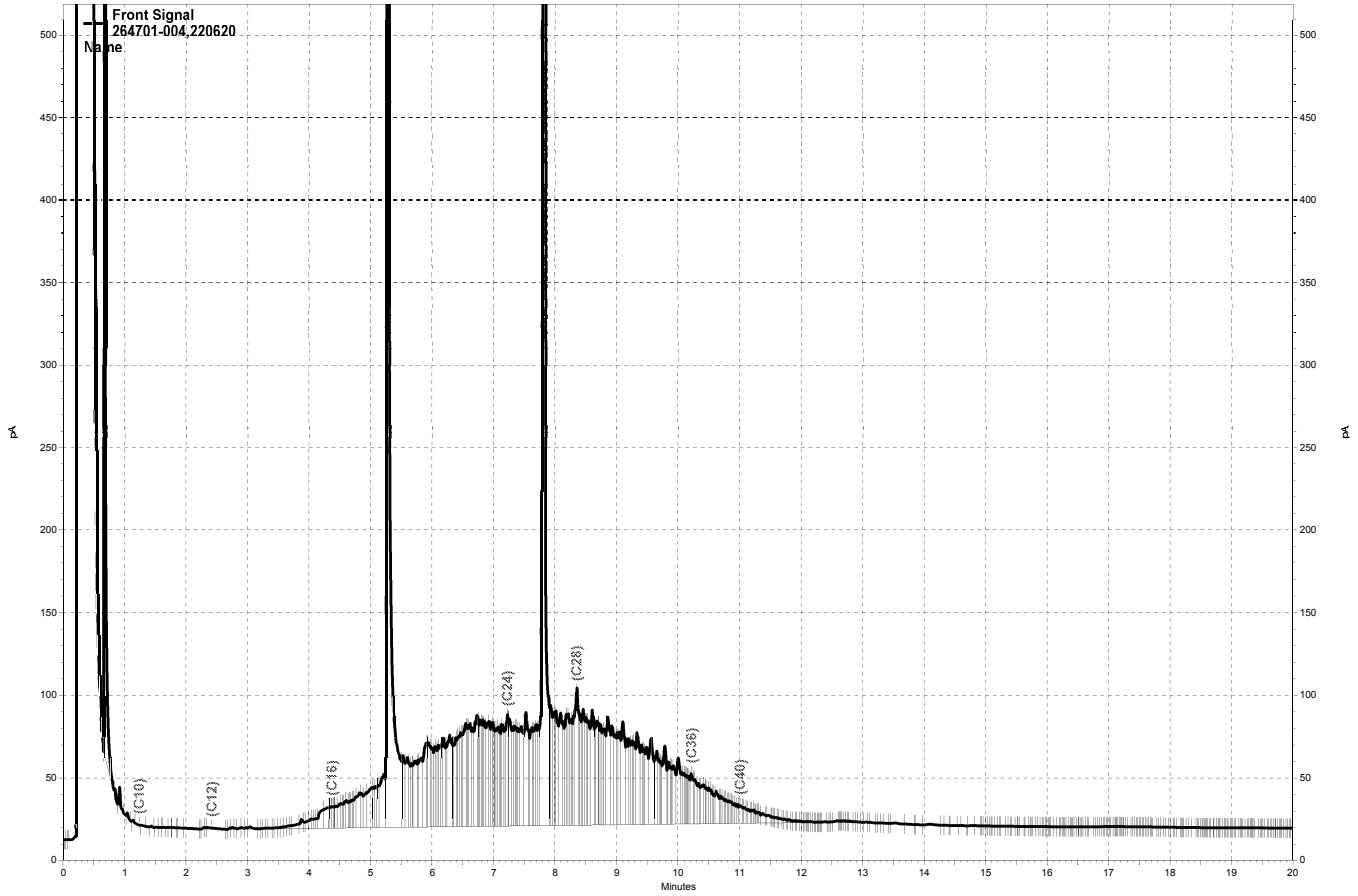

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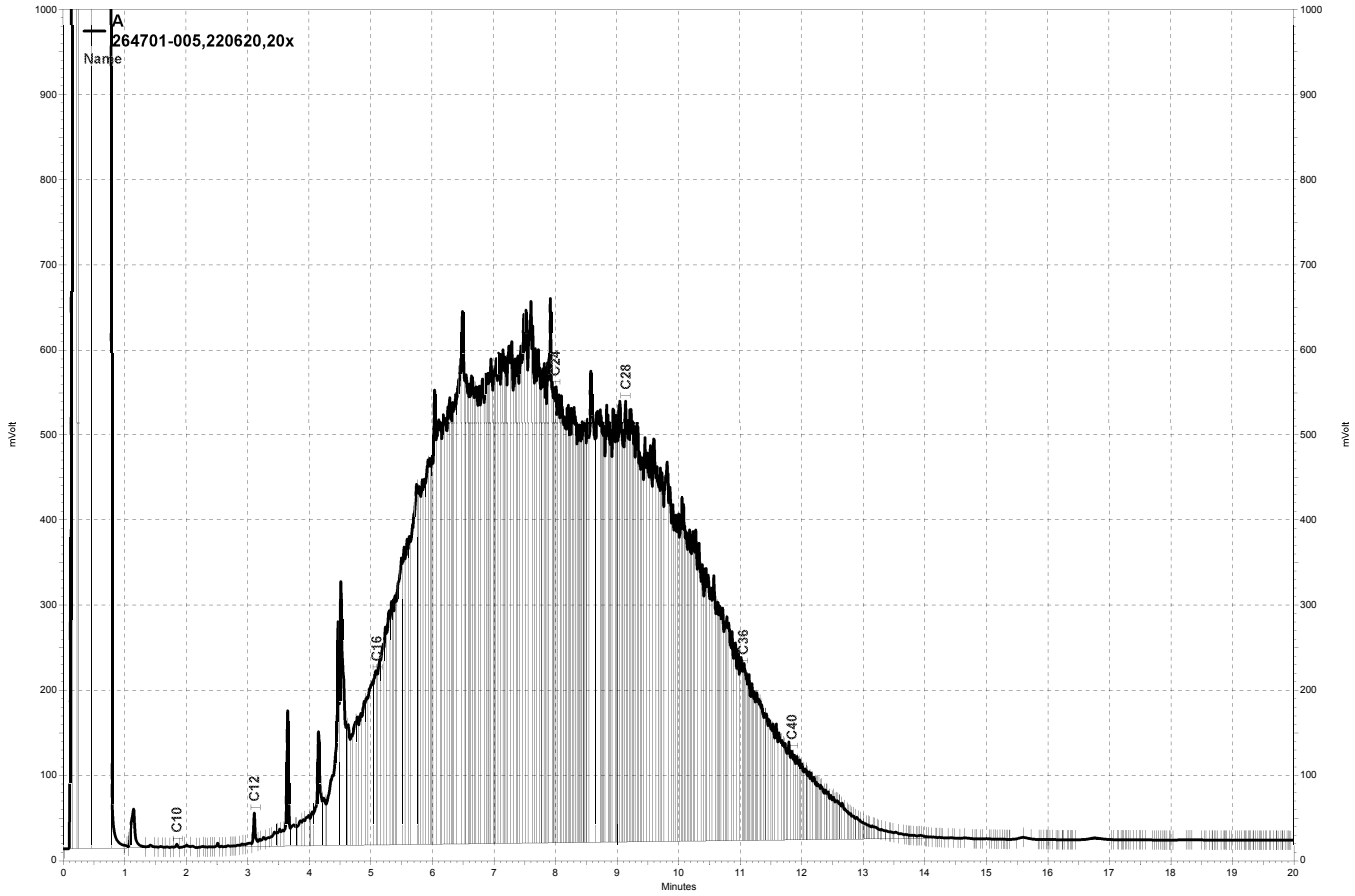

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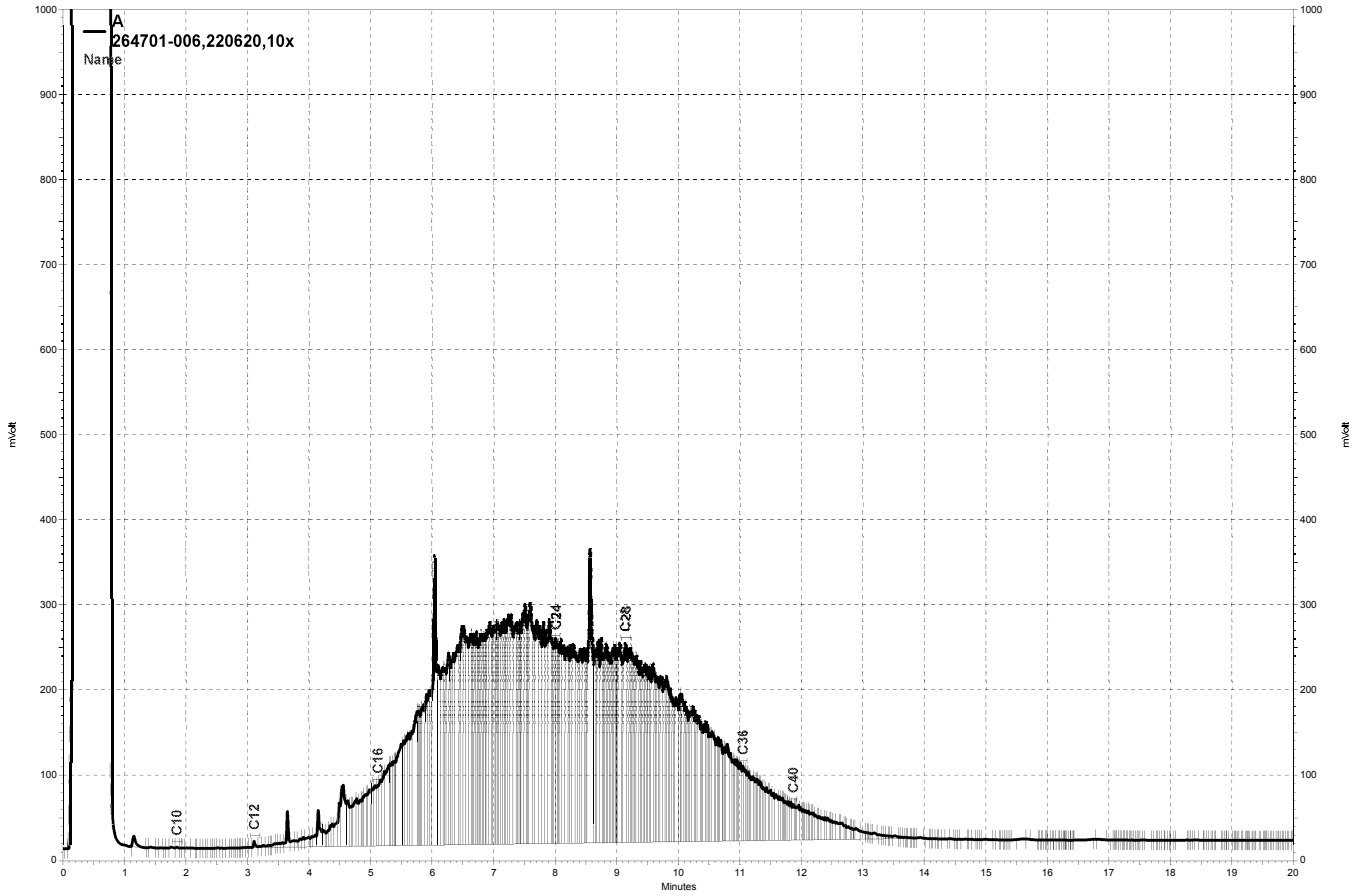

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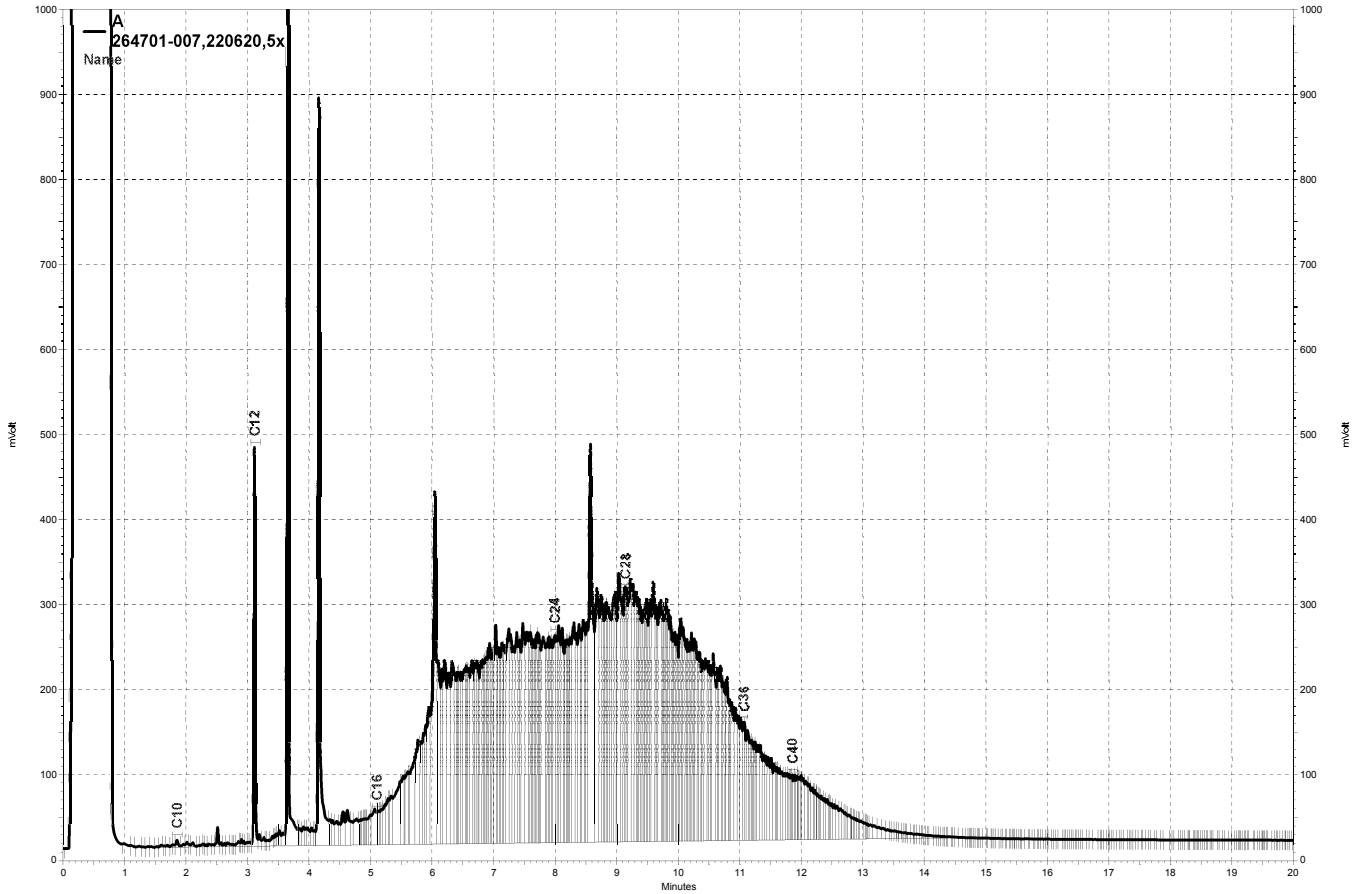

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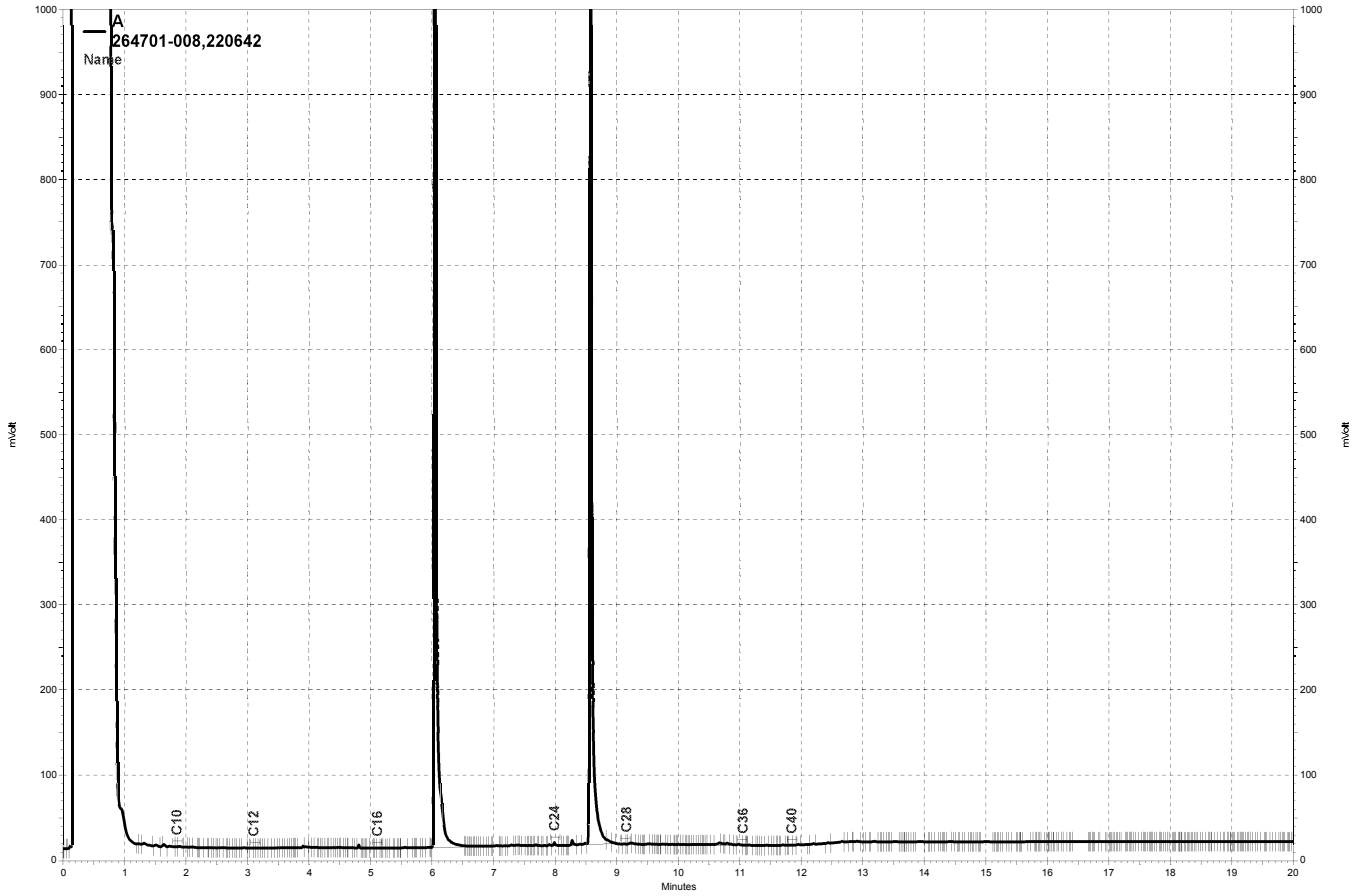

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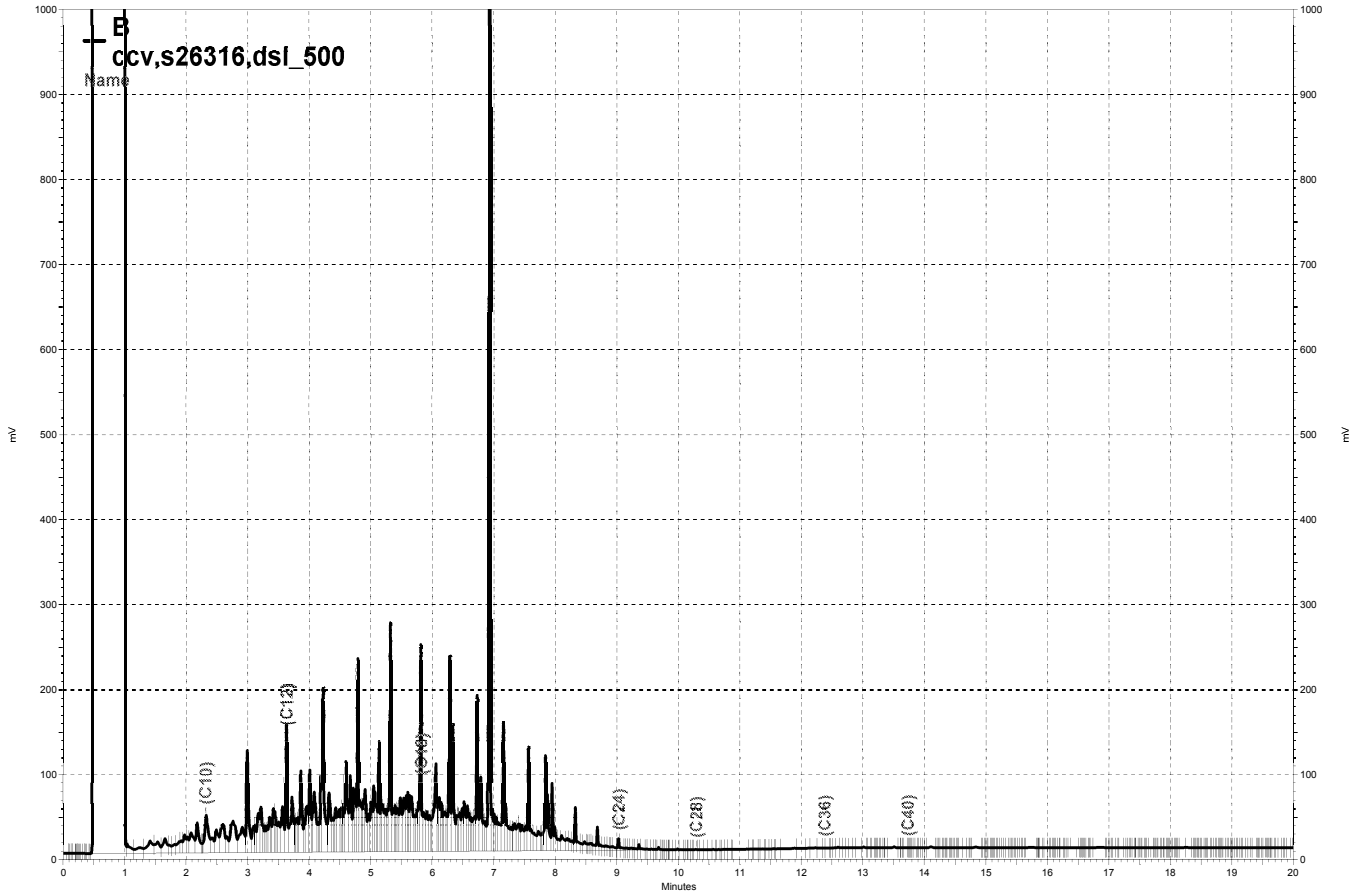

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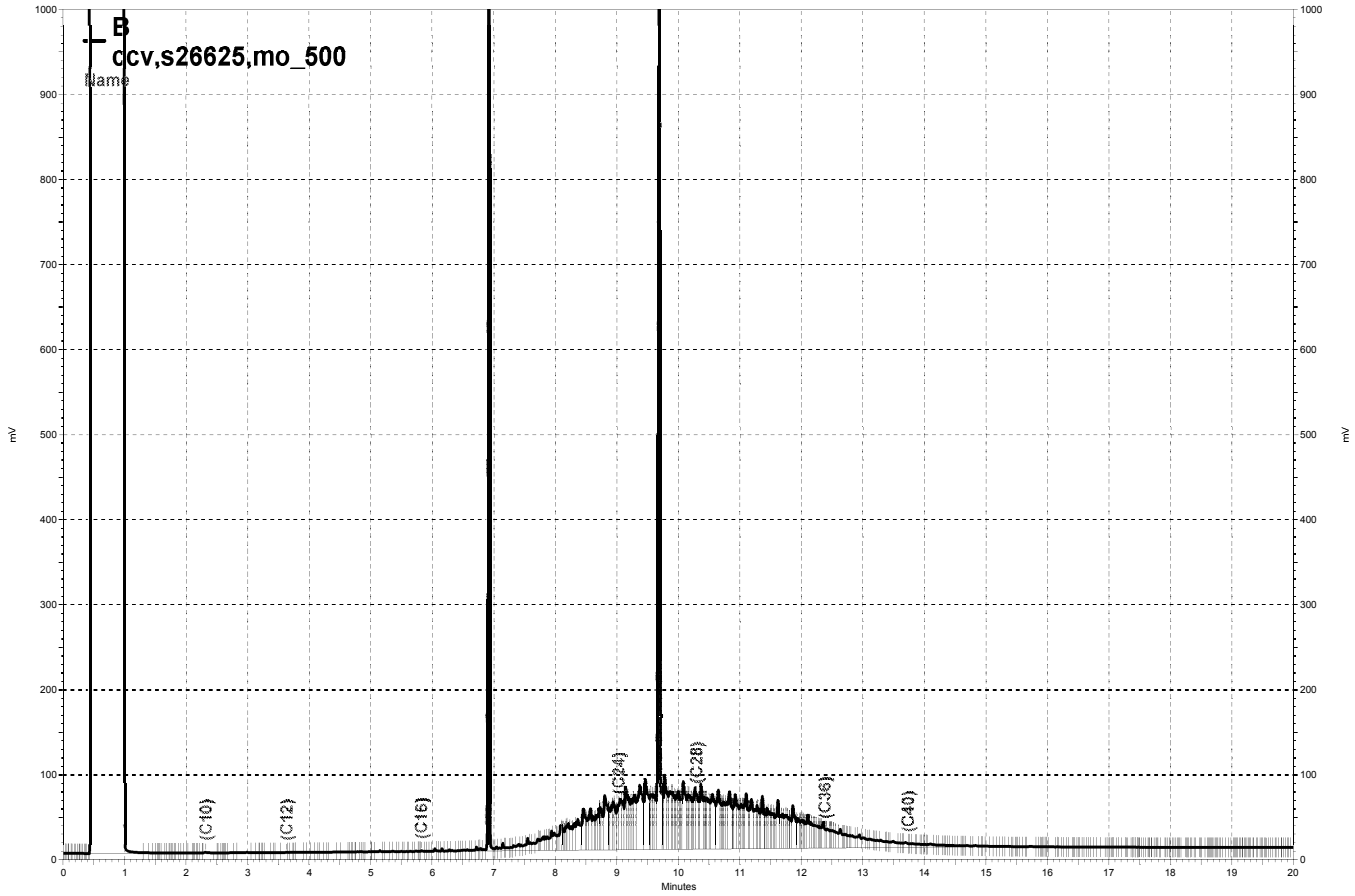

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Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8260B
Field ID:	TB-021315	Batch#:	220538
Lab ID:	264701-009	Sampled:	02/13/15
Matrix:	Water	Received:	02/13/15
Units:	ug/L	Analyzed:	02/18/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.2
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	0.3 J	1.0	0.1
Chloroethane	ND	1.0	0.1
Trichlorofluoromethane	ND	1.0	0.2
Acetone	ND	10	0.6
Freon 113	ND	2.0	0.2
1,1-Dichloroethene	ND	0.5	0.2
Methylene Chloride	ND	10	0.1
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.2
Vinyl Acetate	ND	10	0.5
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.4
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.2
Chloroform	0.2 J	0.5	0.1
Bromochloromethane	ND	0.5	0.1
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.1
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8260B
Field ID:	TB-021315	Batch#:	220538
Lab ID:	264701-009	Sampled:	02/13/15
Matrix:	Water	Received:	02/13/15
Units:	ug/L	Analyzed:	02/18/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.3
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.1
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-128
1,2-Dichloroethane-d4	100	75-139
Toluene-d8	99	80-120
Bromofluorobenzene	96	80-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

5.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	220538
Units:	ug/L	Analyzed:	02/18/15
Diln Fac:	1.000		

Type: BS Lab ID: QC777647

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	12.78	102	66-135
Benzene	12.50	13.14	105	80-123
Trichloroethene	12.50	13.09	105	80-123
Toluene	12.50	13.80	110	80-121
Chlorobenzene	12.50	13.22	106	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-128
1,2-Dichloroethane-d4	98	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	93	80-120

Type: BSD Lab ID: QC777648

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	11.66	93	66-135	9	24
Benzene	12.50	11.99	96	80-123	9	20
Trichloroethene	12.50	12.04	96	80-123	8	20
Toluene	12.50	12.55	100	80-121	9	20
Chlorobenzene	12.50	12.13	97	80-123	9	20

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-128
1,2-Dichloroethane-d4	97	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	94	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777649	Batch#:	220538
Matrix:	Water	Analyzed:	02/18/15
Units:	ug/L		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.2
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	0.4 J	1.0	0.1
Chloroethane	ND	1.0	0.1
Trichlorofluoromethane	ND	1.0	0.2
Acetone	ND	10	0.6
Freon 113	ND	2.0	0.2
1,1-Dichloroethene	ND	0.5	0.2
Methylene Chloride	ND	10	0.1
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.2
Vinyl Acetate	ND	10	0.5
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.4
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.2
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.1
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.1
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777649	Batch#:	220538
Matrix:	Water	Analyzed:	02/18/15
Units:	ug/L		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.3
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.1
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-128
1,2-Dichloroethane-d4	99	75-139
Toluene-d8	99	80-120
Bromofluorobenzene	94	80-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-13-3.0-4.0	Diln Fac:	105.5
Lab ID:	264701-001	Batch#:	220747
Matrix:	Soil	Sampled:	02/13/15
Units:	ug/Kg	Received:	02/13/15
Basis:	dry	Analyzed:	02/24/15

Moisture: 22%

Analyte	Result	RL	MDL
Freon 12	ND	1,400	82
Chloromethane	ND	1,400	48
Vinyl Chloride	ND	1,400	110
Bromomethane	ND	1,400	130
Chloroethane	ND	1,400	140
Trichlorofluoromethane	ND	680	63
Acetone	4,200	2,700	8.9
Freon 113	ND	680	110
1,1-Dichloroethene	ND	680	68
Methylene Chloride	ND	2,700	67
Carbon Disulfide	ND	680	54
MTBE	ND	680	84
trans-1,2-Dichloroethene	ND	680	63
Vinyl Acetate	ND	6,800	100
1,1-Dichloroethane	ND	680	63
2-Butanone	ND	1,400	190
cis-1,2-Dichloroethene	ND	680	66
2,2-Dichloropropane	ND	680	110
Chloroform	ND	680	61
Bromochloromethane	ND	680	100
1,1,1-Trichloroethane	ND	680	60
1,1-Dichloropropene	ND	680	55
Carbon Tetrachloride	ND	680	67
1,2-Dichloroethane	ND	680	61
Benzene	ND	680	70
Trichloroethene	ND	680	68
1,2-Dichloropropane	ND	680	97
Bromodichloromethane	ND	680	61
Dibromomethane	ND	680	63
4-Methyl-2-Pentanone	ND	1,400	130
cis-1,3-Dichloropropene	ND	680	65
Toluene	ND	680	67
trans-1,3-Dichloropropene	ND	680	62
1,1,2-Trichloroethane	ND	680	55
2-Hexanone	ND	1,400	98
1,3-Dichloropropane	ND	680	89
Tetrachloroethene	ND	680	57
Dibromochloromethane	ND	680	61
1,2-Dibromoethane	ND	680	81
Chlorobenzene	ND	680	70
1,1,1,2-Tetrachloroethane	ND	680	78
Ethylbenzene	ND	680	44
m,p-Xylenes	ND	680	130
o-Xylene	73 J	680	62
Styrene	ND	680	63
Bromoform	ND	680	67
Isopropylbenzene	92 J	680	71
1,1,2,2-Tetrachloroethane	ND	680	74
1,2,3-Trichloropropane	ND	680	110
Propylbenzene	270 J	680	61

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-13-3.0-4.0	Diln Fac:	105.5
Lab ID:	264701-001	Batch#:	220747
Matrix:	Soil	Sampled:	02/13/15
Units:	ug/Kg	Received:	02/13/15
Basis:	dry	Analyzed:	02/24/15

Analyte	Result	RL	MDL
Bromobenzene	ND	680	79
1,3,5-Trimethylbenzene	470 J	680	81
2-Chlorotoluene	ND	680	97
4-Chlorotoluene	ND	680	66
tert-Butylbenzene	ND	680	65
1,2,4-Trimethylbenzene	1,400	680	49
sec-Butylbenzene	210 J	680	76
para-Isopropyl Toluene	170 J	680	70
1,3-Dichlorobenzene	ND	680	64
1,4-Dichlorobenzene	ND	680	68
n-Butylbenzene	300 J	680	80
1,2-Dichlorobenzene	ND	680	50
1,2-Dibromo-3-Chloropropane	ND	680	140
1,2,4-Trichlorobenzene	ND	680	96
Hexachlorobutadiene	ND	680	120
Naphthalene	120 J	680	60
1,2,3-Trichlorobenzene	ND	680	100

Surrogate	%REC	Limits
Dibromofluoromethane	102	78-134
1,2-Dichloroethane-d4	120	80-138
Toluene-d8	90	80-120
Bromofluorobenzene	108	78-123

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-13-12.0-13.0	Basis:	dry
Lab ID:	264701-002	Diln Fac:	44.02
Matrix:	Soil	Sampled:	02/13/15
Units:	ug/Kg	Received:	02/13/15

Moisture: 13%

Analyte	Result	RL	MDL	Batch#	Analyzed
Freon 12	ND	510	31	220597	02/19/15
Chloromethane	ND	510	18	220597	02/19/15
Vinyl Chloride	ND	510	42	220597	02/19/15
Bromomethane	ND	510	47	220597	02/19/15
Chloroethane	ND	510	54	220597	02/19/15
Trichlorofluoromethane	ND	250	23	220597	02/19/15
Acetone	ND	1,000	170	220687	02/22/15
Freon 113	ND	250	41	220597	02/19/15
1,1-Dichloroethene	ND	250	25	220597	02/19/15
Methylene Chloride	ND	1,000	25	220597	02/19/15
Carbon Disulfide	ND	250	20	220597	02/19/15
MTBE	ND	250	31	220597	02/19/15
trans-1,2-Dichloroethene	ND	250	24	220597	02/19/15
Vinyl Acetate	ND	2,500	37	220597	02/19/15
1,1-Dichloroethane	ND	250	23	220597	02/19/15
2-Butanone	ND	510	72	220597	02/19/15
cis-1,2-Dichloroethene	ND	250	25	220597	02/19/15
2,2-Dichloropropane	ND	250	41	220597	02/19/15
Chloroform	ND	250	23	220597	02/19/15
Bromochloromethane	ND	250	38	220597	02/19/15
1,1,1-Trichloroethane	ND	250	22	220597	02/19/15
1,1-Dichloropropene	ND	250	21	220597	02/19/15
Carbon Tetrachloride	ND	250	25	220597	02/19/15
1,2-Dichloroethane	ND	250	23	220597	02/19/15
Benzene	ND	250	26	220597	02/19/15
Trichloroethene	ND	250	25	220597	02/19/15
1,2-Dichloropropane	ND	250	36	220597	02/19/15
Bromodichloromethane	ND	250	23	220597	02/19/15
Dibromomethane	ND	250	24	220597	02/19/15
4-Methyl-2-Pentanone	ND	510	48	220597	02/19/15
cis-1,3-Dichloropropene	ND	250	24	220597	02/19/15
Toluene	ND	250	25	220597	02/19/15
trans-1,3-Dichloropropene	ND	250	23	220597	02/19/15
1,1,2-Trichloroethane	ND	250	21	220597	02/19/15
2-Hexanone	ND	510	37	220597	02/19/15
1,3-Dichloropropane	ND	250	33	220597	02/19/15
Tetrachloroethene	ND	250	21	220597	02/19/15
Dibromochloromethane	ND	250	23	220597	02/19/15
1,2-Dibromoethane	ND	250	30	220597	02/19/15
Chlorobenzene	ND	250	26	220597	02/19/15
1,1,1,2-Tetrachloroethane	ND	250	29	220597	02/19/15
Ethylbenzene	ND	250	16	220597	02/19/15
m,p-Xylenes	ND	250	49	220597	02/19/15
o-Xylene	43 J	250	23	220597	02/19/15
Styrene	ND	250	23	220597	02/19/15
Bromoform	ND	250	25	220597	02/19/15
Isopropylbenzene	35 J	250	26	220597	02/19/15
1,1,2,2-Tetrachloroethane	ND	250	28	220597	02/19/15
1,2,3-Trichloropropane	ND	250	42	220597	02/19/15
Propylbenzene	42 J	250	23	220597	02/19/15
Bromobenzene	ND	250	30	220597	02/19/15

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-13-12.0-13.0	Basis:	dry
Lab ID:	264701-002	Diln Fac:	44.02
Matrix:	Soil	Sampled:	02/13/15
Units:	ug/Kg	Received:	02/13/15

Analyte	Result	RL	MDL	Batch#	Analyzed
1,3,5-Trimethylbenzene	120 J	250	30	220597	02/19/15
2-Chlorotoluene	ND	250	36	220597	02/19/15
4-Chlorotoluene	ND	250	25	220597	02/19/15
tert-Butylbenzene	ND	250	24	220597	02/19/15
1,2,4-Trimethylbenzene	ND	250	18	220597	02/19/15
sec-Butylbenzene	55 J	250	28	220597	02/19/15
para-Isopropyl Toluene	74 J	250	26	220597	02/19/15
1,3-Dichlorobenzene	ND	250	24	220597	02/19/15
1,4-Dichlorobenzene	ND	250	25	220597	02/19/15
n-Butylbenzene	64 J	250	30	220597	02/19/15
1,2-Dichlorobenzene	ND	250	19	220597	02/19/15
1,2-Dibromo-3-Chloropropane	ND	250	52	220597	02/19/15
1,2,4-Trichlorobenzene	ND	250	36	220597	02/19/15
Hexachlorobutadiene	ND	250	44	220597	02/19/15
Naphthalene	26 J	250	22	220597	02/19/15
1,2,3-Trichlorobenzene	ND	250	38	220597	02/19/15

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	101	78-134	220597	02/19/15
1,2-Dichloroethane-d4	110	80-138	220597	02/19/15
Toluene-d8	90	80-120	220597	02/19/15
Bromofluorobenzene	123	78-123	220597	02/19/15

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

56.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-12-2.5-3.5	Basis:	dry
Lab ID:	264701-003	Diln Fac:	38.76
Matrix:	Soil	Sampled:	02/13/15
Units:	ug/Kg	Received:	02/13/15

Moisture: 18%

Analyte	Result	RL	MDL	Batch#	Analyzed
Freon 12	ND	470	29	220597	02/19/15
Chloromethane	ND	470	17	220597	02/19/15
Vinyl Chloride	ND	470	39	220597	02/19/15
Bromomethane	ND	470	44	220597	02/19/15
Chloroethane	ND	470	50	220597	02/19/15
Trichlorofluoromethane	ND	240	22	220597	02/19/15
Acetone	ND	950	160	220687	02/22/15
Freon 113	ND	240	38	220597	02/19/15
1,1-Dichloroethene	ND	240	24	220597	02/19/15
Methylene Chloride	ND	950	23	220597	02/19/15
Carbon Disulfide	ND	240	19	220597	02/19/15
MTBE	ND	240	29	220597	02/19/15
trans-1,2-Dichloroethene	ND	240	22	220597	02/19/15
Vinyl Acetate	ND	2,400	35	220597	02/19/15
1,1-Dichloroethane	ND	240	22	220597	02/19/15
2-Butanone	ND	470	67	220597	02/19/15
cis-1,2-Dichloroethene	ND	240	23	220597	02/19/15
2,2-Dichloropropane	ND	240	38	220597	02/19/15
Chloroform	ND	240	21	220597	02/19/15
Bromochloromethane	ND	240	36	220597	02/19/15
1,1,1-Trichloroethane	ND	240	21	220597	02/19/15
1,1-Dichloropropene	ND	240	19	220597	02/19/15
Carbon Tetrachloride	ND	240	23	220597	02/19/15
1,2-Dichloroethane	ND	240	21	220597	02/19/15
Benzene	ND	240	25	220597	02/19/15
Trichloroethene	ND	240	24	220597	02/19/15
1,2-Dichloropropane	ND	240	34	220597	02/19/15
Bromodichloromethane	ND	240	21	220597	02/19/15
Dibromomethane	ND	240	22	220597	02/19/15
4-Methyl-2-Pentanone	ND	470	44	220597	02/19/15
cis-1,3-Dichloropropene	ND	240	23	220597	02/19/15
Toluene	ND	240	23	220597	02/19/15
trans-1,3-Dichloropropene	ND	240	22	220597	02/19/15
1,1,2-Trichloroethane	ND	240	19	220597	02/19/15
2-Hexanone	ND	470	34	220597	02/19/15
1,3-Dichloropropane	ND	240	31	220597	02/19/15
Tetrachloroethene	ND	240	20	220597	02/19/15
Dibromochloromethane	ND	240	21	220597	02/19/15
1,2-Dibromoethane	ND	240	28	220597	02/19/15
Chlorobenzene	ND	240	24	220597	02/19/15
1,1,1,2-Tetrachloroethane	ND	240	27	220597	02/19/15
Ethylbenzene	ND	240	15	220597	02/19/15
m,p-Xylenes	ND	240	46	220597	02/19/15
o-Xylene	ND	240	22	220597	02/19/15
Styrene	ND	240	22	220597	02/19/15
Bromoform	ND	240	23	220597	02/19/15
Isopropylbenzene	ND	240	25	220597	02/19/15
1,1,2,2-Tetrachloroethane	ND	240	26	220597	02/19/15
1,2,3-Trichloropropane	ND	240	39	220597	02/19/15
Propylbenzene	ND	240	21	220597	02/19/15
Bromobenzene	ND	240	28	220597	02/19/15
1,3,5-Trimethylbenzene	ND	240	28	220597	02/19/15

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

57.1

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-12-2.5-3.5	Basis:	dry
Lab ID:	264701-003	Diln Fac:	38.76
Matrix:	Soil	Sampled:	02/13/15
Units:	ug/Kg	Received:	02/13/15

Analyte	Result	RL	MDL	Batch#	Analyzed
2-Chlorotoluene	ND	240	34	220597	02/19/15
4-Chlorotoluene	ND	240	23	220597	02/19/15
tert-Butylbenzene	ND	240	23	220597	02/19/15
1,2,4-Trimethylbenzene	ND	240	17	220597	02/19/15
sec-Butylbenzene	ND	240	27	220597	02/19/15
para-Isopropyl Toluene	ND	240	25	220597	02/19/15
1,3-Dichlorobenzene	ND	240	22	220597	02/19/15
1,4-Dichlorobenzene	ND	240	24	220597	02/19/15
n-Butylbenzene	ND	240	28	220597	02/19/15
1,2-Dichlorobenzene	ND	240	17	220597	02/19/15
1,2-Dibromo-3-Chloropropane	ND	240	49	220597	02/19/15
1,2,4-Trichlorobenzene	ND	240	34	220597	02/19/15
Hexachlorobutadiene	ND	240	41	220597	02/19/15
Naphthalene	ND	240	21	220597	02/19/15
1,2,3-Trichlorobenzene	ND	240	35	220597	02/19/15

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	100	78-134	220597	02/19/15
1,2-Dichloroethane-d4	107	80-138	220597	02/19/15
Toluene-d8	92	80-120	220597	02/19/15
Bromofluorobenzene	101	78-123	220597	02/19/15

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-12-11.0-12.0	Diln Fac:	0.6993
Lab ID:	264701-004	Batch#:	220545
Matrix:	Soil	Sampled:	02/13/15
Units:	ug/Kg	Received:	02/13/15
Basis:	dry	Analyzed:	02/18/15

Moisture: 11%

Analyte	Result	RL	MDL
Freon 12	ND	7.9	0.31
Chloromethane	ND	7.9	0.81
Vinyl Chloride	ND	7.9	0.73
Bromomethane	ND	7.9	0.92
Chloroethane	ND	7.9	0.39
Trichlorofluoromethane	ND	3.9	0.55
Acetone	ND	16	1.5
Freon 113	ND	3.9	0.34
1,1-Dichloroethene	ND	3.9	0.74
Methylene Chloride	ND	16	0.87
Carbon Disulfide	ND	3.9	0.68
MTBE	ND	3.9	0.79
trans-1,2-Dichloroethene	ND	3.9	0.66
Vinyl Acetate	ND	39	0.57
1,1-Dichloroethane	ND	3.9	0.91
2-Butanone	ND	7.9	1.1
cis-1,2-Dichloroethene	ND	3.9	0.68
2,2-Dichloropropane	ND	3.9	0.85
Chloroform	ND	3.9	1.0
Bromochloromethane	ND	3.9	0.73
1,1,1-Trichloroethane	ND	3.9	0.63
1,1-Dichloropropene	ND	3.9	0.49
Carbon Tetrachloride	ND	3.9	0.38
1,2-Dichloroethane	ND	3.9	0.73
Benzene	ND	3.9	0.71
Trichloroethene	ND	3.9	0.66
1,2-Dichloropropane	ND	3.9	0.61
Bromodichloromethane	ND	3.9	0.66
Dibromomethane	ND	3.9	0.61
4-Methyl-2-Pentanone	ND	7.9	0.80
cis-1,3-Dichloropropene	ND	3.9	0.48
Toluene	ND	3.9	0.56
trans-1,3-Dichloropropene	ND	3.9	0.51
1,1,2-Trichloroethane	ND	3.9	0.49
2-Hexanone	ND	7.9	0.69
1,3-Dichloropropane	ND	3.9	0.66
Tetrachloroethene	ND	3.9	0.41
Dibromochloromethane	ND	3.9	0.40
1,2-Dibromoethane	ND	3.9	0.51
Chlorobenzene	ND	3.9	0.54
1,1,1,2-Tetrachloroethane	ND	3.9	0.49
Ethylbenzene	ND	3.9	0.53
m,p-Xylenes	ND	3.9	0.98
o-Xylene	ND	3.9	0.49
Styrene	ND	3.9	0.45
Bromoform	ND	3.9	0.31
Isopropylbenzene	ND	3.9	0.39
1,1,2,2-Tetrachloroethane	ND	3.9	0.32
1,2,3-Trichloropropane	ND	3.9	0.46
Propylbenzene	ND	3.9	0.35
Bromobenzene	ND	3.9	0.42

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-12-11.0-12.0	Diln Fac:	0.6993
Lab ID:	264701-004	Batch#:	220545
Matrix:	Soil	Sampled:	02/13/15
Units:	ug/Kg	Received:	02/13/15
Basis:	dry	Analyzed:	02/18/15

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	3.9	0.45
2-Chlorotoluene	ND	3.9	0.53
4-Chlorotoluene	ND	3.9	0.51
tert-Butylbenzene	ND	3.9	0.32
1,2,4-Trimethylbenzene	ND	3.9	0.47
sec-Butylbenzene	ND	3.9	0.33
para-Isopropyl Toluene	ND	3.9	0.33
1,3-Dichlorobenzene	ND	3.9	0.35
1,4-Dichlorobenzene	ND	3.9	0.42
n-Butylbenzene	ND	3.9	0.30
1,2-Dichlorobenzene	ND	3.9	0.42
1,2-Dibromo-3-Chloropropane	ND	3.9	0.74
1,2,4-Trichlorobenzene	ND	3.9	0.33
Hexachlorobutadiene	ND	3.9	0.23
Naphthalene	ND	3.9	0.24
1,2,3-Trichlorobenzene	ND	3.9	0.34

Surrogate	%REC	Limits
Dibromofluoromethane	104	78-134
1,2-Dichloroethane-d4	106	80-138
Toluene-d8	101	80-120
Bromofluorobenzene	111	78-123

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-22-4.0-5.0	Diln Fac:	40.26
Lab ID:	264701-005	Batch#:	220747
Matrix:	Soil	Sampled:	02/13/15
Units:	ug/Kg	Received:	02/13/15
Basis:	dry	Analyzed:	02/24/15

Moisture: 19%

Analyte	Result	RL	MDL
Freon 12	ND	500	30
Chloromethane	ND	500	18
Vinyl Chloride	ND	500	41
Bromomethane	ND	500	46
Chloroethane	ND	500	53
Trichlorofluoromethane	ND	250	23
Acetone	1,000	990	3.3
Freon 113	ND	250	40
1,1-Dichloroethene	ND	250	25
Methylene Chloride	ND	990	25
Carbon Disulfide	ND	250	20
MTBE	ND	250	31
trans-1,2-Dichloroethene	ND	250	23
Vinyl Acetate	ND	2,500	37
1,1-Dichloroethane	ND	250	23
2-Butanone	71 J	500	71
cis-1,2-Dichloroethene	ND	250	24
2,2-Dichloropropane	ND	250	40
Chloroform	ND	250	22
Bromochloromethane	ND	250	37
1,1,1-Trichloroethane	ND	250	22
1,1-Dichloropropene	ND	250	20
Carbon Tetrachloride	ND	250	25
1,2-Dichloroethane	ND	250	22
Benzene	ND	250	26
Trichloroethene	ND	250	25
1,2-Dichloropropane	ND	250	36
Bromodichloromethane	ND	250	22
Dibromomethane	ND	250	23
4-Methyl-2-Pentanone	3,700	500	47
cis-1,3-Dichloropropene	ND	250	24
Toluene	ND	250	25
trans-1,3-Dichloropropene	ND	250	23
1,1,2-Trichloroethane	ND	250	20
2-Hexanone	ND	500	36
1,3-Dichloropropane	ND	250	33
Tetrachloroethene	68 J	250	21
Dibromochloromethane	ND	250	22
1,2-Dibromoethane	ND	250	30
Chlorobenzene	ND	250	26
1,1,1,2-Tetrachloroethane	ND	250	29
Ethylbenzene	ND	250	16
m,p-Xylenes	ND	250	48
o-Xylene	ND	250	23
Styrene	ND	250	23
Bromoform	ND	250	25
Isopropylbenzene	ND	250	26
1,1,2,2-Tetrachloroethane	ND	250	27
1,2,3-Trichloropropane	ND	250	41
Propylbenzene	ND	250	22

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-22-4.0-5.0	Diln Fac:	40.26
Lab ID:	264701-005	Batch#:	220747
Matrix:	Soil	Sampled:	02/13/15
Units:	ug/Kg	Received:	02/13/15
Basis:	dry	Analyzed:	02/24/15

Analyte	Result	RL	MDL
Bromobenzene	ND	250	29
1,3,5-Trimethylbenzene	ND	250	30
2-Chlorotoluene	ND	250	36
4-Chlorotoluene	ND	250	24
tert-Butylbenzene	ND	250	24
1,2,4-Trimethylbenzene	26 J	250	18
sec-Butylbenzene	ND	250	28
para-Isopropyl Toluene	ND	250	26
1,3-Dichlorobenzene	ND	250	23
1,4-Dichlorobenzene	ND	250	25
n-Butylbenzene	ND	250	29
1,2-Dichlorobenzene	ND	250	18
1,2-Dibromo-3-Chloropropane	ND	250	51
1,2,4-Trichlorobenzene	ND	250	35
Hexachlorobutadiene	ND	250	44
Naphthalene	ND	250	22
1,2,3-Trichlorobenzene	ND	250	37

Surrogate	%REC	Limits
Dibromofluoromethane	108	78-134
1,2-Dichloroethane-d4	114	80-138
Toluene-d8	90	80-120
Bromofluorobenzene	107	78-123

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

59.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-22-11.0-12.0	Basis:	dry
Lab ID:	264701-006	Sampled:	02/13/15
Matrix:	Soil	Received:	02/13/15
Units:	ug/Kg		

Moisture: 17%

Analyte	Result	RL	MDL	Diln Fac	Batch#	Analyzed
Freon 12	ND	9.3	0.43	0.7728	220597	02/19/15
Chloromethane	ND	9.3	0.47	0.7728	220597	02/19/15
Vinyl Chloride	ND	9.3	0.43	0.7728	220597	02/19/15
Bromomethane	ND	9.3	0.99	0.7728	220597	02/19/15
Chloroethane	ND	9.3	0.70	0.7728	220597	02/19/15
Trichlorofluoromethane	ND	4.7	0.24	0.7728	220597	02/19/15
Acetone	34	19	1.7	0.7825	220545	02/18/15
Freon 113	ND	4.7	0.42	0.7728	220597	02/19/15
1,1-Dichloroethene	ND	4.7	0.41	0.7728	220597	02/19/15
Methylene Chloride	0.81 J	19	0.42	0.7728	220597	02/19/15
Carbon Disulfide	ND	4.7	0.44	0.7728	220597	02/19/15
MTBE	ND	4.7	0.14	0.7728	220597	02/19/15
trans-1,2-Dichloroethene	ND	4.7	0.58	0.7728	220597	02/19/15
Vinyl Acetate	ND	47	0.69	0.7728	220597	02/19/15
1,1-Dichloroethane	ND	4.7	0.34	0.7728	220597	02/19/15
2-Butanone	ND	9.3	1.3	0.7728	220597	02/19/15
cis-1,2-Dichloroethene	ND	4.7	0.28	0.7728	220597	02/19/15
2,2-Dichloropropane	ND	4.7	0.34	0.7728	220597	02/19/15
Chloroform	ND	4.7	0.29	0.7728	220597	02/19/15
Bromochloromethane	ND	4.7	0.50	0.7728	220597	02/19/15
1,1,1-Trichloroethane	ND	4.7	0.37	0.7728	220597	02/19/15
1,1-Dichloropropene	ND	4.7	0.23	0.7728	220597	02/19/15
Carbon Tetrachloride	ND	4.7	0.45	0.7728	220597	02/19/15
1,2-Dichloroethane	ND	4.7	0.32	0.7728	220597	02/19/15
Benzene	ND	4.7	0.41	0.7728	220597	02/19/15
Trichloroethene	ND	4.7	0.39	0.7728	220597	02/19/15
1,2-Dichloropropane	ND	4.7	0.21	0.7728	220597	02/19/15
Bromodichloromethane	ND	4.7	0.23	0.7728	220597	02/19/15
Dibromomethane	ND	4.7	0.61	0.7728	220597	02/19/15
4-Methyl-2-Pentanone	29	9.3	0.45	0.7728	220597	02/19/15
cis-1,3-Dichloropropene	ND	4.7	0.27	0.7728	220597	02/19/15
Toluene	ND	4.7	0.30	0.7728	220597	02/19/15
trans-1,3-Dichloropropene	ND	4.7	0.22	0.7728	220597	02/19/15
1,1,2-Trichloroethane	ND	4.7	0.35	0.7728	220597	02/19/15
2-Hexanone	ND	9.3	1.0	0.7728	220597	02/19/15
1,3-Dichloropropane	ND	4.7	0.20	0.7728	220597	02/19/15
Tetrachloroethene	3.5 J	4.7	0.22	0.7728	220597	02/19/15
Dibromochloromethane	ND	4.7	0.26	0.7728	220597	02/19/15
1,2-Dibromoethane	ND	4.7	0.20	0.7728	220597	02/19/15
Chlorobenzene	ND	4.7	0.37	0.7728	220597	02/19/15
1,1,1,2-Tetrachloroethane	ND	4.7	0.25	0.7728	220597	02/19/15
Ethylbenzene	ND	4.7	0.35	0.7728	220597	02/19/15
m,p-Xylenes	ND	4.7	0.84	0.7728	220597	02/19/15
o-Xylene	ND	4.7	0.25	0.7728	220597	02/19/15
Styrene	ND	4.7	0.27	0.7728	220597	02/19/15
Bromoform	ND	4.7	0.44	0.7728	220597	02/19/15
Isopropylbenzene	ND	4.7	0.28	0.7728	220597	02/19/15
1,1,2,2-Tetrachloroethane	ND	4.7	0.40	0.7728	220597	02/19/15
1,2,3-Trichloropropane	ND	4.7	0.23	0.7728	220597	02/19/15
Propylbenzene	ND	4.7	0.29	0.7728	220597	02/19/15
Bromobenzene	ND	4.7	0.40	0.7728	220597	02/19/15

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-22-11.0-12.0	Basis:	dry
Lab ID:	264701-006	Sampled:	02/13/15
Matrix:	Soil	Received:	02/13/15
Units:	ug/Kg		

Analyte	Result	RL	MDL	Diln Fac	Batch#	Analyzed
1,3,5-Trimethylbenzene	0.45 J	4.7	0.30	0.7728	220597	02/19/15
2-Chlorotoluene	ND	4.7	0.36	0.7728	220597	02/19/15
4-Chlorotoluene	ND	4.7	0.43	0.7728	220597	02/19/15
tert-Butylbenzene	ND	4.7	0.36	0.7728	220597	02/19/15
1,2,4-Trimethylbenzene	1.4 J	4.7	0.26	0.7728	220597	02/19/15
sec-Butylbenzene	ND	4.7	0.24	0.7728	220597	02/19/15
para-Isopropyl Toluene	0.45 J	4.7	0.33	0.7728	220597	02/19/15
1,3-Dichlorobenzene	ND	4.7	0.40	0.7728	220597	02/19/15
1,4-Dichlorobenzene	ND	4.7	0.37	0.7728	220597	02/19/15
n-Butylbenzene	ND	4.7	0.34	0.7728	220597	02/19/15
1,2-Dichlorobenzene	ND	4.7	0.26	0.7728	220597	02/19/15
1,2-Dibromo-3-Chloropropane	ND	4.7	0.95	0.7728	220597	02/19/15
1,2,4-Trichlorobenzene	ND	4.7	0.44	0.7728	220597	02/19/15
Hexachlorobutadiene	ND	4.7	0.61	0.7728	220597	02/19/15
Naphthalene	ND	4.7	0.99	0.7728	220597	02/19/15
1,2,3-Trichlorobenzene	ND	4.7	0.31	0.7728	220597	02/19/15

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	113	78-134	0.7728	220597	02/19/15
1,2-Dichloroethane-d4	113	80-138	0.7728	220597	02/19/15
Toluene-d8	99	80-120	0.7728	220597	02/19/15
Bromofluorobenzene	121	78-123	0.7728	220597	02/19/15

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-20-6.0-7.0	Diln Fac:	33.74
Lab ID:	264701-007	Batch#:	220747
Matrix:	Soil	Sampled:	02/13/15
Units:	ug/Kg	Received:	02/13/15
Basis:	dry	Analyzed:	02/24/15

Moisture: 16%

Analyte	Result	RL	MDL
Freon 12	ND	400	24
Chloromethane	ND	400	14
Vinyl Chloride	ND	400	34
Bromomethane	ND	400	37
Chloroethane	ND	400	42
Trichlorofluoromethane	ND	200	19
Acetone	1,500	800	2.7
Freon 113	ND	200	32
1,1-Dichloroethene	ND	200	20
Methylene Chloride	ND	800	20
Carbon Disulfide	ND	200	16
MTBE	ND	200	25
trans-1,2-Dichloroethene	ND	200	19
Vinyl Acetate	ND	2,000	30
1,1-Dichloroethane	ND	200	19
2-Butanone	ND	400	57
cis-1,2-Dichloroethene	ND	200	20
2,2-Dichloropropane	ND	200	33
Chloroform	ND	200	18
Bromochloromethane	ND	200	30
1,1,1-Trichloroethane	ND	200	18
1,1-Dichloropropene	ND	200	16
Carbon Tetrachloride	ND	200	20
1,2-Dichloroethane	ND	200	18
Benzene	ND	200	21
Trichloroethene	ND	200	20
1,2-Dichloropropane	ND	200	29
Bromodichloromethane	ND	200	18
Dibromomethane	ND	200	19
4-Methyl-2-Pentanone	1,500	400	38
cis-1,3-Dichloropropene	ND	200	19
Toluene	ND	200	20
trans-1,3-Dichloropropene	ND	200	18
1,1,2-Trichloroethane	ND	200	16
2-Hexanone	ND	400	29
1,3-Dichloropropane	ND	200	26
Tetrachloroethene	ND	200	17
Dibromochloromethane	ND	200	18
1,2-Dibromoethane	ND	200	24
Chlorobenzene	ND	200	21
1,1,1,2-Tetrachloroethane	ND	200	23
Ethylbenzene	ND	200	13
m,p-Xylenes	ND	200	39
o-Xylene	ND	200	18
Styrene	ND	200	19
Bromoform	ND	200	20
Isopropylbenzene	ND	200	21
1,1,2,2-Tetrachloroethane	ND	200	22
1,2,3-Trichloropropane	ND	200	33
Propylbenzene	ND	200	18
Bromobenzene	ND	200	23

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-20-6.0-7.0	Diln Fac:	33.74
Lab ID:	264701-007	Batch#:	220747
Matrix:	Soil	Sampled:	02/13/15
Units:	ug/Kg	Received:	02/13/15
Basis:	dry	Analyzed:	02/24/15

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	200	24
2-Chlorotoluene	ND	200	29
4-Chlorotoluene	ND	200	19
tert-Butylbenzene	ND	200	19
1,2,4-Trimethylbenzene	ND	200	15
sec-Butylbenzene	ND	200	23
para-Isopropyl Toluene	ND	200	21
1,3-Dichlorobenzene	ND	200	19
1,4-Dichlorobenzene	ND	200	20
n-Butylbenzene	ND	200	24
1,2-Dichlorobenzene	ND	200	15
1,2-Dibromo-3-Chloropropane	ND	200	41
1,2,4-Trichlorobenzene	ND	200	29
Hexachlorobutadiene	ND	200	35
Naphthalene	ND	200	18
1,2,3-Trichlorobenzene	ND	200	30

Surrogate	%REC	Limits
Dibromofluoromethane	98	78-134
1,2-Dichloroethane-d4	109	80-138
Toluene-d8	91	80-120
Bromofluorobenzene	103	78-123

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-20-10.5-11.5	Diln Fac:	0.8333
Lab ID:	264701-008	Batch#:	220716
Matrix:	Soil	Sampled:	02/13/15
Units:	ug/Kg	Received:	02/13/15
Basis:	dry	Analyzed:	02/23/15

Moisture: 13%

Analyte	Result	RL	MDL
Freon 12	ND	9.6	0.44
Chloromethane	ND	9.6	0.48
Vinyl Chloride	ND	9.6	0.45
Bromomethane	ND	9.6	1.0
Chloroethane	ND	9.6	0.72
Trichlorofluoromethane	ND	4.8	0.25
Acetone	3.5 J b	19	3.2
Freon 113	ND	4.8	0.43
1,1-Dichloroethene	ND	4.8	0.42
Methylene Chloride	1.3 J	19	0.43
Carbon Disulfide	ND	4.8	0.46
MTBE	ND	4.8	0.15
trans-1,2-Dichloroethene	ND	4.8	0.60
Vinyl Acetate	ND	48	0.71
1,1-Dichloroethane	ND	4.8	0.35
2-Butanone	ND	9.6	1.4
cis-1,2-Dichloroethene	0.85 J	4.8	0.29
2,2-Dichloropropane	ND	4.8	0.35
Chloroform	ND	4.8	0.29
Bromochloromethane	ND	4.8	0.51
1,1,1-Trichloroethane	ND	4.8	0.38
1,1-Dichloropropene	ND	4.8	0.24
Carbon Tetrachloride	ND	4.8	0.46
1,2-Dichloroethane	ND	4.8	0.33
Benzene	ND	4.8	0.42
Trichloroethene	1.4 J	4.8	0.40
1,2-Dichloropropane	ND	4.8	0.22
Bromodichloromethane	ND	4.8	0.23
Dibromomethane	ND	4.8	0.62
4-Methyl-2-Pentanone	ND	9.6	0.46
cis-1,3-Dichloropropene	ND	4.8	0.27
Toluene	ND	4.8	0.30
trans-1,3-Dichloropropene	ND	4.8	0.23
1,1,2-Trichloroethane	ND	4.8	0.36
2-Hexanone	ND	9.6	1.1
1,3-Dichloropropane	ND	4.8	0.21
Tetrachloroethene	ND	4.8	0.23
Dibromochloromethane	ND	4.8	0.27
1,2-Dibromoethane	ND	4.8	0.20
Chlorobenzene	ND	4.8	0.38
1,1,1,2-Tetrachloroethane	ND	4.8	0.26
Ethylbenzene	ND	4.8	0.36
m,p-Xylenes	ND	4.8	0.87
o-Xylene	ND	4.8	0.26
Styrene	ND	4.8	0.28
Bromoform	ND	4.8	0.45
Isopropylbenzene	ND	4.8	0.28
1,1,2,2-Tetrachloroethane	ND	4.8	0.41
1,2,3-Trichloropropane	ND	4.8	0.24

J= Estimated value
b= See narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-20-10.5-11.5	Diln Fac:	0.8333
Lab ID:	264701-008	Batch#:	220716
Matrix:	Soil	Sampled:	02/13/15
Units:	ug/Kg	Received:	02/13/15
Basis:	dry	Analyzed:	02/23/15

Analyte	Result	RL	MDL
Propylbenzene	ND	4.8	0.30
Bromobenzene	ND	4.8	0.41
1,3,5-Trimethylbenzene	ND	4.8	0.31
2-Chlorotoluene	ND	4.8	0.37
4-Chlorotoluene	ND	4.8	0.44
tert-Butylbenzene	ND	4.8	0.37
1,2,4-Trimethylbenzene	ND	4.8	0.27
sec-Butylbenzene	ND	4.8	0.24
para-Isopropyl Toluene	ND	4.8	0.34
1,3-Dichlorobenzene	ND	4.8	0.41
1,4-Dichlorobenzene	ND	4.8	0.38
n-Butylbenzene	ND	4.8	0.35
1,2-Dichlorobenzene	ND	4.8	0.27
1,2-Dibromo-3-Chloropropane	ND	4.8	0.98
1,2,4-Trichlorobenzene	ND	4.8	0.46
Hexachlorobutadiene	ND	4.8	0.63
Naphthalene	ND	4.8	1.0
1,2,3-Trichlorobenzene	ND	4.8	0.32

Surrogate	%REC	Limits
Dibromofluoromethane	117	78-134
1,2-Dichloroethane-d4	115	80-138
Toluene-d8	97	80-120
Bromofluorobenzene	98	78-123

J= Estimated value
b= See narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777668	Batch#:	220545
Matrix:	Soil	Analyzed:	02/18/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.40
Chloromethane	ND	10	1.0
Vinyl Chloride	ND	10	0.93
Bromomethane	ND	10	1.2
Chloroethane	ND	10	0.50
Trichlorofluoromethane	ND	5.0	0.70
Acetone	ND	20	1.8
Freon 113	ND	5.0	0.44
1,1-Dichloroethene	ND	5.0	0.94
Methylene Chloride	ND	20	1.1
Carbon Disulfide	ND	5.0	0.87
MTBE	ND	5.0	1.0
trans-1,2-Dichloroethene	ND	5.0	0.84
Vinyl Acetate	ND	50	0.72
1,1-Dichloroethane	ND	5.0	1.2
2-Butanone	ND	10	1.3
cis-1,2-Dichloroethene	ND	5.0	0.87
2,2-Dichloropropane	ND	5.0	1.1
Chloroform	ND	5.0	1.3
Bromochloromethane	ND	5.0	0.93
1,1,1-Trichloroethane	ND	5.0	0.81
1,1-Dichloropropene	ND	5.0	0.63
Carbon Tetrachloride	ND	5.0	0.48
1,2-Dichloroethane	ND	5.0	0.93
Benzene	ND	5.0	0.90
Trichloroethene	ND	5.0	0.84
1,2-Dichloropropane	ND	5.0	0.78
Bromodichloromethane	ND	5.0	0.85
Dibromomethane	ND	5.0	0.77
4-Methyl-2-Pentanone	ND	10	1.0
cis-1,3-Dichloropropene	ND	5.0	0.61
Toluene	ND	5.0	0.71
trans-1,3-Dichloropropene	ND	5.0	0.65
1,1,2-Trichloroethane	ND	5.0	0.62
2-Hexanone	ND	10	0.88
1,3-Dichloropropane	ND	5.0	0.84
Tetrachloroethene	ND	5.0	0.52
Dibromochloromethane	ND	5.0	0.51
1,2-Dibromoethane	ND	5.0	0.65
Chlorobenzene	ND	5.0	0.69
1,1,1,2-Tetrachloroethane	ND	5.0	0.62
Ethylbenzene	ND	5.0	0.68
m,p-Xylenes	ND	5.0	1.3
o-Xylene	ND	5.0	0.63
Styrene	ND	5.0	0.58
Bromoform	ND	5.0	0.39
Isopropylbenzene	ND	5.0	0.50
1,1,2,2-Tetrachloroethane	ND	5.0	0.41
1,2,3-Trichloropropane	ND	5.0	0.58
Propylbenzene	ND	5.0	0.45
Bromobenzene	ND	5.0	0.53
1,3,5-Trimethylbenzene	ND	5.0	0.57
2-Chlorotoluene	ND	5.0	0.68

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

63.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777668	Batch#:	220545
Matrix:	Soil	Analyzed:	02/18/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
4-Chlorotoluene	ND	5.0	0.65
tert-Butylbenzene	ND	5.0	0.40
1,2,4-Trimethylbenzene	ND	5.0	0.60
sec-Butylbenzene	ND	5.0	0.42
para-Isopropyl Toluene	ND	5.0	0.42
1,3-Dichlorobenzene	ND	5.0	0.44
1,4-Dichlorobenzene	ND	5.0	0.54
n-Butylbenzene	ND	5.0	0.38
1,2-Dichlorobenzene	ND	5.0	0.53
1,2-Dibromo-3-Chloropropane	ND	5.0	0.94
1,2,4-Trichlorobenzene	ND	5.0	0.42
Hexachlorobutadiene	ND	5.0	0.30
Naphthalene	ND	5.0	0.31
1,2,3-Trichlorobenzene	ND	5.0	0.43

Surrogate	%REC	Limits
Dibromofluoromethane	98	78-134
1,2-Dichloroethane-d4	97	80-138
Toluene-d8	104	80-120
Bromofluorobenzene	110	78-123

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Matrix:	Soil	Batch#:	220545
Units:	ug/Kg	Analyzed:	02/18/15
Diln Fac:	1.000		

Type: BS Lab ID: QC777669

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	19.83	99	70-134
Benzene	20.00	19.86	99	80-123
Trichloroethene	20.00	21.41	107	80-128
Toluene	20.00	21.40	107	80-120
Chlorobenzene	20.00	20.47	102	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	96	78-134
1,2-Dichloroethane-d4	100	80-138
Toluene-d8	103	80-120
Bromofluorobenzene	100	78-123

Type: BSD Lab ID: QC777670

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	20.00	19.01	95	70-134	4	22
Benzene	20.00	19.90	99	80-123	0	21
Trichloroethene	20.00	20.50	102	80-128	4	23
Toluene	20.00	20.28	101	80-120	5	20
Chlorobenzene	20.00	19.72	99	80-123	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	98	78-134
1,2-Dichloroethane-d4	102	80-138
Toluene-d8	103	80-120
Bromofluorobenzene	100	78-123

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777863	Batch#:	220597
Matrix:	Soil	Analyzed:	02/19/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.46
Chloromethane	ND	10	0.50
Vinyl Chloride	ND	10	0.47
Bromomethane	ND	10	1.1
Chloroethane	ND	10	0.75
Trichlorofluoromethane	ND	5.0	0.26
Acetone	ND	20	3.3
Freon 113	ND	5.0	0.45
1,1-Dichloroethene	ND	5.0	0.44
Methylene Chloride	ND	20	0.45
Carbon Disulfide	ND	5.0	0.48
MTBE	ND	5.0	0.15
trans-1,2-Dichloroethene	ND	5.0	0.62
Vinyl Acetate	ND	50	0.74
1,1-Dichloroethane	ND	5.0	0.37
2-Butanone	ND	10	1.4
cis-1,2-Dichloroethene	ND	5.0	0.30
2,2-Dichloropropane	ND	5.0	0.36
Chloroform	ND	5.0	0.31
Bromochloromethane	ND	5.0	0.53
1,1,1-Trichloroethane	ND	5.0	0.40
1,1-Dichloropropene	ND	5.0	0.25
Carbon Tetrachloride	ND	5.0	0.49
1,2-Dichloroethane	ND	5.0	0.34
Benzene	ND	5.0	0.44
Trichloroethene	ND	5.0	0.42
1,2-Dichloropropane	ND	5.0	0.23
Bromodichloromethane	ND	5.0	0.24
Dibromomethane	ND	5.0	0.65
4-Methyl-2-Pentanone	ND	10	0.48
cis-1,3-Dichloropropene	ND	5.0	0.28
Toluene	ND	5.0	0.32
trans-1,3-Dichloropropene	ND	5.0	0.24
1,1,2-Trichloroethane	ND	5.0	0.37
2-Hexanone	ND	10	1.1
1,3-Dichloropropane	ND	5.0	0.22
Tetrachloroethene	ND	5.0	0.24
Dibromochloromethane	ND	5.0	0.28
1,2-Dibromoethane	ND	5.0	0.21
Chlorobenzene	ND	5.0	0.40
1,1,1,2-Tetrachloroethane	ND	5.0	0.27
Ethylbenzene	ND	5.0	0.38
m,p-Xylenes	ND	5.0	0.91
o-Xylene	ND	5.0	0.27
Styrene	ND	5.0	0.29
Bromoform	ND	5.0	0.47
Isopropylbenzene	ND	5.0	0.30
1,1,2,2-Tetrachloroethane	ND	5.0	0.43
1,2,3-Trichloropropane	ND	5.0	0.25
Propylbenzene	ND	5.0	0.31
Bromobenzene	ND	5.0	0.43
1,3,5-Trimethylbenzene	ND	5.0	0.32
2-Chlorotoluene	ND	5.0	0.39

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

65.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777863	Batch#:	220597
Matrix:	Soil	Analyzed:	02/19/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
4-Chlorotoluene	ND	5.0	0.46
tert-Butylbenzene	ND	5.0	0.38
1,2,4-Trimethylbenzene	ND	5.0	0.28
sec-Butylbenzene	ND	5.0	0.25
para-Isopropyl Toluene	ND	5.0	0.35
1,3-Dichlorobenzene	ND	5.0	0.43
1,4-Dichlorobenzene	ND	5.0	0.40
n-Butylbenzene	ND	5.0	0.37
1,2-Dichlorobenzene	ND	5.0	0.28
1,2-Dibromo-3-Chloropropane	ND	5.0	1.0
1,2,4-Trichlorobenzene	ND	5.0	0.48
Hexachlorobutadiene	ND	5.0	0.66
Naphthalene	ND	5.0	1.1
1,2,3-Trichlorobenzene	ND	5.0	0.33

Surrogate	%REC	Limits
Dibromofluoromethane	116	78-134
1,2-Dichloroethane-d4	114	80-138
Toluene-d8	104	80-120
Bromofluorobenzene	97	78-123

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Matrix:	Soil	Batch#:	220597
Units:	ug/Kg	Analyzed:	02/19/15
Diln Fac:	1.000		

Type: BS Lab ID: QC777864

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	20.80	104	70-134
Benzene	20.00	19.91	100	80-123
Trichloroethene	20.00	19.37	97	80-128
Toluene	20.00	17.98	90	80-120
Chlorobenzene	20.00	18.01	90	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	110	78-134
1,2-Dichloroethane-d4	111	80-138
Toluene-d8	94	80-120
Bromofluorobenzene	97	78-123

Type: BSD Lab ID: QC777865

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	20.00	20.41	102	70-134	2	22
Benzene	20.00	20.43	102	80-123	3	21
Trichloroethene	20.00	19.90	100	80-128	3	23
Toluene	20.00	18.04	90	80-120	0	20
Chlorobenzene	20.00	17.99	90	80-123	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	108	78-134
1,2-Dichloroethane-d4	112	80-138
Toluene-d8	96	80-120
Bromofluorobenzene	101	78-123

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778222	Batch#:	220687
Matrix:	Soil	Analyzed:	02/22/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.40
Chloromethane	ND	10	1.0
Vinyl Chloride	ND	10	0.93
Bromomethane	ND	10	1.2
Chloroethane	ND	10	0.50
Trichlorofluoromethane	ND	5.0	0.70
Acetone	ND	20	1.8
Freon 113	ND	5.0	0.44
1,1-Dichloroethene	ND	5.0	0.94
Methylene Chloride	ND	20	1.1
Carbon Disulfide	ND	5.0	0.87
MTBE	ND	5.0	1.0
trans-1,2-Dichloroethene	ND	5.0	0.84
Vinyl Acetate	ND	50	0.72
1,1-Dichloroethane	ND	5.0	1.2
2-Butanone	ND	10	1.3
cis-1,2-Dichloroethene	ND	5.0	0.87
2,2-Dichloropropane	ND	5.0	1.1
Chloroform	ND	5.0	1.3
Bromochloromethane	ND	5.0	0.93
1,1,1-Trichloroethane	ND	5.0	0.81
1,1-Dichloropropene	ND	5.0	0.63
Carbon Tetrachloride	ND	5.0	0.48
1,2-Dichloroethane	ND	5.0	0.93
Benzene	ND	5.0	0.90
Trichloroethene	ND	5.0	0.84
1,2-Dichloropropane	ND	5.0	0.78
Bromodichloromethane	ND	5.0	0.85
Dibromomethane	ND	5.0	0.77
4-Methyl-2-Pentanone	ND	10	1.0
cis-1,3-Dichloropropene	ND	5.0	0.61
Toluene	ND	5.0	0.71
trans-1,3-Dichloropropene	ND	5.0	0.65
1,1,2-Trichloroethane	ND	5.0	0.62
2-Hexanone	ND	10	0.88
1,3-Dichloropropane	ND	5.0	0.84
Tetrachloroethene	ND	5.0	0.52
Dibromochloromethane	ND	5.0	0.51
1,2-Dibromoethane	ND	5.0	0.65
Chlorobenzene	ND	5.0	0.69
1,1,1,2-Tetrachloroethane	ND	5.0	0.62
Ethylbenzene	ND	5.0	0.68
m,p-Xylenes	ND	5.0	1.3
o-Xylene	ND	5.0	0.63
Styrene	ND	5.0	0.58
Bromoform	ND	5.0	0.39
Isopropylbenzene	ND	5.0	0.50
1,1,2,2-Tetrachloroethane	ND	5.0	0.41
1,2,3-Trichloropropane	ND	5.0	0.58
Propylbenzene	ND	5.0	0.45
Bromobenzene	ND	5.0	0.53
1,3,5-Trimethylbenzene	ND	5.0	0.57

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

67.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778222	Batch#:	220687
Matrix:	Soil	Analyzed:	02/22/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	5.0	0.68
4-Chlorotoluene	ND	5.0	0.65
tert-Butylbenzene	ND	5.0	0.40
1,2,4-Trimethylbenzene	ND	5.0	0.60
sec-Butylbenzene	ND	5.0	0.42
para-Isopropyl Toluene	ND	5.0	0.42
1,3-Dichlorobenzene	ND	5.0	0.44
1,4-Dichlorobenzene	ND	5.0	0.54
n-Butylbenzene	ND	5.0	0.38
1,2-Dichlorobenzene	ND	5.0	0.53
1,2-Dibromo-3-Chloropropane	ND	5.0	0.94
1,2,4-Trichlorobenzene	ND	5.0	0.42
Hexachlorobutadiene	ND	5.0	0.30
Naphthalene	ND	5.0	0.31
1,2,3-Trichlorobenzene	ND	5.0	0.43

Surrogate	%REC	Limits
Dibromofluoromethane	102	78-134
1,2-Dichloroethane-d4	78 *	80-138
Toluene-d8	109	80-120
Bromofluorobenzene	122	78-123

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

67.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC778223	Batch#:	220687
Matrix:	Soil	Analyzed:	02/22/15
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	22.95	115	70-134
Benzene	20.00	20.19	101	80-123
Trichloroethene	20.00	19.30	96	80-128
Toluene	20.00	21.38	107	80-120
Chlorobenzene	20.00	20.65	103	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	102	78-134
1,2-Dichloroethane-d4	80	80-138
Toluene-d8	109	80-120
Bromofluorobenzene	110	78-123

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778342	Batch#:	220716
Matrix:	Soil	Analyzed:	02/23/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.46
Chloromethane	ND	10	0.50
Vinyl Chloride	ND	10	0.47
Bromomethane	ND	10	1.1
Chloroethane	ND	10	0.75
Trichlorofluoromethane	ND	5.0	0.26
Acetone	4.7 J b	20	3.3
Freon 113	ND	5.0	0.45
1,1-Dichloroethene	ND	5.0	0.44
Methylene Chloride	ND	20	0.45
Carbon Disulfide	ND	5.0	0.48
MTBE	ND	5.0	0.15
trans-1,2-Dichloroethene	ND	5.0	0.62
Vinyl Acetate	ND	50	0.74
1,1-Dichloroethane	ND	5.0	0.37
2-Butanone	ND	10	1.4
cis-1,2-Dichloroethene	ND	5.0	0.30
2,2-Dichloropropane	ND	5.0	0.36
Chloroform	ND	5.0	0.31
Bromochloromethane	ND	5.0	0.53
1,1,1-Trichloroethane	ND	5.0	0.40
1,1-Dichloropropene	ND	5.0	0.25
Carbon Tetrachloride	ND	5.0	0.49
1,2-Dichloroethane	ND	5.0	0.34
Benzene	ND	5.0	0.44
Trichloroethene	ND	5.0	0.42
1,2-Dichloropropane	ND	5.0	0.23
Bromodichloromethane	ND	5.0	0.24
Dibromomethane	ND	5.0	0.65
4-Methyl-2-Pentanone	ND	10	0.48
cis-1,3-Dichloropropene	ND	5.0	0.28
Toluene	ND	5.0	0.32
trans-1,3-Dichloropropene	ND	5.0	0.24
1,1,2-Trichloroethane	ND	5.0	0.37
2-Hexanone	ND	10	1.1
1,3-Dichloropropane	ND	5.0	0.22
Tetrachloroethene	ND	5.0	0.24
Dibromochloromethane	ND	5.0	0.28
1,2-Dibromoethane	ND	5.0	0.21
Chlorobenzene	ND	5.0	0.40
1,1,1,2-Tetrachloroethane	ND	5.0	0.27
Ethylbenzene	ND	5.0	0.38
m,p-Xylenes	ND	5.0	0.91
o-Xylene	ND	5.0	0.27
Styrene	ND	5.0	0.29
Bromoform	ND	5.0	0.47
Isopropylbenzene	ND	5.0	0.30
1,1,2,2-Tetrachloroethane	ND	5.0	0.43
1,2,3-Trichloropropane	ND	5.0	0.25
Propylbenzene	ND	5.0	0.31
Bromobenzene	ND	5.0	0.43

J= Estimated value
b= See narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

69.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778342	Batch#:	220716
Matrix:	Soil	Analyzed:	02/23/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	5.0	0.32
2-Chlorotoluene	ND	5.0	0.39
4-Chlorotoluene	ND	5.0	0.46
tert-Butylbenzene	ND	5.0	0.38
1,2,4-Trimethylbenzene	ND	5.0	0.28
sec-Butylbenzene	ND	5.0	0.25
para-Isopropyl Toluene	ND	5.0	0.35
1,3-Dichlorobenzene	ND	5.0	0.43
1,4-Dichlorobenzene	ND	5.0	0.40
n-Butylbenzene	ND	5.0	0.37
1,2-Dichlorobenzene	ND	5.0	0.28
1,2-Dibromo-3-Chloropropane	ND	5.0	1.0
1,2,4-Trichlorobenzene	ND	5.0	0.48
Hexachlorobutadiene	ND	5.0	0.66
Naphthalene	ND	5.0	1.1
1,2,3-Trichlorobenzene	ND	5.0	0.33

Surrogate	%REC	Limits
Dibromofluoromethane	109	78-134
1,2-Dichloroethane-d4	116	80-138
Toluene-d8	95	80-120
Bromofluorobenzene	104	78-123

J= Estimated value
b= See narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC778343	Batch#:	220716
Matrix:	Soil	Analyzed:	02/23/15
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	21.21	106	70-134
Benzene	20.00	21.02	105	80-123
Trichloroethene	20.00	19.73	99	80-128
Toluene	20.00	18.69	93	80-120
Chlorobenzene	20.00	17.96	90	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	116	78-134
1,2-Dichloroethane-d4	118	80-138
Toluene-d8	95	80-120
Bromofluorobenzene	103	78-123

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	220716
MSS Lab ID:	264795-011	Sampled:	02/19/15
Matrix:	Soil	Received:	02/20/15
Units:	ug/Kg	Analyzed:	02/23/15
Basis:	as received		

Type: MS Diln Fac: 0.9653
Lab ID: QC778344

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.4239	48.26	50.16	104	56-133
Benzene	<0.4203	48.26	49.59	103	57-120
Trichloroethene	<0.4038	48.26	47.39	98	49-145
Toluene	<0.3053	48.26	41.58	86	51-120
Chlorobenzene	<0.3808	48.26	38.22	79	47-120

Surrogate	%REC	Limits
Dibromofluoromethane	115	78-134
1,2-Dichloroethane-d4	122	80-138
Toluene-d8	89	80-120
Bromofluorobenzene	95	78-123

Type: MSD Diln Fac: 0.9709
Lab ID: QC778345

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	48.54	43.97	91	56-133	14	46
Benzene	48.54	43.69	90	57-120	13	44
Trichloroethene	48.54	42.76	88	49-145	11	46
Toluene	48.54	38.55	79	51-120	8	47
Chlorobenzene	48.54	36.19	75	47-120	6	50

Surrogate	%REC	Limits
Dibromofluoromethane	110	78-134
1,2-Dichloroethane-d4	116	80-138
Toluene-d8	90	80-120
Bromofluorobenzene	95	78-123

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778474	Batch#:	220747
Matrix:	Soil	Analyzed:	02/24/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.46
Chloromethane	ND	10	0.50
Vinyl Chloride	ND	10	0.47
Bromomethane	ND	10	1.1
Chloroethane	ND	10	0.75
Trichlorofluoromethane	ND	5.0	0.26
Acetone	ND	20	3.3
Freon 113	ND	5.0	0.45
1,1-Dichloroethene	ND	5.0	0.44
Methylene Chloride	ND	20	0.45
Carbon Disulfide	ND	5.0	0.48
MTBE	ND	5.0	0.15
trans-1,2-Dichloroethene	ND	5.0	0.62
Vinyl Acetate	ND	50	0.74
1,1-Dichloroethane	ND	5.0	0.37
2-Butanone	ND	10	1.4
cis-1,2-Dichloroethene	ND	5.0	0.30
2,2-Dichloropropane	ND	5.0	0.36
Chloroform	ND	5.0	0.31
Bromochloromethane	ND	5.0	0.53
1,1,1-Trichloroethane	ND	5.0	0.40
1,1-Dichloropropene	ND	5.0	0.25
Carbon Tetrachloride	ND	5.0	0.49
1,2-Dichloroethane	ND	5.0	0.34
Benzene	ND	5.0	0.44
Trichloroethene	ND	5.0	0.42
1,2-Dichloropropane	ND	5.0	0.23
Bromodichloromethane	ND	5.0	0.24
Dibromomethane	ND	5.0	0.65
4-Methyl-2-Pentanone	ND	10	0.48
cis-1,3-Dichloropropene	ND	5.0	0.28
Toluene	ND	5.0	0.32
trans-1,3-Dichloropropene	ND	5.0	0.24
1,1,2-Trichloroethane	ND	5.0	0.37
2-Hexanone	ND	10	1.1
1,3-Dichloropropane	ND	5.0	0.22
Tetrachloroethene	ND	5.0	0.24
Dibromochloromethane	ND	5.0	0.28
1,2-Dibromoethane	ND	5.0	0.21
Chlorobenzene	ND	5.0	0.40
1,1,1,2-Tetrachloroethane	ND	5.0	0.27
Ethylbenzene	ND	5.0	0.38
m,p-Xylenes	ND	5.0	0.91
o-Xylene	ND	5.0	0.27
Styrene	ND	5.0	0.29
Bromoform	ND	5.0	0.47
Isopropylbenzene	ND	5.0	0.30
1,1,2,2-Tetrachloroethane	ND	5.0	0.43
1,2,3-Trichloropropane	ND	5.0	0.25
Propylbenzene	ND	5.0	0.31
Bromobenzene	ND	5.0	0.43
1,3,5-Trimethylbenzene	ND	5.0	0.32
2-Chlorotoluene	ND	5.0	0.39

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

72.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778474	Batch#:	220747
Matrix:	Soil	Analyzed:	02/24/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
4-Chlorotoluene	ND	5.0	0.46
tert-Butylbenzene	ND	5.0	0.38
1,2,4-Trimethylbenzene	ND	5.0	0.28
sec-Butylbenzene	ND	5.0	0.25
para-Isopropyl Toluene	ND	5.0	0.35
1,3-Dichlorobenzene	ND	5.0	0.43
1,4-Dichlorobenzene	ND	5.0	0.40
n-Butylbenzene	ND	5.0	0.37
1,2-Dichlorobenzene	ND	5.0	0.28
1,2-Dibromo-3-Chloropropane	ND	5.0	1.0
1,2,4-Trichlorobenzene	ND	5.0	0.48
Hexachlorobutadiene	ND	5.0	0.66
Naphthalene	ND	5.0	1.1
1,2,3-Trichlorobenzene	ND	5.0	0.33

Surrogate	%REC	Limits
Dibromofluoromethane	121	78-134
1,2-Dichloroethane-d4	123	80-138
Toluene-d8	97	80-120
Bromofluorobenzene	99	78-123

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC778475	Batch#:	220747
Matrix:	Soil	Analyzed:	02/24/15
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	19.12	96	70-134
Benzene	20.00	21.50	108	80-123
Trichloroethene	20.00	19.70	99	80-128
Toluene	20.00	18.10	91	80-120
Chlorobenzene	20.00	17.96	90	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	106	78-134
1,2-Dichloroethane-d4	120	80-138
Toluene-d8	93	80-120
Bromofluorobenzene	97	78-123

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	220747
MSS Lab ID:	264826-004	Sampled:	02/18/15
Matrix:	Soil	Received:	02/20/15
Units:	ug/Kg	Analyzed:	02/25/15
Basis:	as received		

Type: MS Diln Fac: 0.9804
Lab ID: QC778476

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.4340	49.02	46.55	95	56-133
Benzene	<0.4303	49.02	49.26	100	57-120
Trichloroethene	<0.4133	49.02	47.84	98	49-145
Toluene	<0.3125	49.02	42.86	87	51-120
Chlorobenzene	<0.3898	49.02	40.75	83	47-120

Surrogate	%REC	Limits
Dibromofluoromethane	108	78-134
1,2-Dichloroethane-d4	123	80-138
Toluene-d8	93	80-120
Bromofluorobenzene	106	78-123

Type: MSD Diln Fac: 0.9843
Lab ID: QC778477

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	49.21	41.72	85	56-133	11	46
Benzene	49.21	46.63	95	57-120	6	44
Trichloroethene	49.21	45.29	92	49-145	6	46
Toluene	49.21	41.61	85	51-120	3	47
Chlorobenzene	49.21	39.38	80	47-120	4	50

Surrogate	%REC	Limits
Dibromofluoromethane	102	78-134
1,2-Dichloroethane-d4	116	80-138
Toluene-d8	93	80-120
Bromofluorobenzene	104	78-123

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-13-3.0-4.0	Batch#:	220582
Lab ID:	264701-001	Sampled:	02/13/15
Matrix:	Soil	Received:	02/13/15
Units:	ug/Kg	Prepared:	02/19/15
Basis:	dry	Analyzed:	02/23/15
Diln Fac:	20.00		

Moisture: 22%

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	8,600	1,800
Phenol	ND	8,600	1,200
bis(2-Chloroethyl)ether	ND	8,600	1,400
2-Chlorophenol	ND	8,600	1,400
1,3-Dichlorobenzene	ND	8,600	970
1,4-Dichlorobenzene	ND	8,600	380
Benzyl alcohol	ND	8,600	1,300
1,2-Dichlorobenzene	ND	8,600	860
2-Methylphenol	ND	8,600	1,600
bis(2-Chloroisopropyl) ether	ND	8,600	2,100
4-Methylphenol	ND	8,600	1,300
N-Nitroso-di-n-propylamine	ND	8,600	1,300
Hexachloroethane	ND	8,600	660
Nitrobenzene	ND	8,600	380
Isophorone	ND	8,600	250
2-Nitrophenol	ND	17,000	260
2,4-Dimethylphenol	ND	8,600	360
Benzoic acid	ND	43,000	6,400
bis(2-Chloroethoxy)methane	ND	8,600	290
2,4-Dichlorophenol	ND	8,600	320
1,2,4-Trichlorobenzene	ND	8,600	330
Naphthalene	ND	1,700	330
4-Chloroaniline	ND	8,600	420
Hexachlorobutadiene	ND	8,600	350
4-Chloro-3-methylphenol	480 J	8,600	360
2-Methylnaphthalene	ND	1,700	280
Hexachlorocyclopentadiene	ND	17,000	310
2,4,6-Trichlorophenol	ND	8,600	360
2,4,5-Trichlorophenol	ND	8,600	340
2-Chloronaphthalene	ND	8,600	260
2-Nitroaniline	ND	17,000	270
Dimethylphthalate	ND	8,600	320
Acenaphthylene	ND	1,700	330
2,6-Dinitrotoluene	ND	8,600	320
3-Nitroaniline	ND	17,000	210
Acenaphthene	ND	1,700	290
2,4-Dinitrophenol	ND	17,000	2,400
4-Nitrophenol	ND	17,000	1,300
Dibenzofuran	ND	8,600	370
2,4-Dinitrotoluene	ND	8,600	250
Diethylphthalate	ND	8,600	350
Fluorene	ND	1,700	300
4-Chlorophenyl-phenylether	ND	8,600	320
4-Nitroaniline	ND	17,000	250
4,6-Dinitro-2-methylphenol	ND	17,000	1,800
N-Nitrosodiphenylamine	ND	8,600	350
Azobenzene	ND	8,600	360
4-Bromophenyl-phenylether	ND	8,600	330

J= Estimated value
DO= Diluted Out
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-13-3.0-4.0	Batch#:	220582
Lab ID:	264701-001	Sampled:	02/13/15
Matrix:	Soil	Received:	02/13/15
Units:	ug/Kg	Prepared:	02/19/15
Basis:	dry	Analyzed:	02/23/15
Diln Fac:	20.00		

Analyte	Result	RL	MDL
Hexachlorobenzene	ND	8,600	350
Pentachlorophenol	ND	17,000	1,600
Phenanthrene	ND	1,700	380
Anthracene	ND	1,700	320
Di-n-butylphthalate	ND	8,600	370
Fluoranthene	ND	1,700	330
Pyrene	ND	1,700	300
Butylbenzylphthalate	ND	8,600	280
3,3'-Dichlorobenzidine	ND	17,000	280
Benzo(a)anthracene	ND	1,700	300
Chrysene	ND	1,700	370
bis(2-Ethylhexyl)phthalate	620 J	8,600	380
Di-n-octylphthalate	ND	8,600	440
Benzo(b)fluoranthene	ND	1,700	360
Benzo(k)fluoranthene	ND	1,700	460
Benzo(a)pyrene	ND	1,700	400
Indeno(1,2,3-cd)pyrene	ND	1,700	380
Dibenz(a,h)anthracene	ND	1,700	380
Benzo(g,h,i)perylene	ND	1,700	330

Surrogate	%REC	Limits
2-Fluorophenol	DO	25-120
Phenol-d5	DO	36-120
2,4,6-Tribromophenol	DO	27-120
Nitrobenzene-d5	DO	44-120
2-Fluorobiphenyl	DO	47-120
Terphenyl-d14	DO	49-120

J= Estimated value
DO= Diluted Out
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-13-12.0-13.0	Batch#:	220582
Lab ID:	264701-002	Sampled:	02/13/15
Matrix:	Soil	Received:	02/13/15
Units:	ug/Kg	Prepared:	02/19/15
Basis:	dry	Analyzed:	02/23/15
Diln Fac:	20.00		

Moisture: 13%

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	7,700	1,100
Phenol	ND	7,700	160
bis(2-Chloroethyl)ether	ND	7,700	1,400
2-Chlorophenol	ND	7,700	170
1,3-Dichlorobenzene	ND	7,700	1,300
1,4-Dichlorobenzene	ND	7,700	180
Benzyl alcohol	ND	7,700	250
1,2-Dichlorobenzene	ND	7,700	180
2-Methylphenol	ND	7,700	310
bis(2-Chloroisopropyl) ether	ND	7,700	160
4-Methylphenol	ND	7,700	170
N-Nitroso-di-n-propylamine	ND	7,700	180
Hexachloroethane	ND	7,700	160
Nitrobenzene	ND	7,700	250
Isophorone	ND	7,700	160
2-Nitrophenol	ND	15,000	180
2,4-Dimethylphenol	ND	7,700	320
Benzoic acid	ND	38,000	10,000
bis(2-Chloroethoxy)methane	ND	7,700	170
2,4-Dichlorophenol	ND	7,700	190
1,2,4-Trichlorobenzene	ND	7,700	180
Naphthalene	ND	1,500	180
4-Chloroaniline	ND	7,700	220
Hexachlorobutadiene	ND	7,700	200
4-Chloro-3-methylphenol	930 J	7,700	190
2-Methylnaphthalene	ND	1,500	150
Hexachlorocyclopentadiene	ND	15,000	310
2,4,6-Trichlorophenol	ND	7,700	290
2,4,5-Trichlorophenol	ND	7,700	190
2-Chloronaphthalene	ND	7,700	210
2-Nitroaniline	ND	15,000	250
Dimethylphthalate	ND	7,700	230
Acenaphthylene	ND	1,500	210
2,6-Dinitrotoluene	ND	7,700	210
3-Nitroaniline	ND	15,000	170
Acenaphthene	ND	1,500	190
2,4-Dinitrophenol	ND	15,000	1,500
4-Nitrophenol	ND	15,000	1,600
Dibenzofuran	ND	7,700	240
2,4-Dinitrotoluene	ND	7,700	220
Diethylphthalate	ND	7,700	260
Fluorene	ND	1,500	230
4-Chlorophenyl-phenylether	ND	7,700	220
4-Nitroaniline	ND	15,000	190
4,6-Dinitro-2-methylphenol	ND	15,000	1,800
N-Nitrosodiphenylamine	ND	7,700	240
Azobenzene	ND	7,700	200
4-Bromophenyl-phenylether	ND	7,700	240

J= Estimated value
DO= Diluted Out
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-13-12.0-13.0	Batch#:	220582
Lab ID:	264701-002	Sampled:	02/13/15
Matrix:	Soil	Received:	02/13/15
Units:	ug/Kg	Prepared:	02/19/15
Basis:	dry	Analyzed:	02/23/15
Diln Fac:	20.00		

Analyte	Result	RL	MDL
Hexachlorobenzene	ND	7,700	250
Pentachlorophenol	ND	15,000	2,900
Phenanthrene	ND	1,500	240
Anthracene	ND	1,500	260
Di-n-butylphthalate	450 J	7,700	280
Fluoranthene	ND	1,500	240
Pyrene	ND	1,500	250
Butylbenzylphthalate	ND	7,700	230
3,3'-Dichlorobenzidine	ND	15,000	160
Benzo(a)anthracene	ND	1,500	240
Chrysene	ND	1,500	260
bis(2-Ethylhexyl)phthalate	520 J	7,700	300
Di-n-octylphthalate	ND	7,700	170
Benzo(b)fluoranthene	ND	1,500	210
Benzo(k)fluoranthene	ND	1,500	220
Benzo(a)pyrene	ND	1,500	200
Indeno(1,2,3-cd)pyrene	ND	1,500	200
Dibenz(a,h)anthracene	ND	1,500	220
Benzo(g,h,i)perylene	ND	1,500	230

Surrogate	%REC	Limits
2-Fluorophenol	DO	25-120
Phenol-d5	DO	36-120
2,4,6-Tribromophenol	DO	27-120
Nitrobenzene-d5	DO	44-120
2-Fluorobiphenyl	DO	47-120
Terphenyl-d14	DO	49-120

J= Estimated value
DO= Diluted Out
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-12-2.5-3.5	Batch#:	220582
Lab ID:	264701-003	Sampled:	02/13/15
Matrix:	Soil	Received:	02/13/15
Units:	ug/Kg	Prepared:	02/19/15
Basis:	dry	Analyzed:	02/20/15
Diln Fac:	2.000		

Moisture: 18%

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	820	53
Phenol	ND	820	37
bis(2-Chloroethyl)ether	ND	820	39
2-Chlorophenol	ND	820	34
1,3-Dichlorobenzene	ND	820	32
1,4-Dichlorobenzene	ND	820	18
Benzyl alcohol	ND	820	40
1,2-Dichlorobenzene	ND	820	25
2-Methylphenol	ND	820	35
bis(2-Chloroisopropyl) ether	ND	820	39
4-Methylphenol	ND	820	39
N-Nitroso-di-n-propylamine	ND	820	37
Hexachloroethane	ND	820	26
Nitrobenzene	ND	820	22
Isophorone	ND	820	25
2-Nitrophenol	ND	1,600	95
2,4-Dimethylphenol	ND	820	46
Benzoic acid	ND	4,100	930
bis(2-Chloroethoxy)methane	ND	820	25
2,4-Dichlorophenol	ND	820	23
1,2,4-Trichlorobenzene	ND	820	21
Naphthalene	ND	160	32
4-Chloroaniline	ND	820	31
Hexachlorobutadiene	ND	820	20
4-Chloro-3-methylphenol	ND	820	21
2-Methylnaphthalene	ND	160	24
Hexachlorocyclopentadiene	ND	1,600	190
2,4,6-Trichlorophenol	ND	820	27
2,4,5-Trichlorophenol	ND	820	22
2-Chloronaphthalene	ND	820	19
2-Nitroaniline	ND	1,600	83
Dimethylphthalate	ND	820	18
Acenaphthylene	ND	160	20
2,6-Dinitrotoluene	ND	820	82
3-Nitroaniline	ND	1,600	18
Acenaphthene	ND	160	16
2,4-Dinitrophenol	ND	1,600	120
4-Nitrophenol	ND	1,600	17
Dibenzofuran	ND	820	21
2,4-Dinitrotoluene	ND	820	20
Diethylphthalate	ND	820	21
Fluorene	ND	160	20
4-Chlorophenyl-phenylether	ND	820	21
4-Nitroaniline	ND	1,600	26
4,6-Dinitro-2-methylphenol	ND	1,600	86
N-Nitrosodiphenylamine	ND	820	19
Azobenzene	ND	820	17
4-Bromophenyl-phenylether	ND	820	20
Hexachlorobenzene	ND	820	17

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-12-2.5-3.5	Batch#:	220582
Lab ID:	264701-003	Sampled:	02/13/15
Matrix:	Soil	Received:	02/13/15
Units:	ug/Kg	Prepared:	02/19/15
Basis:	dry	Analyzed:	02/20/15
Diln Fac:	2.000		

Analyte	Result	RL	MDL
Pentachlorophenol	ND	1,600	250
Phenanthrene	28 J	160	20
Anthracene	ND	160	22
Di-n-butylphthalate	ND	820	23
Fluoranthene	36 J	160	23
Pyrene	37 J	160	18
Butylbenzylphthalate	ND	820	24
3,3'-Dichlorobenzidine	ND	1,600	190
Benzo(a)anthracene	19 J	160	16
Chrysene	31 J	160	20
bis(2-Ethylhexyl)phthalate	ND	820	21
Di-n-octylphthalate	ND	820	84
Benzo(b)fluoranthene	34 J	160	14
Benzo(k)fluoranthene	ND	160	15
Benzo(a)pyrene	21 J	160	14
Indeno(1,2,3-cd)pyrene	20 J	160	19
Dibenz(a,h)anthracene	ND	160	18
Benzo(g,h,i)perylene	27 J	160	20

Surrogate	%REC	Limits
2-Fluorophenol	60	25-120
Phenol-d5	66	36-120
2,4,6-Tribromophenol	74	27-120
Nitrobenzene-d5	60	44-120
2-Fluorobiphenyl	69	47-120
Terphenyl-d14	65	49-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-12-11.0-12.0	Batch#:	220582
Lab ID:	264701-004	Sampled:	02/13/15
Matrix:	Soil	Received:	02/13/15
Units:	ug/Kg	Prepared:	02/19/15
Basis:	dry	Analyzed:	02/20/15
Diln Fac:	1.000		

Moisture: 11%

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	380	25
Phenol	ND	380	17
bis(2-Chloroethyl)ether	ND	380	18
2-Chlorophenol	ND	380	16
1,3-Dichlorobenzene	ND	380	15
1,4-Dichlorobenzene	ND	380	8.3
Benzyl alcohol	ND	380	19
1,2-Dichlorobenzene	ND	380	12
2-Methylphenol	ND	380	16
bis(2-Chloroisopropyl) ether	ND	380	18
4-Methylphenol	ND	380	18
N-Nitroso-di-n-propylamine	ND	380	17
Hexachloroethane	ND	380	12
Nitrobenzene	ND	380	10
Isophorone	ND	380	12
2-Nitrophenol	ND	760	44
2,4-Dimethylphenol	ND	380	21
Benzoic acid	ND	1,900	430
bis(2-Chloroethoxy)methane	ND	380	12
2,4-Dichlorophenol	ND	380	11
1,2,4-Trichlorobenzene	ND	380	9.6
Naphthalene	ND	76	15
4-Chloroaniline	ND	380	14
Hexachlorobutadiene	ND	380	9.5
4-Chloro-3-methylphenol	ND	380	9.9
2-Methylnaphthalene	ND	76	11
Hexachlorocyclopentadiene	ND	760	86
2,4,6-Trichlorophenol	ND	380	13
2,4,5-Trichlorophenol	ND	380	10
2-Chloronaphthalene	ND	380	8.8
2-Nitroaniline	ND	760	38
Dimethylphthalate	ND	380	8.2
Acenaphthylene	ND	76	9.5
2,6-Dinitrotoluene	ND	380	38
3-Nitroaniline	ND	760	8.2
Acenaphthene	ND	76	7.6
2,4-Dinitrophenol	ND	760	56
4-Nitrophenol	ND	760	8.1
Dibenzofuran	ND	380	9.6
2,4-Dinitrotoluene	ND	380	9.5
Diethylphthalate	ND	380	9.5
Fluorene	ND	76	9.1
4-Chlorophenyl-phenylether	ND	380	9.6
4-Nitroaniline	ND	760	12
4,6-Dinitro-2-methylphenol	ND	760	40
N-Nitrosodiphenylamine	ND	380	8.9
Azobenzene	ND	380	7.9
4-Bromophenyl-phenylether	ND	380	9.2
Hexachlorobenzene	ND	380	7.8
Pentachlorophenol	ND	760	120

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-12-11.0-12.0	Batch#:	220582
Lab ID:	264701-004	Sampled:	02/13/15
Matrix:	Soil	Received:	02/13/15
Units:	ug/Kg	Prepared:	02/19/15
Basis:	dry	Analyzed:	02/20/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Phenanthrene	ND	76	9.2
Anthracene	ND	76	10
Di-n-butylphthalate	ND	380	11
Fluoranthene	ND	76	11
Pyrene	ND	76	8.3
Butylbenzylphthalate	ND	380	11
3,3'-Dichlorobenzidine	ND	760	90
Benzo(a)anthracene	ND	76	7.6
Chrysene	ND	76	9.3
bis(2-Ethylhexyl)phthalate	ND	380	9.7
Di-n-octylphthalate	ND	380	39
Benzo(b)fluoranthene	ND	76	6.6
Benzo(k)fluoranthene	ND	76	6.8
Benzo(a)pyrene	ND	76	6.7
Indeno(1,2,3-cd)pyrene	ND	76	8.7
Dibenz(a,h)anthracene	ND	76	8.4
Benzo(g,h,i)perylene	ND	76	9.4

Surrogate	%REC	Limits
2-Fluorophenol	81	25-120
Phenol-d5	85	36-120
2,4,6-Tribromophenol	91	27-120
Nitrobenzene-d5	80	44-120
2-Fluorobiphenyl	85	47-120
Terphenyl-d14	92	49-120

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-22-4.0-5.0	Batch#:	220582
Lab ID:	264701-005	Sampled:	02/13/15
Matrix:	Soil	Received:	02/13/15
Units:	ug/Kg	Prepared:	02/19/15
Basis:	dry	Analyzed:	02/20/15
Diln Fac:	50.00		

Moisture: 19%

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	20,000	1,300
Phenol	ND	20,000	920
bis(2-Chloroethyl)ether	ND	20,000	970
2-Chlorophenol	ND	20,000	850
1,3-Dichlorobenzene	ND	20,000	800
1,4-Dichlorobenzene	ND	20,000	450
Benzyl alcohol	ND	20,000	990
1,2-Dichlorobenzene	ND	20,000	630
2-Methylphenol	ND	20,000	880
bis(2-Chloroisopropyl) ether	ND	20,000	970
4-Methylphenol	ND	20,000	970
N-Nitroso-di-n-propylamine	ND	20,000	930
Hexachloroethane	ND	20,000	640
Nitrobenzene	ND	20,000	550
Isophorone	ND	20,000	620
2-Nitrophenol	ND	41,000	2,400
2,4-Dimethylphenol	ND	20,000	1,100
Benzoic acid	ND	100,000	23,000
bis(2-Chloroethoxy)methane	ND	20,000	630
2,4-Dichlorophenol	ND	20,000	570
1,2,4-Trichlorobenzene	ND	20,000	520
Naphthalene	ND	4,100	790
4-Chloroaniline	ND	20,000	770
Hexachlorobutadiene	ND	20,000	510
4-Chloro-3-methylphenol	1,100 J	20,000	530
2-Methylnaphthalene	ND	4,100	610
Hexachlorocyclopentadiene	ND	41,000	4,600
2,4,6-Trichlorophenol	ND	20,000	670
2,4,5-Trichlorophenol	ND	20,000	560
2-Chloronaphthalene	ND	20,000	470
2-Nitroaniline	ND	41,000	2,100
Dimethylphthalate	ND	20,000	440
Acenaphthylene	ND	4,100	510
2,6-Dinitrotoluene	ND	20,000	2,100
3-Nitroaniline	ND	41,000	440
Acenaphthene	ND	4,100	410
2,4-Dinitrophenol	ND	41,000	3,000
4-Nitrophenol	ND	41,000	430
Dibenzofuran	ND	20,000	510
2,4-Dinitrotoluene	ND	20,000	510
Diethylphthalate	ND	20,000	510
Fluorene	ND	4,100	490
4-Chlorophenyl-phenylether	ND	20,000	510
4-Nitroaniline	ND	41,000	640
4,6-Dinitro-2-methylphenol	ND	41,000	2,100
N-Nitrosodiphenylamine	ND	20,000	480
Azobenzene	ND	20,000	430
4-Bromophenyl-phenylether	ND	20,000	490

J= Estimated value
DO= Diluted Out
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-22-4.0-5.0	Batch#:	220582
Lab ID:	264701-005	Sampled:	02/13/15
Matrix:	Soil	Received:	02/13/15
Units:	ug/Kg	Prepared:	02/19/15
Basis:	dry	Analyzed:	02/20/15
Diln Fac:	50.00		

Analyte	Result	RL	MDL
Hexachlorobenzene	ND	20,000	420
Pentachlorophenol	ND	41,000	6,300
Phenanthrene	ND	4,100	490
Anthracene	ND	4,100	550
Di-n-butylphthalate	ND	20,000	580
Fluoranthene	ND	4,100	570
Pyrene	ND	4,100	450
Butylbenzylphthalate	ND	20,000	590
3,3'-Dichlorobenzidine	ND	41,000	4,800
Benzo(a)anthracene	ND	4,100	410
Chrysene	ND	4,100	500
bis(2-Ethylhexyl)phthalate	2,300 J	20,000	520
Di-n-octylphthalate	ND	20,000	2,100
Benzo(b)fluoranthene	ND	4,100	350
Benzo(k)fluoranthene	ND	4,100	360
Benzo(a)pyrene	ND	4,100	360
Indeno(1,2,3-cd)pyrene	ND	4,100	470
Dibenz(a,h)anthracene	ND	4,100	450
Benzo(g,h,i)perylene	ND	4,100	500

Surrogate	%REC	Limits
2-Fluorophenol	DO	25-120
Phenol-d5	DO	36-120
2,4,6-Tribromophenol	DO	27-120
Nitrobenzene-d5	DO	44-120
2-Fluorobiphenyl	DO	47-120
Terphenyl-d14	DO	49-120

J= Estimated value
DO= Diluted Out
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-22-11.0-12.0	Batch#:	220582
Lab ID:	264701-006	Sampled:	02/13/15
Matrix:	Soil	Received:	02/13/15
Units:	ug/Kg	Prepared:	02/19/15
Basis:	dry	Analyzed:	02/23/15
Diln Fac:	20.00		

Moisture: 17%

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	8,100	1,100
Phenol	ND	8,100	170
bis(2-Chloroethyl)ether	ND	8,100	1,400
2-Chlorophenol	ND	8,100	180
1,3-Dichlorobenzene	ND	8,100	1,400
1,4-Dichlorobenzene	ND	8,100	190
Benzyl alcohol	ND	8,100	260
1,2-Dichlorobenzene	ND	8,100	190
2-Methylphenol	ND	8,100	330
bis(2-Chloroisopropyl) ether	ND	8,100	170
4-Methylphenol	ND	8,100	180
N-Nitroso-di-n-propylamine	ND	8,100	190
Hexachloroethane	ND	8,100	170
Nitrobenzene	ND	8,100	270
Isophorone	ND	8,100	160
2-Nitrophenol	ND	16,000	190
2,4-Dimethylphenol	ND	8,100	340
Benzoic acid	ND	40,000	11,000
bis(2-Chloroethoxy)methane	ND	8,100	180
2,4-Dichlorophenol	ND	8,100	200
1,2,4-Trichlorobenzene	ND	8,100	190
Naphthalene	ND	1,600	190
4-Chloroaniline	ND	8,100	230
Hexachlorobutadiene	ND	8,100	220
4-Chloro-3-methylphenol	ND	8,100	200
2-Methylnaphthalene	ND	1,600	150
Hexachlorocyclopentadiene	ND	16,000	330
2,4,6-Trichlorophenol	ND	8,100	310
2,4,5-Trichlorophenol	ND	8,100	200
2-Chloronaphthalene	ND	8,100	220
2-Nitroaniline	ND	16,000	260
Dimethylphthalate	ND	8,100	240
Acenaphthylene	ND	1,600	220
2,6-Dinitrotoluene	ND	8,100	220
3-Nitroaniline	ND	16,000	180
Acenaphthene	ND	1,600	200
2,4-Dinitrophenol	ND	16,000	1,600
4-Nitrophenol	ND	16,000	1,700
Dibenzofuran	ND	8,100	250
2,4-Dinitrotoluene	ND	8,100	230
Diethylphthalate	ND	8,100	280
Fluorene	ND	1,600	240
4-Chlorophenyl-phenylether	ND	8,100	230
4-Nitroaniline	ND	16,000	200
4,6-Dinitro-2-methylphenol	ND	16,000	1,900
N-Nitrosodiphenylamine	ND	8,100	260
Azobenzene	ND	8,100	210
4-Bromophenyl-phenylether	ND	8,100	260
Hexachlorobenzene	ND	8,100	260

DO= Diluted Out
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-22-11.0-12.0	Batch#:	220582
Lab ID:	264701-006	Sampled:	02/13/15
Matrix:	Soil	Received:	02/13/15
Units:	ug/Kg	Prepared:	02/19/15
Basis:	dry	Analyzed:	02/23/15
Diln Fac:	20.00		

Analyte	Result	RL	MDL
Pentachlorophenol	ND	16,000	3,100
Phenanthrene	ND	1,600	260
Anthracene	ND	1,600	280
Di-n-butylphthalate	ND	8,100	290
Fluoranthene	ND	1,600	250
Pyrene	ND	1,600	260
Butylbenzylphthalate	ND	8,100	240
3,3'-Dichlorobenzidine	ND	16,000	170
Benzo(a)anthracene	ND	1,600	250
Chrysene	ND	1,600	270
bis(2-Ethylhexyl)phthalate	ND	8,100	320
Di-n-octylphthalate	ND	8,100	180
Benzo(b)fluoranthene	ND	1,600	220
Benzo(k)fluoranthene	ND	1,600	230
Benzo(a)pyrene	ND	1,600	210
Indeno(1,2,3-cd)pyrene	ND	1,600	210
Dibenz(a,h)anthracene	ND	1,600	230
Benzo(g,h,i)perylene	ND	1,600	250

Surrogate	%REC	Limits
2-Fluorophenol	DO	25-120
Phenol-d5	DO	36-120
2,4,6-Tribromophenol	DO	27-120
Nitrobenzene-d5	DO	44-120
2-Fluorobiphenyl	DO	47-120
Terphenyl-d14	DO	49-120

DO= Diluted Out
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-20-6.0-7.0	Batch#:	220582
Lab ID:	264701-007	Sampled:	02/13/15
Matrix:	Soil	Received:	02/13/15
Units:	ug/Kg	Prepared:	02/19/15
Basis:	dry	Analyzed:	02/20/15
Diln Fac:	5.000		

Moisture: 16%

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	2,000	78
Phenol	ND	2,000	100
bis(2-Chloroethyl)ether	ND	2,000	76
2-Chlorophenol	ND	2,000	99
1,3-Dichlorobenzene	ND	2,000	46
1,4-Dichlorobenzene	ND	2,000	61
Benzyl alcohol	ND	2,000	94
1,2-Dichlorobenzene	ND	2,000	57
2-Methylphenol	ND	2,000	93
bis(2-Chloroisopropyl) ether	ND	2,000	110
4-Methylphenol	ND	2,000	110
N-Nitroso-di-n-propylamine	ND	2,000	65
Hexachloroethane	ND	2,000	50
Nitrobenzene	ND	2,000	47
Isophorone	ND	2,000	65
2-Nitrophenol	ND	4,000	61
2,4-Dimethylphenol	ND	2,000	83
Benzoic acid	ND	10,000	1,900
bis(2-Chloroethoxy)methane	ND	2,000	69
2,4-Dichlorophenol	ND	2,000	76
1,2,4-Trichlorobenzene	ND	2,000	58
Naphthalene	ND	400	53
4-Chloroaniline	ND	2,000	99
Hexachlorobutadiene	ND	2,000	370
4-Chloro-3-methylphenol	420 J	2,000	89
2-Methylnaphthalene	ND	400	59
Hexachlorocyclopentadiene	ND	4,000	360
2,4,6-Trichlorophenol	ND	2,000	84
2,4,5-Trichlorophenol	ND	2,000	53
2-Chloronaphthalene	ND	2,000	330
2-Nitroaniline	ND	4,000	48
Dimethylphthalate	ND	2,000	56
Acenaphthylene	ND	400	51
2,6-Dinitrotoluene	ND	2,000	53
3-Nitroaniline	ND	4,000	65
Acenaphthene	ND	400	42
2,4-Dinitrophenol	ND	4,000	250
4-Nitrophenol	ND	4,000	410
Dibenzofuran	ND	2,000	53
2,4-Dinitrotoluene	ND	2,000	58
Diethylphthalate	ND	2,000	51
Fluorene	ND	400	54
4-Chlorophenyl-phenylether	ND	2,000	59
4-Nitroaniline	ND	4,000	48
4,6-Dinitro-2-methylphenol	ND	4,000	250
N-Nitrosodiphenylamine	ND	2,000	340
Azobenzene	ND	2,000	43
4-Bromophenyl-phenylether	ND	2,000	350
Hexachlorobenzene	ND	2,000	44

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-20-6.0-7.0	Batch#:	220582
Lab ID:	264701-007	Sampled:	02/13/15
Matrix:	Soil	Received:	02/13/15
Units:	ug/Kg	Prepared:	02/19/15
Basis:	dry	Analyzed:	02/20/15
Diln Fac:	5.000		

Analyte	Result	RL	MDL
Pentachlorophenol	ND	4,000	890
Phenanthrene	ND	400	58
Anthracene	ND	400	42
Di-n-butylphthalate	670 J	2,000	50
Fluoranthene	ND	400	52
Pyrene	ND	400	56
Butylbenzylphthalate	ND	2,000	50
3,3'-Dichlorobenzidine	ND	4,000	260
Benzo(a)anthracene	ND	400	52
Chrysene	ND	400	41
bis(2-Ethylhexyl)phthalate	410 J	2,000	53
Di-n-octylphthalate	ND	2,000	51
Benzo(b)fluoranthene	ND	400	50
Benzo(k)fluoranthene	ND	400	52
Benzo(a)pyrene	ND	400	52
Indeno(1,2,3-cd)pyrene	ND	400	49
Dibenz(a,h)anthracene	ND	400	42
Benzo(g,h,i)perylene	ND	400	52

Surrogate	%REC	Limits
2-Fluorophenol	82	25-120
Phenol-d5	86	36-120
2,4,6-Tribromophenol	60	27-120
Nitrobenzene-d5	77	44-120
2-Fluorobiphenyl	82	47-120
Terphenyl-d14	88	49-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-20-10.5-11.5	Batch#:	220626
Lab ID:	264701-008	Sampled:	02/13/15
Matrix:	Soil	Received:	02/13/15
Units:	ug/Kg	Prepared:	02/20/15
Basis:	dry	Analyzed:	02/20/15
Diln Fac:	1.000		

Moisture: 13%

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	390	15
Phenol	ND	390	20
bis(2-Chloroethyl)ether	ND	390	15
2-Chlorophenol	ND	390	19
1,3-Dichlorobenzene	ND	390	8.8
1,4-Dichlorobenzene	ND	390	12
Benzyl alcohol	ND	390	18
1,2-Dichlorobenzene	ND	390	11
2-Methylphenol	ND	390	18
bis(2-Chloroisopropyl) ether	ND	390	21
4-Methylphenol	ND	390	20
N-Nitroso-di-n-propylamine	ND	390	13
Hexachloroethane	ND	390	9.6
Nitrobenzene	ND	390	9.1
Isophorone	ND	390	13
2-Nitrophenol	ND	780	12
2,4-Dimethylphenol	ND	390	16
Benzoic acid	ND	1,900	360
bis(2-Chloroethoxy)methane	ND	390	13
2,4-Dichlorophenol	ND	390	15
1,2,4-Trichlorobenzene	ND	390	11
Naphthalene	ND	78	10
4-Chloroaniline	ND	390	19
Hexachlorobutadiene	ND	390	71
4-Chloro-3-methylphenol	ND	390	17
2-Methylnaphthalene	ND	78	11
Hexachlorocyclopentadiene	ND	780	70
2,4,6-Trichlorophenol	ND	390	16
2,4,5-Trichlorophenol	ND	390	10
2-Chloronaphthalene	ND	390	64
2-Nitroaniline	ND	780	9.3
Dimethylphthalate	ND	390	11
Acenaphthylene	ND	78	9.9
2,6-Dinitrotoluene	ND	390	10
3-Nitroaniline	ND	780	13
Acenaphthene	ND	78	8.1
2,4-Dinitrophenol	ND	780	48
4-Nitrophenol	ND	780	80
Dibenzofuran	ND	390	10
2,4-Dinitrotoluene	ND	390	11
Diethylphthalate	ND	390	9.9
Fluorene	ND	78	10
4-Chlorophenyl-phenylether	ND	390	11
4-Nitroaniline	ND	780	9.2
4,6-Dinitro-2-methylphenol	ND	780	49
N-Nitrosodiphenylamine	ND	390	65
Azobenzene	ND	390	8.3
4-Bromophenyl-phenylether	ND	390	68
Hexachlorobenzene	ND	390	8.5
Pentachlorophenol	ND	780	170

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-20-10.5-11.5	Batch#:	220626
Lab ID:	264701-008	Sampled:	02/13/15
Matrix:	Soil	Received:	02/13/15
Units:	ug/Kg	Prepared:	02/20/15
Basis:	dry	Analyzed:	02/20/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Phenanthrene	ND	78	11
Anthracene	ND	78	8.1
Di-n-butylphthalate	ND	390	9.7
Fluoranthene	ND	78	10
Pyrene	ND	78	11
Butylbenzylphthalate	ND	390	9.7
3,3'-Dichlorobenzidine	ND	780	50
Benzo(a)anthracene	ND	78	10
Chrysene	ND	78	7.9
bis(2-Ethylhexyl)phthalate	ND	390	10
Di-n-octylphthalate	ND	390	9.8
Benzo(b)fluoranthene	ND	78	9.6
Benzo(k)fluoranthene	ND	78	10
Benzo(a)pyrene	ND	78	10
Indeno(1,2,3-cd)pyrene	ND	78	9.4
Dibenz(a,h)anthracene	ND	78	8.0
Benzo(g,h,i)perylene	ND	78	10

Surrogate	%REC	Limits
2-Fluorophenol	105	25-120
Phenol-d5	116	36-120
2,4,6-Tribromophenol	59	27-120
Nitrobenzene-d5	75	44-120
2-Fluorobiphenyl	76	47-120
Terphenyl-d14	79	49-120

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777813	Batch#:	220582
Matrix:	Soil	Prepared:	02/19/15
Units:	ug/Kg	Analyzed:	02/19/15

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	340	13
Phenol	ND	340	17
bis(2-Chloroethyl)ether	ND	340	13
2-Chlorophenol	ND	340	17
1,3-Dichlorobenzene	ND	340	7.6
1,4-Dichlorobenzene	ND	340	10
Benzyl alcohol	ND	340	16
1,2-Dichlorobenzene	ND	340	9.5
2-Methylphenol	ND	340	15
bis(2-Chloroisopropyl) ether	ND	340	18
4-Methylphenol	ND	340	18
N-Nitroso-di-n-propylamine	ND	340	11
Hexachloroethane	ND	340	8.3
Nitrobenzene	ND	340	7.8
Isophorone	ND	340	11
2-Nitrophenol	ND	670	10
2,4-Dimethylphenol	ND	340	14
Benzoic acid	ND	1,700	310
bis(2-Chloroethoxy)methane	ND	340	12
2,4-Dichlorophenol	ND	340	13
1,2,4-Trichlorobenzene	ND	340	9.7
Naphthalene	ND	67	8.8
4-Chloroaniline	ND	340	17
Hexachlorobutadiene	ND	340	61
4-Chloro-3-methylphenol	ND	340	15
2-Methylnaphthalene	ND	67	9.9
Hexachlorocyclopentadiene	ND	670	61
2,4,6-Trichlorophenol	ND	340	14
2,4,5-Trichlorophenol	ND	340	8.8
2-Chloronaphthalene	ND	340	56
2-Nitroaniline	ND	670	8.1
Dimethylphthalate	ND	340	9.4
Acenaphthylene	ND	67	8.6
2,6-Dinitrotoluene	ND	340	8.8
3-Nitroaniline	ND	670	11
Acenaphthene	ND	67	7.0
2,4-Dinitrophenol	ND	670	42
4-Nitrophenol	ND	670	69
Dibenzofuran	ND	340	8.8
2,4-Dinitrotoluene	ND	340	9.7
Diethylphthalate	ND	340	8.6
Fluorene	ND	67	9.0
4-Chlorophenyl-phenylether	ND	340	9.8
4-Nitroaniline	ND	670	8.0
4,6-Dinitro-2-methylphenol	ND	670	42
N-Nitrosodiphenylamine	ND	340	56
Azobenzene	ND	340	7.2
4-Bromophenyl-phenylether	ND	340	59
Hexachlorobenzene	ND	340	7.3
Pentachlorophenol	ND	670	150
Phenanthrene	ND	67	9.6
Anthracene	ND	67	7.0
Di-n-butylphthalate	ND	340	8.4

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777813	Batch#:	220582
Matrix:	Soil	Prepared:	02/19/15
Units:	ug/Kg	Analyzed:	02/19/15

Analyte	Result	RL	MDL
Fluoranthene	ND	67	8.7
Pyrene	ND	67	9.4
Butylbenzylphthalate	ND	340	8.4
3,3'-Dichlorobenzidine	ND	670	43
Benzo(a)anthracene	ND	67	8.7
Chrysene	ND	67	6.8
bis(2-Ethylhexyl)phthalate	ND	340	8.8
Di-n-octylphthalate	ND	340	8.5
Benzo(b)fluoranthene	ND	67	8.3
Benzo(k)fluoranthene	ND	67	8.7
Benzo(a)pyrene	ND	67	8.7
Indeno(1,2,3-cd)pyrene	ND	67	8.2
Dibenz(a,h)anthracene	ND	67	6.9
Benzo(g,h,i)perylene	ND	67	8.7

Surrogate	%REC	Limits
2-Fluorophenol	76	25-120
Phenol-d5	90	36-120
2,4,6-Tribromophenol	52	27-120
Nitrobenzene-d5	58	44-120
2-Fluorobiphenyl	62	47-120
Terphenyl-d14	75	49-120

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC777814	Batch#:	220582
Matrix:	Soil	Prepared:	02/19/15
Units:	ug/Kg	Analyzed:	02/19/15

Analyte	Spiked	Result	%REC	Limits
Phenol	2,671	2,961	111	42-120
2-Chlorophenol	2,671	2,683	100	45-120
1,4-Dichlorobenzene	2,671	2,128	80	48-120
N-Nitroso-di-n-propylamine	2,671	2,667	100	27-123
1,2,4-Trichlorobenzene	2,671	2,048	77	50-120
4-Chloro-3-methylphenol	2,671	1,836	69	59-120
Acenaphthene	1,002	798.7	80	53-120
4-Nitrophenol	2,671	2,044	77	47-120
2,4-Dinitrotoluene	2,671	2,188	82	55-120
Pentachlorophenol	2,671	1,067	40	32-120
Pyrene	1,002	801.0	80	52-120

Surrogate	%REC	Limits
2-Fluorophenol	98	25-120
Phenol-d5	108	36-120
2,4,6-Tribromophenol	74	27-120
Nitrobenzene-d5	75	44-120
2-Fluorobiphenyl	72	47-120
Terphenyl-d14	73	49-120

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	ZZZZZZZZZZ	Batch#:	220582
MSS Lab ID:	264640-046	Sampled:	02/12/15
Matrix:	Soil	Received:	02/12/15
Units:	ug/Kg	Prepared:	02/19/15
Basis:	as received	Analyzed:	02/20/15
Diln Fac:	1.000		

Type: MS Lab ID: QC777815

Analyte	MSS Result	Spiked	Result	%REC	Limits
Phenol	<15.10	2,640	2,958	112	47-120
2-Chlorophenol	<14.03	2,640	2,699	102	44-120
1,4-Dichlorobenzene	<7.366	2,640	1,878	71	49-120
N-Nitroso-di-n-propylamine	<15.28	2,640	2,669	101	42-120
1,2,4-Trichlorobenzene	<8.531	2,640	1,901	72	54-120
4-Chloro-3-methylphenol	<8.718	2,640	1,802	68	55-120
Acenaphthene	<6.732	990.1	777.1	78	51-120
4-Nitrophenol	<7.127	2,640	2,150	81	36-120
2,4-Dinitrotoluene	<8.384	2,640	2,146	81	52-120
Pentachlorophenol	<103.2	2,640	1,655	63	14-120
Pyrene	<7.360	990.1	821.8	83	46-124

Surrogate	%REC	Limits
2-Fluorophenol	99	25-120
Phenol-d5	110	36-120
2,4,6-Tribromophenol	70	27-120
Nitrobenzene-d5	73	44-120
2-Fluorobiphenyl	72	47-120
Terphenyl-d14	77	49-120

Type: MSD Lab ID: QC777816

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Phenol	2,631	3,074	117	47-120	4	39
2-Chlorophenol	2,631	2,877	109	44-120	7	38
1,4-Dichlorobenzene	2,631	2,095	80	49-120	11	45
N-Nitroso-di-n-propylamine	2,631	2,701	103	42-120	2	40
1,2,4-Trichlorobenzene	2,631	2,062	78	54-120	8	38
4-Chloro-3-methylphenol	2,631	1,884	72	55-120	5	41
Acenaphthene	986.5	854.9	87	51-120	10	47
4-Nitrophenol	2,631	2,241	85	36-120	5	41
2,4-Dinitrotoluene	2,631	2,315	88	52-120	8	40
Pentachlorophenol	2,631	1,481	56	14-120	11	53
Pyrene	986.5	871.6	88	46-124	6	50

Surrogate	%REC	Limits
2-Fluorophenol	106	25-120
Phenol-d5	115	36-120
2,4,6-Tribromophenol	73	27-120
Nitrobenzene-d5	80	44-120
2-Fluorobiphenyl	77	47-120
Terphenyl-d14	81	49-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777996	Batch#:	220626
Matrix:	Soil	Prepared:	02/20/15
Units:	ug/Kg	Analyzed:	02/20/15

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	330	13
Phenol	ND	330	17
bis(2-Chloroethyl)ether	ND	330	13
2-Chlorophenol	ND	330	16
1,3-Dichlorobenzene	ND	330	7.6
1,4-Dichlorobenzene	ND	330	10
Benzyl alcohol	ND	330	16
1,2-Dichlorobenzene	ND	330	9.5
2-Methylphenol	ND	330	15
bis(2-Chloroisopropyl) ether	ND	330	18
4-Methylphenol	ND	330	18
N-Nitroso-di-n-propylamine	ND	330	11
Hexachloroethane	ND	330	8.3
Nitrobenzene	ND	330	7.8
Isophorone	ND	330	11
2-Nitrophenol	ND	670	10
2,4-Dimethylphenol	ND	330	14
Benzoic acid	ND	1,700	310
bis(2-Chloroethoxy)methane	ND	330	12
2,4-Dichlorophenol	ND	330	13
1,2,4-Trichlorobenzene	ND	330	9.7
Naphthalene	ND	67	8.8
4-Chloroaniline	ND	330	17
Hexachlorobutadiene	ND	330	61
4-Chloro-3-methylphenol	ND	330	15
2-Methylnaphthalene	ND	67	9.9
Hexachlorocyclopentadiene	ND	670	61
2,4,6-Trichlorophenol	ND	330	14
2,4,5-Trichlorophenol	ND	330	8.8
2-Chloronaphthalene	ND	330	55
2-Nitroaniline	ND	670	8.0
Dimethylphthalate	ND	330	9.4
Acenaphthylene	ND	67	8.5
2,6-Dinitrotoluene	ND	330	8.8
3-Nitroaniline	ND	670	11
Acenaphthene	ND	67	7.0
2,4-Dinitrophenol	ND	670	41
4-Nitrophenol	ND	670	69
Dibenzofuran	ND	330	8.8
2,4-Dinitrotoluene	ND	330	9.7
Diethylphthalate	ND	330	8.5
Fluorene	ND	67	8.9
4-Chlorophenyl-phenylether	ND	330	9.8
4-Nitroaniline	ND	670	7.9
4,6-Dinitro-2-methylphenol	ND	670	42
N-Nitrosodiphenylamine	ND	330	56
Azobenzene	ND	330	7.2
4-Bromophenyl-phenylether	ND	330	59
Hexachlorobenzene	ND	330	7.3
Pentachlorophenol	ND	670	150
Phenanthrene	ND	67	9.6
Anthracene	ND	67	6.9
Di-n-butylphthalate	ND	330	8.3

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777996	Batch#:	220626
Matrix:	Soil	Prepared:	02/20/15
Units:	ug/Kg	Analyzed:	02/20/15

Analyte	Result	RL	MDL
Fluoranthene	ND	67	8.6
Pyrene	ND	67	9.4
Butylbenzylphthalate	ND	330	8.4
3,3'-Dichlorobenzidine	ND	670	43
Benzo(a)anthracene	ND	67	8.6
Chrysene	ND	67	6.8
bis(2-Ethylhexyl)phthalate	ND	330	8.7
Di-n-octylphthalate	ND	330	8.4
Benzo(b)fluoranthene	ND	67	8.3
Benzo(k)fluoranthene	ND	67	8.7
Benzo(a)pyrene	ND	67	8.7
Indeno(1,2,3-cd)pyrene	ND	67	8.1
Dibenz(a,h)anthracene	ND	67	6.9
Benzo(g,h,i)perylene	ND	67	8.6

Surrogate	%REC	Limits
2-Fluorophenol	106	25-120
Phenol-d5	110	36-120
2,4,6-Tribromophenol	49	27-120
Nitrobenzene-d5	73	44-120
2-Fluorobiphenyl	78	47-120
Terphenyl-d14	79	49-120

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Type:	LCS	Diln Fac:	2.000
Lab ID:	QC777997	Batch#:	220626
Matrix:	Soil	Prepared:	02/20/15
Units:	ug/Kg	Analyzed:	02/23/15

Analyte	Spiked	Result	%REC	Limits
Phenol	2,650	2,400	91	42-120
2-Chlorophenol	2,650	2,384	90	45-120
1,4-Dichlorobenzene	2,650	2,430	92	48-120
N-Nitroso-di-n-propylamine	2,650	2,487	94	27-123
1,2,4-Trichlorobenzene	2,650	2,467	93	50-120
4-Chloro-3-methylphenol	2,650	2,596	98	59-120
Acenaphthene	993.7	900.3	91	53-120
4-Nitrophenol	2,650	2,246	85	47-120
2,4-Dinitrotoluene	2,650	2,275	86	55-120
Pentachlorophenol	2,650	1,963	74	32-120
Pyrene	993.7	978.9	99	52-120

Surrogate	%REC	Limits
2-Fluorophenol	74	25-120
Phenol-d5	90	36-120
2,4,6-Tribromophenol	86	27-120
Nitrobenzene-d5	83	44-120
2-Fluorobiphenyl	78	47-120
Terphenyl-d14	84	49-120

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-20-10.5-11.5	Batch#:	220626
MSS Lab ID:	264701-008	Sampled:	02/13/15
Matrix:	Soil	Received:	02/13/15
Units:	ug/Kg	Prepared:	02/20/15
Basis:	dry	Analyzed:	02/24/15
Diln Fac:	1.000		

Type: MS Moisture: 13%
Lab ID: QC777998

Analyte	MSS Result	Spiked	Result	%REC	Limits
Phenol	<20.17	3,088	1,960	63	47-120
2-Chlorophenol	<19.16	3,088	2,410	78	44-120
1,4-Dichlorobenzene	<11.78	3,088	2,368	77	49-120
N-Nitroso-di-n-propylamine	<12.56	3,088	2,519	82	42-120
1,2,4-Trichlorobenzene	<11.25	3,088	2,505	81	54-120
4-Chloro-3-methylphenol	<17.12	3,088	2,845	92	55-120
Acenaphthene	<8.079	1,158	948.4	82	51-120
4-Nitrophenol	<80.07	3,088	2,764	90	36-120
2,4-Dinitrotoluene	<11.28	3,088	2,473	80	52-120
Pentachlorophenol	<172.8	3,088	1,713	55	14-120
Pyrene	<10.90	1,158	989.9	85	46-124

Surrogate	%REC	Limits
2-Fluorophenol	64	25-120
Phenol-d5	64	36-120
2,4,6-Tribromophenol	80	27-120
Nitrobenzene-d5	80	44-120
2-Fluorobiphenyl	69	47-120
Terphenyl-d14	73	49-120

Type: MSD Moisture: 13%
Lab ID: QC777999

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Phenol	3,086	1,911	62	47-120	2	39
2-Chlorophenol	3,086	2,297	74	44-120	5	38
1,4-Dichlorobenzene	3,086	2,242	73	49-120	5	45
N-Nitroso-di-n-propylamine	3,086	2,307	75	42-120	9	40
1,2,4-Trichlorobenzene	3,086	2,360	76	54-120	6	38
4-Chloro-3-methylphenol	3,086	2,605	84	55-120	9	41
Acenaphthene	1,157	873.5	75	51-120	8	47
4-Nitrophenol	3,086	2,436	79	36-120	13	41
2,4-Dinitrotoluene	3,086	2,277	74	52-120	8	40
Pentachlorophenol	3,086	1,434	46	14-120	18	53
Pyrene	1,157	908.2	78	46-124	9	50

Surrogate	%REC	Limits
2-Fluorophenol	61	25-120
Phenol-d5	60	36-120
2,4,6-Tribromophenol	70	27-120
Nitrobenzene-d5	73	44-120
2-Fluorobiphenyl	63	47-120
Terphenyl-d14	67	49-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8082
Matrix:	Soil	Diln Fac:	1.000
Units:	ug/Kg	Sampled:	02/13/15
Basis:	dry	Received:	02/13/15

Field ID:	SB-13-3.0-4.0	Batch#:	220550
Type:	SAMPLE	Prepared:	02/18/15
Lab ID:	264701-001	Analyzed:	02/19/15
Moisture:	22%		

Analyte	Result	RL	MDL
Aroclor-1016	ND	15	3.8
Aroclor-1221	ND	31	10
Aroclor-1232	ND	15	5.0
Aroclor-1242	ND	15	4.6
Aroclor-1248	ND	15	4.9
Aroclor-1254	ND	15	4.0
Aroclor-1260	ND	15	2.5

Surrogate	%REC	Limits
TCMX	74	46-141
Decachlorobiphenyl	77	25-135

Field ID:	SB-13-12.0-13.0	Batch#:	220550
Type:	SAMPLE	Prepared:	02/18/15
Lab ID:	264701-002	Analyzed:	02/19/15
Moisture:	13%		

Analyte	Result	RL	MDL
Aroclor-1016	ND	14	3.4
Aroclor-1221	ND	28	9.2
Aroclor-1232	ND	14	4.5
Aroclor-1242	ND	14	4.1
Aroclor-1248	ND	14	4.4
Aroclor-1254	ND	14	3.5
Aroclor-1260	ND	14	2.2

Surrogate	%REC	Limits
TCMX	87	46-141
Decachlorobiphenyl	87	25-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8082
Matrix:	Soil	Diln Fac:	1.000
Units:	ug/Kg	Sampled:	02/13/15
Basis:	dry	Received:	02/13/15

Field ID:	SB-12-2.5-3.5	Batch#:	220550
Type:	SAMPLE	Prepared:	02/18/15
Lab ID:	264701-003	Analyzed:	02/19/15
Moisture:	18%		

Analyte	Result	RL	MDL
Aroclor-1016	ND	15	3.6
Aroclor-1221	ND	29	9.7
Aroclor-1232	ND	15	4.7
Aroclor-1242	ND	15	4.4
Aroclor-1248	ND	15	4.6
Aroclor-1254	ND	15	3.7
Aroclor-1260	ND	15	2.3

Surrogate	%REC	Limits
TCMX	107	46-141
Decachlorobiphenyl	106	25-135

Field ID:	SB-12-11.0-12.0	Batch#:	220643
Type:	SAMPLE	Prepared:	02/20/15
Lab ID:	264701-004	Analyzed:	02/21/15
Moisture:	11%		

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	3.4
Aroclor-1221	ND	27	9.0
Aroclor-1232	ND	13	4.4
Aroclor-1242	ND	13	4.1
Aroclor-1248	ND	13	4.3
Aroclor-1254	ND	13	3.5
Aroclor-1260	ND	13	2.2

Surrogate	%REC	Limits
TCMX	115	46-141
Decachlorobiphenyl	121	25-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8082
Matrix:	Soil	Diln Fac:	1.000
Units:	ug/Kg	Sampled:	02/13/15
Basis:	dry	Received:	02/13/15

Field ID:	SB-22-4.0-5.0	Batch#:	220550
Type:	SAMPLE	Prepared:	02/18/15
Lab ID:	264701-005	Analyzed:	02/19/15
Moisture:	19%		

Analyte	Result	RL	MDL
Aroclor-1016	ND	15	3.6
Aroclor-1221	ND	30	9.8
Aroclor-1232	ND	15	4.8
Aroclor-1242	ND	15	4.4
Aroclor-1248	ND	15	4.7
Aroclor-1254	ND	15	3.8
Aroclor-1260	ND	15	2.4

Surrogate	%REC	Limits
TCMX	82	46-141
Decachlorobiphenyl	81	25-135

Field ID:	SB-22-11.0-12.0	Batch#:	220550
Type:	SAMPLE	Prepared:	02/18/15
Lab ID:	264701-006	Analyzed:	02/19/15
Moisture:	17%		

Analyte	Result	RL	MDL
Aroclor-1016	ND	14	3.6
Aroclor-1221	ND	29	9.7
Aroclor-1232	ND	14	4.7
Aroclor-1242	ND	14	4.4
Aroclor-1248	ND	14	4.6
Aroclor-1254	ND	14	3.7
Aroclor-1260	ND	14	2.4

Surrogate	%REC	Limits
TCMX	80	46-141
Decachlorobiphenyl	82	25-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8082
Matrix:	Soil	Diln Fac:	1.000
Units:	ug/Kg	Sampled:	02/13/15
Basis:	dry	Received:	02/13/15

Field ID:	SB-20-6.0-7.0	Batch#:	220643
Type:	SAMPLE	Prepared:	02/20/15
Lab ID:	264701-007	Analyzed:	02/21/15
Moisture:	16%		

Analyte	Result	RL	MDL
Aroclor-1016	ND	14	3.5
Aroclor-1221	ND	28	9.3
Aroclor-1232	ND	14	4.5
Aroclor-1242	ND	14	4.2
Aroclor-1248	ND	14	4.5
Aroclor-1254	ND	14	3.6
Aroclor-1260	ND	14	2.3

Surrogate	%REC	Limits
TCMX	93	46-141
Decachlorobiphenyl	110	25-135

Field ID:	SB-20-10.5-11.5	Batch#:	220643
Type:	SAMPLE	Prepared:	02/20/15
Lab ID:	264701-008	Analyzed:	02/21/15
Moisture:	13%		

Analyte	Result	RL	MDL
Aroclor-1016	ND	14	3.4
Aroclor-1221	ND	28	9.3
Aroclor-1232	ND	14	4.5
Aroclor-1242	ND	14	4.2
Aroclor-1248	ND	14	4.4
Aroclor-1254	ND	14	3.5
Aroclor-1260	ND	14	2.2

Surrogate	%REC	Limits
TCMX	94	46-141
Decachlorobiphenyl	103	25-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8082
Matrix:	Soil	Diln Fac:	1.000
Units:	ug/Kg	Sampled:	02/13/15
Basis:	dry	Received:	02/13/15

Type:	BLANK	Prepared:	02/18/15
Lab ID:	QC777690	Analyzed:	02/19/15
Batch#:	220550		

Analyte	Result	RL	MDL
Aroclor-1016	ND	12	3.0
Aroclor-1221	ND	24	8.0
Aroclor-1232	ND	12	3.9
Aroclor-1242	ND	12	3.6
Aroclor-1248	ND	12	3.8
Aroclor-1254	ND	12	3.1
Aroclor-1260	ND	12	1.9

Surrogate	%REC	Limits
TCMX	122	46-141
Decachlorobiphenyl	105	25-135

Type:	BLANK	Prepared:	02/20/15
Lab ID:	QC778061	Analyzed:	02/21/15
Batch#:	220643		

Analyte	Result	RL	MDL
Aroclor-1016	ND	12	2.9
Aroclor-1221	ND	24	7.9
Aroclor-1232	ND	12	3.8
Aroclor-1242	ND	12	3.5
Aroclor-1248	ND	12	3.8
Aroclor-1254	ND	12	3.0
Aroclor-1260	ND	12	1.9

Surrogate	%REC	Limits
TCMX	116	46-141
Decachlorobiphenyl	122	25-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC777691	Batch#:	220550
Matrix:	Soil	Prepared:	02/18/15
Units:	ug/Kg	Analyzed:	02/19/15

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	165.3	228.1	138	64-140
Aroclor-1260	165.3	214.4	130	65-146

Surrogate	%REC	Limits
TCMX	127	46-141
Decachlorobiphenyl	107	25-135

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8082
Field ID:	ZZZZZZZZZZ	Batch#:	220550
MSS Lab ID:	264719-001	Sampled:	02/17/15
Matrix:	Soil	Received:	02/17/15
Units:	ug/Kg	Prepared:	02/18/15
Basis:	as received	Analyzed:	02/18/15
Diln Fac:	1.000		

Type: MS Lab ID: QC777692

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<3.001	169.3	181.7	107	60-161
Aroclor-1260	91.91	169.3	221.4	76	42-166

Surrogate	%REC	Limits
TCMX	99	46-141
Decachlorobiphenyl	94	25-135

Type: MSD Lab ID: QC777693

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	168.7	194.1	115	60-161	7	43
Aroclor-1260	168.7	231.3	83	42-166	5	51

Surrogate	%REC	Limits
TCMX	94	46-141
Decachlorobiphenyl	86	25-135

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC778062	Batch#:	220643
Matrix:	Soil	Prepared:	02/20/15
Units:	ug/Kg	Analyzed:	02/21/15

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	164.4	187.8	114	64-140
Aroclor-1260	164.4	195.4	119	65-146

Surrogate	%REC	Limits
TCMX	109	46-141
Decachlorobiphenyl	116	25-135

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	264701	Project#:	C1374
Client:	Integral Consulting, Inc.	Location:	Allied Engineering
Field ID:	SB-13-3.0-4.0	Basis:	dry
Lab ID:	264701-001	Diln Fac:	1.000
Matrix:	Soil	Sampled:	02/13/15
Units:	mg/Kg	Received:	02/13/15

Moisture: 22%

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	1.1	0.63	0.20	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Arsenic	3.0	0.32	0.11	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Barium	170	0.32	0.062	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Beryllium	0.40	0.13	0.024	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Cadmium	0.20 J	0.32	0.020	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Chromium	34	0.32	0.027	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Cobalt	7.4	0.32	0.025	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Copper	17	0.33	0.11	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Lead	12	0.32	0.093	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Mercury	0.072	0.020	0.0011	220649	02/20/15	02/20/15	METHOD	EPA 7471A
Molybdenum	0.089 J	0.32	0.071	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Nickel	39	0.32	0.086	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Selenium	ND	0.63	0.19	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Silver	ND	0.32	0.095	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Thallium	ND	0.63	0.21	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Vanadium	40	0.32	0.031	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Zinc	30	1.3	0.12	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	264701	Project#:	C1374
Client:	Integral Consulting, Inc.	Location:	Allied Engineering
Field ID:	SB-13-12.0-13.0	Basis:	dry
Lab ID:	264701-002	Diln Fac:	1.000
Matrix:	Soil	Sampled:	02/13/15
Units:	mg/Kg	Received:	02/13/15

Moisture: 13%

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	3.3	0.61	0.18	220569	02/19/15	02/24/15	EPA 3050B	EPA 6010B
Arsenic	1.4	0.31	0.10	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Barium	58	0.31	0.060	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Beryllium	0.28	0.12	0.015	220569	02/19/15	02/24/15	EPA 3050B	EPA 6010B
Cadmium	0.22 J	0.31	0.020	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Chromium	59	0.31	0.026	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Cobalt	3.5	0.31	0.024	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Copper	12	0.32	0.11	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Lead	3.7	0.31	0.089	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Mercury	0.045	0.018	0.0010	220649	02/20/15	02/20/15	METHOD	EPA 7471A
Molybdenum	ND	0.31	0.069	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Nickel	32	0.31	0.083	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Selenium	ND	0.61	0.18	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Silver	ND	0.31	0.091	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Thallium	ND	0.61	0.20	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Vanadium	26	0.31	0.030	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Zinc	25	1.2	0.12	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	264701	Project#:	C1374
Client:	Integral Consulting, Inc.	Location:	Allied Engineering
Field ID:	SB-12-2.5-3.5	Basis:	dry
Lab ID:	264701-003	Diln Fac:	1.000
Matrix:	Soil	Sampled:	02/13/15
Units:	mg/Kg	Received:	02/13/15

Moisture: 18%

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	6.0	0.57	0.17	220569	02/19/15	02/24/15	EPA 3050B	EPA 6010B
Arsenic	6.0	0.28	0.095	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Barium	200	0.28	0.056	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Beryllium	0.51	0.11	0.014	220569	02/19/15	02/24/15	EPA 3050B	EPA 6010B
Cadmium	0.65	0.28	0.018	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Chromium	52	0.28	0.024	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Cobalt	9.9	0.28	0.022	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Copper	38	0.30	0.099	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Lead	95	0.28	0.083	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Mercury	0.39	0.020	0.0011	220649	02/20/15	02/20/15	METHOD	EPA 7471A
Molybdenum	0.54	0.28	0.056	220569	02/19/15	02/24/15	EPA 3050B	EPA 6010B
Nickel	70	0.28	0.077	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Selenium	ND	0.57	0.17	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Silver	ND	0.28	0.085	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Thallium	ND	0.57	0.19	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Vanadium	40	0.28	0.028	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Zinc	98	1.1	0.11	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	264701	Project#:	C1374
Client:	Integral Consulting, Inc.	Location:	Allied Engineering
Field ID:	SB-12-11.0-12.0	Basis:	dry
Lab ID:	264701-004	Diln Fac:	1.000
Matrix:	Soil	Sampled:	02/13/15
Units:	mg/Kg	Received:	02/13/15

Moisture: 11%

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	2.2	0.59	0.19	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Arsenic	19	0.30	0.098	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Barium	100	0.30	0.058	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Beryllium	0.33	0.12	0.015	220569	02/19/15	02/24/15	EPA 3050B	EPA 6010B
Cadmium	0.64	0.30	0.019	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Chromium	61	0.30	0.025	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Cobalt	13	0.30	0.023	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Copper	23	0.31	0.10	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Lead	4.8	0.30	0.086	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Mercury	0.031	0.018	0.0010	220649	02/20/15	02/20/15	METHOD	EPA 7471A
Molybdenum	0.11 J	0.30	0.066	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Nickel	49	0.30	0.080	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Selenium	ND	0.59	0.17	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Silver	ND	0.30	0.088	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Thallium	ND	0.59	0.19	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Vanadium	67	0.30	0.029	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Zinc	30	1.2	0.12	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	264701	Project#:	C1374
Client:	Integral Consulting, Inc.	Location:	Allied Engineering
Field ID:	SB-22-4.0-5.0	Basis:	dry
Lab ID:	264701-005	Diln Fac:	1.000
Matrix:	Soil	Sampled:	02/13/15
Units:	mg/Kg	Received:	02/13/15

Moisture: 19%

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	4.4	0.62	0.18	220569	02/19/15	02/24/15	EPA 3050B	EPA 6010B
Arsenic	4.0	0.31	0.10	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Barium	130	0.31	0.060	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Beryllium	0.33	0.12	0.015	220569	02/19/15	02/24/15	EPA 3050B	EPA 6010B
Cadmium	0.40	0.31	0.020	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Chromium	41	0.31	0.026	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Cobalt	19	0.31	0.024	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Copper	26	0.32	0.11	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Lead	57	0.31	0.090	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Mercury	0.041	0.021	0.0012	220649	02/20/15	02/20/15	METHOD	EPA 7471A
Molybdenum	0.75	0.31	0.069	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Nickel	40	0.31	0.084	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Selenium	0.37 J	0.62	0.18	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Silver	ND	0.31	0.092	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Thallium	ND	0.62	0.20	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Vanadium	30	0.31	0.031	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Zinc	53	1.2	0.12	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	264701	Project#:	C1374
Client:	Integral Consulting, Inc.	Location:	Allied Engineering
Field ID:	SB-22-11.0-12.0	Basis:	dry
Lab ID:	264701-006	Diln Fac:	1.000
Matrix:	Soil	Sampled:	02/13/15
Units:	mg/Kg	Received:	02/13/15

Moisture: 17%

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	4.6	0.58	0.17	220569	02/19/15	02/24/15	EPA 3050B	EPA 6010B
Arsenic	1.9	0.29	0.096	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Barium	61	0.29	0.056	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Beryllium	0.31	0.12	0.014	220569	02/19/15	02/24/15	EPA 3050B	EPA 6010B
Cadmium	0.36	0.29	0.019	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Chromium	52	0.29	0.024	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Cobalt	5.9	0.29	0.022	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Copper	14	0.30	0.10	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Lead	4.7	0.29	0.085	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Mercury	0.057	0.019	0.0011	220649	02/20/15	02/20/15	METHOD	EPA 7471A
Molybdenum	ND	0.29	0.065	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Nickel	39	0.29	0.078	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Selenium	ND	0.58	0.17	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Silver	ND	0.29	0.087	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Thallium	ND	0.58	0.19	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Vanadium	34	0.29	0.029	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Zinc	31	1.2	0.11	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	264701	Project#:	C1374
Client:	Integral Consulting, Inc.	Location:	Allied Engineering
Field ID:	SB-20-6.0-7.0	Basis:	dry
Lab ID:	264701-007	Diln Fac:	1.000
Matrix:	Soil	Sampled:	02/13/15
Units:	mg/Kg	Received:	02/13/15

Moisture: 16%

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	0.39 J	0.64	0.20	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Arsenic	0.14 J	0.32	0.093	220569	02/19/15	02/24/15	EPA 3050B	EPA 6010B
Barium	52	0.32	0.062	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Beryllium	0.38	0.13	0.016	220569	02/19/15	02/24/15	EPA 3050B	EPA 6010B
Cadmium	0.37	0.32	0.020	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Chromium	51	0.32	0.027	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Cobalt	3.9	0.32	0.025	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Copper	14	0.33	0.11	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Lead	3.6	0.32	0.093	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Mercury	0.029	0.022	0.0012	220649	02/20/15	02/20/15	METHOD	EPA 7471A
Molybdenum	ND	0.32	0.072	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Nickel	42	0.32	0.087	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Selenium	ND	0.64	0.19	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Silver	ND	0.32	0.096	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Thallium	ND	0.64	0.21	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Vanadium	24	0.32	0.032	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Zinc	33	1.3	0.12	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	264701	Project#:	C1374
Client:	Integral Consulting, Inc.	Location:	Allied Engineering
Field ID:	SB-20-10.5-11.5	Basis:	dry
Lab ID:	264701-008	Diln Fac:	1.000
Matrix:	Soil	Sampled:	02/13/15
Units:	mg/Kg	Received:	02/13/15

Moisture: 13%

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	0.43 J	0.62	0.20	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Arsenic	1.1	0.31	0.10	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Barium	59	0.31	0.060	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Beryllium	0.33	0.12	0.015	220569	02/19/15	02/24/15	EPA 3050B	EPA 6010B
Cadmium	0.43	0.31	0.020	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Chromium	57	0.31	0.026	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Cobalt	8.7	0.31	0.024	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Copper	18	0.32	0.11	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Lead	4.2	0.31	0.090	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Mercury	0.041	0.017	0.00096	220649	02/20/15	02/20/15	METHOD	EPA 7471A
Molybdenum	ND	0.31	0.069	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Nickel	54	0.31	0.084	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Selenium	ND	0.62	0.18	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Silver	ND	0.31	0.092	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Thallium	ND	0.62	0.20	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Vanadium	38	0.31	0.031	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B
Zinc	37	1.2	0.12	220569	02/19/15	02/23/15	EPA 3050B	EPA 6010B

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3050B
Project#:	C1374	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777757	Batch#:	220569
Matrix:	Soil	Prepared:	02/19/15
Units:	mg/Kg	Analyzed:	02/23/15

Analyte	Result	RL	MDL
Antimony	ND	0.50	0.16
Arsenic	ND	0.25	0.083
Barium	ND	0.25	0.049
Beryllium	ND	0.10	0.019
Cadmium	ND	0.25	0.016
Chromium	ND	0.25	0.021
Cobalt	ND	0.25	0.019
Copper	ND	0.26	0.086
Lead	ND	0.25	0.073
Molybdenum	ND	0.25	0.056
Nickel	ND	0.25	0.068
Selenium	ND	0.50	0.15
Silver	ND	0.25	0.075
Thallium	ND	0.50	0.16
Vanadium	ND	0.25	0.025
Zinc	0.58 J	1.0	0.098

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3050B
Project#:	C1374	Analysis:	EPA 6010B
Matrix:	Soil	Batch#:	220569
Units:	mg/Kg	Prepared:	02/19/15
Diln Fac:	5.000	Analyzed:	02/23/15

Type: BS Lab ID: QC777758

Analyte	Spiked	Result	%REC	Limits
Antimony	50.00	55.57	111	80-120
Arsenic	50.00	56.31	113	80-120
Barium	50.00	55.92	112	80-120
Beryllium	50.00	54.10	108	80-120
Cadmium	50.00	57.74	115	80-120
Chromium	50.00	55.10	110	80-120
Cobalt	50.00	54.00	108	80-120
Copper	50.00	49.18	98	80-120
Lead	50.00	53.88	108	80-120
Molybdenum	50.00	55.77	112	80-120
Nickel	50.00	54.50	109	80-120
Selenium	50.00	56.55	113	80-120
Silver	50.00	53.45	107	80-120
Thallium	50.00	55.88	112	80-120
Vanadium	50.00	57.69	115	80-120
Zinc	50.00	57.19	114	80-120

Type: BSD Lab ID: QC777759

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	50.00	50.07	100	80-120	10	20
Arsenic	50.00	51.06	102	80-120	10	20
Barium	50.00	50.11	100	80-120	11	20
Beryllium	50.00	48.47	97	80-120	11	20
Cadmium	50.00	51.84	104	80-120	11	20
Chromium	50.00	49.93	100	80-120	10	20
Cobalt	50.00	48.68	97	80-120	10	20
Copper	50.00	43.87	88	80-120	11	20
Lead	50.00	48.64	97	80-120	10	20
Molybdenum	50.00	50.54	101	80-120	10	20
Nickel	50.00	49.47	99	80-120	10	20
Selenium	50.00	51.53	103	80-120	9	20
Silver	50.00	47.78	96	80-120	11	20
Thallium	50.00	50.60	101	80-120	10	20
Vanadium	50.00	51.91	104	80-120	11	20
Zinc	50.00	51.47	103	80-120	11	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3050B
Project#:	C1374	Analysis:	EPA 6010B
Field ID:	SB-13-3.0-4.0	Batch#:	220569
MSS Lab ID:	264701-001	Sampled:	02/13/15
Matrix:	Soil	Received:	02/13/15
Units:	mg/Kg	Prepared:	02/19/15
Basis:	dry	Analyzed:	02/23/15
Diln Fac:	5.000		

Type: MS Moisture: 22%
Lab ID: QC777760

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	1.066	65.41	26.09	38	15-120
Arsenic	3.046	65.41	61.36	89	69-120
Barium	170.6	65.41	234.0	97	35-154
Beryllium	0.4031	65.41	59.49	90	75-120
Cadmium	0.1963	65.41	62.56	95	71-120
Chromium	34.33	65.41	96.32	95	57-133
Cobalt	7.442	65.41	65.55	89	56-125
Copper	16.72	65.41	74.68	89	54-144
Lead	11.55	65.41	76.57	99	53-125
Molybdenum	0.08878	65.41	51.70	79	66-120
Nickel	39.03	65.41	97.25	89	44-141
Selenium	<0.1856	65.41	59.67	91	61-120
Silver	<0.09489	65.41	57.69	88	69-120
Thallium	<0.2069	65.41	58.81	90	59-120
Vanadium	40.23	65.41	97.36	87	52-144
Zinc	29.76	65.41	94.22	99	45-145

Type: MSD Moisture: 22%
Lab ID: QC777761

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	66.09	25.99	38	15-120	1	41
Arsenic	66.09	62.11	89	69-120	0	35
Barium	66.09	224.3	81	35-154	5	36
Beryllium	66.09	60.35	91	75-120	0	20
Cadmium	66.09	62.97	95	71-120	0	25
Chromium	66.09	102.0	102	57-133	5	33
Cobalt	66.09	81.78	112	56-125	21	36
Copper	66.09	78.01	93	54-144	4	38
Lead	66.09	122.4	168 *	53-125	45 *	42
Molybdenum	66.09	52.82	80	66-120	1	20
Nickel	66.09	97.27	88	44-141	1	39
Selenium	66.09	59.59	90	61-120	1	33
Silver	66.09	60.35	91	69-120	3	22
Thallium	66.09	58.78	89	59-120	1	27
Vanadium	66.09	98.39	88	52-144	0	29
Zinc	66.09	111.7	124	45-145	16	39

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	220649
Lab ID:	QC778086	Prepared:	02/20/15
Matrix:	Soil	Analyzed:	02/20/15
Units:	mg/Kg		

Result	RL	MDL
0.0032 J	0.017	0.00093

J= Estimated value
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7471A
Analyte:	Mercury	Batch#:	220649
Matrix:	Soil	Prepared:	02/20/15
Units:	mg/Kg	Analyzed:	02/20/15
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC778087	0.2083	0.2184	105	80-120		
BSD	QC778088	0.2083	0.2148	103	80-120	2	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Field ID:	SB-13-3.0-4.0	Batch#:	220649
MSS Lab ID:	264701-001	Sampled:	02/13/15
Matrix:	Soil	Received:	02/13/15
Units:	mg/Kg	Prepared:	02/20/15
Basis:	dry	Analyzed:	02/20/15

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	Moisture	RPD	Lim
MS	QC778089	0.07150	0.2716	0.3442	100	69-142	22%		
MSD	QC778090		0.3024	0.3698	99	69-142	22%	1	36

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Hexavalent Chromium

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3060A
Project#:	C1374	Analysis:	EPA 7196A
Analyte:	Hexavalent Chromium	Batch#:	220802
Matrix:	Soil	Received:	02/13/15
Units:	mg/Kg	Prepared:	02/25/15 15:20
Basis:	dry	Analyzed:	02/26/15 14:00
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Moisture	Sampled
SB-13-3.0-4.0	SAMPLE	264701-001	ND	0.51	22%	02/13/15 08:45
SB-13-12.0-13.0	SAMPLE	264701-002	1.1	0.47	13%	02/13/15 09:05
SB-12-2.5-3.5	SAMPLE	264701-003	ND	0.48	18%	02/13/15 10:00
SB-12-11.0-12.0	SAMPLE	264701-004	1.0	0.45	11%	02/13/15 10:15
SB-22-4.0-5.0	SAMPLE	264701-005	ND	0.49	19%	02/13/15 11:20
SB-22-11.0-12.0	SAMPLE	264701-006	ND	0.47	17%	02/13/15 11:25
SB-20-6.0-7.0	SAMPLE	264701-007	ND	0.45	16%	02/13/15 12:20
SB-20-10.5-11.5	SAMPLE	264701-008	0.57	0.47	13%	02/13/15 12:25
	BLANK	QC778683	ND	0.42		

ND= Not Detected
RL= Reporting Limit

75.0

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Batch QC Report

Hexavalent Chromium

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3060A
Project#:	C1374	Analysis:	EPA 7196A
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	220802
MSS Lab ID:	264669-001	Sampled:	02/11/15 10:30
Matrix:	Soil	Received:	02/13/15
Units:	mg/Kg	Prepared:	02/25/15 15:20
Basis:	dry	Analyzed:	02/26/15 14:00

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	Moisture	RPD	Lim
LCS	QC778684		40.98	37.79		92	80-120			
SSPIKE	QC778685	<0.4659	46.19	34.27		74 *	85-115	12%		
SDUP	QC778686	<0.4659		<0.4773	0.4773			12%	NC	30

*= Value outside of QC limits; see narrative
NC= Not Calculated
RL= Reporting Limit
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Moisture

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	ASTM D2216/CLP
Analyte:	Moisture, Percent	Batch#:	220565
Matrix:	Soil	Sampled:	02/13/15
Units:	%	Received:	02/13/15
Diln Fac:	1.000	Analyzed:	02/18/15

Field ID	Lab ID	Result	RL
SB-13-3.0-4.0	264701-001	22	1
SB-13-12.0-13.0	264701-002	13	1
SB-12-2.5-3.5	264701-003	18	1
SB-12-11.0-12.0	264701-004	11	1
SB-22-4.0-5.0	264701-005	19	1
SB-22-11.0-12.0	264701-006	17	1
SB-20-6.0-7.0	264701-007	16	1
SB-20-10.5-11.5	264701-008	13	1

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Moisture

Lab #:	264701	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	ASTM D2216/CLP
Analyte:	Moisture, Percent	Units:	%
Field ID:	SB-24-7.0-7.3	Diln Fac:	1.000
Type:	SDUP	Batch#:	220565
MSS Lab ID:	264757-011	Sampled:	02/18/15
Lab ID:	QC777749	Received:	02/18/15
Matrix:	Soil	Analyzed:	02/18/15

MSS Result	Result	RL	RPD	Lim
14.72	14.42	1.000	2	26

RL= Reporting Limit
RPD= Relative Percent Difference

79.0

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2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 264706
ANALYTICAL REPORT

Integral Consulting, Inc.	Project : C1374
115 Sansome Street	Location : Allied Engineering
San Francisco, CA 94104	Level : II

Sample ID	Lab ID
SB-19-GW-PROD	264706-001
SB-22-GW-PROD	264706-002

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 03/25/2015

John Goyette
Senior Program Manager
goyette@ctberk.com
(510) 204-2233

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**264706**
Client:	**Integral Consulting, Inc.**
Project:	**C1374**
Location:	**Allied Engineering**
Request Date:	**02/20/15**
Samples Received:	**02/13/15**

This data package contains sample and QC results for two product samples, requested for the above referenced project on 02/20/15. The samples were received cold and intact.

TPH-Extractables by GC:

A portion of the product phase of each sample was separated from the aqueous phase and diluted in dichloromethane for TPH-D/MO fingerprint analysis by GC-FID. Both samples exhibited chromatographic patterns consistent with some type of lubricating oil such as motor oil. SG-19-GW-PROD is the heavier of the two, with peaks predominantly in the C24-C40 range. SB-22-GW-PROD features peaks from C16-C40 and the presence of a double apex could indicate a mixture of two oils. Chromatograms for each sample compared to a motor oil standard are included. No analytical problems were encountered.

Semivolatile Organics by GC/MS SIM (EPA 8270C-SIM):

SB-19-GW-PROD (lab # 264706-001) and SB-22-GW-PROD (lab # 264706-002) were diluted due to the viscous nature of the sample extracts. No other analytical problems were encountered.

PCBs (EPA 8082):

All samples underwent sulfuric acid cleanup using EPA Method 3665A. All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. SB-19-GW-PROD (lab # 264706-001) and SB-22-GW-PROD (lab # 264706-002) were diluted due to foaming. No other analytical problems were encountered.

Subject: RE: C1361 - C&T Login Summary (264706); Total Lab Costs
From: Chris Lyles <clyles@integral-corp.com>
Date: 2/20/2015 12:02 PM
To: Tracy Babjar <tracy.babjar@ctberk.com>, Bridgette DeShields <bdeshields@integral-corp.com>
CC: "John Goyette (Goyette@ctberk.com)" <Goyette@ctberk.com>, Jacquelyn Caridi <jcaridi@integral-corp.com>

Tracy,

Can you make sure that these sample IDs are changed to:

SB-19-GW-PROD
SB-22-GW-PROD

We would like to take these off hold and run the non-aqueous phase (product on water surface) for:

TPH-E Fingerprint Analysis
PAHs
PCBs

This will be on Standard TAT.

Also how much will this cost? We need some updated costs to submit to the client.

Maybe it is just easiest if you connect with your billing department to see how much everything we have submitted will cost (including this above analysis). These may be in two project numbers as we changed from C1361 to C1374. We would like all data to be billed under C1374 Task 02002. We need this number as soon as you can get it to us as we have a change order due to the client shortly.

Best,

Chris

Christopher B. Lyles, GIT | Associate Geologist
Integral Consulting Inc. | www.integral-corp.com
115 Sansome Street, Suite 200 | San Francisco, CA 94104
Tel: 415.393.4750 ext: 851 | Cell: 301.706.0791

HEALTH ENVIRONMENT TECHNOLOGY SUSTAINABILITY
This correspondence contains confidential or privileged information from Integral Consulting Inc. It may be "Attorney-Client Privileged" and protected as "Work Product". The information contained herein is intended for the use of the individual or party named above. If you are not the intended recipient, note that any copying, distribution, disclosure, or use of the text and/or attached document(s) is strictly prohibited. If you have received this correspondence in error, please notify sender immediately. Thank you.

From: Tracy Babjar [mailto:tracy.babjar@ctberk.com]
Sent: Tuesday, February 17, 2015 4:11 PM
To: Chris Lyles; Bridgette DeShields
Subject: C1361 - C&T Login Summary (264706)

C&T Login Summary for 264706

Project: C1361
Site: Allied Engineering
Lab Login #: 264706

Report To: Integral Consulting, Inc.
115 Sansome Street
Suite 200

Bill To: Integral Consulting, Inc.
285 Century Place
Suite 190

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Fax (510) 486-0532

Chain of Custody # _____

C&T LOGIN # 264706

Project No: C1361
Project Name: Allied Engineering
Project P. O. No: C1367 Task 4
EDD Format: Report Level ☐ II ☐ III ☐ IV
Turnaround Time: ☐ RUSH _____ ☒ Standard

Sampler: [redacted] / B. Wishnoff
Report To: Bridgette DeShields
Company: Integral Consulting Inc
Telephone:
Email: bdeshields@integral-corp.com

Lab No.	Sample ID.	SAMPLING Date Collected	SAMPLING Time Collected	MATRIX Water	MATRIX Solid	MATRIX Product	# of Containers	CHEMICAL PRESERVATIVE HCl	H2SO4	HNO3	NaOH	None	ANALYTICAL REQUEST: Fuel Scan (HOLD All)
1	SB-17-G[redacted]OD	2/13/15	1435			X	1					1	X
2	SB-22-G[redacted]ROD	2/13/15	1620			X	1					1	X

Notes: HOLD both samples, will likely analyze the product layer at a later date.

SAMPLE RECEIPT
☒ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:	DATE:	TIME:
[signature]	2/13/15	1633
[signature]	2/13/15	1707

RECEIVED BY:	DATE:	TIME:
[signature]	2/13/15	1633
[signature]	2/13/15	1707

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 264706 Date Received 2/13/15 Number of coolers 1
Client Integral Project Allied Engineering

Date Opened 2/13 By (print) BL (sign) [illegible]
Date Logged in 2/17 By (print) [illegible] (sign) [illegible]

1. Did cooler come with a shipping slip (airbill, etc) _____ YES NO
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO N/A
3. Were custody papers dry and intact when received? _____ YES NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO
6. Indicate the packing in cooler: (if other, describe) _____

   ☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☒ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels
7. Temperature documentation: * Notify PM if temperature exceeds 6°C

   Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) _____

   ☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES NO
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ YES NO
10. Are there any missing / extra samples? _____ YES NO
11. Are samples in the appropriate containers for indicated tests? _____ YES NO
12. Are sample labels present, in good condition and complete? _____ YES NO
13. Do the sample labels agree with custody papers? _____ YES NO
14. Was sufficient amount of sample sent for tests requested? _____ YES NO
15. Are the samples appropriately preserved? _____ YES NO N/A
16. Did you check preservatives for all bottles for each sample? _____ YES NO N/A
17. Did you document your preservative check? _____ YES NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO N/A
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO N/A
20. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A
21. Was the client contacted concerning this sample delivery? _____ YES NO
    If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

Rev 10, 9/12

Curtis & Tompkins, Ltd.

Detections Summary for 264706

Results for any subcontracted analyses are not included in this summary.

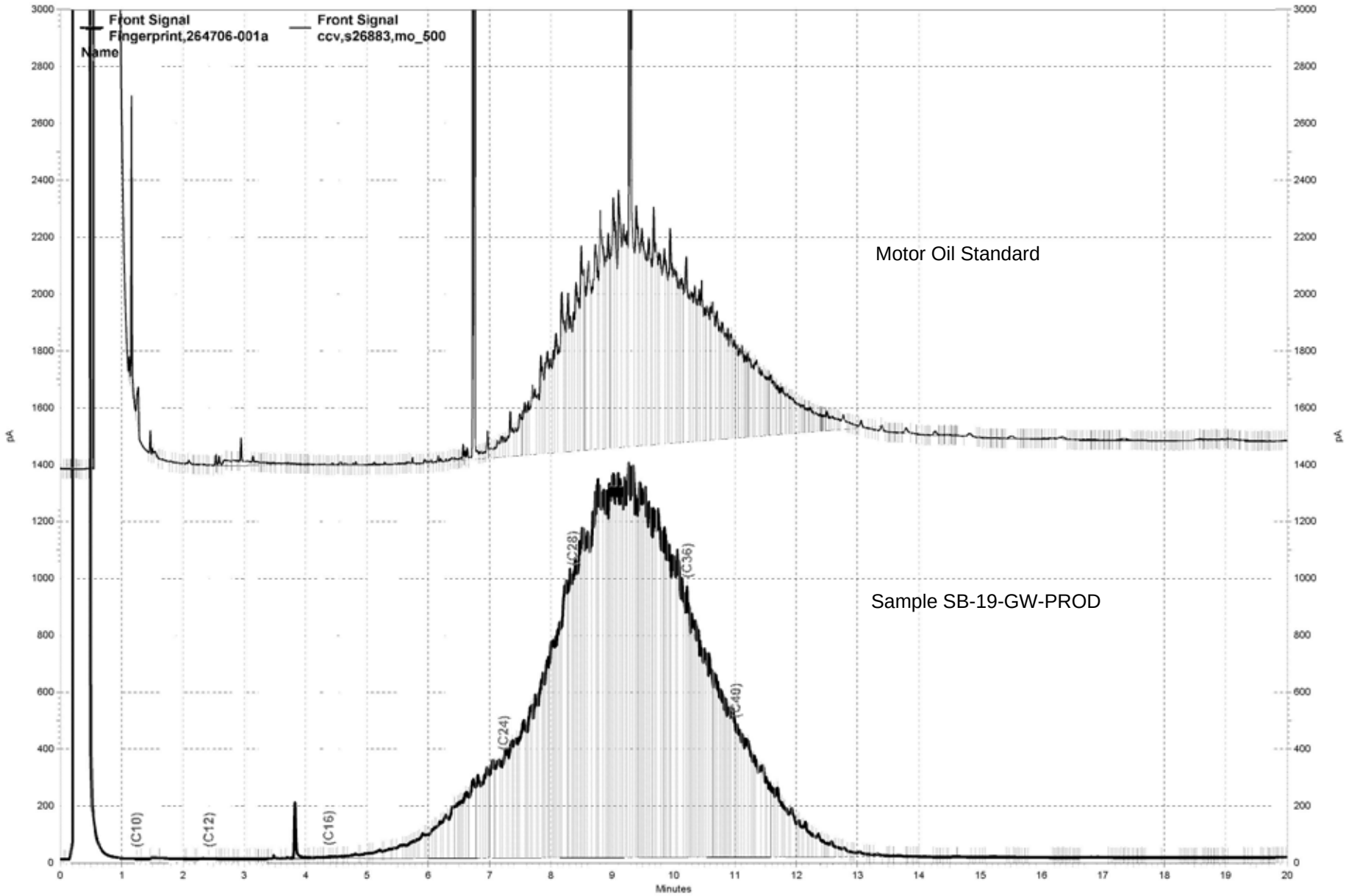
Client : Integral Consulting, Inc.
Project : C1374
Location : Allied Engineering

Client Sample ID : SB-19-GW-PROD Laboratory Sample ID : 264706-001

No Detections

Client Sample ID : SB-22-GW-PROD Laboratory Sample ID : 264706-002

No Detections



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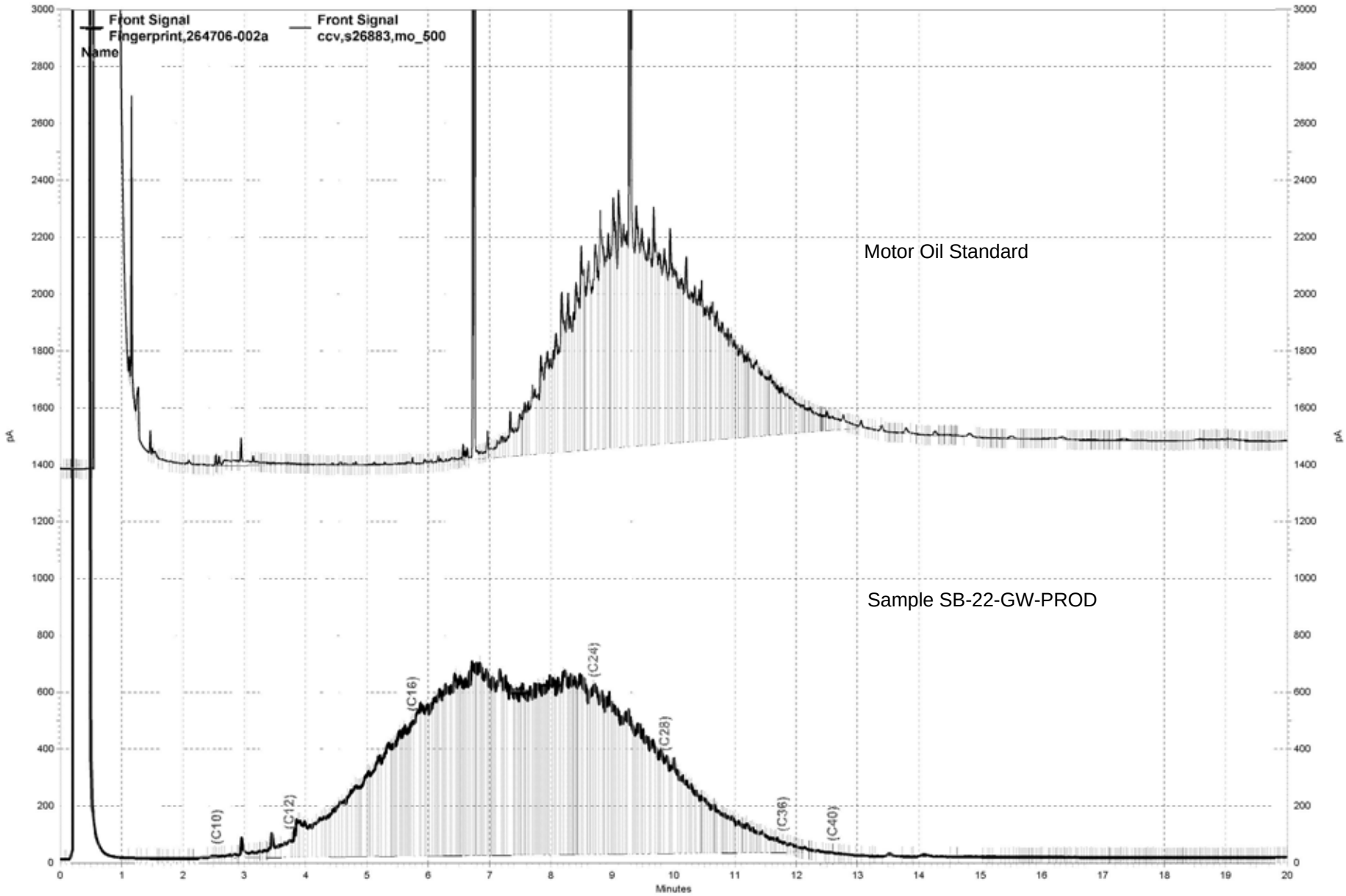
G:\ezchrom\Projects\GC27\Data\082a003.dat, Front Signal



\\lims\gdrive\ezchrom\Projects\GC27\Data\055a007.dat, Front Signal

G:\ezchrom\Projects\GC27\Data\082a003.dat, Front Signal

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Semivolatile Organics by GC/MS SIM

Lab #:	264706	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3580
Project#:	C1374	Analysis:	EPA 8270C-SIM
Field ID:	SB-19-GW-PROD	Batch#:	220795
Lab ID:	264706-001	Sampled:	02/13/15
Matrix:	Miscell.	Received:	02/13/15
Units:	ug/Kg	Prepared:	02/25/15
Basis:	as received	Analyzed:	02/26/15
Diln Fac:	20.00		

Analyte	Result	RL	MDL
Naphthalene	ND	29,000	7,100
Acenaphthylene	ND	29,000	5,900
Acenaphthene	ND	29,000	5,900
Fluorene	ND	29,000	5,900
Phenanthrene	ND	29,000	5,900
Anthracene	ND	29,000	5,900
Fluoranthene	ND	29,000	5,900
Pyrene	ND	29,000	5,900
Benzo(a)anthracene	ND	29,000	5,900
Chrysene	ND	29,000	5,900
Benzo(b)fluoranthene	ND	29,000	5,900
Benzo(k)fluoranthene	ND	29,000	5,900
Benzo(a)pyrene	ND	29,000	5,900
Indeno(1,2,3-cd)pyrene	ND	29,000	5,900
Dibenz(a,h)anthracene	ND	29,000	5,900
Benzo(g,h,i)perylene	ND	29,000	5,900

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	33-120
2-Fluorobiphenyl	DO	43-120
Terphenyl-d14	DO	38-120

DO= Diluted Out
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS SIM

Lab #:	264706	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3580
Project#:	C1374	Analysis:	EPA 8270C-SIM
Field ID:	SB-22-GW-PROD	Batch#:	220795
Lab ID:	264706-002	Sampled:	02/13/15
Matrix:	Miscell.	Received:	02/13/15
Units:	ug/Kg	Prepared:	02/25/15
Basis:	as received	Analyzed:	02/26/15
Diln Fac:	200.0		

Analyte	Result	RL	MDL
Naphthalene	ND	300,000	61,000
Acenaphthylene	ND	300,000	61,000
Acenaphthene	ND	300,000	61,000
Fluorene	ND	300,000	61,000
Phenanthrene	ND	300,000	61,000
Anthracene	ND	300,000	61,000
Fluoranthene	ND	300,000	61,000
Pyrene	ND	300,000	61,000
Benzo(a)anthracene	ND	300,000	61,000
Chrysene	ND	300,000	61,000
Benzo(b)fluoranthene	ND	300,000	61,000
Benzo(k)fluoranthene	ND	300,000	61,000
Benzo(a)pyrene	ND	300,000	60,000
Indeno(1,2,3-cd)pyrene	ND	300,000	61,000
Dibenz(a,h)anthracene	ND	300,000	61,000
Benzo(g,h,i)perylene	ND	300,000	74,000

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	33-120
2-Fluorobiphenyl	DO	43-120
Terphenyl-d14	DO	38-120

DO= Diluted Out
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS SIM

Lab #:	264706	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3580
Project#:	C1374	Analysis:	EPA 8270C-SIM
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778655	Batch#:	220795
Matrix:	Miscell.	Prepared:	02/25/15
Units:	ug/Kg	Analyzed:	02/25/15

Analyte	Result	RL	MDL
Naphthalene	ND	1,500	300
Acenaphthylene	ND	1,500	300
Acenaphthene	ND	1,500	300
Fluorene	ND	1,500	300
Phenanthrene	ND	1,500	300
Anthracene	ND	1,500	300
Fluoranthene	ND	1,500	300
Pyrene	ND	1,500	300
Benzo(a)anthracene	ND	1,500	300
Chrysene	ND	1,500	300
Benzo(b)fluoranthene	ND	1,500	300
Benzo(k)fluoranthene	ND	1,500	300
Benzo(a)pyrene	ND	1,500	300
Indeno(1,2,3-cd)pyrene	ND	1,500	300
Dibenz(a,h)anthracene	ND	1,500	300
Benzo(g,h,i)perylene	ND	1,500	300

Surrogate	%REC	Limits
Nitrobenzene-d5	90	33-120
2-Fluorobiphenyl	87	43-120
Terphenyl-d14	72	38-120

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS SIM

Lab #:	264706	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3580
Project#:	C1374	Analysis:	EPA 8270C-SIM
Matrix:	Miscell.	Batch#:	220795
Units:	ug/Kg	Prepared:	02/25/15
Diln Fac:	1.000	Analyzed:	02/25/15

Type: BS Lab ID: QC778656

Analyte	Spiked	Result	%REC	Limits
Acenaphthene	5,000	3,333	67	44-120
Pyrene	5,000	3,192	64	36-120

Surrogate	%REC	Limits
Nitrobenzene-d5	102	33-120
2-Fluorobiphenyl	90	43-120
Terphenyl-d14	75	38-120

Type: BSD Lab ID: QC778657

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Acenaphthene	5,000	3,711	74	44-120	11	20
Pyrene	5,000	3,537	71	36-120	10	20

Surrogate	%REC	Limits
Nitrobenzene-d5	89	33-120
2-Fluorobiphenyl	87	43-120
Terphenyl-d14	71	38-120

RPD= Relative Percent Difference

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Polychlorinated Biphenyls (PCBs)

Lab #:	264706	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3580
Project#:	C1374	Analysis:	EPA 8082
Matrix:	Miscell.	Sampled:	02/13/15
Units:	ug/Kg	Received:	02/13/15
Basis:	as received	Prepared:	02/25/15
Batch#:	220796		

Field ID:	SB-19-GW-PROD	Diln Fac:	5.000
Type:	SAMPLE	Analyzed:	02/27/15
Lab ID:	264706-001		

Analyte	Result	RL	MDL
Aroclor-1016	ND	2,500	890
Aroclor-1221	ND	5,000	2,400
Aroclor-1232	ND	2,500	1,200
Aroclor-1242	ND	2,500	1,100
Aroclor-1248	ND	2,500	1,100
Aroclor-1254	ND	2,500	920
Aroclor-1260	ND	2,500	580

Surrogate	%REC	Limits
TCMX	86	46-141
Decachlorobiphenyl	84	25-135

Field ID:	SB-22-GW-PROD	Diln Fac:	5.000
Type:	SAMPLE	Analyzed:	02/27/15
Lab ID:	264706-002		

Analyte	Result	RL	MDL
Aroclor-1016	ND	2,500	890
Aroclor-1221	ND	5,000	2,400
Aroclor-1232	ND	2,500	1,200
Aroclor-1242	ND	2,500	1,100
Aroclor-1248	ND	2,500	1,100
Aroclor-1254	ND	2,500	910
Aroclor-1260	ND	2,500	580

Surrogate	%REC	Limits
TCMX	67	46-141
Decachlorobiphenyl	95	25-135

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778658	Analyzed:	02/26/15

Analyte	Result	RL	MDL
Aroclor-1016	ND	500	180
Aroclor-1221	ND	1,000	480
Aroclor-1232	ND	500	230
Aroclor-1242	ND	500	210
Aroclor-1248	ND	500	230
Aroclor-1254	ND	500	180
Aroclor-1260	ND	500	120

Surrogate	%REC	Limits
TCMX	89	46-141
Decachlorobiphenyl	92	25-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	264706	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3580
Project#:	C1374	Analysis:	EPA 8082
Matrix:	Miscell.	Batch#:	220796
Units:	ug/Kg	Prepared:	02/25/15
Diln Fac:	1.000	Analyzed:	02/26/15

Type: BS Lab ID: QC778659

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	10,000	11,190	112	64-140
Aroclor-1260	10,000	10,800	108	65-146

Surrogate	%REC	Limits
TCMX	102	46-141
Decachlorobiphenyl	108	25-135

Type: BSD Lab ID: QC778660

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	10,000	9,089	91	64-140	21	35
Aroclor-1260	10,000	8,726	87	65-146	21	36

Surrogate	%REC	Limits
TCMX	86	46-141
Decachlorobiphenyl	87	25-135

RPD= Relative Percent Difference

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2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 264721
ANALYTICAL REPORT

Integral Consulting, Inc. 115 Sansome Street San Francisco, CA 94104	Project : C1374 Location : Allied Engineering Level : II

Sample ID	Lab ID
SB-19-GW	264721-001

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Tracy Babjar Date: 02/25/2015

Tracy Babjar
Project Manager
tracy.babjar@ctberk.com
(510) 204-2226

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**264721**
Client:	**Integral Consulting, Inc.**
Project:	**C1374**
Location:	**Allied Engineering**
Request Date:	**02/17/15**
Samples Received:	**02/17/15**

This data package contains sample and QC results for one water sample, requested for the above referenced project on 02/17/15. The sample was received cold and intact.

Volatile Organics by GC/MS (EPA 8260B):
1,2,3-trichlorobenzene was detected between the MDL and the RL in the method blank for batch 220530; this analyte was not detected in the sample at or above the RL. No other analytical problems were encountered.

Semivolatile Organics by GC/MS (EPA 8270C):
Low surrogate recovery was observed for 2-fluorobiphenyl in SB-19-GW (lab # 264721-001). Low surrogate recovery was observed for terphenyl-d14 in SB-19-GW (lab # 264721-001). No other analytical problems were encountered.

PCBs (EPA 8082):
All samples underwent sulfuric acid cleanup using EPA Method 3665A. All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. No analytical problems were encountered.

Metals (EPA 6010B and EPA 7470A):
Low recoveries were observed for copper, molybdenum, and lead in the MS/MSD for batch 220663; the parent sample was not a project sample, the BS/BSD were within limits, and the associated RPDs were within limits. High recoveries were observed for chromium and selenium in the MSD for batch 220663; the BS/BSD were within limits, the associated RPDs were within limits, and these analytes were not detected at or above the RL in the associated sample. Copper and antimony were detected between the MDL and the RL in the method blank for batch 220663; these analytes were not detected in the sample at or above the RL. Zinc was detected between the MDL and the RL in the method blank for batch 220663; this analyte was not detected in the sample at or above the RL. No other analytical problems were encountered.

Hexavalent Chromium (EPA 7196A):
No analytical problems were encountered.

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # 2604721

Chain of Custody #

Project No: C1361 → C1374

Project Name: Allied Engineering

Project P. O. No:

EDD Format: Report Level ☐ II ☐ III ☐ IV

Turnaround Time: ☐ RUSH ☒ Standard

Sampler: C. Gyles

Report To: B. DeShields

Company: Integral Consulting Inc.

Telephone:

Email: bdeshields@integral-corp.com

Lab No.	Sample ID.	SAMPLING Date Collected	SAMPLING Time Collected	MATRIX Water	MATRIX Solid	MATRIX	MATRIX	# of Containers	CHEMICAL PRESERVATIVE HCl	H2SO4	HNO3	NaOH	None	ANALYTICAL REQUEST: ~~TPH~~ full list by 8260	SVOCs by 8270	Dissolved Metals (1 lab filtered) 22 metals by 7196	Cr VI by 7196	PCBs by 8082
	SB-19-GW	2/17/15	1730	X				12	6				6	X	X	X	X	X

Notes:
- Dissolved metals to be lab filtered
- Report all to MDL
- EDF required

SAMPLE RECEIPT
☐ Intact
☒ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 2/17/15 TIME: 1826
DATE: TIME:
DATE: TIME:

RECEIVED BY:
DATE: 2/17 TIME: 1826
DATE: TIME:
DATE: TIME:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 264721 Date Received 2/17/15 Number of coolers 1
Client Integral Consulting Project Allied Engineering

Date Opened 2/17 By (print) SC (sign) [signature]
Date Logged in 2/17 By (print) [illegible] (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc) _____ YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO (N/A)
3. Were custody papers dry and intact when received? _____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

☒ Bubble Wrap ☒ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) _____

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ (YES) NO
10. Are there any missing / extra samples? _____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? _____ (YES) NO
12. Are sample labels present, in good condition and complete? _____ (YES) NO
13. Do the sample labels agree with custody papers? _____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
15. Are the samples appropriately preserved? _____ (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? _____ YES NO (N/A)
17. Did you document your preservative check? _____ YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? _____ (YES) NO N/A
21. Was the client contacted concerning this sample delivery? _____ YES (NO)
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

Rev 10, 9/12

Curtis & Tompkins, Ltd.

Detections Summary for 264721

Results for any subcontracted analyses are not included in this summary.

Client : Integral Consulting, Inc.
Project : C1374
Location : Allied Engineering

Client Sample ID : SB-19-GW Laboratory Sample ID : 264721-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Vinyl Chloride	0.2	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Acetone	2.5	J	10	1.6	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
MTBE	0.9		0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	0.4	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Trichloroethene	0.9		0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Toluene	0.3	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Tetrachloroethene	2.9		0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Barium	66		5.0	1.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Chromium	1.2	J	5.0	0.57	ug/L	DISS.	1.000	EPA 6010B	METHOD
Molybdenum	17		5.0	0.40	ug/L	DISS.	1.000	EPA 6010B	METHOD
Nickel	4.2	J	5.0	0.71	ug/L	DISS.	1.000	EPA 6010B	METHOD
Vanadium	22		5.0	0.67	ug/L	DISS.	1.000	EPA 6010B	METHOD

J = Estimated value

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264721	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8260B
Field ID:	SB-19-GW	Batch#:	220530
Lab ID:	264721-001	Sampled:	02/17/15
Matrix:	Water	Received:	02/17/15
Units:	ug/L	Analyzed:	02/18/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.3
Vinyl Chloride	0.2 J	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.3
Trichlorofluoromethane	ND	1.0	0.2
Acetone	2.5 J	10	1.6
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.2
Methylene Chloride	ND	10	0.2
Carbon Disulfide	ND	0.5	0.1
MTBE	0.9	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.2
Vinyl Acetate	ND	10	1.1
1,1-Dichloroethane	ND	0.5	0.2
2-Butanone	ND	10	0.4
cis-1,2-Dichloroethene	0.4 J	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.1
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	0.9	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.7
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	0.3 J	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.2
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	2.9	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.2
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264721	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8260B
Field ID:	SB-19-GW	Batch#:	220530
Lab ID:	264721-001	Sampled:	02/17/15
Matrix:	Water	Received:	02/17/15
Units:	ug/L	Analyzed:	02/18/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.2
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.1
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-128
1,2-Dichloroethane-d4	113	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	100	80-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264721	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	220530
Units:	ug/L	Analyzed:	02/18/15
Diln Fac:	1.000		

Type: BS Lab ID: QC777614

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	12.88	103	66-135
Benzene	12.50	13.57	109	80-123
Trichloroethene	12.50	13.23	106	80-123
Toluene	12.50	13.01	104	80-121
Chlorobenzene	12.50	13.21	106	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-128
1,2-Dichloroethane-d4	102	75-139
Toluene-d8	93	80-120
Bromofluorobenzene	97	80-120

Type: BSD Lab ID: QC777615

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	13.17	105	66-135	2	24
Benzene	12.50	13.27	106	80-123	2	20
Trichloroethene	12.50	13.18	105	80-123	0	20
Toluene	12.50	13.19	106	80-121	1	20
Chlorobenzene	12.50	13.49	108	80-123	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-128
1,2-Dichloroethane-d4	101	75-139
Toluene-d8	95	80-120
Bromofluorobenzene	94	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264721	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777616	Batch#:	220530
Matrix:	Water	Analyzed:	02/18/15
Units:	ug/L		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.3
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.3
Trichlorofluoromethane	ND	1.0	0.2
Acetone	ND	10	1.6
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.2
Methylene Chloride	ND	10	0.2
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.2
Vinyl Acetate	ND	10	1.1
1,1-Dichloroethane	ND	0.5	0.2
2-Butanone	ND	10	0.4
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.1
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.7
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.2
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.2
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264721	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777616	Batch#:	220530
Matrix:	Water	Analyzed:	02/18/15
Units:	ug/L		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.2
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.1
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	0.2 J	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-128
1,2-Dichloroethane-d4	110	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	100	80-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264721	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1361	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	220530
MSS Lab ID:	264724-002	Sampled:	02/17/15
Matrix:	Water	Received:	02/17/15
Units:	ug/L	Analyzed:	02/18/15
Diln Fac:	1.000		

Type: MS Lab ID: QC777707

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.1519	12.50	13.78	110	73-129
Benzene	<0.1000	12.50	13.98	112	80-120
Trichloroethene	71.50	12.50	74.53	24 NM	73-123
Toluene	<0.1000	12.50	13.12	105	80-120
Chlorobenzene	<0.1296	12.50	13.68	109	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-128
1,2-Dichloroethane-d4	107	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	95	80-120

Type: MSD Lab ID: QC777708

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	13.68	109	73-129	1	25
Benzene	12.50	13.37	107	80-120	4	20
Trichloroethene	12.50	70.41	-9 NM	73-123	6	20
Toluene	12.50	13.22	106	80-120	1	21
Chlorobenzene	12.50	13.62	109	80-120	0	24

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-128
1,2-Dichloroethane-d4	105	75-139
Toluene-d8	96	80-120
Bromofluorobenzene	93	80-120

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264721	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-19-GW	Batch#:	220613
Lab ID:	264721-001	Sampled:	02/17/15
Matrix:	Water	Received:	02/17/15
Units:	ug/L	Prepared:	02/18/15
Diln Fac:	1.000	Analyzed:	02/20/15

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	10	0.76
Phenol	ND	10	0.98
bis(2-Chloroethyl)ether	ND	10	1.8
2-Chlorophenol	ND	10	1.0
1,3-Dichlorobenzene	ND	10	0.67
1,4-Dichlorobenzene	ND	10	0.65
Benzyl alcohol	ND	10	0.59
1,2-Dichlorobenzene	ND	10	0.69
2-Methylphenol	ND	10	0.63
bis(2-Chloroisopropyl) ether	ND	10	0.81
4-Methylphenol	ND	10	0.60
N-Nitroso-di-n-propylamine	ND	10	0.84
Hexachloroethane	ND	10	0.69
Nitrobenzene	ND	10	0.60
Isophorone	ND	10	0.67
2-Nitrophenol	ND	20	3.1
2,4-Dimethylphenol	ND	10	0.69
Benzoic acid	ND	50	15
bis(2-Chloroethoxy)methane	ND	10	0.56
2,4-Dichlorophenol	ND	10	0.73
1,2,4-Trichlorobenzene	ND	10	0.61
Naphthalene	ND	10	0.58
4-Chloroaniline	ND	10	0.65
Hexachlorobutadiene	ND	10	0.54
4-Chloro-3-methylphenol	ND	10	0.82
2-Methylnaphthalene	ND	10	0.53
Hexachlorocyclopentadiene	ND	20	0.18
2,4,6-Trichlorophenol	ND	10	1.1
2,4,5-Trichlorophenol	ND	10	1.1
2-Chloronaphthalene	ND	10	0.55
2-Nitroaniline	ND	20	2.6
Dimethylphthalate	ND	10	0.66
Acenaphthylene	ND	10	0.58
2,6-Dinitrotoluene	ND	10	0.67
3-Nitroaniline	ND	20	0.84
Acenaphthene	ND	10	0.49
2,4-Dinitrophenol	ND	20	2.3
4-Nitrophenol	ND	20	1.2
Dibenzofuran	ND	10	0.57
2,4-Dinitrotoluene	ND	10	0.65
Diethylphthalate	ND	10	0.68
Fluorene	ND	10	0.57
4-Chlorophenyl-phenylether	ND	10	0.53
4-Nitroaniline	ND	20	3.3
4,6-Dinitro-2-methylphenol	ND	20	2.5
N-Nitrosodiphenylamine	ND	10	1.9
Azobenzene	ND	10	0.65
4-Bromophenyl-phenylether	ND	10	0.56
Hexachlorobenzene	ND	10	0.68
Pentachlorophenol	ND	20	1.7
Phenanthrene	ND	10	0.71
Anthracene	ND	10	0.62

*= Value outside of QC limits; see narrative
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264721	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-19-GW	Batch#:	220613
Lab ID:	264721-001	Sampled:	02/17/15
Matrix:	Water	Received:	02/17/15
Units:	ug/L	Prepared:	02/18/15
Diln Fac:	1.000	Analyzed:	02/20/15

Analyte	Result	RL	MDL
Di-n-butylphthalate	ND	10	1.4
Fluoranthene	ND	10	0.77
Pyrene	ND	10	0.74
Butylbenzylphthalate	ND	10	0.82
3,3'-Dichlorobenzidine	ND	20	2.5
Benzo(a)anthracene	ND	10	0.75
Chrysene	ND	10	0.70
bis(2-Ethylhexyl)phthalate	ND	10	1.6
Di-n-octylphthalate	ND	10	0.63
Benzo(b)fluoranthene	ND	10	0.71
Benzo(k)fluoranthene	ND	10	0.66
Benzo(a)pyrene	ND	10	0.57
Indeno(1,2,3-cd)pyrene	ND	10	0.77
Dibenz(a,h)anthracene	ND	10	0.79
Benzo(g,h,i)perylene	ND	10	0.87

Surrogate	%REC	Limits
2-Fluorophenol	73	38-120
Phenol-d5	78	38-120
2,4,6-Tribromophenol	74	46-120
Nitrobenzene-d5	78	51-120
2-Fluorobiphenyl	40 *	54-120
Terphenyl-d14	20 *	21-120

*= Value outside of QC limits; see narrative
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264721	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777931	Batch#:	220613
Matrix:	Water	Prepared:	02/19/15
Units:	ug/L	Analyzed:	02/20/15

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	10	2.2
Phenol	ND	10	0.80
bis(2-Chloroethyl)ether	ND	10	1.5
2-Chlorophenol	ND	10	0.91
1,3-Dichlorobenzene	ND	10	1.5
1,4-Dichlorobenzene	ND	10	1.5
Benzyl alcohol	ND	10	1.5
1,2-Dichlorobenzene	ND	10	1.5
2-Methylphenol	ND	10	0.70
bis(2-Chloroisopropyl) ether	ND	10	1.5
4-Methylphenol	ND	10	1.2
N-Nitroso-di-n-propylamine	ND	10	1.3
Hexachloroethane	ND	10	1.5
Nitrobenzene	ND	10	1.3
Isophorone	ND	10	1.7
2-Nitrophenol	ND	20	2.0
2,4-Dimethylphenol	ND	10	0.58
Benzoic acid	ND	50	6.9
bis(2-Chloroethoxy)methane	ND	10	1.3
2,4-Dichlorophenol	ND	10	0.80
1,2,4-Trichlorobenzene	ND	10	1.4
Naphthalene	ND	10	1.4
4-Chloroaniline	ND	10	1.4
Hexachlorobutadiene	ND	10	1.4
4-Chloro-3-methylphenol	ND	10	1.5
2-Methylnaphthalene	ND	10	1.3
Hexachlorocyclopentadiene	ND	20	1.7
2,4,6-Trichlorophenol	ND	10	0.94
2,4,5-Trichlorophenol	ND	10	1.1
2-Chloronaphthalene	ND	10	1.3
2-Nitroaniline	ND	20	1.6
Dimethylphthalate	ND	10	1.6
Acenaphthylene	ND	10	1.3
2,6-Dinitrotoluene	ND	10	1.7
3-Nitroaniline	ND	20	3.8
Acenaphthene	ND	10	1.4
2,4-Dinitrophenol	ND	20	2.6
4-Nitrophenol	ND	20	1.4
Dibenzofuran	ND	10	1.5
2,4-Dinitrotoluene	ND	10	1.4
Diethylphthalate	ND	10	1.5
Fluorene	ND	10	1.4
4-Chlorophenyl-phenylether	ND	10	1.4
4-Nitroaniline	ND	20	2.2
4,6-Dinitro-2-methylphenol	ND	20	1.6
N-Nitrosodiphenylamine	ND	10	1.3
Azobenzene	ND	10	1.4
4-Bromophenyl-phenylether	ND	10	1.3
Hexachlorobenzene	ND	10	1.4
Pentachlorophenol	ND	20	1.4
Phenanthrene	ND	10	1.4
Anthracene	ND	10	1.3
Di-n-butylphthalate	ND	10	1.3

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264721	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777931	Batch#:	220613
Matrix:	Water	Prepared:	02/19/15
Units:	ug/L	Analyzed:	02/20/15

Analyte	Result	RL	MDL
Fluoranthene	ND	10	1.4
Pyrene	ND	10	1.3
Butylbenzylphthalate	ND	10	1.3
3,3'-Dichlorobenzidine	ND	20	1.5
Benzo(a)anthracene	ND	10	1.3
Chrysene	ND	10	1.3
bis(2-Ethylhexyl)phthalate	ND	10	1.9
Di-n-octylphthalate	ND	10	1.4
Benzo(b)fluoranthene	ND	10	1.4
Benzo(k)fluoranthene	ND	10	1.5
Benzo(a)pyrene	ND	10	1.1
Indeno(1,2,3-cd)pyrene	ND	10	1.3
Dibenz(a,h)anthracene	ND	10	1.4
Benzo(g,h,i)perylene	ND	10	1.3

Surrogate	%REC	Limits
2-Fluorophenol	75	38-120
Phenol-d5	67	38-120
2,4,6-Tribromophenol	76	46-120
Nitrobenzene-d5	77	51-120
2-Fluorobiphenyl	79	54-120
Terphenyl-d14	70	21-120

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264721	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8270C
Matrix:	Water	Batch#:	220613
Units:	ug/L	Prepared:	02/19/15
Diln Fac:	1.000	Analyzed:	02/20/15

Type: BS Lab ID: QC777932

Analyte	Spiked	Result	%REC	Limits
Phenol	80.00	67.80	85	46-120
2-Chlorophenol	80.00	65.44	82	48-120
1,4-Dichlorobenzene	80.00	48.90	61	52-120
N-Nitroso-di-n-propylamine	80.00	63.58	79	46-120
1,2,4-Trichlorobenzene	80.00	51.79	65	53-120
4-Chloro-3-methylphenol	80.00	62.28	78	40-120
Acenaphthene	30.00	24.41	81	61-120
4-Nitrophenol	80.00	72.44	91	40-120
2,4-Dinitrotoluene	80.00	73.63	92	64-120
Pentachlorophenol	80.00	66.80	83	47-120
Pyrene	30.00	24.69	82	62-120

Surrogate	%REC	Limits
2-Fluorophenol	75	38-120
Phenol-d5	84	38-120
2,4,6-Tribromophenol	92	46-120
Nitrobenzene-d5	78	51-120
2-Fluorobiphenyl	78	54-120
Terphenyl-d14	82	21-120

Type: BSD Lab ID: QC777933

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Phenol	80.00	60.96	76	46-120	11	55
2-Chlorophenol	80.00	58.98	74	48-120	10	54
1,4-Dichlorobenzene	80.00	46.15	58	52-120	6	30
N-Nitroso-di-n-propylamine	80.00	56.69	71	46-120	11	25
1,2,4-Trichlorobenzene	80.00	46.55	58	53-120	11	26
4-Chloro-3-methylphenol	80.00	53.98	67	40-120	14	54
Acenaphthene	30.00	21.36	71	61-120	13	25
4-Nitrophenol	80.00	64.49	81	40-120	12	45
2,4-Dinitrotoluene	80.00	63.42	79	64-120	15	32
Pentachlorophenol	80.00	60.84	76	47-120	9	48
Pyrene	30.00	23.00	77	62-120	7	26

Surrogate	%REC	Limits
2-Fluorophenol	70	38-120
Phenol-d5	76	38-120
2,4,6-Tribromophenol	79	46-120
Nitrobenzene-d5	69	51-120
2-Fluorobiphenyl	68	54-120
Terphenyl-d14	72	21-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	264721	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8082
Field ID:	SB-19-GW	Sampled:	02/17/15
Matrix:	Water	Received:	02/17/15
Units:	ug/L	Prepared:	02/19/15
Diln Fac:	1.000	Analyzed:	02/20/15
Batch#:	220611		

Type: SAMPLE Lab ID: 264721-001

Analyte	Result	RL	MDL
Aroclor-1016	ND	0.50	0.16
Aroclor-1221	ND	1.0	0.32
Aroclor-1232	ND	0.50	0.14
Aroclor-1242	ND	0.50	0.16
Aroclor-1248	ND	0.50	0.16
Aroclor-1254	ND	0.50	0.16
Aroclor-1260	ND	0.50	0.13

Surrogate	%REC	Limits
TCMX	75	39-120
Decachlorobiphenyl	62	28-120

Type: BLANK Lab ID: QC777925

Analyte	Result	RL	MDL
Aroclor-1016	ND	0.50	0.16
Aroclor-1221	ND	1.0	0.32
Aroclor-1232	ND	0.50	0.14
Aroclor-1242	ND	0.50	0.16
Aroclor-1248	ND	0.50	0.16
Aroclor-1254	ND	0.50	0.16
Aroclor-1260	ND	0.50	0.13

Surrogate	%REC	Limits
TCMX	68	39-120
Decachlorobiphenyl	81	28-120

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	264721	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8082
Matrix:	Water	Batch#:	220611
Units:	ug/L	Prepared:	02/19/15
Diln Fac:	1.000	Analyzed:	02/20/15

Type: BS Lab ID: QC777926

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	5.000	3.768	75	62-127
Aroclor-1260	5.000	3.975	79	60-135

Surrogate	%REC	Limits
TCMX	67	39-120
Decachlorobiphenyl	75	28-120

Type: BSD Lab ID: QC777927

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	5.000	3.513	70	62-127	7	29
Aroclor-1260	5.000	3.618	72	60-135	9	40

Surrogate	%REC	Limits
TCMX	64	39-120
Decachlorobiphenyl	72	28-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved California Title 22 Metals

Lab #:	264721	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374		
Field ID:	SB-19-GW	Diln Fac:	1.000
Lab ID:	264721-001	Sampled:	02/17/15
Matrix:	Filtrate	Received:	02/17/15
Units:	ug/L		

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Analysis
Antimony	ND	10	0.65	220663	02/20/15	02/20/15	EPA 6010B
Arsenic	ND	5.0	1.3	220663	02/20/15	02/20/15	EPA 6010B
Barium	66	5.0	1.0	220663	02/20/15	02/20/15	EPA 6010B
Beryllium	ND	2.0	0.30	220663	02/20/15	02/20/15	EPA 6010B
Cadmium	ND	5.0	0.58	220663	02/20/15	02/20/15	EPA 6010B
Chromium	1.2 J	5.0	0.57	220663	02/20/15	02/20/15	EPA 6010B
Cobalt	ND	5.0	0.32	220663	02/20/15	02/20/15	EPA 6010B
Copper	ND	5.0	0.99	220663	02/20/15	02/20/15	EPA 6010B
Lead	ND	5.0	0.91	220663	02/20/15	02/20/15	EPA 6010B
Mercury	ND	0.20	0.040	220695	02/22/15	02/23/15	EPA 7470A
Molybdenum	17	5.0	0.40	220663	02/20/15	02/20/15	EPA 6010B
Nickel	4.2 J	5.0	0.71	220663	02/20/15	02/20/15	EPA 6010B
Selenium	ND	10	2.3	220663	02/20/15	02/20/15	EPA 6010B
Silver	ND	5.0	0.66	220663	02/20/15	02/20/15	EPA 6010B
Thallium	ND	10	2.0	220663	02/20/15	02/20/15	EPA 6010B
Vanadium	22	5.0	0.67	220663	02/20/15	02/20/15	EPA 6010B
Zinc	ND	20	3.0	220663	02/20/15	02/20/15	EPA 6010B

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264721	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778145	Batch#:	220663
Matrix:	Filtrate	Prepared:	02/20/15
Units:	ug/L	Analyzed:	02/20/15

Analyte	Result	RL	MDL
Antimony	0.99 J	10	0.65
Arsenic	ND	5.0	1.3
Barium	ND	5.0	1.0
Beryllium	ND	2.0	0.30
Cadmium	ND	5.0	0.58
Chromium	ND	5.0	0.57
Cobalt	ND	5.0	0.32
Copper	1.3 J	5.0	0.99
Lead	ND	5.0	0.91
Molybdenum	ND	5.0	0.40
Nickel	ND	5.0	0.71
Selenium	ND	10	2.3
Silver	ND	5.0	0.66
Thallium	ND	10	2.0
Vanadium	ND	5.0	0.67
Zinc	ND	20	3.0

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264721	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778146	Batch#:	220663
Matrix:	Filtrate	Prepared:	02/20/15
Units:	ug/L	Analyzed:	02/20/15

Analyte	Result	RL	MDL
Antimony	ND	10	0.65
Arsenic	ND	5.0	1.3
Barium	ND	5.0	1.0
Beryllium	ND	2.0	0.30
Cadmium	ND	5.0	0.58
Chromium	ND	5.0	0.57
Cobalt	ND	5.0	0.32
Copper	ND	5.0	0.99
Lead	ND	5.0	0.91
Molybdenum	ND	5.0	0.40
Nickel	ND	5.0	0.71
Selenium	ND	10	2.3
Silver	ND	5.0	0.66
Thallium	ND	10	2.0
Vanadium	ND	5.0	0.67
Zinc	ND	20	3.0

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264721	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778147	Batch#:	220663
Matrix:	Filtrate	Prepared:	02/20/15
Units:	ug/L	Analyzed:	02/20/15

Analyte	Result	RL	MDL
Antimony	ND	10	0.65
Arsenic	ND	5.0	1.3
Barium	ND	5.0	1.0
Beryllium	ND	2.0	0.30
Cadmium	ND	5.0	0.58
Chromium	ND	5.0	0.57
Cobalt	ND	5.0	0.32
Copper	ND	5.0	0.99
Lead	ND	5.0	0.91
Molybdenum	ND	5.0	0.40
Nickel	ND	5.0	0.71
Selenium	ND	10	2.3
Silver	ND	5.0	0.66
Thallium	ND	10	2.0
Vanadium	ND	5.0	0.67
Zinc	3.8 J	20	3.0

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264721	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 6010B
Matrix:	Filtrate	Batch#:	220663
Units:	ug/L	Prepared:	02/20/15
Diln Fac:	1.000	Analyzed:	02/20/15

Type: BS Lab ID: QC778148

Analyte	Spiked	Result	%REC	Limits
Antimony	100.0	97.64	98	79-120
Arsenic	100.0	96.06	96	80-120
Barium	100.0	99.87	100	80-120
Beryllium	100.0	96.97	97	80-120
Cadmium	100.0	103.4	103	80-120
Chromium	100.0	98.15	98	80-120
Cobalt	100.0	96.55	97	80-120
Copper	100.0	82.40	82	80-120
Lead	100.0	94.34	94	80-120
Molybdenum	100.0	98.09	98	80-120
Nickel	100.0	95.79	96	80-120
Selenium	100.0	106.0	106	80-120
Silver	100.0	98.51	99	77-120
Thallium	50.00	53.02	106	80-121
Vanadium	100.0	99.42	99	80-120
Zinc	100.0	98.76	99	80-120

Type: BSD Lab ID: QC778149

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	100.0	102.8	103	79-120	5	20
Arsenic	100.0	98.34	98	80-120	2	20
Barium	100.0	105.8	106	80-120	6	20
Beryllium	100.0	100.3	100	80-120	3	20
Cadmium	100.0	108.5	108	80-120	5	20
Chromium	100.0	104.4	104	80-120	6	20
Cobalt	100.0	100.9	101	80-120	4	20
Copper	100.0	88.73	89	80-120	7	20
Lead	100.0	98.63	99	80-120	4	20
Molybdenum	100.0	103.1	103	80-120	5	20
Nickel	100.0	99.32	99	80-120	4	20
Selenium	100.0	109.3	109	80-120	3	20
Silver	100.0	103.8	104	77-120	5	20
Thallium	50.00	52.23	104	80-121	1	20
Vanadium	100.0	104.7	105	80-120	5	20
Zinc	100.0	100.9	101	80-120	2	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264721	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	220663
MSS Lab ID:	264784-002	Sampled:	02/18/15
Matrix:	Filtrate	Received:	02/19/15
Units:	ug/L	Prepared:	02/20/15
Diln Fac:	10.00	Analyzed:	02/23/15

Type: MS Lab ID: QC778150

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	<23.48	100.0	77.72	78	74-120
Arsenic	<10.28	100.0	88.52	89	80-127
Barium	169.7	100.0	259.4	90	80-120
Beryllium	<1.463	100.0	87.61	88	80-120
Cadmium	<2.822	100.0	89.90	90	80-120
Chromium	261.3	100.0	367.7	106	80-120
Cobalt	<8.861	100.0	87.51	88	80-120
Copper	7.481	100.0	80.65	73 *	80-120
Lead	<13.06	100.0	60.03	60 *	67-120
Molybdenum	<5.528	100.0	23.16	23 *	80-120
Nickel	<7.500	100.0	80.26	80	80-120
Selenium	<23.08	100.0	127.4	127	73-132
Silver	<11.26	100.0	91.03	91	67-120
Thallium	<27.77	50.00	58.77	DO	76-121
Vanadium	<7.199	100.0	88.43	88	80-120
Zinc	<28.30	100.0	78.58	DO	80-122

Type: MSD Lab ID: QC778151

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	100.0	93.36	93	74-120	18	24
Arsenic	100.0	94.55	95	80-127	7	25
Barium	100.0	281.4	112	80-120	8	20
Beryllium	100.0	96.58	97	80-120	10	20
Cadmium	100.0	97.63	98	80-120	8	20
Chromium	100.0	385.3	124 *	80-120	5	20
Cobalt	100.0	96.96	97	80-120	10	20
Copper	100.0	90.51	83	80-120	12	20
Lead	100.0	72.97	73	67-120	19	23
Molybdenum	100.0	27.48	27 *	80-120	17	20
Nickel	100.0	92.90	93	80-120	15	20
Selenium	100.0	139.7	140 *	73-132	9	30
Silver	100.0	98.04	98	67-120	7	22
Thallium	50.00	54.39	DO	76-121	NC	20
Vanadium	100.0	97.83	98	80-120	10	20
Zinc	100.0	87.42	DO	80-122	NC	20

*= Value outside of QC limits; see narrative
DO= Diluted Out
NC= Not Calculated
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264721	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	220695
Lab ID:	QC778259	Prepared:	02/22/15
Matrix:	Filtrate	Analyzed:	02/23/15
Units:	ug/L		

Result	RL	MDL
ND	0.20	0.040

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264721	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	220695
Matrix:	Water	Prepared:	02/22/15
Units:	ug/L	Analyzed:	02/23/15
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC778260	2.500	2.526	101	80-120		
BSD	QC778261	2.500	2.526	101	80-120	0	24

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264721	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	220695
Field ID:	SB-19-GW	Sampled:	02/17/15
MSS Lab ID:	264721-001	Received:	02/17/15
Matrix:	Filtrate	Prepared:	02/22/15
Units:	ug/L	Analyzed:	02/23/15
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC778262	<0.04000	2.500	2.602	104	60-130		
MSD	QC778263		2.500	2.513	101	60-130	3	34

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264721	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	220695
Lab ID:	QC778296	Prepared:	02/22/15
Matrix:	Filtrate	Analyzed:	02/23/15
Units:	ug/L		

Result	RL	MDL
ND	0.20	0.040

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Hexavalent Chromium

Lab #:	264721	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1361	Analysis:	EPA 7196A
Analyte:	Hexavalent Chromium	Batch#:	220560
Field ID:	SB-19-GW	Sampled:	02/17/15 17:30
Matrix:	Water	Received:	02/17/15
Units:	mg/L	Analyzed:	02/18/15 12:55
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	264721-001	ND	0.01
BLANK	QC777733	ND	0.01

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Hexavalent Chromium

Lab #:	264721	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1361	Analysis:	EPA 7196A
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Field ID:	SB-19-GW	Batch#:	220560
MSS Lab ID:	264721-001	Sampled:	02/17/15 17:30
Matrix:	Water	Received:	02/17/15
Units:	mg/L	Analyzed:	02/18/15 12:55

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC777734		1.053	1.094	104	90-110		
MS	QC777735	<0.01000	1.053	1.076	102	85-115		
MSD	QC777736		1.053	1.092	104	85-115	1	23

RPD= Relative Percent Difference

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Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 264728
ANALYTICAL REPORT

Integral Consulting, Inc.	Project : C1374
115 Sansome Street	Location : Allied Engineering
San Francisco, CA 94104	Level : II

Sample ID	Lab ID
SB-22-GW	264728-001
SB-20-GW	264728-002
TB-021715	264728-003

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Tracy Babjar Date: 02/25/2015

Tracy Babjar
Project Manager
tracy.babjar@ctberk.com
(510) 204-2226

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**264728**
Client:	**Integral Consulting, Inc.**
Project:	**C1374**
Location:	**Allied Engineering**
Request Date:	**02/17/15**
Samples Received:	**02/17/15**

This data package contains sample and QC results for three water samples, requested for the above referenced project on 02/17/15. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):
Gasoline C7-C12 was detected between the MDL and the RL in the method blank for batch 220602; this analyte was not detected in the sample at or above the RL. No other analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
Diesel C10-C24 was detected between the MDL and the RL in the method blank for batch 220612; this analyte was detected in the sample at a level at least 10 times that of the blank. No other analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
No analytical problems were encountered.

Semivolatile Organics by GC/MS (EPA 8270C):
Low surrogate recovery was observed for terphenyl-d14 in SB-22-GW (lab # 264728-001). No other analytical problems were encountered.

PCBs (EPA 8082):
All samples underwent sulfuric acid cleanup using EPA Method 3665A. All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. No analytical problems were encountered.

Metals (EPA 6010B and EPA 7470A):
Low recoveries were observed for copper, molybdenum, and lead in the MS/MSD for batch 220663; the parent sample was not a project sample, the BS/BSD were within limits, and the associated RPDs were within limits. High recoveries were observed for chromium and selenium in the MSD for batch 220663; the BS/BSD were within limits, the associated RPDs were within limits, and these analytes were not detected at or above the RL in the associated samples. Copper and antimony were detected between the MDL and the RL in the method blank for batch 220663; these analytes were not detected in samples at or above the RL. Zinc was detected between the MDL and the RL in the method blank for batch 220663; this analyte was not detected in samples at or above the RL. No other analytical problems were encountered.

Hexavalent Chromium (EPA 7196A):
No analytical problems were encountered.

CHAIN OF CUSTODY

Page 1 of 1

Chain of Custody # _____

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2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # 704728

Project No: C1361 changed to C1374
Project Name: Allied Engineering
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☐ IV
Turnaround Time: ☐ RUSH _____ ☒ Standard

Sampler: C. Tyler
Report To: B. Deshields
Company: Integral Consulting Inc.
Telephone:
Email: bdeshields@integral-corp.com

Lab No.	Sample ID.	Sampling: Date Collected	Sampling: Time Collected	Matrix: Water	Matrix: Solid	# of Containers	Chemical Preservative: HCl	H2SO4	HNO3	NaOH	None	TPH-G by 8015	TPH-D by 8015	TPH mo by 8015	Full list of VOCs by 8260	SVOCs by 8270	Dissolved Metals (lab filter)	Cr VI by 7196	PCBs by 8082
	SB-22-GW	2/17/15	1428	X		12	6				6				X	X	X	X	X
	SB-20-GW	2/17/15	1600	X		13	6				7	X	X	X	X	X	X	X	X
	TB-021715	--	--	X		1	1									X			

Notes:
- Dissolved metals to be lab filtered
- Report to MDL
- EDF required

SAMPLE RECEIPT
☐ Intact
☐ Cold
☐ On Ice
☐ Ambient

RELINQUISHED BY:	DATE:	TIME:
[signature]	2/17/15	1618
[signature]	2/17	1741

RECEIVED BY:	DATE:	TIME:
[signature]	2/17/15	1618
[signature]	2/17/15	1741

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 264728 Date Received 2/17/15 Number of coolers 1
Client Integral Project 01374

Date Opened 2/17 By (print) [illegible] (sign) [illegible]
Date Logged in " " By (print) " " (sign) " "

1. Did cooler come with a shipping slip (airbill, etc) _____ YES NO
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO N/A
3. Were custody papers dry and intact when received? _____ YES NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ___ YES NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☒ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☒ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) _____

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES NO
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ YES NO
10. Are there any missing / extra samples? _____ YES NO
11. Are samples in the appropriate containers for indicated tests? _____ YES NO
12. Are sample labels present, in good condition and complete? _____ YES NO
13. Do the sample labels agree with custody papers? _____ YES NO
14. Was sufficient amount of sample sent for tests requested? _____ YES NO
15. Are the samples appropriately preserved? _____ YES NO N/A
16. Did you check preservatives for all bottles for each sample? _____ YES NO N/A
17. Did you document your preservative check? _____ YES NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO N/A
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO N/A
20. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A
21. Was the client contacted concerning this sample delivery? _____ YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____
_____
_____
_____
_____
_____

Rev 10, 9/12

Curtis & Tompkins, Ltd.

Detections Summary for 264728

Results for any subcontracted analyses are not included in this summary.

Client : Integral Consulting, Inc.
Project : C1374
Location : Allied Engineering

Client Sample ID : SB-22-GW Laboratory Sample ID : 264728-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Bromomethane	0.6	J	1.0	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Acetone	22		10	0.6	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Carbon Disulfide	0.4	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
MTBE	0.2	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
2-Butanone	0.7	J	10	0.4	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Benzene	0.1	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
4-Methyl-2-Pentanone	47		10	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Toluene	0.1	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Tetrachloroethene	0.7		0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
m,p-Xylenes	0.1	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,2,4-Trimethylbenzene	0.3	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
4-Chloro-3-methylphenol	2.1	J	10	0.82	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
Diethylphthalate	1.2	J	10	0.68	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
Barium	71		5.0	1.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Chromium	2.4	J	5.0	0.57	ug/L	DISS.	1.000	EPA 6010B	METHOD
Molybdenum	37		5.0	0.40	ug/L	DISS.	1.000	EPA 6010B	METHOD
Nickel	5.6		5.0	0.71	ug/L	DISS.	1.000	EPA 6010B	METHOD
Vanadium	3.9	J	5.0	0.67	ug/L	DISS.	1.000	EPA 6010B	METHOD

Client Sample ID : SB-20-GW Laboratory Sample ID : 264728-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	25	J	50	11	ug/L	As Recd	1.000	EPA 8015B	EPA 5030B
Diesel C10-C24	1,400	Y	50	16	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
Motor Oil C24-C36	2,600		300	96	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
Bromomethane	0.6	J	1.0	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Acetone	2.0	J	10	0.6	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
MTBE	0.7		0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
4-Methyl-2-Pentanone	2.3	J	10	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Toluene	0.1	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
4-Chloro-3-methylphenol	6.5	J	10	0.82	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
Barium	56		5.0	1.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Chromium	0.68	J	5.0	0.57	ug/L	DISS.	1.000	EPA 6010B	METHOD
Molybdenum	57		5.0	0.40	ug/L	DISS.	1.000	EPA 6010B	METHOD
Nickel	6.3		5.0	0.71	ug/L	DISS.	1.000	EPA 6010B	METHOD
Vanadium	1.6	J	5.0	0.67	ug/L	DISS.	1.000	EPA 6010B	METHOD

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Client Sample ID : TB-021715 Laboratory Sample ID : 264728-003

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Chloroform	0.1	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

J = Estimated value
Y = Sample exhibits chromatographic pattern which does not resemble standard

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8015B
Field ID:	SB-20-GW	Batch#:	220602
Matrix:	Water	Sampled:	02/17/15
Units:	ug/L	Received:	02/17/15
Diln Fac:	1.000	Analyzed:	02/19/15

Type: SAMPLE Lab ID: 264728-002

Analyte	Result	RL	MDL
Gasoline C7-C12	25 J	50	11

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	96	80-132

Type: BLANK Lab ID: QC777879

Analyte	Result	RL	MDL
Gasoline C7-C12	13 J	50	11

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	93	80-132

J= Estimated value
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC777878	Batch#:	220602
Matrix:	Water	Analyzed:	02/19/15
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	981.9	98	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	91	80-132

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	220602
MSS Lab ID:	264703-002	Sampled:	02/16/15
Matrix:	Water	Received:	02/17/15
Units:	ug/L	Analyzed:	02/19/15
Diln Fac:	1.000		

Type: MS Lab ID: QC777880

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	18.30	2,000	2,077	103	76-120

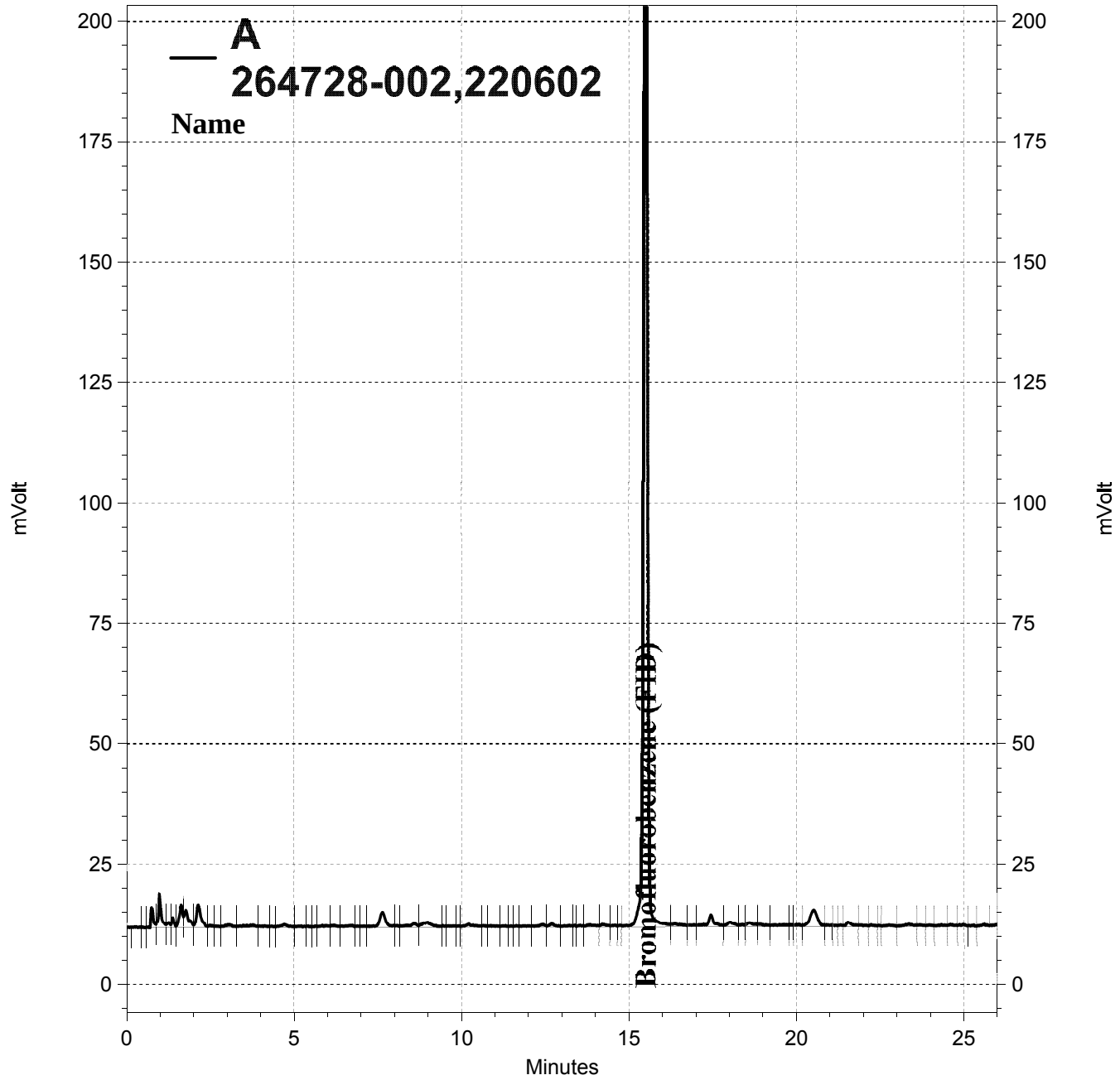
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	98	80-132

Type: MSD Lab ID: QC777881

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,030	101	76-120	2	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	98	80-132

RPD= Relative Percent Difference



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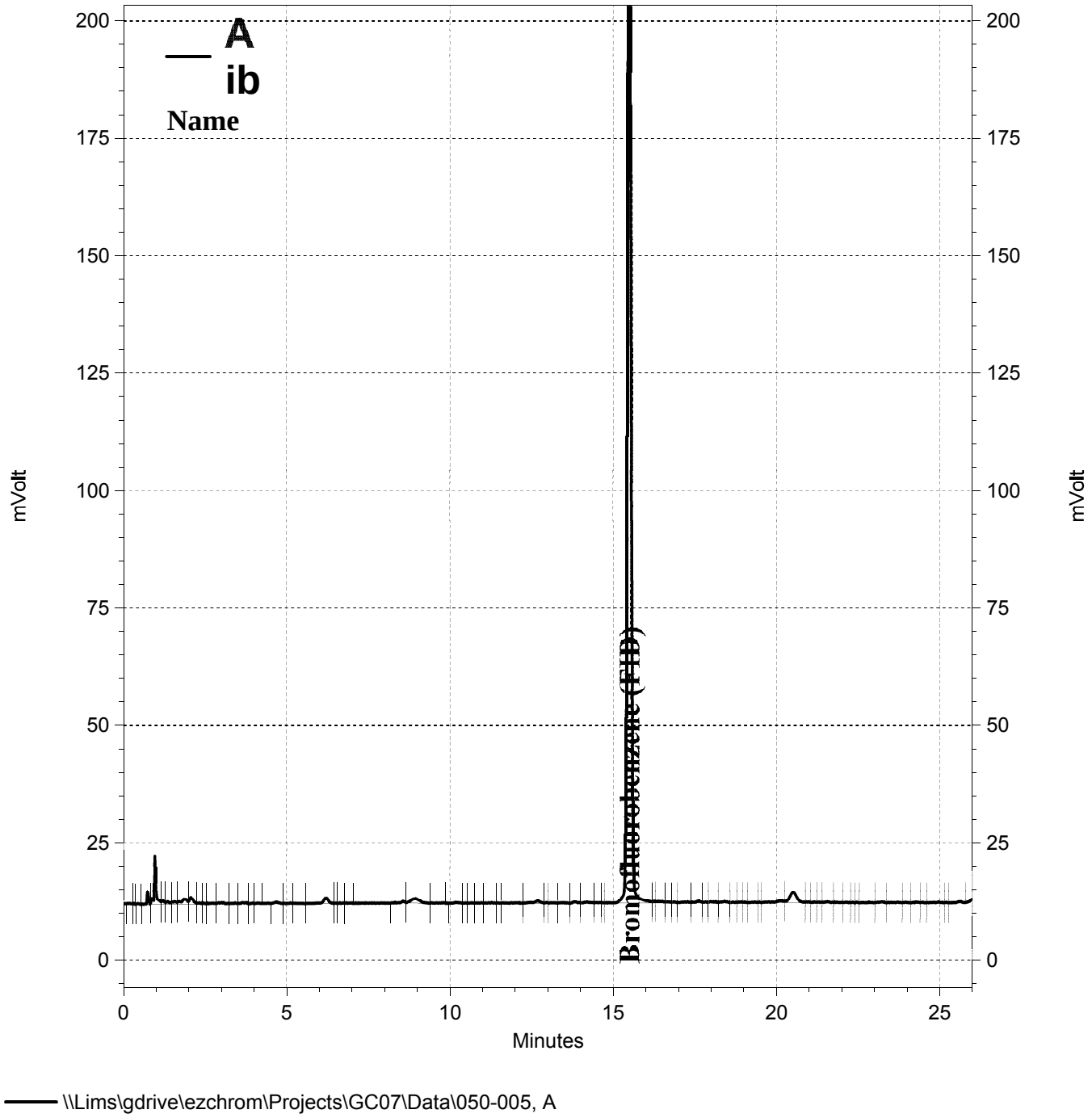

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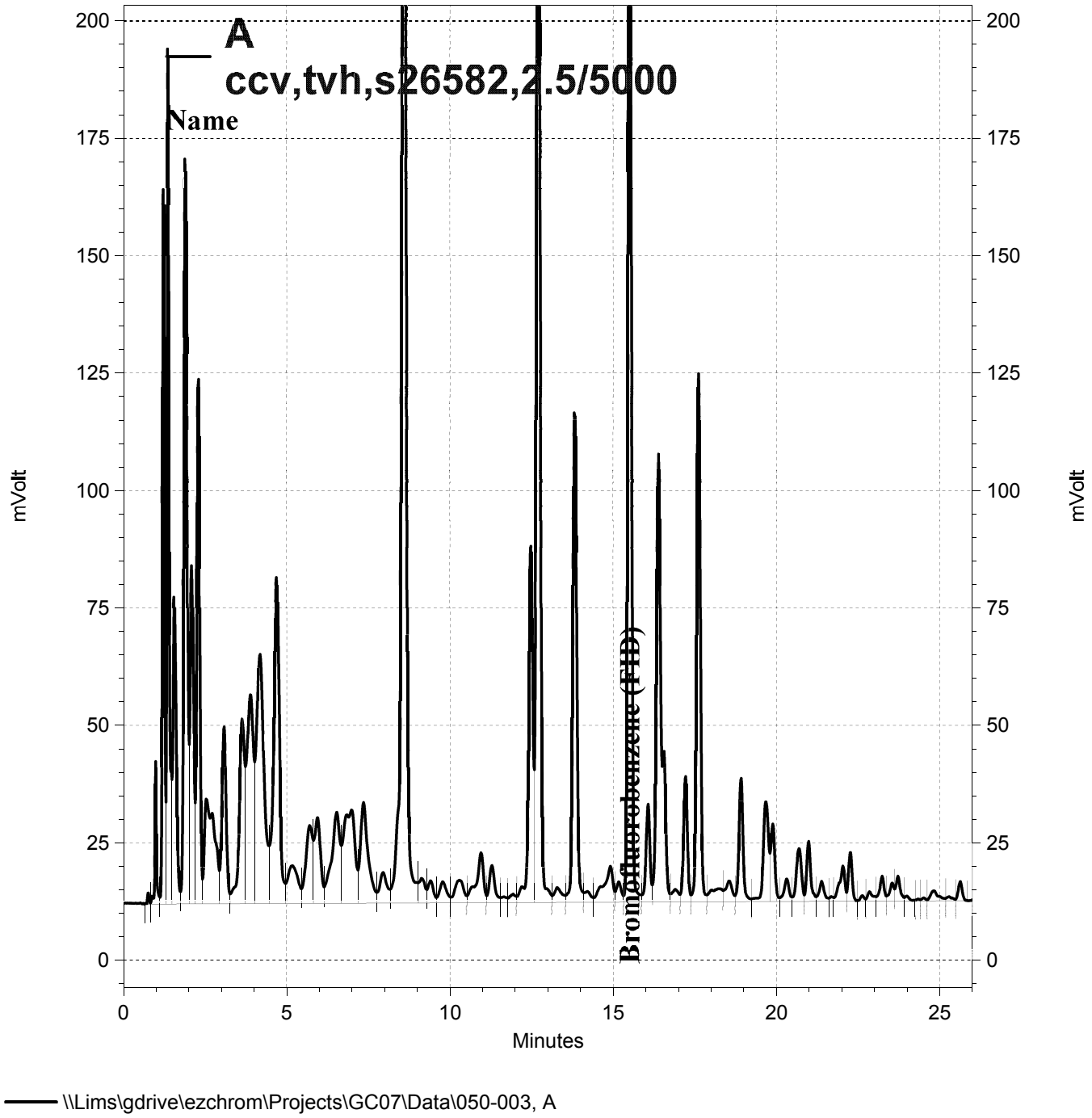

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Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8015B
Field ID:	SB-20-GW	Batch#:	220612
Matrix:	Water	Sampled:	02/17/15
Units:	ug/L	Received:	02/17/15
Diln Fac:	1.000	Prepared:	02/19/15

Type: SAMPLE Analyzed: 02/23/15
Lab ID: 264728-002

Analyte	Result	RL	MDL
Diesel C10-C24	1,400 Y	50	16
Motor Oil C24-C36	2,600	300	96

Surrogate	%REC	Limits
o-Terphenyl	72	67-136

Type: BLANK Analyzed: 02/20/15
Lab ID: QC777928

Analyte	Result	RL	MDL
Diesel C10-C24	23 J	50	16
Motor Oil C24-C36	ND	300	96

Surrogate	%REC	Limits
o-Terphenyl	94	67-136

J= Estimated value
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	220612
Units:	ug/L	Prepared:	02/19/15
Diln Fac:	1.000	Analyzed:	02/20/15

Type: BS Lab ID: QC777929

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,540	102	60-121

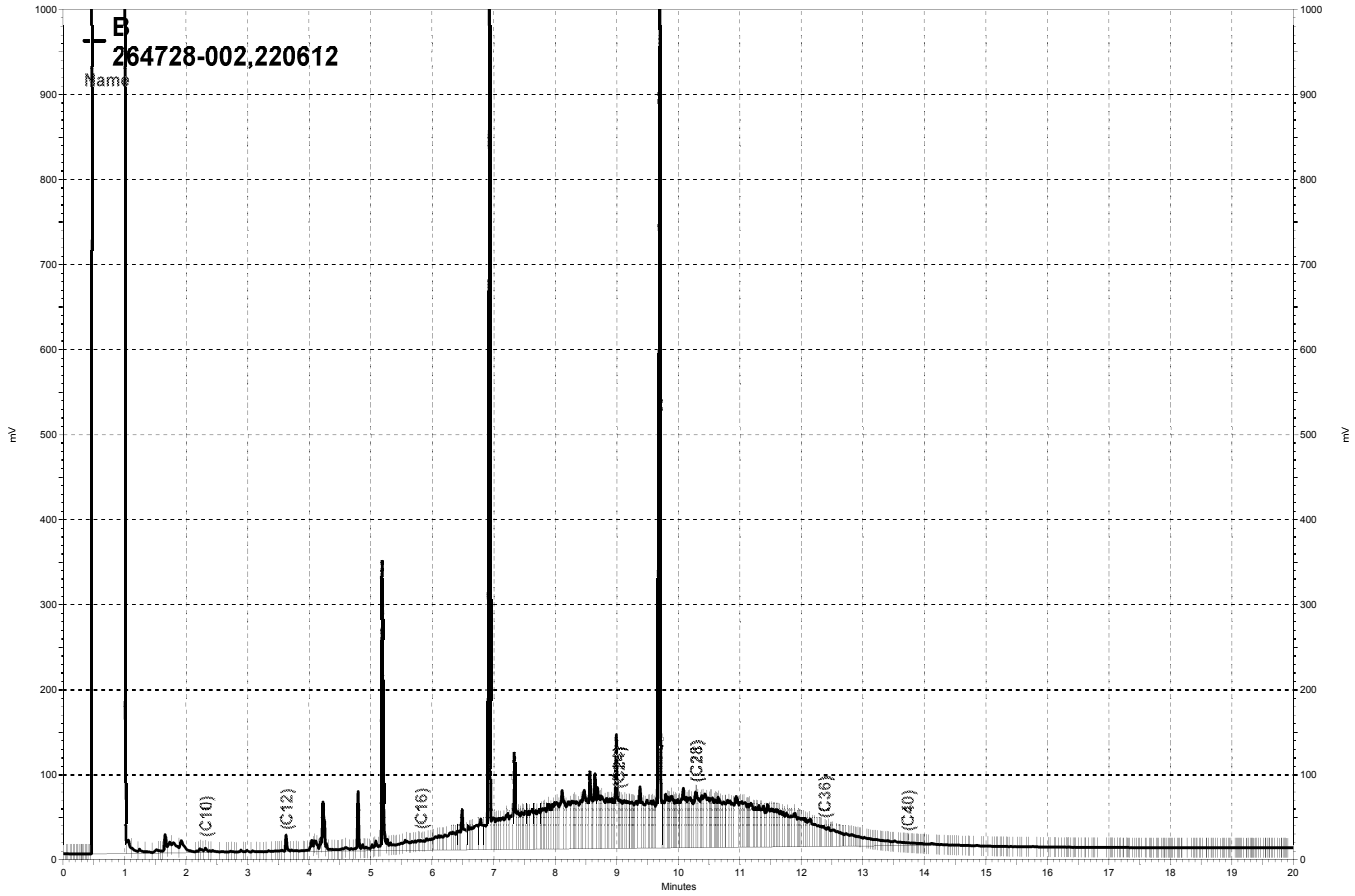
Surrogate	%REC	Limits
o-Terphenyl	100	67-136

Type: BSD Lab ID: QC777930

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,495	100	60-121	2	32

Surrogate	%REC	Limits
o-Terphenyl	103	67-136

RPD= Relative Percent Difference



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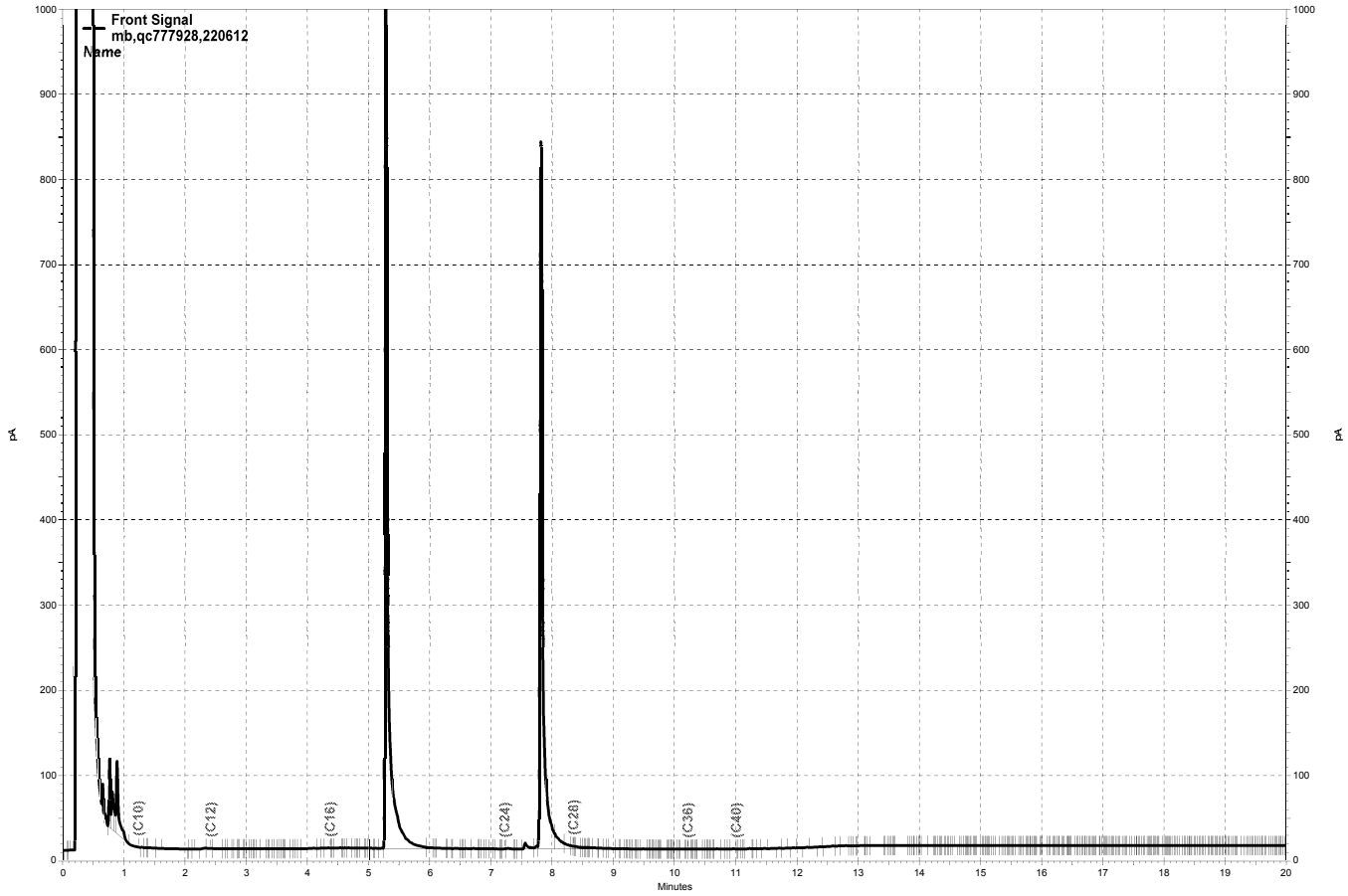

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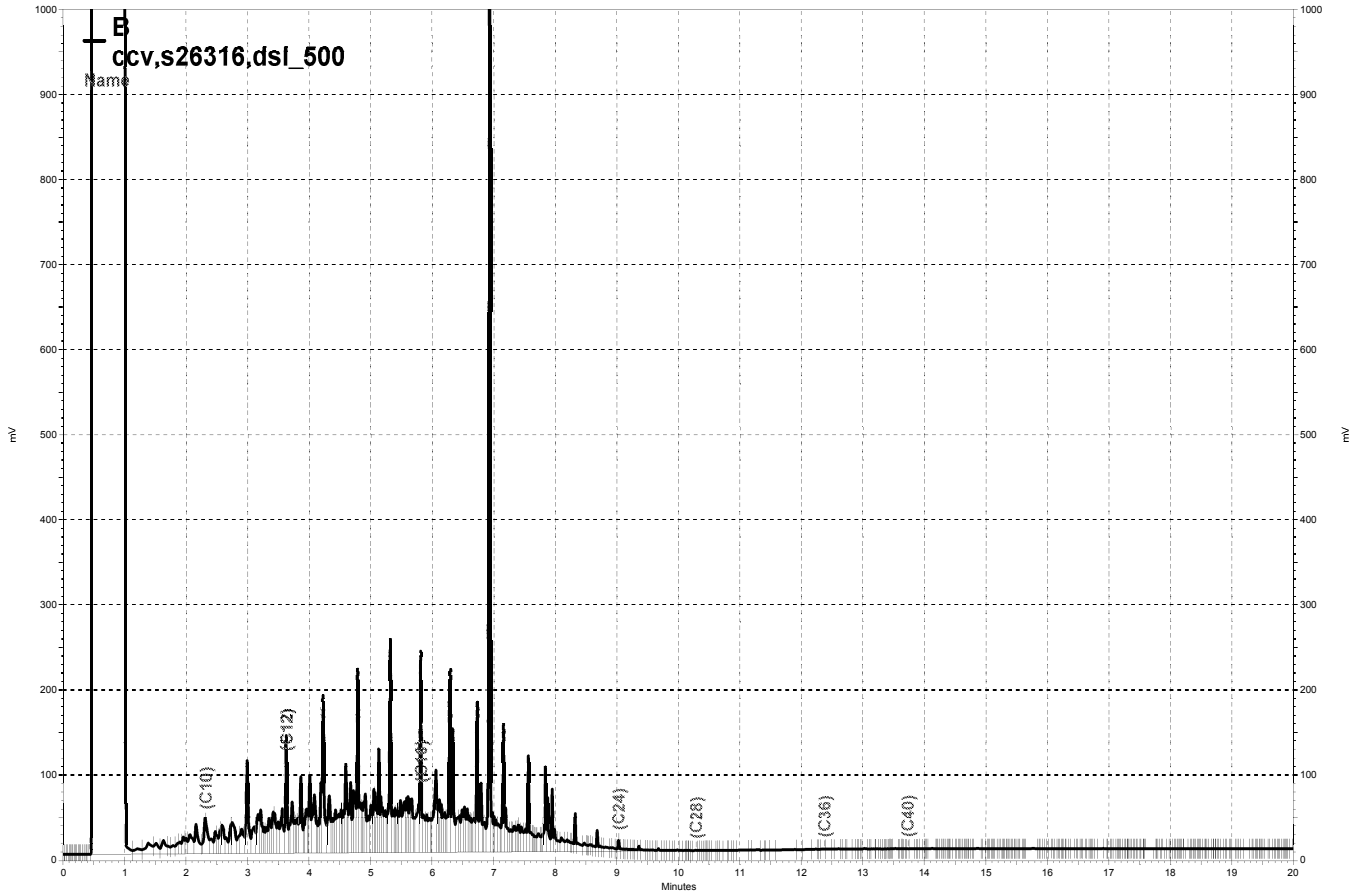

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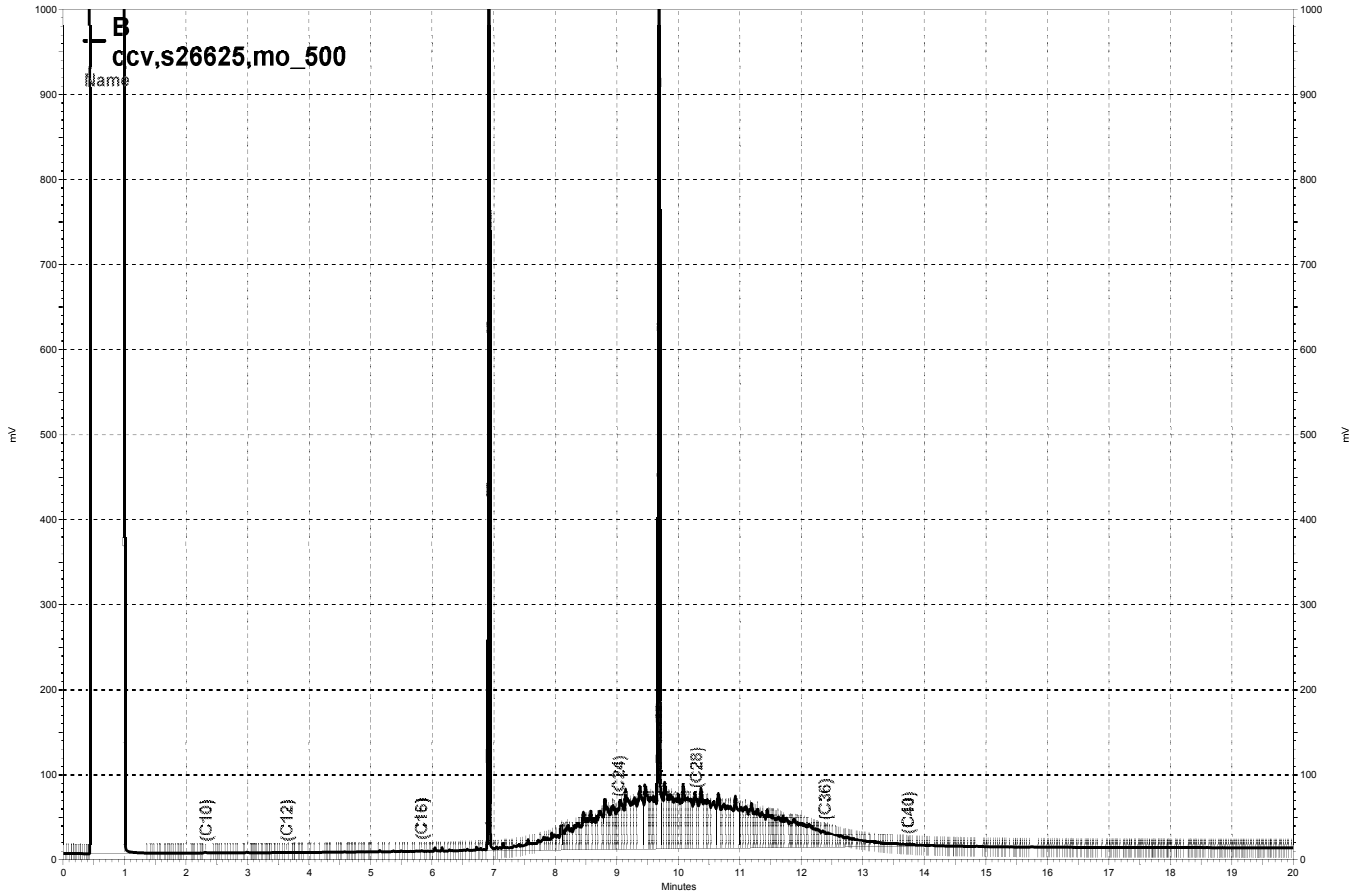

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Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-22-GW	Batch#:	220571
Lab ID:	264728-001	Sampled:	02/17/15
Matrix:	Water	Received:	02/17/15
Units:	ug/L	Analyzed:	02/19/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.2
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	0.6 J	1.0	0.1
Chloroethane	ND	1.0	0.1
Trichlorofluoromethane	ND	1.0	0.2
Acetone	22	10	0.6
Freon 113	ND	2.0	0.2
1,1-Dichloroethene	ND	0.5	0.2
Methylene Chloride	ND	10	0.1
Carbon Disulfide	0.4 J	0.5	0.1
MTBE	0.2 J	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.2
Vinyl Acetate	ND	10	0.5
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	0.7 J	10	0.4
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.2
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.1
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	0.1 J	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	47	10	0.1
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	0.1 J	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	0.7	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	0.1 J	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-22-GW	Batch#:	220571
Lab ID:	264728-001	Sampled:	02/17/15
Matrix:	Water	Received:	02/17/15
Units:	ug/L	Analyzed:	02/19/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	0.3 J	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.3
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.1
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-128
1,2-Dichloroethane-d4	103	75-139
Toluene-d8	99	80-120
Bromofluorobenzene	94	80-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-20-GW	Batch#:	220571
Lab ID:	264728-002	Sampled:	02/17/15
Matrix:	Water	Received:	02/17/15
Units:	ug/L	Analyzed:	02/19/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.2
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	0.6 J	1.0	0.1
Chloroethane	ND	1.0	0.1
Trichlorofluoromethane	ND	1.0	0.2
Acetone	2.0 J	10	0.6
Freon 113	ND	2.0	0.2
1,1-Dichloroethene	ND	0.5	0.2
Methylene Chloride	ND	10	0.1
Carbon Disulfide	ND	0.5	0.1
MTBE	0.7	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.2
Vinyl Acetate	ND	10	0.5
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.4
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.2
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.1
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	2.3 J	10	0.1
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	0.1 J	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-20-GW	Batch#:	220571
Lab ID:	264728-002	Sampled:	02/17/15
Matrix:	Water	Received:	02/17/15
Units:	ug/L	Analyzed:	02/19/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.3
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.1
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-128
1,2-Dichloroethane-d4	103	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	95	80-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	TB-021715	Batch#:	220634
Lab ID:	264728-003	Sampled:	02/17/15
Matrix:	Water	Received:	02/17/15
Units:	ug/L	Analyzed:	02/20/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.1
Trichlorofluoromethane	ND	1.0	0.1
Acetone	ND	10	3.3
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.1
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.1
Vinyl Acetate	ND	10	0.2
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.2
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	0.1 J	0.5	0.1
Bromochloromethane	ND	0.5	0.2
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.2
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.2
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	TB-021715	Batch#:	220634
Lab ID:	264728-003	Sampled:	02/17/15
Matrix:	Water	Received:	02/17/15
Units:	ug/L	Analyzed:	02/20/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.2
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.2
Naphthalene	ND	2.0	0.2
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-128
1,2-Dichloroethane-d4	92	75-139
Toluene-d8	104	80-120
Bromofluorobenzene	93	80-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	220571
Units:	ug/L	Analyzed:	02/19/15
Diln Fac:	1.000		

Type: BS Lab ID: QC777766

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	11.26	90	66-135
Benzene	12.50	11.89	95	80-123
Trichloroethene	12.50	11.81	94	80-123
Toluene	12.50	12.16	97	80-121
Chlorobenzene	12.50	12.00	96	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-128
1,2-Dichloroethane-d4	102	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	94	80-120

Type: BSD Lab ID: QC777767

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	11.98	96	66-135	6	24
Benzene	12.50	12.42	99	80-123	4	20
Trichloroethene	12.50	12.38	99	80-123	5	20
Toluene	12.50	12.87	103	80-121	6	20
Chlorobenzene	12.50	12.61	101	80-123	5	20

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-128
1,2-Dichloroethane-d4	101	75-139
Toluene-d8	99	80-120
Bromofluorobenzene	93	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777768	Batch#:	220571
Matrix:	Water	Analyzed:	02/19/15
Units:	ug/L		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.2
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.1
Chloroethane	ND	1.0	0.1
Trichlorofluoromethane	ND	1.0	0.2
Acetone	ND	10	0.6
Freon 113	ND	2.0	0.2
1,1-Dichloroethene	ND	0.5	0.2
Methylene Chloride	ND	10	0.1
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.2
Vinyl Acetate	ND	10	0.5
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.4
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.2
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.1
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.1
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1
2-Chlorotoluene	ND	0.5	0.1

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777768	Batch#:	220571
Matrix:	Water	Analyzed:	02/19/15
Units:	ug/L		

Analyte	Result	RL	MDL
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.3
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.1
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-128
1,2-Dichloroethane-d4	100	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	95	80-120

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	220634
Units:	ug/L	Analyzed:	02/20/15
Diln Fac:	1.000		

Type: BS Lab ID: QC778027

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	10.90	87	66-135
Benzene	12.50	11.71	94	80-123
Trichloroethene	12.50	10.84	87	80-123
Toluene	12.50	12.68	101	80-121
Chlorobenzene	12.50	12.24	98	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-128
1,2-Dichloroethane-d4	95	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	88	80-120

Type: BSD Lab ID: QC778028

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.38	11.03	89	66-135	2	24
Benzene	12.38	11.97	97	80-123	3	20
Trichloroethene	12.38	12.01	97	80-123	11	20
Toluene	12.38	13.31	108	80-121	6	20
Chlorobenzene	12.38	12.58	102	80-123	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-128
1,2-Dichloroethane-d4	94	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	91	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778029	Batch#:	220634
Matrix:	Water	Analyzed:	02/20/15
Units:	ug/L		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.1
Trichlorofluoromethane	ND	1.0	0.1
Acetone	ND	10	3.3
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.1
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.1
Vinyl Acetate	ND	10	0.2
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.2
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.2
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.2
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.2
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1
2-Chlorotoluene	ND	0.5	0.1

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778029	Batch#:	220634
Matrix:	Water	Analyzed:	02/20/15
Units:	ug/L		

Analyte	Result	RL	MDL
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.2
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.2
Naphthalene	ND	2.0	0.2
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-128
1,2-Dichloroethane-d4	94	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	94	80-120

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-22-GW	Batch#:	220613
Lab ID:	264728-001	Sampled:	02/17/15
Matrix:	Water	Received:	02/17/15
Units:	ug/L	Prepared:	02/18/15
Diln Fac:	1.000	Analyzed:	02/20/15

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	10	0.76
Phenol	ND	10	0.98
bis(2-Chloroethyl)ether	ND	10	1.8
2-Chlorophenol	ND	10	1.0
1,3-Dichlorobenzene	ND	10	0.67
1,4-Dichlorobenzene	ND	10	0.65
Benzyl alcohol	ND	10	0.59
1,2-Dichlorobenzene	ND	10	0.69
2-Methylphenol	ND	10	0.63
bis(2-Chloroisopropyl) ether	ND	10	0.81
4-Methylphenol	ND	10	0.60
N-Nitroso-di-n-propylamine	ND	10	0.84
Hexachloroethane	ND	10	0.69
Nitrobenzene	ND	10	0.60
Isophorone	ND	10	0.67
2-Nitrophenol	ND	20	3.1
2,4-Dimethylphenol	ND	10	0.69
Benzoic acid	ND	50	15
bis(2-Chloroethoxy)methane	ND	10	0.56
2,4-Dichlorophenol	ND	10	0.73
1,2,4-Trichlorobenzene	ND	10	0.61
Naphthalene	ND	10	0.58
4-Chloroaniline	ND	10	0.65
Hexachlorobutadiene	ND	10	0.54
4-Chloro-3-methylphenol	2.1 J	10	0.82
2-Methylnaphthalene	ND	10	0.53
Hexachlorocyclopentadiene	ND	20	0.18
2,4,6-Trichlorophenol	ND	10	1.1
2,4,5-Trichlorophenol	ND	10	1.1
2-Chloronaphthalene	ND	10	0.55
2-Nitroaniline	ND	20	2.6
Dimethylphthalate	ND	10	0.66
Acenaphthylene	ND	10	0.58
2,6-Dinitrotoluene	ND	10	0.67
3-Nitroaniline	ND	20	0.84
Acenaphthene	ND	10	0.49
2,4-Dinitrophenol	ND	20	2.3
4-Nitrophenol	ND	20	1.2
Dibenzofuran	ND	10	0.57
2,4-Dinitrotoluene	ND	10	0.65
Diethylphthalate	1.2 J	10	0.68
Fluorene	ND	10	0.57
4-Chlorophenyl-phenylether	ND	10	0.53
4-Nitroaniline	ND	20	3.3
4,6-Dinitro-2-methylphenol	ND	20	2.5
N-Nitrosodiphenylamine	ND	10	1.9
Azobenzene	ND	10	0.65
4-Bromophenyl-phenylether	ND	10	0.56
Hexachlorobenzene	ND	10	0.68
Pentachlorophenol	ND	20	1.7
Phenanthrene	ND	10	0.71

*= Value outside of QC limits; see narrative
J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-22-GW	Batch#:	220613
Lab ID:	264728-001	Sampled:	02/17/15
Matrix:	Water	Received:	02/17/15
Units:	ug/L	Prepared:	02/18/15
Diln Fac:	1.000	Analyzed:	02/20/15

Analyte	Result	RL	MDL
Anthracene	ND	10	0.62
Di-n-butylphthalate	ND	10	1.4
Fluoranthene	ND	10	0.77
Pyrene	ND	10	0.74
Butylbenzylphthalate	ND	10	0.82
3,3'-Dichlorobenzidine	ND	20	2.5
Benzo(a)anthracene	ND	10	0.75
Chrysene	ND	10	0.70
bis(2-Ethylhexyl)phthalate	ND	10	1.6
Di-n-octylphthalate	ND	10	0.63
Benzo(b)fluoranthene	ND	10	0.71
Benzo(k)fluoranthene	ND	10	0.66
Benzo(a)pyrene	ND	10	0.57
Indeno(1,2,3-cd)pyrene	ND	10	0.77
Dibenz(a,h)anthracene	ND	10	0.79
Benzo(g,h,i)perylene	ND	10	0.87

Surrogate	%REC	Limits
2-Fluorophenol	75	38-120
Phenol-d5	81	38-120
2,4,6-Tribromophenol	98	46-120
Nitrobenzene-d5	81	51-120
2-Fluorobiphenyl	57	54-120
Terphenyl-d14	16 *	21-120

*= Value outside of QC limits; see narrative
J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-20-GW	Batch#:	220613
Lab ID:	264728-002	Sampled:	02/17/15
Matrix:	Water	Received:	02/17/15
Units:	ug/L	Prepared:	02/18/15
Diln Fac:	1.000	Analyzed:	02/20/15

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	10	0.76
Phenol	ND	10	0.98
bis(2-Chloroethyl)ether	ND	10	1.8
2-Chlorophenol	ND	10	1.0
1,3-Dichlorobenzene	ND	10	0.67
1,4-Dichlorobenzene	ND	10	0.65
Benzyl alcohol	ND	10	0.59
1,2-Dichlorobenzene	ND	10	0.69
2-Methylphenol	ND	10	0.63
bis(2-Chloroisopropyl) ether	ND	10	0.81
4-Methylphenol	ND	10	0.60
N-Nitroso-di-n-propylamine	ND	10	0.84
Hexachloroethane	ND	10	0.69
Nitrobenzene	ND	10	0.60
Isophorone	ND	10	0.67
2-Nitrophenol	ND	20	3.1
2,4-Dimethylphenol	ND	10	0.69
Benzoic acid	ND	50	15
bis(2-Chloroethoxy)methane	ND	10	0.56
2,4-Dichlorophenol	ND	10	0.73
1,2,4-Trichlorobenzene	ND	10	0.61
Naphthalene	ND	10	0.58
4-Chloroaniline	ND	10	0.65
Hexachlorobutadiene	ND	10	0.54
4-Chloro-3-methylphenol	6.5 J	10	0.82
2-Methylnaphthalene	ND	10	0.53
Hexachlorocyclopentadiene	ND	20	0.18
2,4,6-Trichlorophenol	ND	10	1.1
2,4,5-Trichlorophenol	ND	10	1.1
2-Chloronaphthalene	ND	10	0.55
2-Nitroaniline	ND	20	2.6
Dimethylphthalate	ND	10	0.66
Acenaphthylene	ND	10	0.58
2,6-Dinitrotoluene	ND	10	0.67
3-Nitroaniline	ND	20	0.84
Acenaphthene	ND	10	0.49
2,4-Dinitrophenol	ND	20	2.3
4-Nitrophenol	ND	20	1.2
Dibenzofuran	ND	10	0.57
2,4-Dinitrotoluene	ND	10	0.65
Diethylphthalate	ND	10	0.68
Fluorene	ND	10	0.57
4-Chlorophenyl-phenylether	ND	10	0.53
4-Nitroaniline	ND	20	3.3
4,6-Dinitro-2-methylphenol	ND	20	2.5
N-Nitrosodiphenylamine	ND	10	1.9
Azobenzene	ND	10	0.65
4-Bromophenyl-phenylether	ND	10	0.56
Hexachlorobenzene	ND	10	0.68
Pentachlorophenol	ND	20	1.7
Phenanthrene	ND	10	0.71
Anthracene	ND	10	0.62

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-20-GW	Batch#:	220613
Lab ID:	264728-002	Sampled:	02/17/15
Matrix:	Water	Received:	02/17/15
Units:	ug/L	Prepared:	02/18/15
Diln Fac:	1.000	Analyzed:	02/20/15

Analyte	Result	RL	MDL
Di-n-butylphthalate	ND	10	1.4
Fluoranthene	ND	10	0.77
Pyrene	ND	10	0.74
Butylbenzylphthalate	ND	10	0.82
3,3'-Dichlorobenzidine	ND	20	2.5
Benzo(a)anthracene	ND	10	0.75
Chrysene	ND	10	0.70
bis(2-Ethylhexyl)phthalate	ND	10	1.6
Di-n-octylphthalate	ND	10	0.63
Benzo(b)fluoranthene	ND	10	0.71
Benzo(k)fluoranthene	ND	10	0.66
Benzo(a)pyrene	ND	10	0.57
Indeno(1,2,3-cd)pyrene	ND	10	0.77
Dibenz(a,h)anthracene	ND	10	0.79
Benzo(g,h,i)perylene	ND	10	0.87

Surrogate	%REC	Limits
2-Fluorophenol	78	38-120
Phenol-d5	83	38-120
2,4,6-Tribromophenol	92	46-120
Nitrobenzene-d5	83	51-120
2-Fluorobiphenyl	75	54-120
Terphenyl-d14	24	21-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777931	Batch#:	220613
Matrix:	Water	Prepared:	02/19/15
Units:	ug/L	Analyzed:	02/20/15

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	10	2.2
Phenol	ND	10	0.80
bis(2-Chloroethyl)ether	ND	10	1.5
2-Chlorophenol	ND	10	0.91
1,3-Dichlorobenzene	ND	10	1.5
1,4-Dichlorobenzene	ND	10	1.5
Benzyl alcohol	ND	10	1.5
1,2-Dichlorobenzene	ND	10	1.5
2-Methylphenol	ND	10	0.70
bis(2-Chloroisopropyl) ether	ND	10	1.5
4-Methylphenol	ND	10	1.2
N-Nitroso-di-n-propylamine	ND	10	1.3
Hexachloroethane	ND	10	1.5
Nitrobenzene	ND	10	1.3
Isophorone	ND	10	1.7
2-Nitrophenol	ND	20	2.0
2,4-Dimethylphenol	ND	10	0.58
Benzoic acid	ND	50	6.9
bis(2-Chloroethoxy)methane	ND	10	1.3
2,4-Dichlorophenol	ND	10	0.80
1,2,4-Trichlorobenzene	ND	10	1.4
Naphthalene	ND	10	1.4
4-Chloroaniline	ND	10	1.4
Hexachlorobutadiene	ND	10	1.4
4-Chloro-3-methylphenol	ND	10	1.5
2-Methylnaphthalene	ND	10	1.3
Hexachlorocyclopentadiene	ND	20	1.7
2,4,6-Trichlorophenol	ND	10	0.94
2,4,5-Trichlorophenol	ND	10	1.1
2-Chloronaphthalene	ND	10	1.3
2-Nitroaniline	ND	20	1.6
Dimethylphthalate	ND	10	1.6
Acenaphthylene	ND	10	1.3
2,6-Dinitrotoluene	ND	10	1.7
3-Nitroaniline	ND	20	3.8
Acenaphthene	ND	10	1.4
2,4-Dinitrophenol	ND	20	2.6
4-Nitrophenol	ND	20	1.4
Dibenzofuran	ND	10	1.5
2,4-Dinitrotoluene	ND	10	1.4
Diethylphthalate	ND	10	1.5
Fluorene	ND	10	1.4
4-Chlorophenyl-phenylether	ND	10	1.4
4-Nitroaniline	ND	20	2.2
4,6-Dinitro-2-methylphenol	ND	20	1.6
N-Nitrosodiphenylamine	ND	10	1.3
Azobenzene	ND	10	1.4
4-Bromophenyl-phenylether	ND	10	1.3
Hexachlorobenzene	ND	10	1.4
Pentachlorophenol	ND	20	1.4
Phenanthrene	ND	10	1.4
Anthracene	ND	10	1.3
Di-n-butylphthalate	ND	10	1.3

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777931	Batch#:	220613
Matrix:	Water	Prepared:	02/19/15
Units:	ug/L	Analyzed:	02/20/15

Analyte	Result	RL	MDL
Fluoranthene	ND	10	1.4
Pyrene	ND	10	1.3
Butylbenzylphthalate	ND	10	1.3
3,3'-Dichlorobenzidine	ND	20	1.5
Benzo(a)anthracene	ND	10	1.3
Chrysene	ND	10	1.3
bis(2-Ethylhexyl)phthalate	ND	10	1.9
Di-n-octylphthalate	ND	10	1.4
Benzo(b)fluoranthene	ND	10	1.4
Benzo(k)fluoranthene	ND	10	1.5
Benzo(a)pyrene	ND	10	1.1
Indeno(1,2,3-cd)pyrene	ND	10	1.3
Dibenz(a,h)anthracene	ND	10	1.4
Benzo(g,h,i)perylene	ND	10	1.3

Surrogate	%REC	Limits
2-Fluorophenol	75	38-120
Phenol-d5	67	38-120
2,4,6-Tribromophenol	76	46-120
Nitrobenzene-d5	77	51-120
2-Fluorobiphenyl	79	54-120
Terphenyl-d14	70	21-120

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8270C
Matrix:	Water	Batch#:	220613
Units:	ug/L	Prepared:	02/19/15
Diln Fac:	1.000	Analyzed:	02/20/15

Type: BS Lab ID: QC777932

Analyte	Spiked	Result	%REC	Limits
Phenol	80.00	67.80	85	46-120
2-Chlorophenol	80.00	65.44	82	48-120
1,4-Dichlorobenzene	80.00	48.90	61	52-120
N-Nitroso-di-n-propylamine	80.00	63.58	79	46-120
1,2,4-Trichlorobenzene	80.00	51.79	65	53-120
4-Chloro-3-methylphenol	80.00	62.28	78	40-120
Acenaphthene	30.00	24.41	81	61-120
4-Nitrophenol	80.00	72.44	91	40-120
2,4-Dinitrotoluene	80.00	73.63	92	64-120
Pentachlorophenol	80.00	66.80	83	47-120
Pyrene	30.00	24.69	82	62-120

Surrogate	%REC	Limits
2-Fluorophenol	75	38-120
Phenol-d5	84	38-120
2,4,6-Tribromophenol	92	46-120
Nitrobenzene-d5	78	51-120
2-Fluorobiphenyl	78	54-120
Terphenyl-d14	82	21-120

Type: BSD Lab ID: QC777933

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Phenol	80.00	60.96	76	46-120	11	55
2-Chlorophenol	80.00	58.98	74	48-120	10	54
1,4-Dichlorobenzene	80.00	46.15	58	52-120	6	30
N-Nitroso-di-n-propylamine	80.00	56.69	71	46-120	11	25
1,2,4-Trichlorobenzene	80.00	46.55	58	53-120	11	26
4-Chloro-3-methylphenol	80.00	53.98	67	40-120	14	54
Acenaphthene	30.00	21.36	71	61-120	13	25
4-Nitrophenol	80.00	64.49	81	40-120	12	45
2,4-Dinitrotoluene	80.00	63.42	79	64-120	15	32
Pentachlorophenol	80.00	60.84	76	47-120	9	48
Pyrene	30.00	23.00	77	62-120	7	26

Surrogate	%REC	Limits
2-Fluorophenol	70	38-120
Phenol-d5	76	38-120
2,4,6-Tribromophenol	79	46-120
Nitrobenzene-d5	69	51-120
2-Fluorobiphenyl	68	54-120
Terphenyl-d14	72	21-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8082
Matrix:	Water	Sampled:	02/17/15
Units:	ug/L	Received:	02/17/15
Diln Fac:	1.000	Prepared:	02/19/15
Batch#:	220611	Analyzed:	02/20/15

Field ID: SB-22-GW Lab ID: 264728-001
Type: SAMPLE

Analyte	Result	RL	MDL
Aroclor-1016	ND	0.50	0.16
Aroclor-1221	ND	1.0	0.32
Aroclor-1232	ND	0.50	0.14
Aroclor-1242	ND	0.50	0.16
Aroclor-1248	ND	0.50	0.16
Aroclor-1254	ND	0.50	0.16
Aroclor-1260	ND	0.50	0.13

Surrogate	%REC	Limits
TCMX	77	39-120
Decachlorobiphenyl	81	28-120

Field ID: SB-20-GW Lab ID: 264728-002
Type: SAMPLE

Analyte	Result	RL	MDL
Aroclor-1016	ND	0.50	0.16
Aroclor-1221	ND	1.0	0.32
Aroclor-1232	ND	0.50	0.14
Aroclor-1242	ND	0.50	0.16
Aroclor-1248	ND	0.50	0.16
Aroclor-1254	ND	0.50	0.16
Aroclor-1260	ND	0.50	0.13

Surrogate	%REC	Limits
TCMX	77	39-120
Decachlorobiphenyl	85	28-120

Type: BLANK Lab ID: QC777925

Analyte	Result	RL	MDL
Aroclor-1016	ND	0.50	0.16
Aroclor-1221	ND	1.0	0.32
Aroclor-1232	ND	0.50	0.14
Aroclor-1242	ND	0.50	0.16
Aroclor-1248	ND	0.50	0.16
Aroclor-1254	ND	0.50	0.16
Aroclor-1260	ND	0.50	0.13

Surrogate	%REC	Limits
TCMX	68	39-120
Decachlorobiphenyl	81	28-120

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8082
Matrix:	Water	Batch#:	220611
Units:	ug/L	Prepared:	02/19/15
Diln Fac:	1.000	Analyzed:	02/20/15

Type: BS Lab ID: QC777926

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	5.000	3.768	75	62-127
Aroclor-1260	5.000	3.975	79	60-135

Surrogate	%REC	Limits
TCMX	67	39-120
Decachlorobiphenyl	75	28-120

Type: BSD Lab ID: QC777927

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	5.000	3.513	70	62-127	7	29
Aroclor-1260	5.000	3.618	72	60-135	9	40

Surrogate	%REC	Limits
TCMX	64	39-120
Decachlorobiphenyl	72	28-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved California Title 22 Metals

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374		
Field ID:	SB-22-GW	Diln Fac:	1.000
Lab ID:	264728-001	Sampled:	02/17/15
Matrix:	Filtrate	Received:	02/17/15
Units:	ug/L		

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Analysis
Antimony	ND	10	0.65	220663	02/20/15	02/20/15	EPA 6010B
Arsenic	ND	5.0	1.3	220663	02/20/15	02/20/15	EPA 6010B
Barium	71	5.0	1.0	220663	02/20/15	02/20/15	EPA 6010B
Beryllium	ND	2.0	0.30	220663	02/20/15	02/20/15	EPA 6010B
Cadmium	ND	5.0	0.58	220663	02/20/15	02/20/15	EPA 6010B
Chromium	2.4 J	5.0	0.57	220663	02/20/15	02/20/15	EPA 6010B
Cobalt	ND	5.0	0.32	220663	02/20/15	02/20/15	EPA 6010B
Copper	ND	5.0	0.99	220663	02/20/15	02/20/15	EPA 6010B
Lead	ND	5.0	0.91	220663	02/20/15	02/20/15	EPA 6010B
Mercury	ND	0.20	0.040	220695	02/22/15	02/23/15	EPA 7470A
Molybdenum	37	5.0	0.40	220663	02/20/15	02/20/15	EPA 6010B
Nickel	5.6	5.0	0.71	220663	02/20/15	02/20/15	EPA 6010B
Selenium	ND	10	2.3	220663	02/20/15	02/20/15	EPA 6010B
Silver	ND	5.0	0.66	220663	02/20/15	02/20/15	EPA 6010B
Thallium	ND	10	2.0	220663	02/20/15	02/20/15	EPA 6010B
Vanadium	3.9 J	5.0	0.67	220663	02/20/15	02/20/15	EPA 6010B
Zinc	ND	20	3.0	220663	02/20/15	02/20/15	EPA 6010B

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Dissolved California Title 22 Metals

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374		
Field ID:	SB-20-GW	Diln Fac:	1.000
Lab ID:	264728-002	Sampled:	02/17/15
Matrix:	Filtrate	Received:	02/17/15
Units:	ug/L		

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Analysis
Antimony	ND	10	0.65	220663	02/20/15	02/20/15	EPA 6010B
Arsenic	ND	5.0	1.3	220663	02/20/15	02/20/15	EPA 6010B
Barium	56	5.0	1.0	220663	02/20/15	02/20/15	EPA 6010B
Beryllium	ND	2.0	0.30	220663	02/20/15	02/20/15	EPA 6010B
Cadmium	ND	5.0	0.58	220663	02/20/15	02/20/15	EPA 6010B
Chromium	0.68 J	5.0	0.57	220663	02/20/15	02/20/15	EPA 6010B
Cobalt	ND	5.0	0.32	220663	02/20/15	02/20/15	EPA 6010B
Copper	ND	5.0	0.99	220663	02/20/15	02/20/15	EPA 6010B
Lead	ND	5.0	0.91	220663	02/20/15	02/20/15	EPA 6010B
Mercury	ND	0.20	0.040	220695	02/22/15	02/23/15	EPA 7470A
Molybdenum	57	5.0	0.40	220663	02/20/15	02/20/15	EPA 6010B
Nickel	6.3	5.0	0.71	220663	02/20/15	02/20/15	EPA 6010B
Selenium	ND	10	2.3	220663	02/20/15	02/20/15	EPA 6010B
Silver	ND	5.0	0.66	220663	02/20/15	02/20/15	EPA 6010B
Thallium	ND	10	2.0	220663	02/20/15	02/20/15	EPA 6010B
Vanadium	1.6 J	5.0	0.67	220663	02/20/15	02/20/15	EPA 6010B
Zinc	ND	20	3.0	220663	02/20/15	02/20/15	EPA 6010B

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778145	Batch#:	220663
Matrix:	Filtrate	Prepared:	02/20/15
Units:	ug/L	Analyzed:	02/20/15

Analyte	Result	RL	MDL
Antimony	0.99 J	10	0.65
Arsenic	ND	5.0	1.3
Barium	ND	5.0	1.0
Beryllium	ND	2.0	0.30
Cadmium	ND	5.0	0.58
Chromium	ND	5.0	0.57
Cobalt	ND	5.0	0.32
Copper	1.3 J	5.0	0.99
Lead	ND	5.0	0.91
Molybdenum	ND	5.0	0.40
Nickel	ND	5.0	0.71
Selenium	ND	10	2.3
Silver	ND	5.0	0.66
Thallium	ND	10	2.0
Vanadium	ND	5.0	0.67
Zinc	ND	20	3.0

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778146	Batch#:	220663
Matrix:	Filtrate	Prepared:	02/20/15
Units:	ug/L	Analyzed:	02/20/15

Analyte	Result	RL	MDL
Antimony	ND	10	0.65
Arsenic	ND	5.0	1.3
Barium	ND	5.0	1.0
Beryllium	ND	2.0	0.30
Cadmium	ND	5.0	0.58
Chromium	ND	5.0	0.57
Cobalt	ND	5.0	0.32
Copper	ND	5.0	0.99
Lead	ND	5.0	0.91
Molybdenum	ND	5.0	0.40
Nickel	ND	5.0	0.71
Selenium	ND	10	2.3
Silver	ND	5.0	0.66
Thallium	ND	10	2.0
Vanadium	ND	5.0	0.67
Zinc	ND	20	3.0

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778147	Batch#:	220663
Matrix:	Filtrate	Prepared:	02/20/15
Units:	ug/L	Analyzed:	02/20/15

Analyte	Result	RL	MDL
Antimony	ND	10	0.65
Arsenic	ND	5.0	1.3
Barium	ND	5.0	1.0
Beryllium	ND	2.0	0.30
Cadmium	ND	5.0	0.58
Chromium	ND	5.0	0.57
Cobalt	ND	5.0	0.32
Copper	ND	5.0	0.99
Lead	ND	5.0	0.91
Molybdenum	ND	5.0	0.40
Nickel	ND	5.0	0.71
Selenium	ND	10	2.3
Silver	ND	5.0	0.66
Thallium	ND	10	2.0
Vanadium	ND	5.0	0.67
Zinc	3.8 J	20	3.0

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 6010B
Matrix:	Filtrate	Batch#:	220663
Units:	ug/L	Prepared:	02/20/15
Diln Fac:	1.000	Analyzed:	02/20/15

Type: BS Lab ID: QC778148

Analyte	Spiked	Result	%REC	Limits
Antimony	100.0	97.64	98	79-120
Arsenic	100.0	96.06	96	80-120
Barium	100.0	99.87	100	80-120
Beryllium	100.0	96.97	97	80-120
Cadmium	100.0	103.4	103	80-120
Chromium	100.0	98.15	98	80-120
Cobalt	100.0	96.55	97	80-120
Copper	100.0	82.40	82	80-120
Lead	100.0	94.34	94	80-120
Molybdenum	100.0	98.09	98	80-120
Nickel	100.0	95.79	96	80-120
Selenium	100.0	106.0	106	80-120
Silver	100.0	98.51	99	77-120
Thallium	50.00	53.02	106	80-121
Vanadium	100.0	99.42	99	80-120
Zinc	100.0	98.76	99	80-120

Type: BSD Lab ID: QC778149

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	100.0	102.8	103	79-120	5	20
Arsenic	100.0	98.34	98	80-120	2	20
Barium	100.0	105.8	106	80-120	6	20
Beryllium	100.0	100.3	100	80-120	3	20
Cadmium	100.0	108.5	108	80-120	5	20
Chromium	100.0	104.4	104	80-120	6	20
Cobalt	100.0	100.9	101	80-120	4	20
Copper	100.0	88.73	89	80-120	7	20
Lead	100.0	98.63	99	80-120	4	20
Molybdenum	100.0	103.1	103	80-120	5	20
Nickel	100.0	99.32	99	80-120	4	20
Selenium	100.0	109.3	109	80-120	3	20
Silver	100.0	103.8	104	77-120	5	20
Thallium	50.00	52.23	104	80-121	1	20
Vanadium	100.0	104.7	105	80-120	5	20
Zinc	100.0	100.9	101	80-120	2	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	220663
MSS Lab ID:	264784-002	Sampled:	02/18/15
Matrix:	Filtrate	Received:	02/19/15
Units:	ug/L	Prepared:	02/20/15
Diln Fac:	10.00	Analyzed:	02/23/15

Type: MS Lab ID: QC778150

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	<23.48	100.0	77.72	78	74-120
Arsenic	<10.28	100.0	88.52	89	80-127
Barium	169.7	100.0	259.4	90	80-120
Beryllium	<1.463	100.0	87.61	88	80-120
Cadmium	<2.822	100.0	89.90	90	80-120
Chromium	261.3	100.0	367.7	106	80-120
Cobalt	<8.861	100.0	87.51	88	80-120
Copper	7.481	100.0	80.65	73 *	80-120
Lead	<13.06	100.0	60.03	60 *	67-120
Molybdenum	<5.528	100.0	23.16	23 *	80-120
Nickel	<7.500	100.0	80.26	80	80-120
Selenium	<23.08	100.0	127.4	127	73-132
Silver	<11.26	100.0	91.03	91	67-120
Thallium	<27.77	50.00	58.77	DO	76-121
Vanadium	<7.199	100.0	88.43	88	80-120
Zinc	<28.30	100.0	78.58	DO	80-122

Type: MSD Lab ID: QC778151

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	100.0	93.36	93	74-120	18	24
Arsenic	100.0	94.55	95	80-127	7	25
Barium	100.0	281.4	112	80-120	8	20
Beryllium	100.0	96.58	97	80-120	10	20
Cadmium	100.0	97.63	98	80-120	8	20
Chromium	100.0	385.3	124 *	80-120	5	20
Cobalt	100.0	96.96	97	80-120	10	20
Copper	100.0	90.51	83	80-120	12	20
Lead	100.0	72.97	73	67-120	19	23
Molybdenum	100.0	27.48	27 *	80-120	17	20
Nickel	100.0	92.90	93	80-120	15	20
Selenium	100.0	139.7	140 *	73-132	9	30
Silver	100.0	98.04	98	67-120	7	22
Thallium	50.00	54.39	DO	76-121	NC	20
Vanadium	100.0	97.83	98	80-120	10	20
Zinc	100.0	87.42	DO	80-122	NC	20

*= Value outside of QC limits; see narrative
DO= Diluted Out
NC= Not Calculated
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	220695
Lab ID:	QC778259	Prepared:	02/22/15
Matrix:	Filtrate	Analyzed:	02/23/15
Units:	ug/L		

Result	RL	MDL
ND	0.20	0.040

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	220695
Matrix:	Water	Prepared:	02/22/15
Units:	ug/L	Analyzed:	02/23/15
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC778260	2.500	2.526	101	80-120		
BSD	QC778261	2.500	2.526	101	80-120	0	24

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	220695
Field ID:	SB-19-GW	Sampled:	02/17/15
MSS Lab ID:	264721-001	Received:	02/17/15
Matrix:	Filtrate	Prepared:	02/22/15
Units:	ug/L	Analyzed:	02/23/15
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC778262	<0.04000	2.500	2.602	104	60-130		
MSD	QC778263		2.500	2.513	101	60-130	3	34

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	220695
Lab ID:	QC778296	Prepared:	02/22/15
Matrix:	Filtrate	Analyzed:	02/23/15
Units:	ug/L		

Result	RL	MDL
ND	0.20	0.040

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

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Hexavalent Chromium

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7196A
Analyte:	Hexavalent Chromium	Batch#:	220560
Matrix:	Water	Received:	02/17/15
Units:	mg/L	Analyzed:	02/18/15 12:55
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Sampled
SB-22-GW	SAMPLE	264728-001	ND	0.01	02/17/15 14:28
SB-20-GW	SAMPLE	264728-002	ND	0.01	02/17/15 16:00
	BLANK	QC777733	ND	0.01	

ND= Not Detected
RL= Reporting Limit

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Batch QC Report

Hexavalent Chromium

Lab #:	264728	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7196A
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	220560
MSS Lab ID:	264721-001	Sampled:	02/17/15 17:30
Matrix:	Water	Received:	02/17/15
Units:	mg/L	Analyzed:	02/18/15 12:55

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC777734		1.053	1.094	104	90-110		
MS	QC777735	<0.01000	1.053	1.076	102	85-115		
MSD	QC777736		1.053	1.092	104	85-115	1	23

RPD= Relative Percent Difference

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2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 264756
ANALYTICAL REPORT

Integral Consulting, Inc. 115 Sansome Street San Francisco, CA 94104	Project : C1374 Location : Allied Engineering Level : II

Sample ID	Lab ID
SB-24-GW	264756-001
SB-14-GW	264756-002

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Tracy Babjar Date: 02/25/2015

Tracy Babjar
Project Manager
tracy.babjar@ctberk.com
(510) 204-2226

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**264756**
Client:	**Integral Consulting, Inc.**
Project:	**C1374**
Location:	**Allied Engineering**
Request Date:	**02/18/15**
Samples Received:	**02/18/15**

This data package contains sample and QC results for two water samples, requested for the above referenced project on 02/18/15. The samples were received on ice and intact, directly from the field.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):
Gasoline C7-C12 was detected between the MDL and the RL in the method blank for batch 220602. No other analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
Diesel C10-C24 was detected between the MDL and the RL in the method blank for batch 220612; this analyte was not detected in the sample at or above the RL. Diesel C10-C24 was detected between the MDL and the RL in the method blank for batch 220670; this analyte was detected in the sample at a level at least 10 times that of the blank. No other analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
1,2,3-trichlorobenzene was detected between the MDL and the RL in the method blank for batch 220579; this analyte was not detected in samples at or above the RL. No other analytical problems were encountered.

Semivolatile Organics by GC/MS (EPA 8270C):
Low surrogate recovery was observed for terphenyl-d14 in SB-24-GW (lab # 264756-001); the low surrogate recovery was confirmed by re-extraction and re-analysis. Low surrogate recovery was observed for 2-fluorobiphenyl in SB-24-GW (lab # 264756-001); the low surrogate recovery was confirmed by re-extraction and re-analysis. No other analytical problems were encountered.

PCBs (EPA 8082):
All samples underwent sulfuric acid cleanup using EPA Method 3665A. All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. No analytical problems were encountered.

Metals (EPA 6010B and EPA 7470A):
Thallium was detected between the MDL and the RL in the method blank for batch 220607; this analyte was not detected in samples at or above the RL. Nickel was detected between the MDL and the RL in the method blank for batch 220607. Thallium and zinc were detected between the MDL and the RL in the method blank for batch 220607; these analytes were not detected in samples at or above the RL. Mercury was detected between the MDL and the RL in the method blank for batch 220592; this analyte was not detected in samples at or

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CASE NARRATIVE

Laboratory number:	**264756**
Client:	**Integral Consulting, Inc.**
Project:	**C1374**
Location:	**Allied Engineering**
Request Date:	**02/18/15**
Samples Received:	**02/18/15**

Metals (EPA 6010B and EPA 7470A):
above the RL. Mercury was detected between the MDL and the RL in the method blank for batch 220592; this analyte was not detected in samples at or above the RL. No other analytical problems were encountered.

Hexavalent Chromium (EPA 7196A):
No analytical problems were encountered.

CHAIN OF CUSTODY

Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

C&T LOGIN # 264756

Chain of Custody # _____

Project No: C1374
Project Name: Allied Engineering
Project P. O. No:
EDD Format: Report Level ☐ II ☐ III ☐ IV
Turnaround Time: ☐ RUSH _____ ☒ Standard

Sampler: C. Lyles
Report To: B. DeShields
Company: Integral Consulting Inc.
Telephone:
Email: bdeshields@integral-corp.com

Lab No.	Sample ID.	SAMPLING Date Collected	SAMPLING Time Collected	MATRIX Water	MATRIX Solid	MATRIX	MATRIX	# of Containers	CHEMICAL PRESERVATIVE HCl	H2SO4	HNO3	NaOH	None	TPH as gasoline by 8015	TPH d by 8015	TPH mo by 8015	Full list of VOCs by 8260	Svocs by 8270	Dissolved Mtls 22 metals (Ca, Mg, Na, K, Fe, Mn, Al, Sb, As, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn)	Cr VI by 7196	PCBs by 8082
	SB-24-GW	2/18/15	1715	X				13	6				7	X	X	X	X	X	X	X	X
	SB-14-GW	2/18/15	1640	X				13	6				7	X	X	X	X	X	X	X	X

Notes:
- Dissolved metals to be lab filtered
- Report all to MDL
- EDF required

SAMPLE RECEIPT
☐ Intact
☐ Cold
☐ On Ice
☐ Ambient

RELINQUISHED BY:
Stephen Sherman — DATE: 2/18/15 TIME: 1630
DATE: TIME:
DATE: TIME:

RECEIVED BY:
[signature] — DATE: 2/18/15 TIME: 1630
DATE: TIME:
DATE: TIME:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 2604754 Date Received 2/18/15 Number of coolers 1
Client Integral Consulting Project Allied Engineering

Date Opened 2/18 By (print) SL (sign) [signature]
Date Logged in 2/18 By (print) [signature] (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc) _____ YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO (N/A)
3. Were custody papers dry and intact when received? _____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ___ (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☒ Foam blocks ☐ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) _____

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ (YES) NO
10. Are there any missing / extra samples? _____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? _____ (YES) NO
12. Are sample labels present, in good condition and complete? _____ (YES) NO
13. Do the sample labels agree with custody papers? _____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
15. Are the samples appropriately preserved? _____ (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? _____ YES NO (N/A)
17. Did you document your preservative check? _____ YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? _____ (YES) NO N/A
21. Was the client contacted concerning this sample delivery? _____ YES (NO)
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

Rev 10, 9/12

Curtis & Tompkins, Ltd.

Detections Summary for 264756

Results for any subcontracted analyses are not included in this summary.

Client : Integral Consulting, Inc.
Project : C1374
Location : Allied Engineering

Client Sample ID : SB-24-GW Laboratory Sample ID : 264756-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	110	Y	50	11	ug/L	As Recd	1.000	EPA 8015B	EPA 5030B
Diesel C10-C24	3,400		50	16	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
Motor Oil C24-C36	6,400		300	96	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
Vinyl Chloride	0.3	J	0.7	0.1	ug/L	As Recd	1.429	EPA 8260B	EPA 5030B
Acetone	5.3	J	14	2.3	ug/L	As Recd	1.429	EPA 8260B	EPA 5030B
1,1-Dichloroethene	0.6	J	0.7	0.2	ug/L	As Recd	1.429	EPA 8260B	EPA 5030B
MTBE	4.9		0.7	0.2	ug/L	As Recd	1.429	EPA 8260B	EPA 5030B
trans-1,2-Dichloroethene	7.9		0.7	0.2	ug/L	As Recd	1.429	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	39		0.7	0.2	ug/L	As Recd	1.429	EPA 8260B	EPA 5030B
Trichloroethene	110		0.7	0.1	ug/L	As Recd	1.429	EPA 8260B	EPA 5030B
4-Methyl-2-Pentanone	1.1	J	14	0.9	ug/L	As Recd	1.429	EPA 8260B	EPA 5030B
Tetrachloroethene	41		0.7	0.1	ug/L	As Recd	1.429	EPA 8260B	EPA 5030B
o-Xylene	0.2	J	0.7	0.1	ug/L	As Recd	1.429	EPA 8260B	EPA 5030B
Propylbenzene	0.2	J	0.7	0.1	ug/L	As Recd	1.429	EPA 8260B	EPA 5030B
1,3,5-Trimethylbenzene	0.3	J	0.7	0.1	ug/L	As Recd	1.429	EPA 8260B	EPA 5030B
1,2,4-Trimethylbenzene	0.9		0.7	0.1	ug/L	As Recd	1.429	EPA 8260B	EPA 5030B
sec-Butylbenzene	0.2	J	0.7	0.1	ug/L	As Recd	1.429	EPA 8260B	EPA 5030B
para-Isopropyl Toluene	0.2	J	0.7	0.1	ug/L	As Recd	1.429	EPA 8260B	EPA 5030B
n-Butylbenzene	0.2	J	0.7	0.1	ug/L	As Recd	1.429	EPA 8260B	EPA 5030B
4-Chloro-3-methylphenol	46		10	1.5	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
bis(2-Ethylhexyl)phthalate	3.1	J	10	1.9	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
Arsenic	5.5		5.0	1.3	ug/L	DISS.	1.000	EPA 6010B	METHOD
Barium	260		5.0	1.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Chromium	1.3	J	5.0	0.57	ug/L	DISS.	1.000	EPA 6010B	METHOD
Cobalt	0.77	J	5.0	0.32	ug/L	DISS.	1.000	EPA 6010B	METHOD
Mercury	0.15	J	0.20	0.040	ug/L	DISS.	1.000	EPA 7470A	METHOD
Molybdenum	4.5	J	5.0	0.40	ug/L	DISS.	1.000	EPA 6010B	METHOD
Nickel	13		5.0	0.71	ug/L	DISS.	1.000	EPA 6010B	METHOD
Vanadium	7.0		5.0	0.67	ug/L	DISS.	1.000	EPA 6010B	METHOD

Curtis & Tompkins, Ltd.

Client Sample ID : SB-14-GW Laboratory Sample ID : 264756-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	19	J	50	11	ug/L	As Recd	1.000	EPA 8015B	EPA 5030B
Diesel C10-C24	38	J	50	16	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
MTBE	0.9		0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
4-Methyl-2-Pentanone	0.8	J	10	0.7	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Arsenic	2.8	J	5.0	1.3	ug/L	DISS.	1.000	EPA 6010B	METHOD
Barium	110		5.0	1.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Chromium	0.67	J	5.0	0.57	ug/L	DISS.	1.000	EPA 6010B	METHOD
Mercury	0.091	J	0.20	0.040	ug/L	DISS.	1.000	EPA 7470A	METHOD
Molybdenum	30		5.0	0.40	ug/L	DISS.	1.000	EPA 6010B	METHOD
Nickel	6.0		5.0	0.71	ug/L	DISS.	1.000	EPA 6010B	METHOD
Vanadium	44		5.0	0.67	ug/L	DISS.	1.000	EPA 6010B	METHOD

J = Estimated value

Y = Sample exhibits chromatographic pattern which does not resemble standard

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	220602
Units:	ug/L	Sampled:	02/18/15
Diln Fac:	1.000	Received:	02/18/15

Field ID: SB-24-GW Lab ID: 264756-001
Type: SAMPLE Analyzed: 02/20/15

Analyte	Result	RL	MDL
Gasoline C7-C12	110 Y	50	11

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	100	80-132

Field ID: SB-14-GW Lab ID: 264756-002
Type: SAMPLE Analyzed: 02/20/15

Analyte	Result	RL	MDL
Gasoline C7-C12	19 J	50	11

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	92	80-132

Type: BLANK Analyzed: 02/19/15
Lab ID: QC777879

Analyte	Result	RL	MDL
Gasoline C7-C12	13 J	50	11

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	93	80-132

J= Estimated value
Y= Sample exhibits chromatographic pattern which does not resemble standard
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC777878	Batch#:	220602
Matrix:	Water	Analyzed:	02/19/15
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	981.9	98	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	91	80-132

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	220602
MSS Lab ID:	264703-002	Sampled:	02/16/15
Matrix:	Water	Received:	02/17/15
Units:	ug/L	Analyzed:	02/19/15
Diln Fac:	1.000		

Type: MS Lab ID: QC777880

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	18.30	2,000	2,077	103	76-120

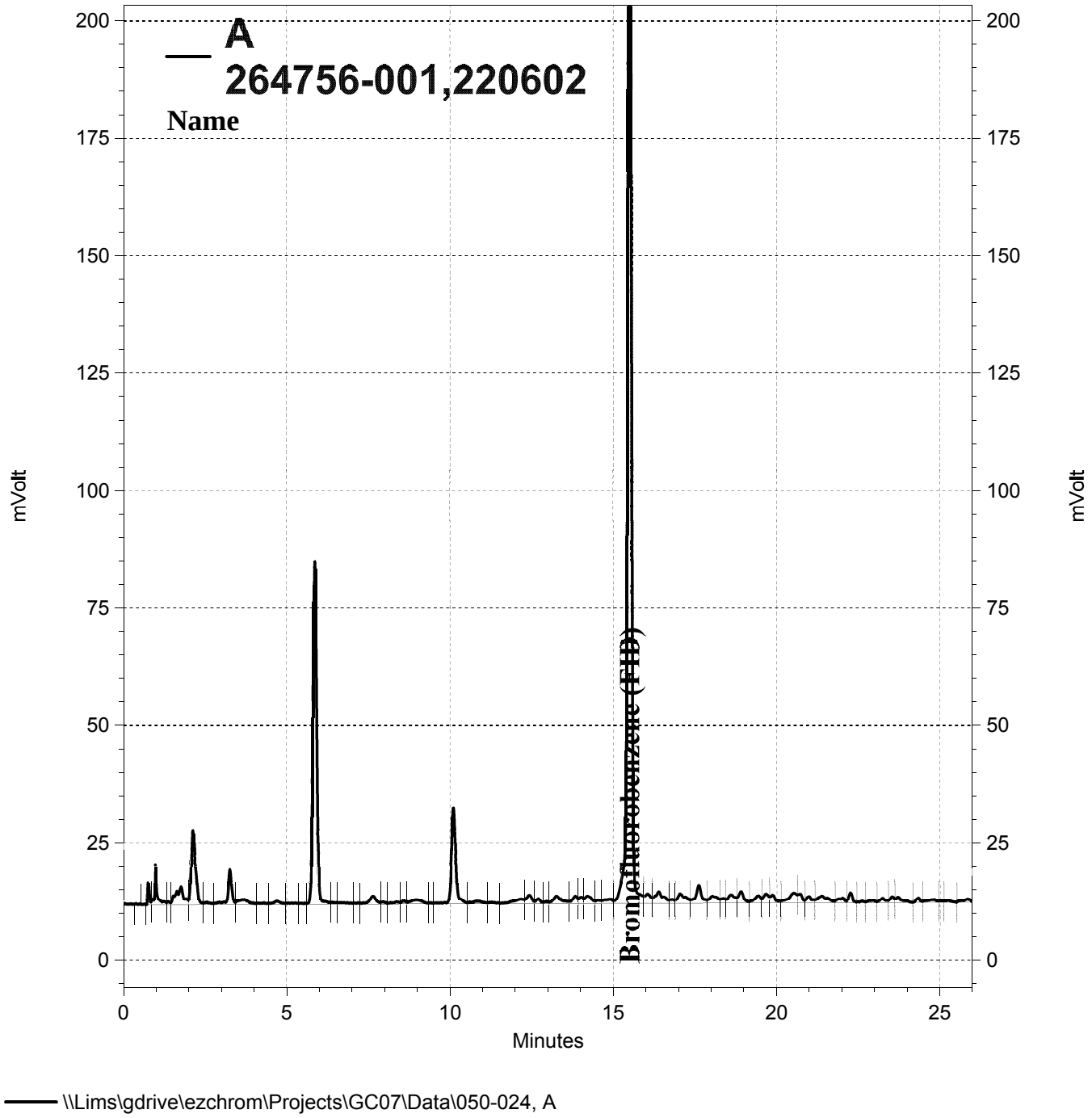
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	98	80-132

Type: MSD Lab ID: QC777881

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,030	101	76-120	2	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	98	80-132

RPD= Relative Percent Difference



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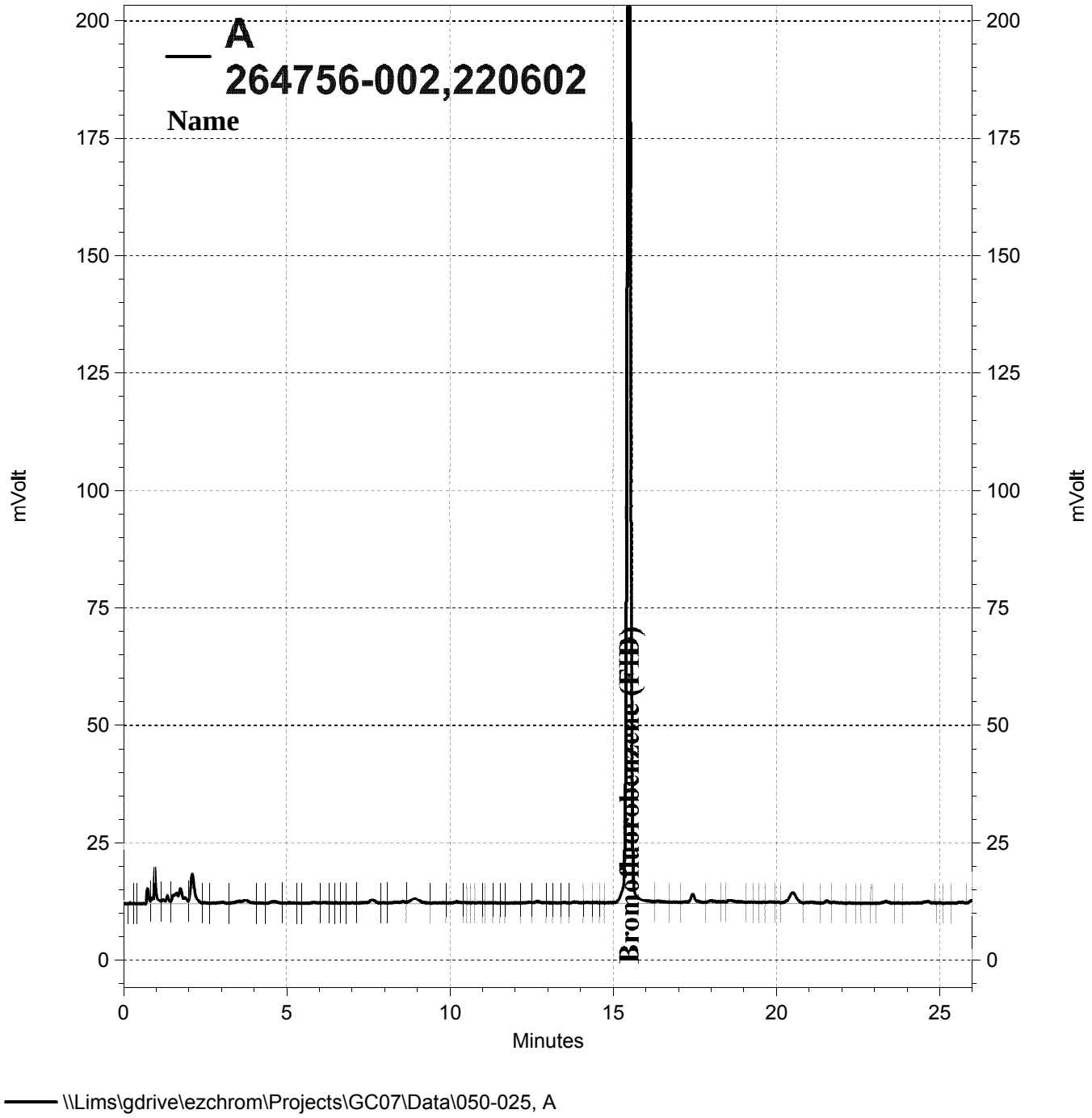

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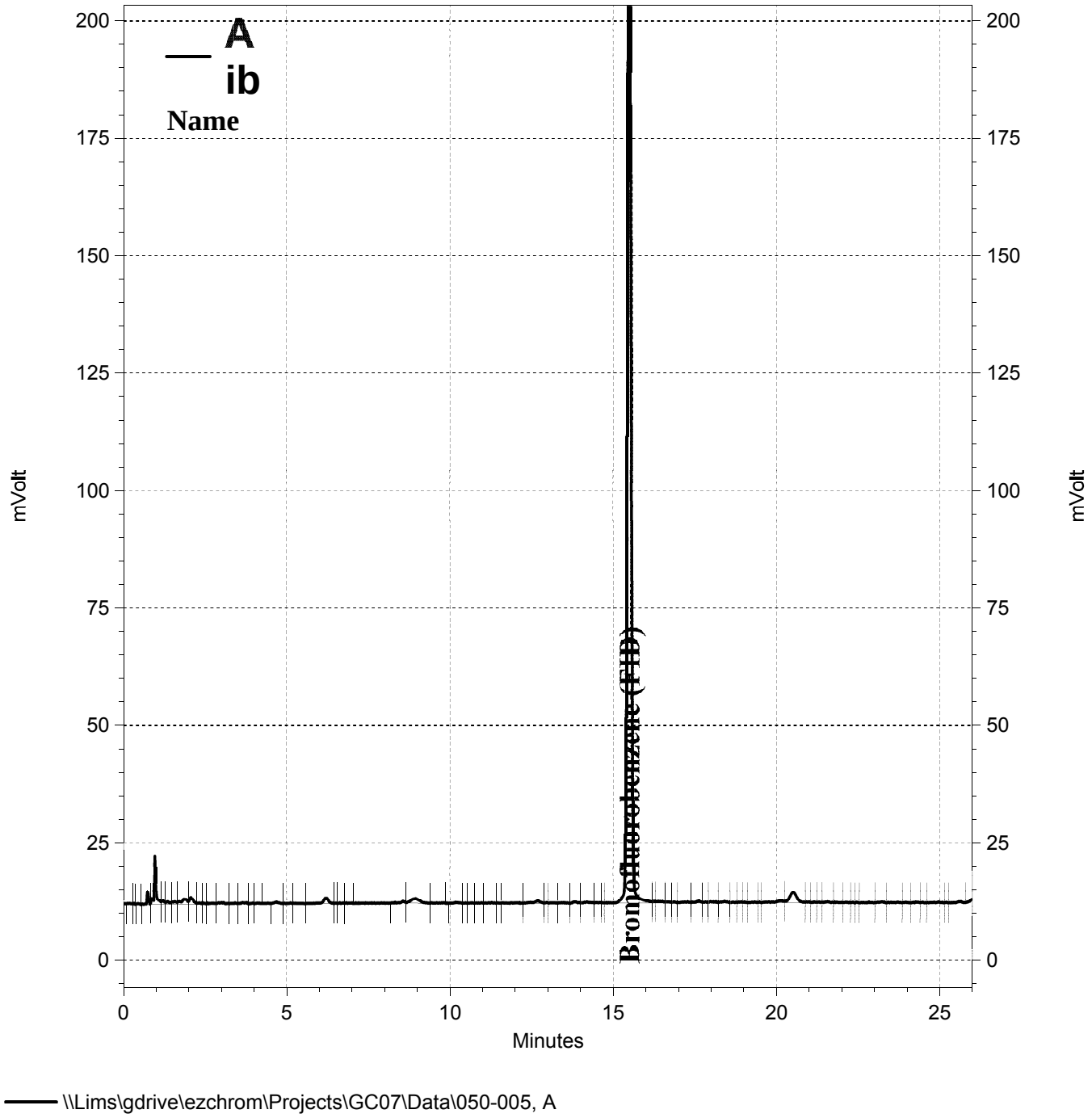

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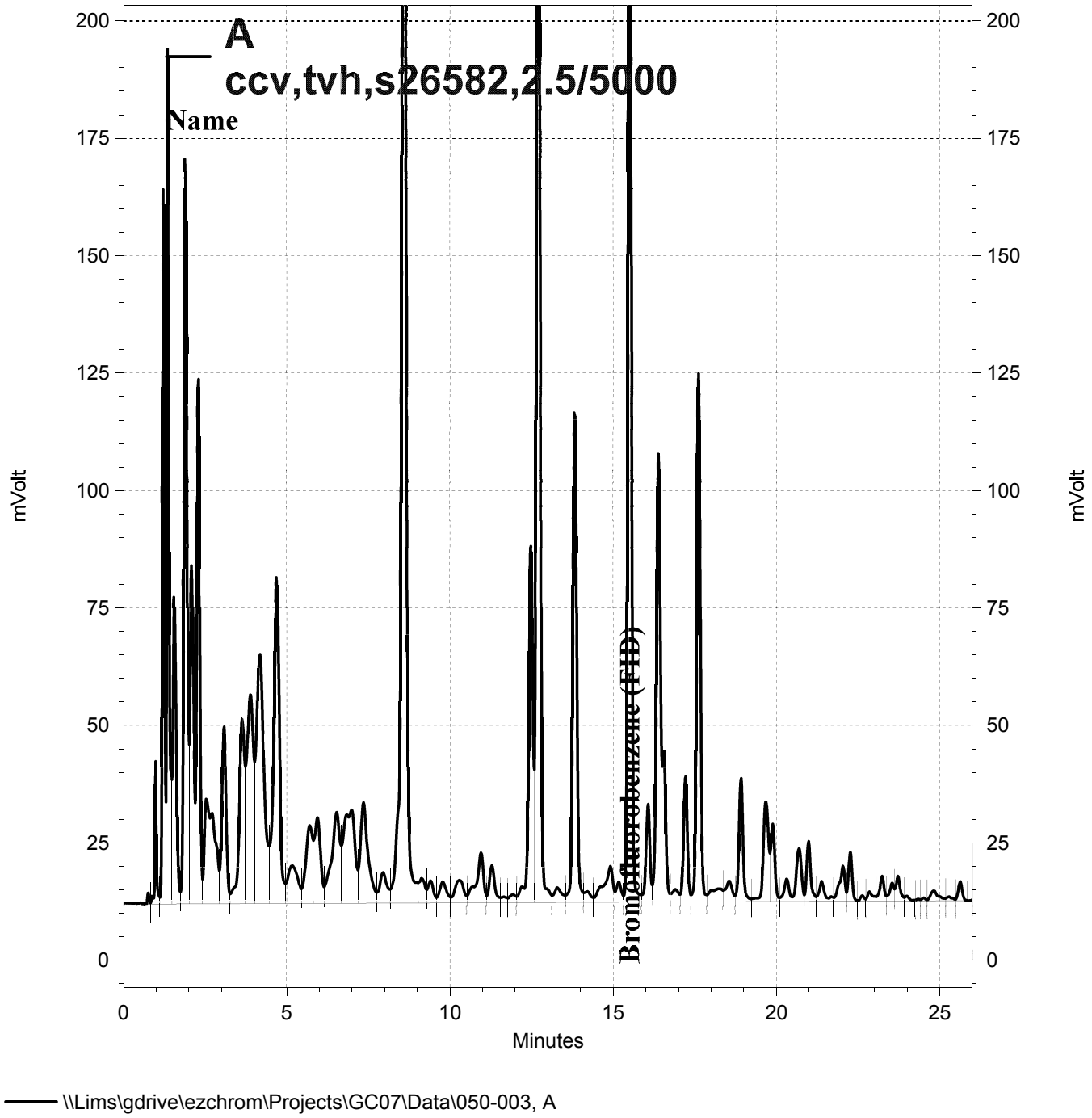
A
ccv,tvh,s26582,2.5/5000
Name
Bromofluorobenzene (FID)
mVolt
Minutes
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25
50
75
100
125
150
175
200
5
10
15
20
25
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Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	02/18/15
Units:	ug/L	Received:	02/18/15
Diln Fac:	1.000		

Field ID:	SB-24-GW	Batch#:	220670
Type:	SAMPLE	Prepared:	02/20/15
Lab ID:	264756-001	Analyzed:	02/23/15

Analyte	Result	RL	MDL
Diesel C10-C24	3,400	50	16
Motor Oil C24-C36	6,400	300	96

Surrogate	%REC	Limits
o-Terphenyl	86	67-136

Field ID:	SB-14-GW	Batch#:	220612
Type:	SAMPLE	Prepared:	02/19/15
Lab ID:	264756-002	Analyzed:	02/20/15

Analyte	Result	RL	MDL
Diesel C10-C24	38 J	50	16
Motor Oil C24-C36	ND	300	96

Surrogate	%REC	Limits
o-Terphenyl	90	67-136

Type:	BLANK	Prepared:	02/19/15
Lab ID:	QC777928	Analyzed:	02/20/15
Batch#:	220612		

Analyte	Result	RL	MDL
Diesel C10-C24	23 J	50	16
Motor Oil C24-C36	ND	300	96

Surrogate	%REC	Limits
o-Terphenyl	94	67-136

Type:	BLANK	Prepared:	02/20/15
Lab ID:	QC778175	Analyzed:	02/23/15
Batch#:	220670		

Analyte	Result	RL	MDL
Diesel C10-C24	21 J	50	16
Motor Oil C24-C36	ND	300	96

Surrogate	%REC	Limits
o-Terphenyl	88	67-136

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	220612
Units:	ug/L	Prepared:	02/19/15
Diln Fac:	1.000	Analyzed:	02/20/15

Type: BS Lab ID: QC777929

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,540	102	60-121

Surrogate	%REC	Limits
o-Terphenyl	100	67-136

Type: BSD Lab ID: QC777930

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,495	100	60-121	2	32

Surrogate	%REC	Limits
o-Terphenyl	103	67-136

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	220670
Units:	ug/L	Prepared:	02/20/15
Diln Fac:	1.000	Analyzed:	02/23/15

Type: BS Lab ID: QC778176

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,158	86	60-121

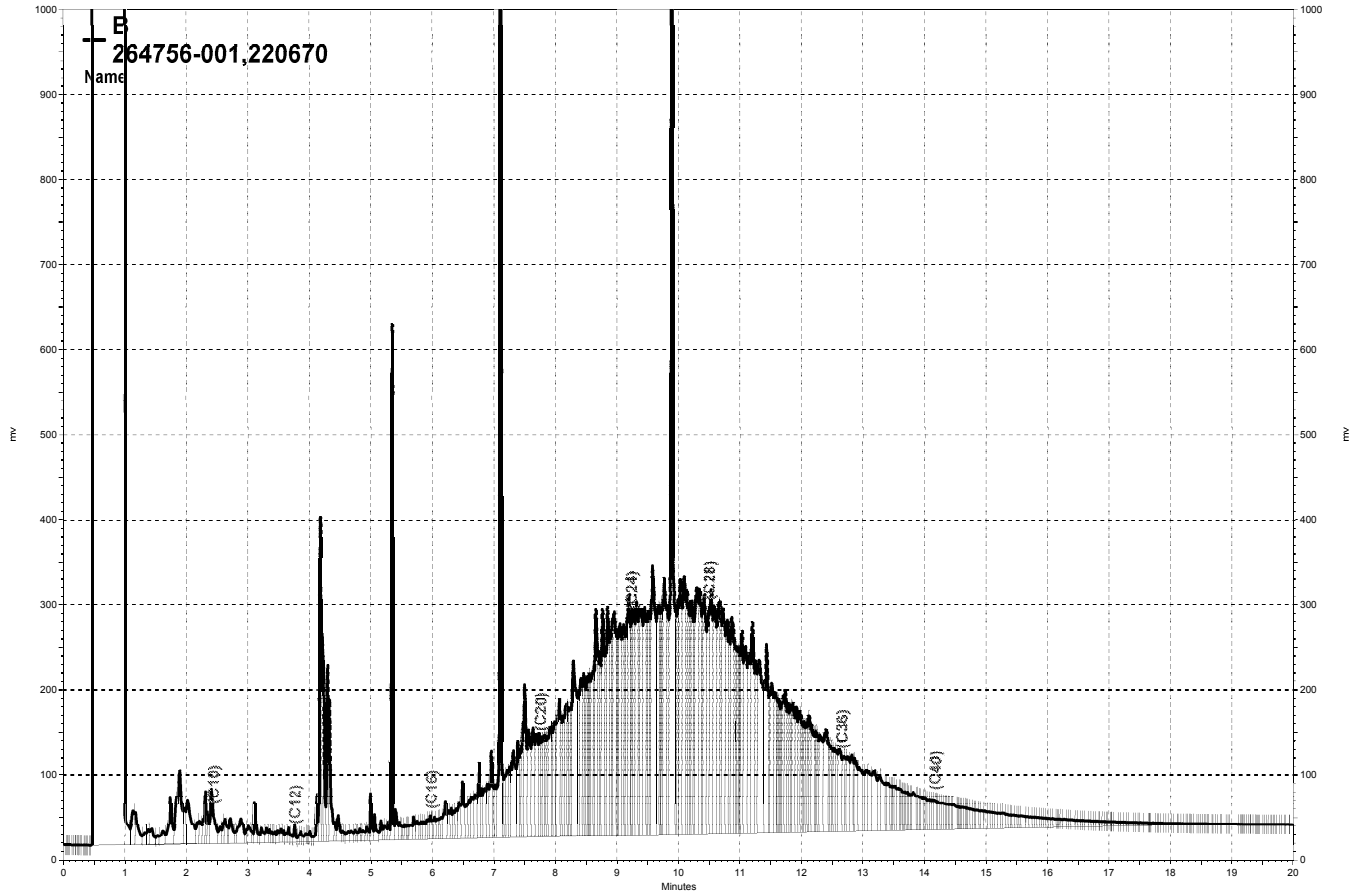
Surrogate	%REC	Limits
o-Terphenyl	89	67-136

Type: BSD Lab ID: QC778177

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,443	98	60-121	12	32

Surrogate	%REC	Limits
o-Terphenyl	99	67-136

RPD= Relative Percent Difference



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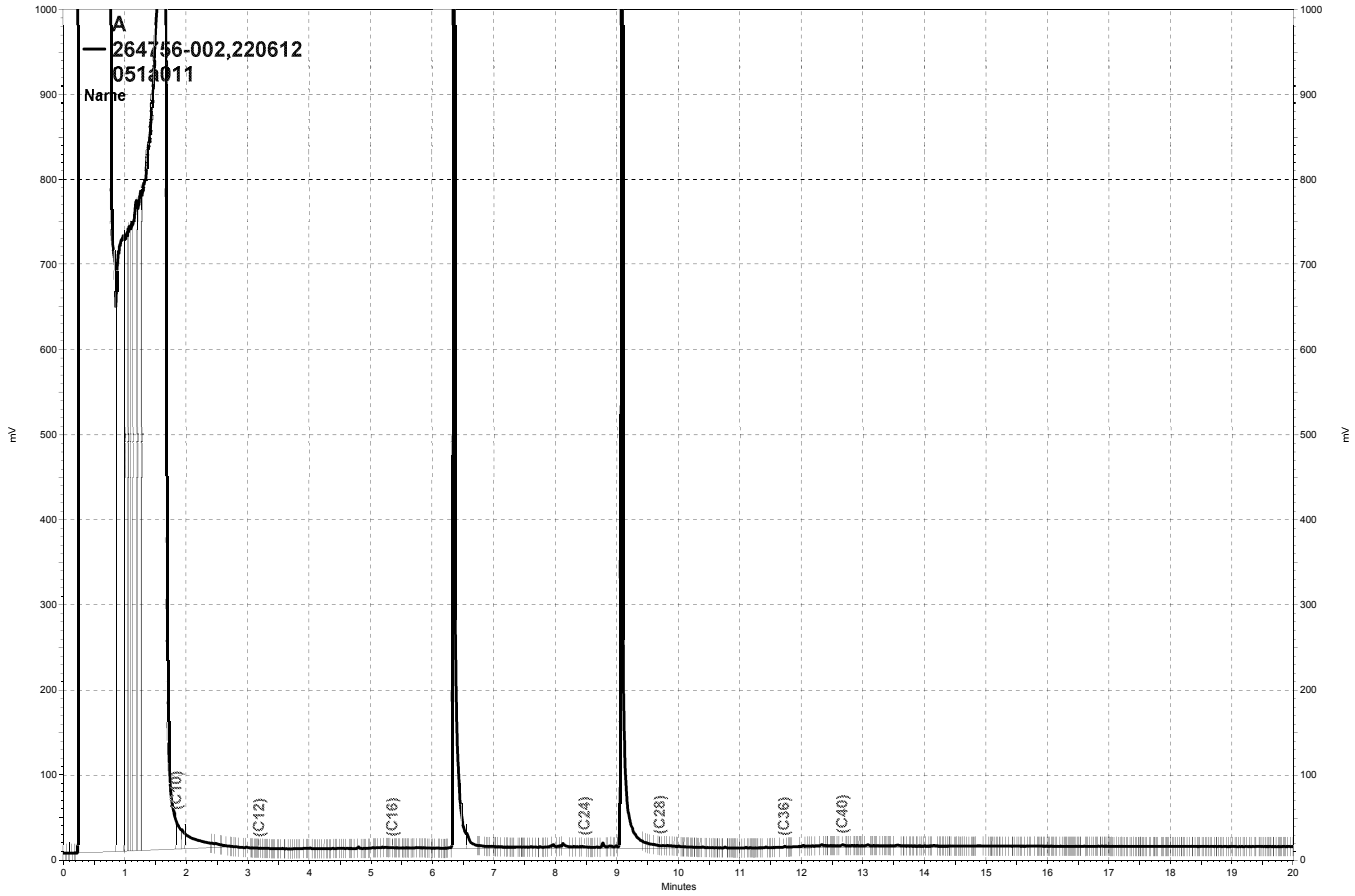

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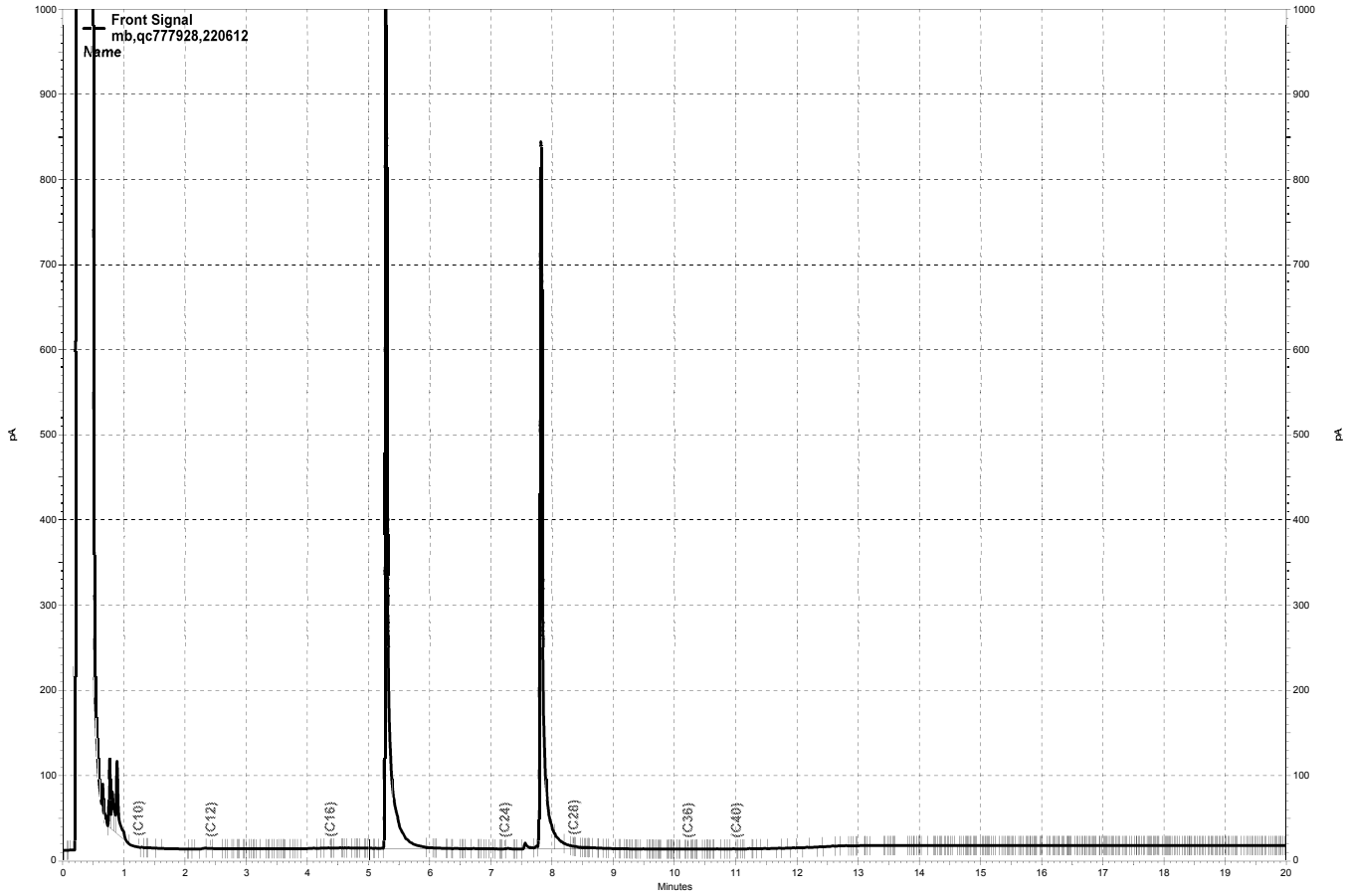

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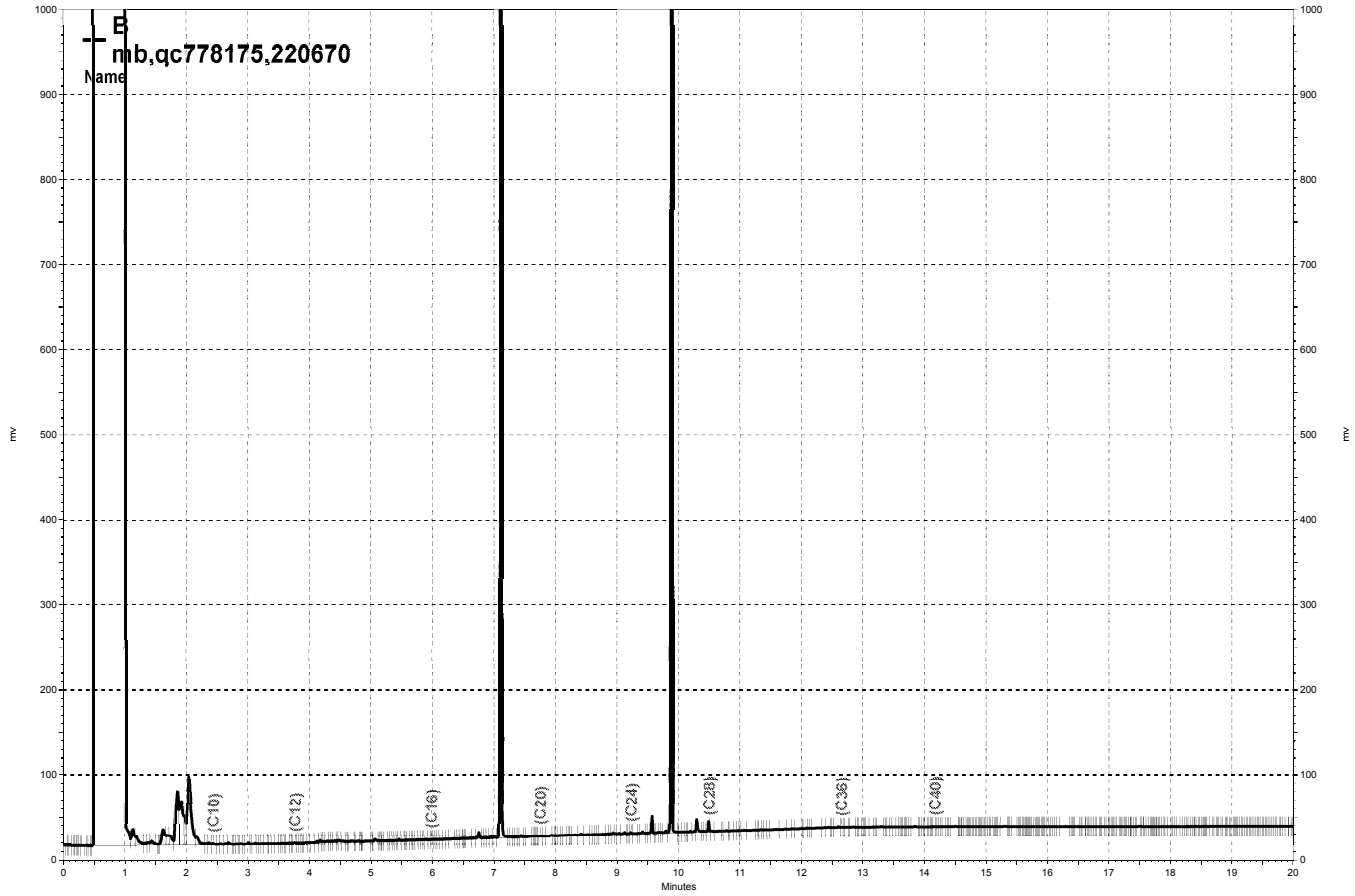

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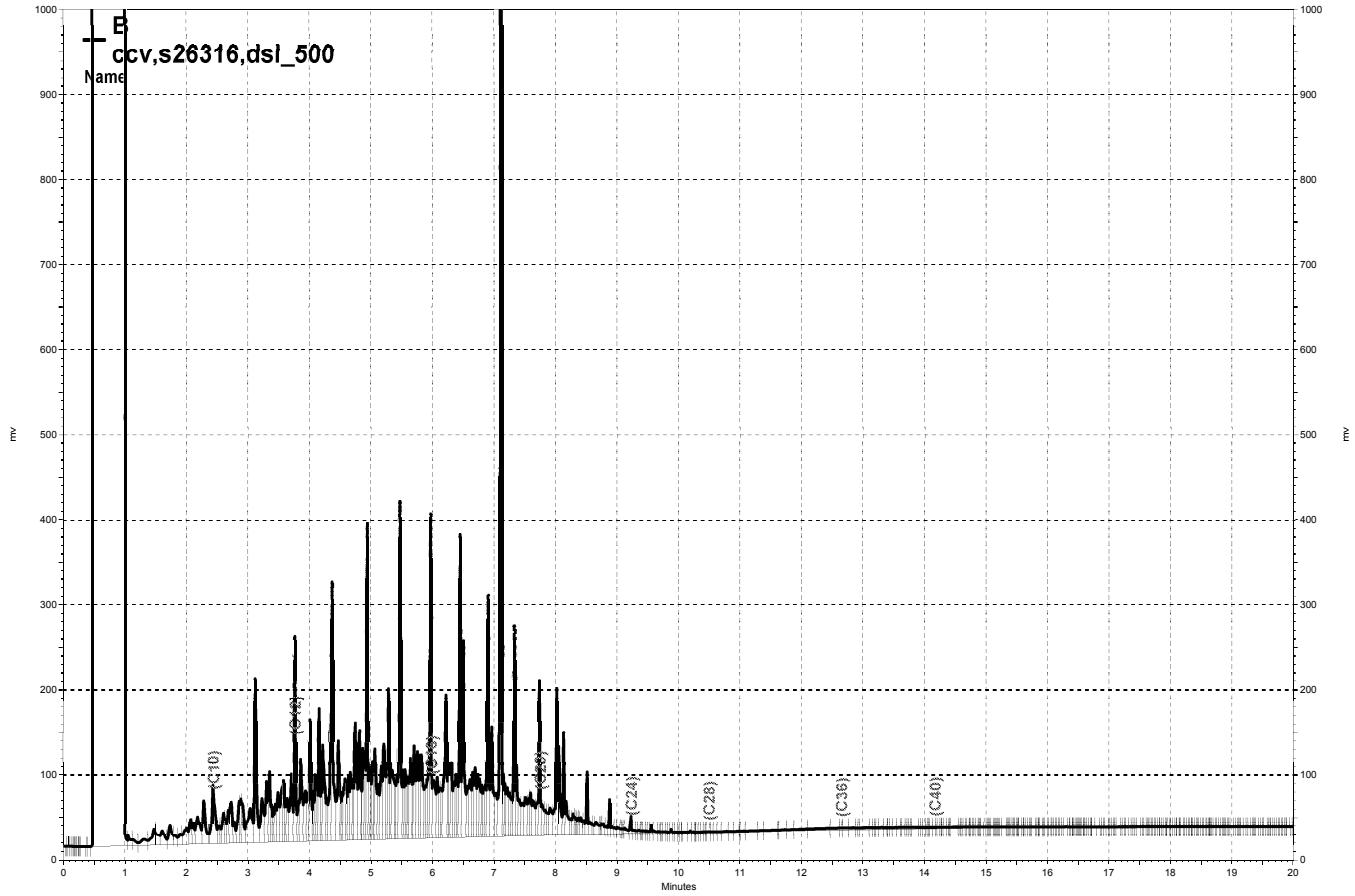

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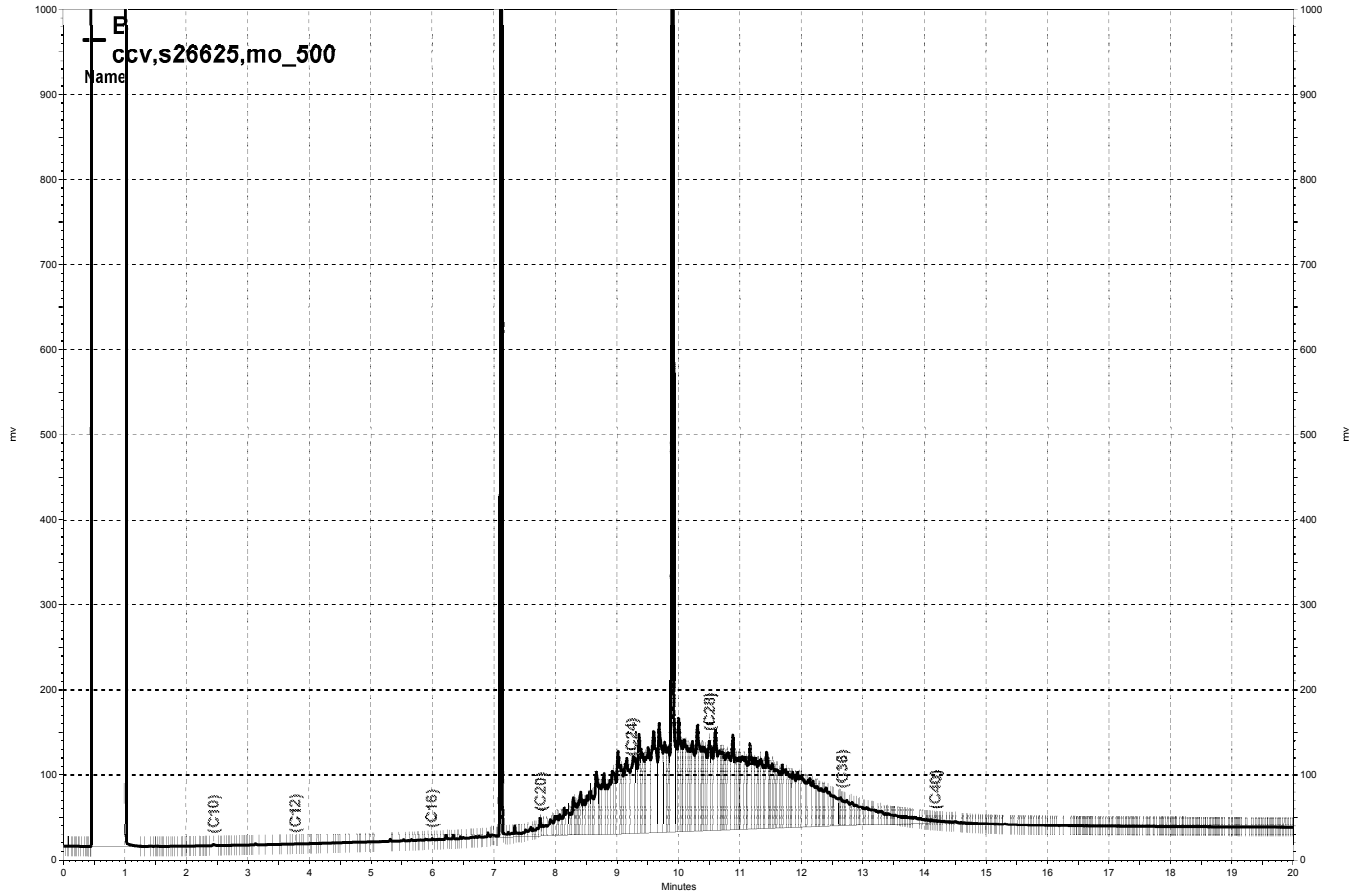

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Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-24-GW	Batch#:	220579
Lab ID:	264756-001	Sampled:	02/18/15
Matrix:	Water	Received:	02/18/15
Units:	ug/L	Analyzed:	02/19/15
Diln Fac:	1.429		

Analyte	Result	RL	MDL
Freon 12	ND	1.4	0.1
Chloromethane	ND	1.4	0.4
Vinyl Chloride	0.3 J	0.7	0.1
Bromomethane	ND	1.4	0.3
Chloroethane	ND	1.4	0.4
Trichlorofluoromethane	ND	1.4	0.3
Acetone	5.3 J	14	2.3
Freon 113	ND	2.9	0.2
1,1-Dichloroethene	0.6 J	0.7	0.2
Methylene Chloride	ND	14	0.3
Carbon Disulfide	ND	0.7	0.1
MTBE	4.9	0.7	0.2
trans-1,2-Dichloroethene	7.9	0.7	0.2
Vinyl Acetate	ND	14	1.6
1,1-Dichloroethane	ND	0.7	0.2
2-Butanone	ND	14	0.5
cis-1,2-Dichloroethene	39	0.7	0.2
2,2-Dichloropropane	ND	0.7	0.2
Chloroform	ND	0.7	0.1
Bromochloromethane	ND	0.7	0.2
1,1,1-Trichloroethane	ND	0.7	0.2
1,1-Dichloropropene	ND	0.7	0.2
Carbon Tetrachloride	ND	0.7	0.2
1,2-Dichloroethane	ND	0.7	0.2
Benzene	ND	0.7	0.1
Trichloroethene	110	0.7	0.1
1,2-Dichloropropane	ND	0.7	0.2
Bromodichloromethane	ND	0.7	0.2
Dibromomethane	ND	0.7	0.2
4-Methyl-2-Pentanone	1.1 J	14	0.9
cis-1,3-Dichloropropene	ND	0.7	0.2
Toluene	ND	0.7	0.1
trans-1,3-Dichloropropene	ND	0.7	0.2
1,1,2-Trichloroethane	ND	0.7	0.2
2-Hexanone	ND	14	0.3
1,3-Dichloropropane	ND	0.7	0.2
Tetrachloroethene	41	0.7	0.1
Dibromochloromethane	ND	0.7	0.2
1,2-Dibromoethane	ND	0.7	0.2
Chlorobenzene	ND	0.7	0.2
1,1,1,2-Tetrachloroethane	ND	0.7	0.1
Ethylbenzene	ND	0.7	0.1
m,p-Xylenes	ND	0.7	0.2
o-Xylene	0.2 J	0.7	0.1
Styrene	ND	0.7	0.1
Bromoform	ND	1.4	0.2
Isopropylbenzene	ND	0.7	0.1
1,1,2,2-Tetrachloroethane	ND	0.7	0.2
1,2,3-Trichloropropane	ND	0.7	0.2
Propylbenzene	0.2 J	0.7	0.1
Bromobenzene	ND	0.7	0.2
1,3,5-Trimethylbenzene	0.3 J	0.7	0.1

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-24-GW	Batch#:	220579
Lab ID:	264756-001	Sampled:	02/18/15
Matrix:	Water	Received:	02/18/15
Units:	ug/L	Analyzed:	02/19/15
Diln Fac:	1.429		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.7	0.1
4-Chlorotoluene	ND	0.7	0.1
tert-Butylbenzene	ND	0.7	0.1
1,2,4-Trimethylbenzene	0.9	0.7	0.1
sec-Butylbenzene	0.2 J	0.7	0.1
para-Isopropyl Toluene	0.2 J	0.7	0.1
1,3-Dichlorobenzene	ND	0.7	0.2
1,4-Dichlorobenzene	ND	0.7	0.1
n-Butylbenzene	0.2 J	0.7	0.1
1,2-Dichlorobenzene	ND	0.7	0.1
1,2-Dibromo-3-Chloropropane	ND	2.9	0.2
1,2,4-Trichlorobenzene	ND	0.7	0.2
Hexachlorobutadiene	ND	2.9	0.2
Naphthalene	ND	2.9	0.2
1,2,3-Trichlorobenzene	ND	0.7	0.2

Surrogate	%REC	Limits
Dibromofluoromethane	108	80-128
1,2-Dichloroethane-d4	111	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	98	80-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-14-GW	Batch#:	220579
Lab ID:	264756-002	Sampled:	02/18/15
Matrix:	Water	Received:	02/18/15
Units:	ug/L	Analyzed:	02/19/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.3
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.3
Trichlorofluoromethane	ND	1.0	0.2
Acetone	ND	10	1.6
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.2
Methylene Chloride	ND	10	0.2
Carbon Disulfide	ND	0.5	0.1
MTBE	0.9	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.2
Vinyl Acetate	ND	10	1.1
1,1-Dichloroethane	ND	0.5	0.2
2-Butanone	ND	10	0.4
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.1
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	0.8 J	10	0.7
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.2
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.2
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-14-GW	Batch#:	220579
Lab ID:	264756-002	Sampled:	02/18/15
Matrix:	Water	Received:	02/18/15
Units:	ug/L	Analyzed:	02/19/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.2
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.1
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-128
1,2-Dichloroethane-d4	108	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	100	80-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

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Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	220579
Units:	ug/L	Analyzed:	02/19/15
Diln Fac:	1.000		

Type: BS Lab ID: QC777802

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	13.24	106	66-135
Benzene	12.50	13.45	108	80-123
Trichloroethene	12.50	13.39	107	80-123
Toluene	12.50	13.33	107	80-121
Chlorobenzene	12.50	13.35	107	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-128
1,2-Dichloroethane-d4	100	75-139
Toluene-d8	95	80-120
Bromofluorobenzene	95	80-120

Type: BSD Lab ID: QC777803

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	12.71	102	66-135	4	24
Benzene	12.50	12.77	102	80-123	5	20
Trichloroethene	12.50	13.30	106	80-123	1	20
Toluene	12.50	12.96	104	80-121	3	20
Chlorobenzene	12.50	13.31	106	80-123	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-128
1,2-Dichloroethane-d4	102	75-139
Toluene-d8	94	80-120
Bromofluorobenzene	95	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777804	Batch#:	220579
Matrix:	Water	Analyzed:	02/19/15
Units:	ug/L		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.3
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.3
Trichlorofluoromethane	ND	1.0	0.2
Acetone	ND	10	1.6
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.2
Methylene Chloride	ND	10	0.2
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.2
Vinyl Acetate	ND	10	1.1
1,1-Dichloroethane	ND	0.5	0.2
2-Butanone	ND	10	0.4
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.1
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.7
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.2
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.2
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777804	Batch#:	220579
Matrix:	Water	Analyzed:	02/19/15
Units:	ug/L		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.2
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.1
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	0.2 J	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-128
1,2-Dichloroethane-d4	107	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	99	80-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-24-GW	Batch#:	220613
Lab ID:	264756-001	Sampled:	02/18/15
Matrix:	Water	Received:	02/18/15
Units:	ug/L	Prepared:	02/19/15
Diln Fac:	1.000	Analyzed:	02/20/15

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	10	2.2
Phenol	ND	10	0.80
bis(2-Chloroethyl)ether	ND	10	1.5
2-Chlorophenol	ND	10	0.91
1,3-Dichlorobenzene	ND	10	1.5
1,4-Dichlorobenzene	ND	10	1.5
Benzyl alcohol	ND	10	1.5
1,2-Dichlorobenzene	ND	10	1.5
2-Methylphenol	ND	10	0.70
bis(2-Chloroisopropyl) ether	ND	10	1.5
4-Methylphenol	ND	10	1.2
N-Nitroso-di-n-propylamine	ND	10	1.3
Hexachloroethane	ND	10	1.5
Nitrobenzene	ND	10	1.3
Isophorone	ND	10	1.7
2-Nitrophenol	ND	20	2.0
2,4-Dimethylphenol	ND	10	0.58
Benzoic acid	ND	50	6.9
bis(2-Chloroethoxy)methane	ND	10	1.3
2,4-Dichlorophenol	ND	10	0.80
1,2,4-Trichlorobenzene	ND	10	1.4
Naphthalene	ND	10	1.4
4-Chloroaniline	ND	10	1.4
Hexachlorobutadiene	ND	10	1.4
4-Chloro-3-methylphenol	46	10	1.5
2-Methylnaphthalene	ND	10	1.3
Hexachlorocyclopentadiene	ND	20	1.7
2,4,6-Trichlorophenol	ND	10	0.94
2,4,5-Trichlorophenol	ND	10	1.1
2-Chloronaphthalene	ND	10	1.3
2-Nitroaniline	ND	20	1.6
Dimethylphthalate	ND	10	1.6
Acenaphthylene	ND	10	1.3
2,6-Dinitrotoluene	ND	10	1.7
3-Nitroaniline	ND	20	3.8
Acenaphthene	ND	10	1.4
2,4-Dinitrophenol	ND	20	2.6
4-Nitrophenol	ND	20	1.4
Dibenzofuran	ND	10	1.5
2,4-Dinitrotoluene	ND	10	1.4
Diethylphthalate	ND	10	1.5
Fluorene	ND	10	1.4
4-Chlorophenyl-phenylether	ND	10	1.4
4-Nitroaniline	ND	20	2.2
4,6-Dinitro-2-methylphenol	ND	20	1.6
N-Nitrosodiphenylamine	ND	10	1.3
Azobenzene	ND	10	1.4
4-Bromophenyl-phenylether	ND	10	1.3
Hexachlorobenzene	ND	10	1.4
Pentachlorophenol	ND	20	1.4
Phenanthrene	ND	10	1.4

*= Value outside of QC limits; see narrative
J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-24-GW	Batch#:	220613
Lab ID:	264756-001	Sampled:	02/18/15
Matrix:	Water	Received:	02/18/15
Units:	ug/L	Prepared:	02/19/15
Diln Fac:	1.000	Analyzed:	02/20/15

Analyte	Result	RL	MDL
Anthracene	ND	10	1.3
Di-n-butylphthalate	ND	10	1.3
Fluoranthene	ND	10	1.4
Pyrene	ND	10	1.3
Butylbenzylphthalate	ND	10	1.3
3,3'-Dichlorobenzidine	ND	20	1.5
Benzo(a)anthracene	ND	10	1.3
Chrysene	ND	10	1.3
bis(2-Ethylhexyl)phthalate	3.1 J	10	1.9
Di-n-octylphthalate	ND	10	1.4
Benzo(b)fluoranthene	ND	10	1.4
Benzo(k)fluoranthene	ND	10	1.5
Benzo(a)pyrene	ND	10	1.1
Indeno(1,2,3-cd)pyrene	ND	10	1.3
Dibenz(a,h)anthracene	ND	10	1.4
Benzo(g,h,i)perylene	ND	10	1.3

Surrogate	%REC	Limits
2-Fluorophenol	76	38-120
Phenol-d5	72	38-120
2,4,6-Tribromophenol	74	46-120
Nitrobenzene-d5	77	51-120
2-Fluorobiphenyl	42 *	54-120
Terphenyl-d14	6 *	21-120

*= Value outside of QC limits; see narrative
J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-14-GW	Batch#:	220724
Lab ID:	264756-002	Sampled:	02/18/15
Matrix:	Water	Received:	02/18/15
Units:	ug/L	Prepared:	02/23/15
Diln Fac:	1.000	Analyzed:	02/24/15

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	9.4	2.1
Phenol	ND	9.4	0.76
bis(2-Chloroethyl)ether	ND	9.4	1.4
2-Chlorophenol	ND	9.4	0.86
1,3-Dichlorobenzene	ND	9.4	1.4
1,4-Dichlorobenzene	ND	9.4	1.4
Benzyl alcohol	ND	9.4	1.4
1,2-Dichlorobenzene	ND	9.4	1.4
2-Methylphenol	ND	9.4	0.66
bis(2-Chloroisopropyl) ether	ND	9.4	1.5
4-Methylphenol	ND	9.4	1.1
N-Nitroso-di-n-propylamine	ND	9.4	1.2
Hexachloroethane	ND	9.4	1.4
Nitrobenzene	ND	9.4	1.2
Isophorone	ND	9.4	1.6
2-Nitrophenol	ND	19	1.9
2,4-Dimethylphenol	ND	9.4	0.54
Benzoic acid	ND	47	6.5
bis(2-Chloroethoxy)methane	ND	9.4	1.3
2,4-Dichlorophenol	ND	9.4	0.75
1,2,4-Trichlorobenzene	ND	9.4	1.3
Naphthalene	ND	9.4	1.3
4-Chloroaniline	ND	9.4	1.3
Hexachlorobutadiene	ND	9.4	1.3
4-Chloro-3-methylphenol	ND	9.4	1.5
2-Methylnaphthalene	ND	9.4	1.2
Hexachlorocyclopentadiene	ND	19	1.6
2,4,6-Trichlorophenol	ND	9.4	0.89
2,4,5-Trichlorophenol	ND	9.4	1.1
2-Chloronaphthalene	ND	9.4	1.2
2-Nitroaniline	ND	19	1.5
Dimethylphthalate	ND	9.4	1.5
Acenaphthylene	ND	9.4	1.3
2,6-Dinitrotoluene	ND	9.4	1.6
3-Nitroaniline	ND	19	3.6
Acenaphthene	ND	9.4	1.3
2,4-Dinitrophenol	ND	19	2.5
4-Nitrophenol	ND	19	1.3
Dibenzofuran	ND	9.4	1.4
2,4-Dinitrotoluene	ND	9.4	1.3
Diethylphthalate	ND	9.4	1.4
Fluorene	ND	9.4	1.3
4-Chlorophenyl-phenylether	ND	9.4	1.3
4-Nitroaniline	ND	19	2.0
4,6-Dinitro-2-methylphenol	ND	19	1.5
N-Nitrosodiphenylamine	ND	9.4	1.2
Azobenzene	ND	9.4	1.3
4-Bromophenyl-phenylether	ND	9.4	1.2
Hexachlorobenzene	ND	9.4	1.3
Pentachlorophenol	ND	19	1.3
Phenanthrene	ND	9.4	1.3
Anthracene	ND	9.4	1.2
Di-n-butylphthalate	ND	9.4	1.3

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-14-GW	Batch#:	220724
Lab ID:	264756-002	Sampled:	02/18/15
Matrix:	Water	Received:	02/18/15
Units:	ug/L	Prepared:	02/23/15
Diln Fac:	1.000	Analyzed:	02/24/15

Analyte	Result	RL	MDL
Fluoranthene	ND	9.4	1.3
Pyrene	ND	9.4	1.2
Butylbenzylphthalate	ND	9.4	1.2
3,3'-Dichlorobenzidine	ND	19	1.4
Benzo(a)anthracene	ND	9.4	1.2
Chrysene	ND	9.4	1.3
bis(2-Ethylhexyl)phthalate	ND	9.4	1.8
Di-n-octylphthalate	ND	9.4	1.4
Benzo(b)fluoranthene	ND	9.4	1.4
Benzo(k)fluoranthene	ND	9.4	1.4
Benzo(a)pyrene	ND	9.4	1.0
Indeno(1,2,3-cd)pyrene	ND	9.4	1.2
Dibenz(a,h)anthracene	ND	9.4	1.3
Benzo(g,h,i)perylene	ND	9.4	1.3

Surrogate	%REC	Limits
2-Fluorophenol	65	38-120
Phenol-d5	65	38-120
2,4,6-Tribromophenol	86	46-120
Nitrobenzene-d5	74	51-120
2-Fluorobiphenyl	76	54-120
Terphenyl-d14	32	21-120

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777931	Batch#:	220613
Matrix:	Water	Prepared:	02/19/15
Units:	ug/L	Analyzed:	02/20/15

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	10	2.2
Phenol	ND	10	0.80
bis(2-Chloroethyl)ether	ND	10	1.5
2-Chlorophenol	ND	10	0.91
1,3-Dichlorobenzene	ND	10	1.5
1,4-Dichlorobenzene	ND	10	1.5
Benzyl alcohol	ND	10	1.5
1,2-Dichlorobenzene	ND	10	1.5
2-Methylphenol	ND	10	0.70
bis(2-Chloroisopropyl) ether	ND	10	1.5
4-Methylphenol	ND	10	1.2
N-Nitroso-di-n-propylamine	ND	10	1.3
Hexachloroethane	ND	10	1.5
Nitrobenzene	ND	10	1.3
Isophorone	ND	10	1.7
2-Nitrophenol	ND	20	2.0
2,4-Dimethylphenol	ND	10	0.58
Benzoic acid	ND	50	6.9
bis(2-Chloroethoxy)methane	ND	10	1.3
2,4-Dichlorophenol	ND	10	0.80
1,2,4-Trichlorobenzene	ND	10	1.4
Naphthalene	ND	10	1.4
4-Chloroaniline	ND	10	1.4
Hexachlorobutadiene	ND	10	1.4
4-Chloro-3-methylphenol	ND	10	1.5
2-Methylnaphthalene	ND	10	1.3
Hexachlorocyclopentadiene	ND	20	1.7
2,4,6-Trichlorophenol	ND	10	0.94
2,4,5-Trichlorophenol	ND	10	1.1
2-Chloronaphthalene	ND	10	1.3
2-Nitroaniline	ND	20	1.6
Dimethylphthalate	ND	10	1.6
Acenaphthylene	ND	10	1.3
2,6-Dinitrotoluene	ND	10	1.7
3-Nitroaniline	ND	20	3.8
Acenaphthene	ND	10	1.4
2,4-Dinitrophenol	ND	20	2.6
4-Nitrophenol	ND	20	1.4
Dibenzofuran	ND	10	1.5
2,4-Dinitrotoluene	ND	10	1.4
Diethylphthalate	ND	10	1.5
Fluorene	ND	10	1.4
4-Chlorophenyl-phenylether	ND	10	1.4
4-Nitroaniline	ND	20	2.2
4,6-Dinitro-2-methylphenol	ND	20	1.6
N-Nitrosodiphenylamine	ND	10	1.3
Azobenzene	ND	10	1.4
4-Bromophenyl-phenylether	ND	10	1.3
Hexachlorobenzene	ND	10	1.4
Pentachlorophenol	ND	20	1.4
Phenanthrene	ND	10	1.4
Anthracene	ND	10	1.3
Di-n-butylphthalate	ND	10	1.3

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777931	Batch#:	220613
Matrix:	Water	Prepared:	02/19/15
Units:	ug/L	Analyzed:	02/20/15

Analyte	Result	RL	MDL
Fluoranthene	ND	10	1.4
Pyrene	ND	10	1.3
Butylbenzylphthalate	ND	10	1.3
3,3'-Dichlorobenzidine	ND	20	1.5
Benzo(a)anthracene	ND	10	1.3
Chrysene	ND	10	1.3
bis(2-Ethylhexyl)phthalate	ND	10	1.9
Di-n-octylphthalate	ND	10	1.4
Benzo(b)fluoranthene	ND	10	1.4
Benzo(k)fluoranthene	ND	10	1.5
Benzo(a)pyrene	ND	10	1.1
Indeno(1,2,3-cd)pyrene	ND	10	1.3
Dibenz(a,h)anthracene	ND	10	1.4
Benzo(g,h,i)perylene	ND	10	1.3

Surrogate	%REC	Limits
2-Fluorophenol	75	38-120
Phenol-d5	67	38-120
2,4,6-Tribromophenol	76	46-120
Nitrobenzene-d5	77	51-120
2-Fluorobiphenyl	79	54-120
Terphenyl-d14	70	21-120

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8270C
Matrix:	Water	Batch#:	220613
Units:	ug/L	Prepared:	02/19/15
Diln Fac:	1.000	Analyzed:	02/20/15

Type: BS Lab ID: QC777932

Analyte	Spiked	Result	%REC	Limits
Phenol	80.00	67.80	85	46-120
2-Chlorophenol	80.00	65.44	82	48-120
1,4-Dichlorobenzene	80.00	48.90	61	52-120
N-Nitroso-di-n-propylamine	80.00	63.58	79	46-120
1,2,4-Trichlorobenzene	80.00	51.79	65	53-120
4-Chloro-3-methylphenol	80.00	62.28	78	40-120
Acenaphthene	30.00	24.41	81	61-120
4-Nitrophenol	80.00	72.44	91	40-120
2,4-Dinitrotoluene	80.00	73.63	92	64-120
Pentachlorophenol	80.00	66.80	83	47-120
Pyrene	30.00	24.69	82	62-120

Surrogate	%REC	Limits
2-Fluorophenol	75	38-120
Phenol-d5	84	38-120
2,4,6-Tribromophenol	92	46-120
Nitrobenzene-d5	78	51-120
2-Fluorobiphenyl	78	54-120
Terphenyl-d14	82	21-120

Type: BSD Lab ID: QC777933

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Phenol	80.00	60.96	76	46-120	11	55
2-Chlorophenol	80.00	58.98	74	48-120	10	54
1,4-Dichlorobenzene	80.00	46.15	58	52-120	6	30
N-Nitroso-di-n-propylamine	80.00	56.69	71	46-120	11	25
1,2,4-Trichlorobenzene	80.00	46.55	58	53-120	11	26
4-Chloro-3-methylphenol	80.00	53.98	67	40-120	14	54
Acenaphthene	30.00	21.36	71	61-120	13	25
4-Nitrophenol	80.00	64.49	81	40-120	12	45
2,4-Dinitrotoluene	80.00	63.42	79	64-120	15	32
Pentachlorophenol	80.00	60.84	76	47-120	9	48
Pyrene	30.00	23.00	77	62-120	7	26

Surrogate	%REC	Limits
2-Fluorophenol	70	38-120
Phenol-d5	76	38-120
2,4,6-Tribromophenol	79	46-120
Nitrobenzene-d5	69	51-120
2-Fluorobiphenyl	68	54-120
Terphenyl-d14	72	21-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778382	Batch#:	220724
Matrix:	Water	Prepared:	02/23/15
Units:	ug/L	Analyzed:	02/24/15

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	10	2.3
Phenol	ND	10	1.7
bis(2-Chloroethyl)ether	ND	10	1.6
2-Chlorophenol	ND	10	1.6
1,3-Dichlorobenzene	ND	10	1.6
1,4-Dichlorobenzene	ND	10	1.6
Benzyl alcohol	ND	10	1.5
1,2-Dichlorobenzene	ND	10	1.7
2-Methylphenol	ND	10	1.5
bis(2-Chloroisopropyl) ether	ND	10	2.7
4-Methylphenol	ND	10	1.5
N-Nitroso-di-n-propylamine	ND	10	2.0
Hexachloroethane	ND	10	1.7
Nitrobenzene	ND	10	1.6
Isophorone	ND	10	1.9
2-Nitrophenol	ND	20	2.6
2,4-Dimethylphenol	ND	10	1.3
Benzoic acid	ND	50	10
bis(2-Chloroethoxy)methane	ND	10	1.2
2,4-Dichlorophenol	ND	10	1.3
1,2,4-Trichlorobenzene	ND	10	1.4
Naphthalene	ND	10	1.4
4-Chloroaniline	ND	10	1.3
Hexachlorobutadiene	ND	10	1.3
4-Chloro-3-methylphenol	ND	10	1.4
2-Methylnaphthalene	ND	10	1.5
Hexachlorocyclopentadiene	ND	20	1.7
2,4,6-Trichlorophenol	ND	10	0.98
2,4,5-Trichlorophenol	ND	10	0.94
2-Chloronaphthalene	ND	10	1.5
2-Nitroaniline	ND	20	1.8
Dimethylphthalate	ND	10	1.5
Acenaphthylene	ND	10	1.5
2,6-Dinitrotoluene	ND	10	1.4
3-Nitroaniline	ND	20	1.0
Acenaphthene	ND	10	1.4
2,4-Dinitrophenol	ND	20	2.1
4-Nitrophenol	ND	20	1.2
Dibenzofuran	ND	10	1.5
2,4-Dinitrotoluene	ND	10	1.5
Diethylphthalate	ND	10	1.6
Fluorene	ND	10	1.5
4-Chlorophenyl-phenylether	ND	10	1.4
4-Nitroaniline	ND	20	1.2
4,6-Dinitro-2-methylphenol	ND	20	1.7
N-Nitrosodiphenylamine	ND	10	1.2
Azobenzene	ND	10	1.6
4-Bromophenyl-phenylether	ND	10	1.2
Hexachlorobenzene	ND	10	1.2
Pentachlorophenol	ND	20	1.3
Phenanthrene	ND	10	1.3
Anthracene	ND	10	1.3
Di-n-butylphthalate	ND	10	1.2

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778382	Batch#:	220724
Matrix:	Water	Prepared:	02/23/15
Units:	ug/L	Analyzed:	02/24/15

Analyte	Result	RL	MDL
Fluoranthene	ND	10	1.6
Pyrene	ND	10	1.3
Butylbenzylphthalate	ND	10	1.4
3,3'-Dichlorobenzidine	ND	20	0.63
Benzo(a)anthracene	ND	10	1.3
Chrysene	ND	10	1.4
bis(2-Ethylhexyl)phthalate	ND	10	1.7
Di-n-octylphthalate	ND	10	1.3
Benzo(b)fluoranthene	ND	10	1.4
Benzo(k)fluoranthene	ND	10	1.5
Benzo(a)pyrene	ND	10	1.1
Indeno(1,2,3-cd)pyrene	ND	10	1.4
Dibenz(a,h)anthracene	ND	10	1.4
Benzo(g,h,i)perylene	ND	10	1.5

Surrogate	%REC	Limits
2-Fluorophenol	71	38-120
Phenol-d5	69	38-120
2,4,6-Tribromophenol	93	46-120
Nitrobenzene-d5	66	51-120
2-Fluorobiphenyl	67	54-120
Terphenyl-d14	70	21-120

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8270C
Matrix:	Water	Prepared:	02/23/15
Units:	ug/L	Analyzed:	02/24/15
Batch#:	220724		

Type: BS Lab ID: QC778383

Analyte	Spiked	Result	%REC	Limits	Diln Fac
Phenol	80.00	52.18	65	46-120	1.000
2-Chlorophenol	80.00	56.99	71	48-120	1.000
1,4-Dichlorobenzene	80.00	49.60	62	52-120	1.000
N-Nitroso-di-n-propylamine	80.00	47.06	59	46-120	2.000
1,2,4-Trichlorobenzene	80.00	52.22	65	53-120	1.000
4-Chloro-3-methylphenol	80.00	59.60	75	40-120	1.000
Acenaphthene	30.00	21.49	72	61-120	1.000
4-Nitrophenol	80.00	67.18	84	40-120	1.000
2,4-Dinitrotoluene	80.00	61.92	77	64-120	1.000
Pentachlorophenol	80.00	63.80	80	47-120	1.000
Pyrene	30.00	22.15	74	62-120	1.000

Surrogate	%REC	Limits	Diln Fac
2-Fluorophenol	64	38-120	1.000
Phenol-d5	67	38-120	1.000
2,4,6-Tribromophenol	91	46-120	1.000
Nitrobenzene-d5	60	51-120	1.000
2-Fluorobiphenyl	63	54-120	1.000
Terphenyl-d14	69	21-120	1.000

Type: BSD Lab ID: QC778384

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
Phenol	80.00	61.66	77	46-120	17	55	1.000
2-Chlorophenol	80.00	65.84	82	48-120	14	54	1.000
1,4-Dichlorobenzene	80.00	56.83	71	52-120	14	30	1.000
N-Nitroso-di-n-propylamine	80.00	57.03	71	46-120	19	25	2.000
1,2,4-Trichlorobenzene	80.00	59.86	75	53-120	14	26	1.000
4-Chloro-3-methylphenol	80.00	69.05	86	40-120	15	54	1.000
Acenaphthene	30.00	23.49	78	61-120	9	25	1.000
4-Nitrophenol	80.00	74.59	93	40-120	10	45	1.000
2,4-Dinitrotoluene	80.00	69.54	87	64-120	12	32	1.000
Pentachlorophenol	80.00	73.65	92	47-120	14	48	1.000
Pyrene	30.00	23.34	78	62-120	5	26	1.000

Surrogate	%REC	Limits	Diln Fac
2-Fluorophenol	73	38-120	1.000
Phenol-d5	77	38-120	1.000
2,4,6-Tribromophenol	99	46-120	1.000
Nitrobenzene-d5	70	51-120	1.000
2-Fluorobiphenyl	71	54-120	1.000
Terphenyl-d14	78	21-120	1.000

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8082
Matrix:	Water	Sampled:	02/18/15
Units:	ug/L	Received:	02/18/15
Diln Fac:	1.000	Prepared:	02/19/15
Batch#:	220611	Analyzed:	02/20/15

Field ID: SB-24-GW Lab ID: 264756-001
Type: SAMPLE

Analyte	Result	RL	MDL
Aroclor-1016	ND	0.50	0.16
Aroclor-1221	ND	1.0	0.32
Aroclor-1232	ND	0.50	0.14
Aroclor-1242	ND	0.50	0.16
Aroclor-1248	ND	0.50	0.16
Aroclor-1254	ND	0.50	0.16
Aroclor-1260	ND	0.50	0.13

Surrogate	%REC	Limits
TCMX	54	39-120
Decachlorobiphenyl	58	28-120

Field ID: SB-14-GW Lab ID: 264756-002
Type: SAMPLE

Analyte	Result	RL	MDL
Aroclor-1016	ND	0.50	0.16
Aroclor-1221	ND	1.0	0.32
Aroclor-1232	ND	0.50	0.14
Aroclor-1242	ND	0.50	0.16
Aroclor-1248	ND	0.50	0.16
Aroclor-1254	ND	0.50	0.16
Aroclor-1260	ND	0.50	0.13

Surrogate	%REC	Limits
TCMX	69	39-120
Decachlorobiphenyl	67	28-120

Type: BLANK Lab ID: QC777925

Analyte	Result	RL	MDL
Aroclor-1016	ND	0.50	0.16
Aroclor-1221	ND	1.0	0.32
Aroclor-1232	ND	0.50	0.14
Aroclor-1242	ND	0.50	0.16
Aroclor-1248	ND	0.50	0.16
Aroclor-1254	ND	0.50	0.16
Aroclor-1260	ND	0.50	0.13

Surrogate	%REC	Limits
TCMX	68	39-120
Decachlorobiphenyl	81	28-120

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8082
Matrix:	Water	Batch#:	220611
Units:	ug/L	Prepared:	02/19/15
Diln Fac:	1.000	Analyzed:	02/20/15

Type: BS Lab ID: QC777926

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	5.000	3.768	75	62-127
Aroclor-1260	5.000	3.975	79	60-135

Surrogate	%REC	Limits
TCMX	67	39-120
Decachlorobiphenyl	75	28-120

Type: BSD Lab ID: QC777927

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	5.000	3.513	70	62-127	7	29
Aroclor-1260	5.000	3.618	72	60-135	9	40

Surrogate	%REC	Limits
TCMX	64	39-120
Decachlorobiphenyl	72	28-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Dissolved California Title 22 Metals

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374		
Field ID:	SB-24-GW	Diln Fac:	1.000
Lab ID:	264756-001	Sampled:	02/18/15
Matrix:	Filtrate	Received:	02/18/15
Units:	ug/L	Prepared:	02/19/15

Analyte	Result	RL	MDL	Batch#	Analyzed	Analysis
Antimony	ND	10	0.65	220607	02/19/15	EPA 6010B
Arsenic	5.5	5.0	1.3	220607	02/19/15	EPA 6010B
Barium	260	5.0	1.0	220607	02/19/15	EPA 6010B
Beryllium	ND	2.0	0.30	220607	02/19/15	EPA 6010B
Cadmium	ND	5.0	0.58	220607	02/19/15	EPA 6010B
Chromium	1.3 J	5.0	0.57	220607	02/19/15	EPA 6010B
Cobalt	0.77 J	5.0	0.32	220607	02/19/15	EPA 6010B
Copper	ND	5.0	0.99	220607	02/19/15	EPA 6010B
Lead	ND	5.0	0.91	220607	02/19/15	EPA 6010B
Mercury	0.15 J	0.20	0.040	220592	02/20/15	EPA 7470A
Molybdenum	4.5 J	5.0	0.40	220607	02/19/15	EPA 6010B
Nickel	13	5.0	0.71	220607	02/19/15	EPA 6010B
Selenium	ND	10	2.3	220607	02/19/15	EPA 6010B
Silver	ND	5.0	0.66	220607	02/19/15	EPA 6010B
Thallium	ND	10	2.0	220607	02/19/15	EPA 6010B
Vanadium	7.0	5.0	0.67	220607	02/19/15	EPA 6010B
Zinc	ND	20	3.0	220607	02/19/15	EPA 6010B

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Dissolved California Title 22 Metals

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374		
Field ID:	SB-14-GW	Diln Fac:	1.000
Lab ID:	264756-002	Sampled:	02/18/15
Matrix:	Filtrate	Received:	02/18/15
Units:	ug/L	Prepared:	02/19/15

Analyte	Result	RL	MDL	Batch#	Analyzed	Analysis
Antimony	ND	10	0.65	220607	02/19/15	EPA 6010B
Arsenic	2.8 J	5.0	1.3	220607	02/19/15	EPA 6010B
Barium	110	5.0	1.0	220607	02/19/15	EPA 6010B
Beryllium	ND	2.0	0.30	220607	02/19/15	EPA 6010B
Cadmium	ND	5.0	0.58	220607	02/19/15	EPA 6010B
Chromium	0.67 J	5.0	0.57	220607	02/19/15	EPA 6010B
Cobalt	ND	5.0	0.32	220607	02/19/15	EPA 6010B
Copper	ND	5.0	0.99	220607	02/19/15	EPA 6010B
Lead	ND	5.0	0.91	220607	02/19/15	EPA 6010B
Mercury	0.091 J	0.20	0.040	220592	02/20/15	EPA 7470A
Molybdenum	30	5.0	0.40	220607	02/19/15	EPA 6010B
Nickel	6.0	5.0	0.71	220607	02/19/15	EPA 6010B
Selenium	ND	10	2.3	220607	02/19/15	EPA 6010B
Silver	ND	5.0	0.66	220607	02/19/15	EPA 6010B
Thallium	ND	10	2.0	220607	02/19/15	EPA 6010B
Vanadium	44	5.0	0.67	220607	02/19/15	EPA 6010B
Zinc	ND	20	3.0	220607	02/19/15	EPA 6010B

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	220592
Matrix:	Water	Prepared:	02/19/15
Units:	ug/L	Analyzed:	02/19/15
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC777844	2.500	2.353	94	80-120		
BSD	QC777845	2.500	2.373	95	80-120	1	24

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	220592
Field ID:	ZZZZZZZZZZ	Sampled:	02/11/15
MSS Lab ID:	264659-001	Received:	02/12/15
Matrix:	Water	Prepared:	02/19/15
Units:	ug/L	Analyzed:	02/19/15
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC777846	0.06626	2.500	2.344	91	60-130		
MSD	QC777847		2.500	2.440	95	60-130	4	34

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	220592
Lab ID:	QC777849	Prepared:	02/19/15
Matrix:	Filtrate	Analyzed:	02/19/15
Units:	ug/L		

Result	RL	MDL
0.047 J	0.20	0.040

J= Estimated value
RL= Reporting Limit
MDL= Method Detection Limit

22.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777899	Batch#:	220607
Matrix:	Filtrate	Prepared:	02/19/15
Units:	ug/L	Analyzed:	02/19/15

Analyte	Result	RL	MDL
Antimony	ND	10	0.65
Arsenic	ND	5.0	1.3
Barium	ND	5.0	1.0
Beryllium	ND	2.0	0.30
Cadmium	ND	5.0	0.58
Chromium	ND	5.0	0.57
Cobalt	ND	5.0	0.32
Copper	ND	5.0	0.99
Lead	ND	5.0	0.91
Molybdenum	ND	5.0	0.40
Nickel	ND	5.0	0.71
Selenium	ND	10	2.3
Silver	ND	5.0	0.66
Thallium	2.1 J	10	2.0
Vanadium	ND	5.0	0.67
Zinc	ND	20	3.0

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777900	Batch#:	220607
Matrix:	Filtrate	Prepared:	02/19/15
Units:	ug/L	Analyzed:	02/19/15

Analyte	Result	RL	MDL
Antimony	ND	10	0.65
Arsenic	ND	5.0	1.3
Barium	ND	5.0	1.0
Beryllium	ND	2.0	0.30
Cadmium	ND	5.0	0.58
Chromium	ND	5.0	0.57
Cobalt	ND	5.0	0.32
Copper	ND	5.0	0.99
Lead	ND	5.0	0.91
Molybdenum	ND	5.0	0.40
Nickel	0.80 J	5.0	0.71
Selenium	ND	10	2.3
Silver	ND	5.0	0.66
Thallium	ND	10	2.0
Vanadium	ND	5.0	0.67
Zinc	ND	20	3.0

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777901	Batch#:	220607
Matrix:	Filtrate	Prepared:	02/19/15
Units:	ug/L	Analyzed:	02/19/15

Analyte	Result	RL	MDL
Antimony	ND	10	0.65
Arsenic	ND	5.0	1.3
Barium	ND	5.0	1.0
Beryllium	ND	2.0	0.30
Cadmium	ND	5.0	0.58
Chromium	ND	5.0	0.57
Cobalt	ND	5.0	0.32
Copper	ND	5.0	0.99
Lead	ND	5.0	0.91
Molybdenum	ND	5.0	0.40
Nickel	ND	5.0	0.71
Selenium	ND	10	2.3
Silver	ND	5.0	0.66
Thallium	2.1 J	10	2.0
Vanadium	ND	5.0	0.67
Zinc	5.6 J	20	3.0

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 6010B
Matrix:	Filtrate	Batch#:	220607
Units:	ug/L	Prepared:	02/19/15
Diln Fac:	1.000	Analyzed:	02/19/15

Type: BS Lab ID: QC777902

Analyte	Spiked	Result	%REC	Limits
Antimony	100.0	97.74	98	79-120
Arsenic	100.0	94.30	94	80-120
Barium	100.0	98.68	99	80-120
Beryllium	100.0	96.09	96	80-120
Cadmium	100.0	100.1	100	80-120
Chromium	100.0	95.45	95	80-120
Cobalt	100.0	94.68	95	80-120
Copper	100.0	84.11	84	80-120
Lead	100.0	90.09	90	80-120
Molybdenum	100.0	100.4	100	80-120
Nickel	100.0	93.70	94	80-120
Selenium	100.0	101.8	102	80-120
Silver	100.0	98.12	98	77-120
Thallium	50.00	52.00	104	80-121
Vanadium	100.0	96.72	97	80-120
Zinc	100.0	97.63	98	80-120

Type: BSD Lab ID: QC777903

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	100.0	97.27	97	79-120	0	20
Arsenic	100.0	94.94	95	80-120	1	20
Barium	100.0	100.3	100	80-120	2	20
Beryllium	100.0	97.96	98	80-120	2	20
Cadmium	100.0	101.1	101	80-120	1	20
Chromium	100.0	98.34	98	80-120	3	20
Cobalt	100.0	96.24	96	80-120	2	20
Copper	100.0	85.69	86	80-120	2	20
Lead	100.0	93.28	93	80-120	3	20
Molybdenum	100.0	99.51	100	80-120	1	20
Nickel	100.0	95.10	95	80-120	1	20
Selenium	100.0	103.0	103	80-120	1	20
Silver	100.0	96.78	97	77-120	1	20
Thallium	50.00	53.08	106	80-121	2	20
Vanadium	100.0	98.86	99	80-120	2	20
Zinc	100.0	99.31	99	80-120	2	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	220607
MSS Lab ID:	264633-004	Sampled:	02/12/15
Matrix:	Filtrate	Received:	02/13/15
Units:	ug/L	Prepared:	02/19/15
Diln Fac:	1.000	Analyzed:	02/19/15

Type: MS Lab ID: QC777904

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	<0.6500	100.0	103.4	103	74-120
Arsenic	3.275	100.0	109.1	106	80-127
Barium	55.21	100.0	159.7	104	80-120
Beryllium	0.3421	100.0	106.3	106	80-120
Cadmium	<0.5791	100.0	97.09	97	80-120
Chromium	1.783	100.0	105.4	104	80-120
Cobalt	<0.3220	100.0	98.77	99	80-120
Copper	<0.9890	100.0	94.58	95	80-120
Lead	<0.9081	100.0	91.83	92	67-120
Molybdenum	0.8307	100.0	109.9	109	80-120
Nickel	3.378	100.0	99.40	96	80-120
Selenium	7.939	100.0	121.5	114	73-132
Silver	<0.6601	100.0	106.3	106	67-120
Thallium	4.856	50.00	52.86	96	76-121
Vanadium	3.428	100.0	112.1	109	80-120
Zinc	40.06	100.0	142.7	103	80-122

Type: MSD Lab ID: QC777905

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	100.0	93.12	93	74-120	10	24
Arsenic	100.0	100.3	97	80-127	8	25
Barium	100.0	148.4	93	80-120	7	20
Beryllium	100.0	96.20	96	80-120	10	20
Cadmium	100.0	87.18	87	80-120	11	20
Chromium	100.0	96.07	94	80-120	9	20
Cobalt	100.0	89.28	89	80-120	10	20
Copper	100.0	86.13	86	80-120	9	20
Lead	100.0	81.75	82	67-120	12	23
Molybdenum	100.0	100.1	99	80-120	9	20
Nickel	100.0	90.37	87	80-120	10	20
Selenium	100.0	110.1	102	73-132	10	30
Silver	100.0	95.22	95	67-120	11	22
Thallium	50.00	49.38	89	76-121	7	20
Vanadium	100.0	102.4	99	80-120	9	20
Zinc	100.0	132.4	92	80-122	8	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved California Title 22 Metals

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	220592
Lab ID:	QC778051	Prepared:	02/19/15
Matrix:	Filtrate	Analyzed:	02/20/15
Units:	ug/L		

Result	RL	MDL
0.050 J	0.20	0.040

J= Estimated value
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Hexavalent Chromium

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7196A
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Matrix:	Water	Batch#:	220560
Units:	mg/L	Received:	02/18/15

Field ID	Type	Lab ID	Result	RL	Sampled	Analyzed
SB-24-GW	SAMPLE	264756-001	ND	0.01	02/18/15 17:15	02/18/15 18:57
SB-14-GW	SAMPLE	264756-002	ND	0.01	02/18/15 16:40	02/18/15 18:57
	BLANK	QC777733	ND	0.01		02/18/15 12:55

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Hexavalent Chromium

Lab #:	264756	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7196A
Analyte:	Hexavalent Chromium	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	220560
MSS Lab ID:	264721-001	Sampled:	02/17/15 17:30
Matrix:	Water	Received:	02/17/15
Units:	mg/L	Analyzed:	02/18/15 12:55

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC777734		1.053	1.094	104	90-110		
MS	QC777735	<0.01000	1.053	1.076	102	85-115		
MSD	QC777736		1.053	1.092	104	85-115	1	23

RPD= Relative Percent Difference

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Analytical Laboratories, Since 1878

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2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 264757
ANALYTICAL REPORT

Integral Consulting, Inc. 115 Sansome Street San Francisco, CA 94104	Project : C1374 Location : Allied Engineering Level : II

Sample ID	Lab ID
SB-17-5.0-6.0	264757-001
SB-17-9.0-10.0	264757-002
TB-021815	264757-003
SB-16-3.0-3.5	264757-004
SB-16-9.5-10.0	264757-005
SB-15-5.0-5.5	264757-006
SB-15-9.5-10.0	264757-007
SB-24-3.2-3.8	264757-008
SB-14-4.0-4.5	264757-009
SB-14-9.5-10.0	264757-010
SB-24-7.0-7.3	264757-011

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Mikelle Chong Date: 02/27/2015

Mikelle M. Chong
Project Manager
mikelle.chong@ctberk.com

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**264757**
Client:	**Integral Consulting, Inc.**
Project:	**C1374**
Location:	**Allied Engineering**
Request Date:	**02/18/15**
Samples Received:	**02/18/15**

This data package contains sample and QC results for ten soil samples and one water sample, requested for the above referenced project on 02/18/15. The samples were received on ice and intact, directly from the field.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):
High surrogate recovery was observed for bromofluorobenzene (FID) in SB-24-3.2-3.8 (lab # 264757-008). Gasoline C7-C12 was detected between the MDL and the RL in the method blank for batch 220548; this analyte was detected in samples at a level at least 10 times that of the blank. Gasoline C7-C12 was detected between the MDL and the RL in the method blank for batch 220599; this analyte was either not detected in samples at or above the RL, or detected at a level at least 10 times that of the blank. Gasoline C7-C12 was detected between the MDL and the RL in the method blank for batch 220715; this analyte was detected in the sample at a level at least 10 times that of the blank. No other analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
Matrix spikes QC778416,QC778417 (batch 220732) were not reported because the parent sample required a dilution that would have diluted out the spikes. No other analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B) Water:
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B) Soil:
Matrix spikes were not performed for this analysis in batch 220572 because of clock limitations; 5030 rushes were added to a 5035 batch. Matrix spikes were not performed for this analysis in batch 220597 due to insufficient sample amount. Matrix spikes were not performed for this analysis in batch 220786 because of clock limitations; 5030 rushes were added to a 5035 batch. High surrogate recovery was observed for bromofluorobenzene in SB-17-5.0-6.0 (lab # 264757-001). Acetone, 1,2,3-trichlorobenzene, and 1,2,4-trichlorobenzene were detected between the MDL and the RL in the method blank for batch 220572; these analytes were not detected in samples at or above the RL. 1,2,4-trichlorobenzene was detected between the MDL and the RL in the method blank for batch 220630; this analyte was not detected in samples at or above the RL. Methylene chloride was detected between the MDL and the RL in a number of samples; this analyte is a common laboratory contaminant. SB-24-3.2-3.8 (lab # 264757-008) and SB-24-7.0-7.3 (lab # 264757-011) were diluted due to high hydrocarbons. No other analytical problems were encountered.

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**264757**
Client:	**Integral Consulting, Inc.**
Project:	**C1374**
Location:	**Allied Engineering**
Request Date:	**02/18/15**
Samples Received:	**02/18/15**

Semivolatile Organics by GC/MS (EPA 8270C):
Matrix spikes QC778350,QC778351 (batch 220704) were not reported because the parent sample was reanalyzed in another batch. Low surrogate recovery was observed for nitrobenzene-d5 in SB-17-9.0-10.0 (lab # 264757-002). A number of samples were diluted due to high non-target analytes. SB-15-5.0-5.5 (lab # 264757-006) and SB-24-3.2-3.8 (lab # 264757-008) were diluted due to the viscous nature of the sample extracts. No other analytical problems were encountered.

PCBs (EPA 8082):
All samples underwent sulfuric acid cleanup using EPA Method 3665A. All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. SB-24-3.2-3.8 (lab # 264757-008) was diluted due to foaming. No other analytical problems were encountered.

Metals (EPA 6010B and EPA 7471A):
Low recoveries were observed for lead in the MS/MSD for batch 220699; the parent sample was not a project sample, the BS/BSD were within limits, and the associated RPD was within limits. High recoveries were observed for barium and vanadium in the MSD for batch 220699; the BS/BSD were within limits, and the associated RPDs were within limits. Zinc was detected between the MDL and the RL in the method blank for batch 220573; this analyte was detected in samples at a level at least 10 times that of the blank. Mercury was detected between the MDL and the RL in the method blank for batch 220694. Mercury was detected between the MDL and the RL in the method blank for batch 220691. Zinc was detected between the MDL and the RL in the method blank for batch 220699; this analyte was detected in samples at a level at least 10 times that of the blank. No other analytical problems were encountered.

Hexavalent Chromium (EPA 7196A):
Low recovery was observed for hexavalent chromium in the matrix spike for batch 220830; the parent sample was not a project sample, and the LCS was within limits. No other analytical problems were encountered.

Moisture (ASTM D2216/CLP):
No analytical problems were encountered.

CHAIN OF CUSTODY

Chain of Custody # _____

Curtis & Tompkins Laboratories
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2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
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C&T LOGIN # 264757

Project No: C1374
Project Name: Allied Engineering
Project P. O. No: C1374 Task 2
EDD Format: Report Level ☐ II ☐ III ☐ IV
Turnaround Time: ☐ RUSH _____ ☒ Standard

Sampler: C. Kyle
Report To: B. DeShields
Company: Integral Consulting
Telephone:
Email: bdeshields@integral-corp.com

Lab No.	Sample ID.	Sampling: Date Collected	Sampling: Time Collected	Matrix: Water	Matrix: Solid	# of Containers	Chemical Preservative: HCl/MeOH	H2SO4	~~HNO3~~	NaOH	None	TPH-g by 8015	TPH-d by 8015	TPH mo by 8015	SVOCs by 8270	Title 22 Metals by 6010/7471	Cr VI by 3060/7196	PCBs by 8082	Full list of VOCs by 8260	RUSH-24hr TAT
1	SB-17-5.0-6.0	2/18/15	0915		X	6	1				5	X	X	X	X	X	X	X	X	
2	SB-17-9.0-10.0	2/18/15	0950		X	6	1				5	X	X	X	X	X	X	X	X	
3	TB-021815	--	--	X		1			1										X	
4	SB-16-3.0-3.5	2/18/15	1205		X	6	1				5	X	X	X	X	X	X	X	X	
5	SB-16-9.5-10.0	2/18/15	1220		X	6	1				5	X	X	X	X	X	X	X	X	
6	SB-15-5.0-5.5	2/18/15	1400		X	6	1				5	X	X	X	X	X	X	X	X	
7	SB-15-9.5-10.0	2/18/15	1415		X	6	1				5	X	→	→	→	→	→	→	→	
8	SB-24-3.2-3.8	2/18/15	1520		X	6	1				5	X	→	→	→	→	→	→	→	X
9	SB-14-4.0-4.5	2/18/15	1540		X	6	1				5	X	→	→	→	→	→	→	→	
10	SB-14-9.5-10.0	2/18/15	1550		X	6	1				5	X	→	→	→	→	→	→	→	
11	SB-24-7.0-7.3	2/18/15	1600		X	6	1				5	X	→	→	→	→	→	→	→	X

Notes:
- EDF required
- Lab to homogenize
- Report all to MDL
- Report in dry weight w/ % moisture.

SAMPLE RECEIPT
☐ Intact
☐ Cold
☐ On Ice
☐ Ambient

RELINQUISHED BY:	DATE	TIME
[signature]	2/18/15	1615
[signature]	2/18/15	1648

RECEIVED BY:	DATE	TIME
[signature]	2/18	1615
[signature]	2/18	1715

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 264757 Date Received 2/18/15 Number of coolers 2
Client Integral Project Allied Engineering

Date Opened 2/18 By (print) BL (sign) [illegible]
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) _____ YES NO
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO N/A
3. Were custody papers dry and intact when received? _____ YES NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ___ YES NO
6. Indicate the packing in cooler: (if other, describe) _____

   ☐ Bubble Wrap ☒ Foam blocks ☒ Bags ☐ None
   ☐ Cloth material ☐ Cardboard ☐ Styrofoam ☒ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

   Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) _____

   ☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

   ☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES NO
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ YES NO
10. Are there any missing / extra samples? _____ YES NO
11. Are samples in the appropriate containers for indicated tests? _____ YES NO
12. Are sample labels present, in good condition and complete? _____ YES NO
13. Do the sample labels agree with custody papers? _____ YES NO
14. Was sufficient amount of sample sent for tests requested? _____ YES NO
15. Are the samples appropriately preserved? _____ YES NO N/A
16. Did you check preservatives for all bottles for each sample? _____ YES NO N/A
17. Did you document your preservative check? _____ YES NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO N/A
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO N/A
20. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A
21. Was the client contacted concerning this sample delivery? _____ YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

Rev 10, 9/12

Curtis & Tompkins, Ltd.

Detections Summary for 264757

Results for any subcontracted analyses are not included in this summary.

Client : Integral Consulting, Inc.
Project : C1374
Location : Allied Engineering

Client Sample ID : SB-17-5.0-6.0 Laboratory Sample ID : 264757-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.49	Y	0.20	0.013	mg/Kg	Dry	1.000	EPA 8015B	EPA 5035
Diesel C10-C24	1,600	Y	23	7.1	mg/Kg	Dry	20.00	EPA 8015B	EPA 3550B
Motor Oil C24-C36	7,300		120	35	mg/Kg	Dry	20.00	EPA 8015B	EPA 3550B
Vinyl Chloride	98		9.0	0.42	ug/Kg	Dry	0.7740	EPA 8260B	EPA 5035
Methylene Chloride	0.49	J	18	0.40	ug/Kg	Dry	0.7740	EPA 8260B	EPA 5035
Carbon Disulfide	0.48	J	4.5	0.43	ug/Kg	Dry	0.7740	EPA 8260B	EPA 5035
trans-1,2-Dichloroethene	17		4.5	0.56	ug/Kg	Dry	0.7740	EPA 8260B	EPA 5035
cis-1,2-Dichloroethene	40		4.5	0.27	ug/Kg	Dry	0.7740	EPA 8260B	EPA 5035
Trichloroethene	10		4.5	0.38	ug/Kg	Dry	0.7740	EPA 8260B	EPA 5035
Toluene	0.37	J	4.5	0.29	ug/Kg	Dry	0.7740	EPA 8260B	EPA 5035
Tetrachloroethene	46		4.5	0.22	ug/Kg	Dry	0.7740	EPA 8260B	EPA 5035
bis(2-Ethylhexyl)phthalate	370	J	3,800	150	ug/Kg	Dry	10.00	EPA 8270C	EPA 3550B
Antimony	4.1		0.58	0.17	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Arsenic	1.3		0.29	0.084	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Barium	53		0.29	0.062	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Beryllium	0.32		0.12	0.014	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cadmium	0.60		0.29	0.030	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Chromium	44		0.29	0.073	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cobalt	3.3		0.29	0.035	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Copper	9.3		0.29	0.097	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Lead	1.7		0.29	0.081	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Mercury	0.034		0.021	0.0014	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Molybdenum	0.16	J	0.29	0.057	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Nickel	37		0.29	0.077	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Vanadium	25		0.29	0.066	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Zinc	23		1.2	0.065	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Moisture, Percent	14		1		%	As Recd	1.000	ASTM D2216/CLP	METHOD

Curtis & Tompkins, Ltd.

Client Sample ID : SB-17-9.0-10.0 Laboratory Sample ID : 264757-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.057	J	0.16	0.010	mg/Kg	Dry	1.000	EPA 8015B	EPA 5035
Diesel C10-C24	18	Y	1.2	0.36	mg/Kg	Dry	1.000	EPA 8015B	EPA 3550B
Motor Oil C24-C36	88		5.8	1.8	mg/Kg	Dry	1.000	EPA 8015B	EPA 3550B
Vinyl Chloride	19		8.8	0.41	ug/Kg	Dry	0.7496	EPA 8260B	EPA 5035
1,1-Dichloroethene	0.67	J	4.4	0.39	ug/Kg	Dry	0.7496	EPA 8260B	EPA 5035
Methylene Chloride	0.98	J	18	0.40	ug/Kg	Dry	0.7496	EPA 8260B	EPA 5035
trans-1,2-Dichloroethene	5.4		4.4	0.55	ug/Kg	Dry	0.7496	EPA 8260B	EPA 5035
cis-1,2-Dichloroethene	39		4.4	0.26	ug/Kg	Dry	0.7496	EPA 8260B	EPA 5035
Trichloroethene	73		4.4	0.37	ug/Kg	Dry	0.7496	EPA 8260B	EPA 5035
Tetrachloroethene	1.0	J	4.4	0.21	ug/Kg	Dry	0.7496	EPA 8260B	EPA 5035
Antimony	4.7		0.59	0.18	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Arsenic	4.1		0.30	0.086	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Barium	63		0.30	0.064	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Beryllium	0.34		0.12	0.015	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cadmium	0.67		0.30	0.030	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Chromium	54		0.30	0.075	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cobalt	5.0		0.30	0.036	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Copper	12		0.30	0.099	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Lead	2.3		0.30	0.083	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Mercury	0.062		0.020	0.0013	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Molybdenum	0.090	J	0.30	0.058	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Nickel	31		0.30	0.078	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Vanadium	36		0.30	0.068	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Zinc	28		1.2	0.067	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Hexavalent Chromium	0.53		0.48	0.15	mg/Kg	Dry	1.000	EPA 7196A	EPA 3060A
Moisture, Percent	15		1		%	As Recd	1.000	ASTM D2216/CLP	METHOD

Client Sample ID : TB-021815 Laboratory Sample ID : 264757-003

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Bromomethane	0.2	J	1.0	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Chloroform	0.1	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Curtis & Tompkins, Ltd.

Client Sample ID : SB-16-3.0-3.5 Laboratory Sample ID : 264757-004

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.1	Y	0.20	0.013	mg/Kg	Dry	1.000	EPA 8015B	EPA 5035
Diesel C10-C24	310	Y	12	3.6	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550B
Motor Oil C24-C36	1,000		58	18	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550B
Acetone	92		16	1.5	ug/Kg	Dry	0.7072	EPA 8260B	EPA 5035
Methylene Chloride	0.61	J	18	0.41	ug/Kg	Dry	0.7764	EPA 8260B	EPA 5035
Carbon Disulfide	0.61	J	4.5	0.43	ug/Kg	Dry	0.7764	EPA 8260B	EPA 5035
2-Butanone	17		8.2	1.1	ug/Kg	Dry	0.7072	EPA 8260B	EPA 5035
cis-1,2-Dichloroethene	0.83	J	4.5	0.27	ug/Kg	Dry	0.7764	EPA 8260B	EPA 5035
Chloroform	0.84	J	4.5	0.28	ug/Kg	Dry	0.7764	EPA 8260B	EPA 5035
Trichloroethene	1.1	J	4.5	0.38	ug/Kg	Dry	0.7764	EPA 8260B	EPA 5035
4-Methyl-2-Pentanone	2.0	J	9.0	0.44	ug/Kg	Dry	0.7764	EPA 8260B	EPA 5035
2-Hexanone	2.2	J	9.0	1.0	ug/Kg	Dry	0.7764	EPA 8260B	EPA 5035
Styrene	0.26	J	4.5	0.26	ug/Kg	Dry	0.7764	EPA 8260B	EPA 5035
1,2,4-Trimethylbenzene	0.30	J	4.5	0.25	ug/Kg	Dry	0.7764	EPA 8260B	EPA 5035
Phenanthrene	62	J	230	37	ug/Kg	Dry	3.000	EPA 8270C	EPA 3550B
Di-n-butylphthalate	50	J	1,200	42	ug/Kg	Dry	3.000	EPA 8270C	EPA 3550B
Fluoranthene	120	J	230	36	ug/Kg	Dry	3.000	EPA 8270C	EPA 3550B
Pyrene	85	J	230	38	ug/Kg	Dry	3.000	EPA 8270C	EPA 3550B
Benzo(a)anthracene	65	J	230	36	ug/Kg	Dry	3.000	EPA 8270C	EPA 3550B
Chrysene	60	J	230	39	ug/Kg	Dry	3.000	EPA 8270C	EPA 3550B
bis(2-Ethylhexyl)phthalate	520	J	1,200	45	ug/Kg	Dry	3.000	EPA 8270C	EPA 3550B
Benzo(b)fluoranthene	55	J	230	31	ug/Kg	Dry	3.000	EPA 8270C	EPA 3550B
Antimony	9.7		0.54	0.16	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Arsenic	2.2		0.27	0.079	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Barium	100		0.27	0.058	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Beryllium	0.25		0.11	0.013	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cadmium	1.8		0.27	0.028	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Chromium	170		0.27	0.068	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cobalt	21		0.27	0.033	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Copper	180		0.27	0.091	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Lead	51		0.27	0.076	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Mercury	0.021		0.018	0.0012	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Molybdenum	10		0.27	0.053	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Nickel	98		0.27	0.072	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Silver	0.52		0.27	0.043	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Vanadium	29		0.27	0.062	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Zinc	100		1.1	0.061	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Moisture, Percent	14		1		%	As Recd	1.000	ASTM D2216/CLP	METHOD

Curtis & Tompkins, Ltd.

Client Sample ID : SB-16-9.5-10.0 Laboratory Sample ID : 264757-005

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.073	J	0.16	0.010	mg/Kg	Dry	1.000	EPA 8015B	EPA 5035
Diesel C10-C24	1.8	Y	1.2	0.36	mg/Kg	Dry	1.000	EPA 8015B	EPA 3550B
1,1-Dichloroethene	1.1	J	4.4	0.38	ug/Kg	Dry	0.7496	EPA 8260B	EPA 5035
Methylene Chloride	1.2	J	17	0.39	ug/Kg	Dry	0.7496	EPA 8260B	EPA 5035
trans-1,2-Dichloroethene	1.9	J	4.4	0.54	ug/Kg	Dry	0.7496	EPA 8260B	EPA 5035
cis-1,2-Dichloroethene	13		4.4	0.26	ug/Kg	Dry	0.7496	EPA 8260B	EPA 5035
Trichloroethene	140		4.4	0.37	ug/Kg	Dry	0.7496	EPA 8260B	EPA 5035
Antimony	5.8		0.53	0.16	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Arsenic	13		0.26	0.077	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Barium	1,100		26	5.7	mg/Kg	Dry	100.0	EPA 6010B	EPA 3050B
Beryllium	0.36		0.11	0.013	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cadmium	1.0		0.26	0.027	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Chromium	53		0.26	0.067	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cobalt	20		0.26	0.032	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Copper	15		0.26	0.088	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Lead	3.3		0.26	0.074	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Mercury	0.029		0.020	0.0013	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Molybdenum	0.78		0.26	0.052	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Nickel	75		0.26	0.070	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Selenium	0.88		0.53	0.17	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Vanadium	67		0.26	0.060	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Zinc	34		1.1	0.059	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Hexavalent Chromium	0.83		0.45	0.15	mg/Kg	Dry	1.000	EPA 7196A	EPA 3060A
Moisture, Percent	14		1		%	As Recd	1.000	ASTM D2216/CLP	METHOD

Curtis & Tompkins, Ltd.

Client Sample ID : SB-15-5.0-5.5 Laboratory Sample ID : 264757-006

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	6.4	Y,Z	0.24	0.015	mg/Kg	Dry	1.000	EPA 8015B	EPA 5035
Diesel C10-C24	2,300	Y	12	3.7	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550B
Motor Oil C24-C36	3,200		61	18	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550B
Acetone	540	J	1,200	190	ug/Kg	Dry	47.99	EPA 8260B	EPA 5035
4-Methyl-2-Pentanone	29,000		2,300	220	ug/Kg	Dry	191.9	EPA 8260B	EPA 5035
1,3,5-Trimethylbenzene	8.9	J	290	5.7	ug/Kg	Dry	47.99	EPA 8260B	EPA 5035
1,2,4-Trimethylbenzene	40	J	290	8.5	ug/Kg	Dry	47.99	EPA 8260B	EPA 5035
1,4-Dichlorobenzene	24	J	290	5.8	ug/Kg	Dry	47.99	EPA 8260B	EPA 5035
4-Chloro-3-methylphenol	410	J	4,000	100	ug/Kg	Dry	10.00	EPA 8270C	EPA 3550B
Di-n-butylphthalate	150	J	4,000	150	ug/Kg	Dry	10.00	EPA 8270C	EPA 3550B
bis(2-Ethylhexyl)phthalate	830	J	4,000	160	ug/Kg	Dry	10.00	EPA 8270C	EPA 3550B
Antimony	4.5		0.55	0.16	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Arsenic	3.5		0.27	0.080	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Barium	96		0.27	0.059	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Beryllium	0.36		0.11	0.014	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cadmium	0.79		0.27	0.028	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Chromium	53		0.27	0.069	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cobalt	26		0.27	0.033	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Copper	18		0.27	0.091	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Lead	12		0.27	0.076	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Mercury	0.036		0.019	0.0013	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Molybdenum	0.33		0.27	0.053	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Nickel	51		0.27	0.072	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Silver	1.3		0.27	0.044	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Vanadium	31		0.27	0.062	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Zinc	47		1.1	0.061	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Moisture, Percent	17		1		%	As Recd	1.000	ASTM D2216/CLP	METHOD

Curtis & Tompkins, Ltd.

Client Sample ID : SB-15-9.5-10.0 Laboratory Sample ID : 264757-007

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.085	J	0.16	0.011	mg/Kg	Dry	1.000	EPA 8015B	EPA 5035
Diesel C10-C24	35	Y	1.2	0.37	mg/Kg	Dry	1.000	EPA 8015B	EPA 3550B
Motor Oil C24-C36	32		6.0	1.8	mg/Kg	Dry	1.000	EPA 8015B	EPA 3550B
Acetone	20		17	2.8	ug/Kg	Dry	0.7003	EPA 8260B	EPA 5035
2-Butanone	1.0	J	8.3	0.56	ug/Kg	Dry	0.7003	EPA 8260B	EPA 5035
4-Methyl-2-Pentanone	48		8.3	0.50	ug/Kg	Dry	0.7003	EPA 8260B	EPA 5035
4-Chloro-3-methylphenol	46	J	400	9.9	ug/Kg	Dry	1.000	EPA 8270C	EPA 3550B
Antimony	7.4		0.57	0.17	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Arsenic	12		0.29	0.083	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Barium	230		0.29	0.061	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Beryllium	0.49		0.11	0.014	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cadmium	1.1		0.29	0.029	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Chromium	66		0.29	0.072	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cobalt	11		0.29	0.034	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Copper	17		0.29	0.095	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Lead	5.5		0.29	0.080	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Mercury	0.050		0.021	0.0013	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Molybdenum	0.40		0.29	0.056	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Nickel	58		0.29	0.075	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Vanadium	57		0.29	0.065	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Zinc	48		1.1	0.064	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Hexavalent Chromium	0.80		0.46	0.15	mg/Kg	Dry	1.000	EPA 7196A	EPA 3060A
Moisture, Percent	16		1		%	As Recd	1.000	ASTM D2216/CLP	METHOD

Curtis & Tompkins, Ltd.

Client Sample ID : SB-24-3.2-3.8 Laboratory Sample ID : 264757-008

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	58	Y	4.5	0.13	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	4,500		59	18	mg/Kg	Dry	50.00	EPA 8015B	EPA 3550B
Motor Oil C24-C36	9,000		290	89	mg/Kg	Dry	50.00	EPA 8015B	EPA 3550B
Bromomethane	50	J	910	9.1	ug/Kg	Dry	77.16	EPA 8260B	EPA 5035
Acetone	850	J	1,800	300	ug/Kg	Dry	77.16	EPA 8260B	EPA 5035
4-Methyl-2-Pentanone	700	J	910	19	ug/Kg	Dry	77.16	EPA 8260B	EPA 5035
Ethylbenzene	15	J	450	9.1	ug/Kg	Dry	77.16	EPA 8260B	EPA 5035
m,p-Xylenes	52	J	450	9.1	ug/Kg	Dry	77.16	EPA 8260B	EPA 5035
o-Xylene	36	J	450	9.1	ug/Kg	Dry	77.16	EPA 8260B	EPA 5035
Isopropylbenzene	21	J	450	11	ug/Kg	Dry	77.16	EPA 8260B	EPA 5035
1,3,5-Trimethylbenzene	150	J	450	9.0	ug/Kg	Dry	77.16	EPA 8260B	EPA 5035
1,2,4-Trimethylbenzene	420	J	450	13	ug/Kg	Dry	77.16	EPA 8260B	EPA 5035
para-Isopropyl Toluene	48	J	450	14	ug/Kg	Dry	77.16	EPA 8260B	EPA 5035
Naphthalene	54	J	450	17	ug/Kg	Dry	77.16	EPA 8260B	EPA 5035
4-Chloro-3-methylphenol	26,000	J	59,000	1,500	ug/Kg	Dry	150.0	EPA 8270C	EPA 3550B
bis(2-Ethylhexyl)phthalate	6,100	J	59,000	2,300	ug/Kg	Dry	150.0	EPA 8270C	EPA 3550B
Antimony	0.48	J	0.63	0.19	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Arsenic	1.6		0.32	0.092	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Barium	120		0.32	0.068	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Beryllium	0.27		0.13	0.016	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cadmium	0.25	J	0.32	0.032	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Chromium	23		0.32	0.080	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cobalt	5.3		0.32	0.038	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Copper	9.6		0.32	0.11	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Lead	14		0.32	0.088	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Mercury	0.024	J	0.10	0.0056	mg/Kg	Dry	5.000	EPA 7471A	METHOD
Molybdenum	0.19	J	0.32	0.062	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Nickel	18		0.32	0.083	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Thallium	0.22	J	0.63	0.18	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Vanadium	20		0.32	0.072	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Zinc	20		1.3	0.071	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Moisture, Percent	15		1		%	As Recd	1.000	ASTM D2216/CLP	METHOD

Curtis & Tompkins, Ltd.

Client Sample ID : SB-14-4.0-4.5 Laboratory Sample ID : 264757-009

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.038	J	0.20	0.013	mg/Kg	Dry	1.000	EPA 8015B	EPA 5035
Diesel C10-C24	360	Y	5.8	1.8	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550B
Motor Oil C24-C36	980		29	8.8	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550B
4-Chloro-3-methylphenol	280	J	770	19	ug/Kg	Dry	2.000	EPA 8270C	EPA 3550B
Di-n-butylphthalate	72	J	770	28	ug/Kg	Dry	2.000	EPA 8270C	EPA 3550B
bis(2-Ethylhexyl)phthalate	300	J	770	30	ug/Kg	Dry	2.000	EPA 8270C	EPA 3550B
Antimony	3.4		0.57	0.17	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Arsenic	2.6		0.28	0.083	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Barium	71		0.28	0.061	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Beryllium	0.30		0.11	0.014	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cadmium	0.50		0.28	0.029	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Chromium	51		0.28	0.072	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cobalt	6.6		0.28	0.034	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Copper	11		0.28	0.095	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Lead	2.3		0.28	0.079	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Mercury	0.040		0.018	0.0012	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Molybdenum	0.12	J	0.28	0.056	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Nickel	33		0.28	0.075	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Vanadium	30		0.28	0.065	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Zinc	24		1.1	0.064	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Hexavalent Chromium	0.62		0.44	0.15	mg/Kg	Dry	1.000	EPA 7196A	EPA 3060A
Moisture, Percent	13		1		%	As Recd	1.000	ASTM D2216/CLP	METHOD

Client Sample ID : SB-14-9.5-10.0 Laboratory Sample ID : 264757-010

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.042	J	0.24	0.016	mg/Kg	Dry	1.000	EPA 8015B	EPA 5035
Diesel C10-C24	7.1	Y	1.1	0.35	mg/Kg	Dry	1.000	EPA 8015B	EPA 3550B
Motor Oil C24-C36	18		5.6	1.7	mg/Kg	Dry	1.000	EPA 8015B	EPA 3550B
Antimony	4.4		0.57	0.17	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Arsenic	3.4		0.29	0.083	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Barium	69		0.29	0.062	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Beryllium	0.33		0.11	0.014	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cadmium	0.62		0.29	0.029	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Chromium	48		0.29	0.072	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cobalt	5.6		0.29	0.034	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Copper	6.6		0.29	0.096	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Lead	1.7		0.29	0.080	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Mercury	0.030		0.020	0.0013	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Molybdenum	0.15	J	0.29	0.056	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Nickel	50		0.29	0.076	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Vanadium	33		0.29	0.065	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Zinc	29		1.1	0.064	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Moisture, Percent	12		1		%	As Recd	1.000	ASTM D2216/CLP	METHOD

Curtis & Tompkins, Ltd.

Client Sample ID : SB-24-7.0-7.3 Laboratory Sample ID : 264757-011

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	16	Y	4.2	0.12	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	0.49	J	1.2	0.36	mg/Kg	Dry	1.000	EPA 8015B	EPA 3550B
Acetone	210	J	840	140	ug/Kg	Dry	35.51	EPA 8260B	EPA 5035
Trichloroethene	25	J	210	4.2	ug/Kg	Dry	35.51	EPA 8260B	EPA 5035
Tetrachloroethene	28	J	210	4.2	ug/Kg	Dry	35.51	EPA 8260B	EPA 5035
1,2,4-Trimethylbenzene	6.7	J	210	6.1	ug/Kg	Dry	35.51	EPA 8260B	EPA 5035
para-Isopropyl Toluene	8.4	J	210	6.2	ug/Kg	Dry	35.51	EPA 8260B	EPA 5035
Antimony	2.0		0.58	0.17	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Arsenic	11		0.29	0.084	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Barium	93		0.29	0.062	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Beryllium	0.33		0.12	0.014	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cadmium	0.76		0.29	0.029	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Chromium	51		0.29	0.073	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Cobalt	6.9		0.29	0.035	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Copper	11		0.29	0.096	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Lead	1.6		0.29	0.080	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Mercury	0.045	J	0.11	0.0059	mg/Kg	Dry	5.000	EPA 7471A	METHOD
Nickel	41		0.29	0.076	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Vanadium	37		0.29	0.066	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Zinc	33		1.2	0.065	mg/Kg	Dry	1.000	EPA 6010B	EPA 3050B
Hexavalent Chromium	0.64		0.46	0.15	mg/Kg	Dry	1.000	EPA 7196A	EPA 3060A
Moisture, Percent	15		1		%	As Recd	1.000	ASTM D2216/CLP	METHOD

J = Estimated value

Y = Sample exhibits chromatographic pattern which does not resemble standard

Z = Sample exhibits unknown single peak or peaks

Curtis & Tompkins, Ltd.

Gasoline by GC/FID (5035 Prep)

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	02/18/15
Units:	mg/Kg	Received:	02/18/15
Basis:	dry		

Field ID:	SB-17-5.0-6.0	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	220599
Lab ID:	264757-001	Analyzed:	02/20/15
Moisture:	14%		

Analyte	Result	RL	MDL
Gasoline C7-C12	0.49 Y	0.20	0.013

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	85	78-138

Field ID:	SB-17-9.0-10.0	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	220599
Lab ID:	264757-002	Analyzed:	02/20/15
Moisture:	15%		

Analyte	Result	RL	MDL
Gasoline C7-C12	0.057 J	0.16	0.010

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	94	78-138

Field ID:	SB-16-3.0-3.5	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	220599
Lab ID:	264757-004	Analyzed:	02/20/15
Moisture:	14%		

Analyte	Result	RL	MDL
Gasoline C7-C12	1.1 Y	0.20	0.013

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	82	78-138

Field ID:	SB-16-9.5-10.0	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	220599
Lab ID:	264757-005	Analyzed:	02/20/15
Moisture:	14%		

Analyte	Result	RL	MDL
Gasoline C7-C12	0.073 J	0.16	0.010

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	92	78-138

*= Value outside of QC limits; see narrative
J= Estimated value
Y= Sample exhibits chromatographic pattern which does not resemble standard
Z= Sample exhibits unknown single peak or peaks
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/FID (5035 Prep)

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	02/18/15
Units:	mg/Kg	Received:	02/18/15
Basis:	dry		

Field ID:	SB-15-5.0-5.5	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	220715
Lab ID:	264757-006	Analyzed:	02/23/15
Moisture:	17%		

Analyte	Result	RL	MDL
Gasoline C7-C12	6.4 Y Z	0.24	0.015

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	88	78-138

Field ID:	SB-15-9.5-10.0	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	220599
Lab ID:	264757-007	Analyzed:	02/20/15
Moisture:	16%		

Analyte	Result	RL	MDL
Gasoline C7-C12	0.085 J	0.16	0.011

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	99	78-138

Field ID:	SB-24-3.2-3.8	Diln Fac:	25.00
Type:	SAMPLE	Batch#:	220548
Lab ID:	264757-008	Analyzed:	02/19/15
Moisture:	15%		

Analyte	Result	RL	MDL
Gasoline C7-C12	58 Y	4.5	0.13

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	142 *	78-138

Field ID:	SB-14-4.0-4.5	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	220599
Lab ID:	264757-009	Analyzed:	02/20/15
Moisture:	13%		

Analyte	Result	RL	MDL
Gasoline C7-C12	0.038 J	0.20	0.013

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	87	78-138

*= Value outside of QC limits; see narrative
J= Estimated value
Y= Sample exhibits chromatographic pattern which does not resemble standard
Z= Sample exhibits unknown single peak or peaks
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/FID (5035 Prep)

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	02/18/15
Units:	mg/Kg	Received:	02/18/15
Basis:	dry		

Field ID:	SB-14-9.5-10.0	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	220599
Lab ID:	264757-010	Analyzed:	02/20/15
Moisture:	12%		

Analyte	Result	RL	MDL
Gasoline C7-C12	0.042 J	0.24	0.016

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	91	78-138

Field ID:	SB-24-7.0-7.3	Diln Fac:	25.00
Type:	SAMPLE	Batch#:	220548
Lab ID:	264757-011	Analyzed:	02/19/15
Moisture:	15%		

Analyte	Result	RL	MDL
Gasoline C7-C12	16 Y	4.2	0.12

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	123	78-138

Type:	BLANK	Batch#:	220548
Lab ID:	QC777682	Analyzed:	02/18/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Gasoline C7-C12	0.026 J	0.20	0.015

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	108	78-138

Type:	BLANK	Batch#:	220599
Lab ID:	QC777871	Analyzed:	02/19/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Gasoline C7-C12	0.033 J	0.20	0.013

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	92	78-138

*= Value outside of QC limits; see narrative
J= Estimated value
Y= Sample exhibits chromatographic pattern which does not resemble standard
Z= Sample exhibits unknown single peak or peaks
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/FID (5035 Prep)

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	02/18/15
Units:	mg/Kg	Received:	02/18/15
Basis:	dry		

Type:	BLANK	Batch#:	220715
Lab ID:	QC778339	Analyzed:	02/23/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Gasoline C7-C12	0.027 J	0.20	0.013

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	81	78-138

*= Value outside of QC limits; see narrative
J= Estimated value
Y= Sample exhibits chromatographic pattern which does not resemble standard
Z= Sample exhibits unknown single peak or peaks
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/FID (5035 Prep)

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC777681	Batch#:	220548
Matrix:	Soil	Analyzed:	02/18/15
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	0.9935	99	80-121

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	117	78-138

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/FID (5035 Prep)

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	264630-009	Batch#:	220548
Matrix:	Soil	Sampled:	02/07/15
Units:	mg/Kg	Received:	02/12/15
Basis:	dry	Analyzed:	02/18/15

Type: MS Moisture: 14%
Lab ID: QC777683

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.1495	11.40	9.839	85	50-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	115	78-138

Type: MSD Moisture: 14%
Lab ID: QC777684

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	10.77	8.435	77	50-120	10	31

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	108	78-138

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/FID (5035 Prep)

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC777870	Batch#:	220599
Matrix:	Soil	Analyzed:	02/19/15
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	0.9991	100	80-121

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	86	78-138

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/FID (5035 Prep)

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	264678-003	Batch#:	220599
Matrix:	Soil	Sampled:	02/13/15
Units:	mg/Kg	Received:	02/13/15
Basis:	as received	Analyzed:	02/19/15

Type: MS Lab ID: QC777872

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.1220	9.346	8.181	86	50-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	91	78-138

Type: MSD Lab ID: QC777873

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	9.174	6.859	73	50-120	16	31

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	91	78-138

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/FID (5035 Prep)

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC778338	Batch#:	220715
Matrix:	Soil	Analyzed:	02/23/15
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	1.044	104	80-121

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	89	78-138

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/FID (5035 Prep)

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	264814-001	Batch#:	220715
Matrix:	Soil	Sampled:	02/20/15
Units:	mg/Kg	Received:	02/20/15
Basis:	as received	Analyzed:	02/23/15

Type: MS Lab ID: QC778340

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.2283	10.31	8.963	85	50-120

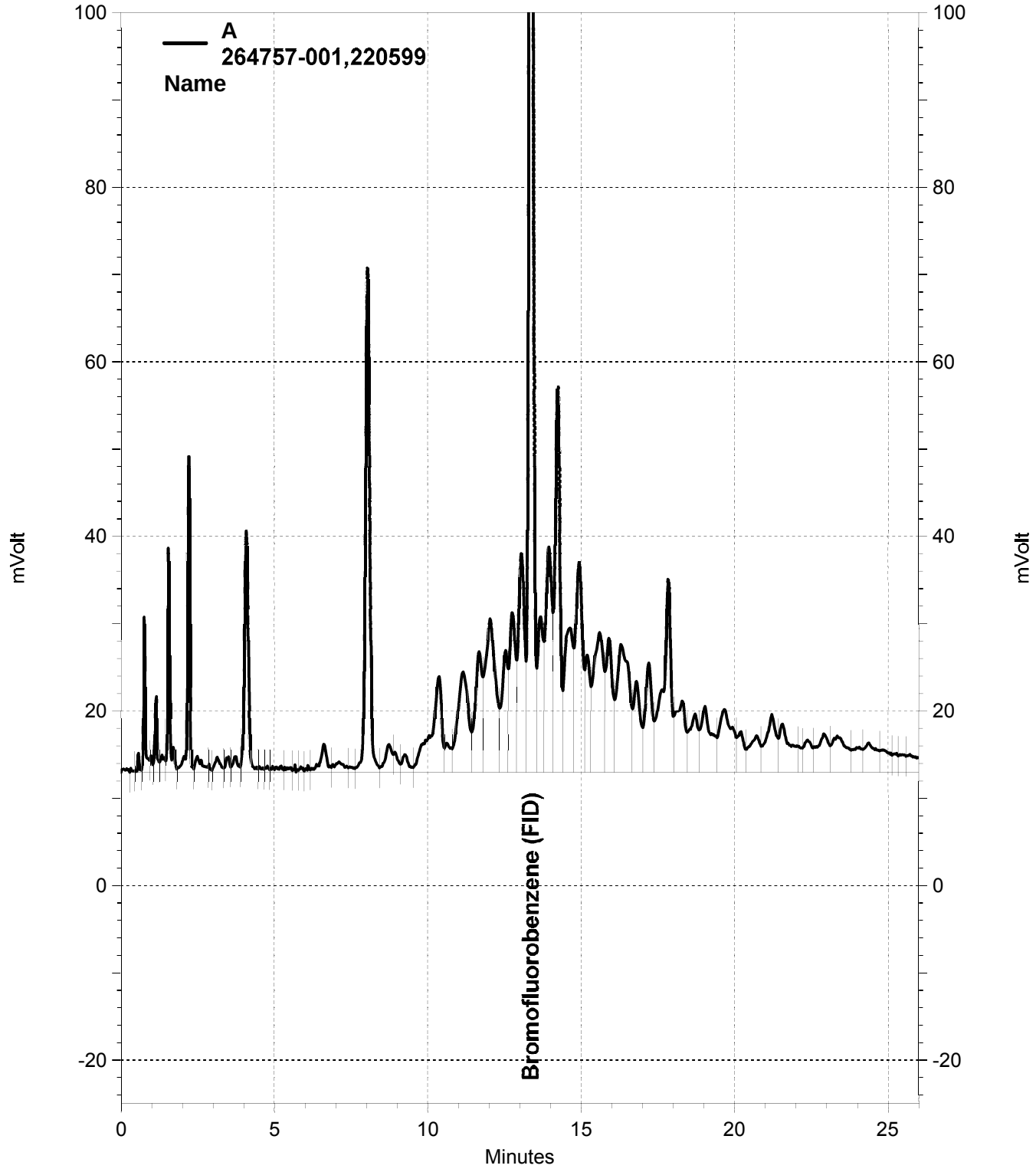
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	96	78-138

Type: MSD Lab ID: QC778341

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	9.174	6.219	65	50-120	25	31

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	91	78-138

RPD= Relative Percent Difference



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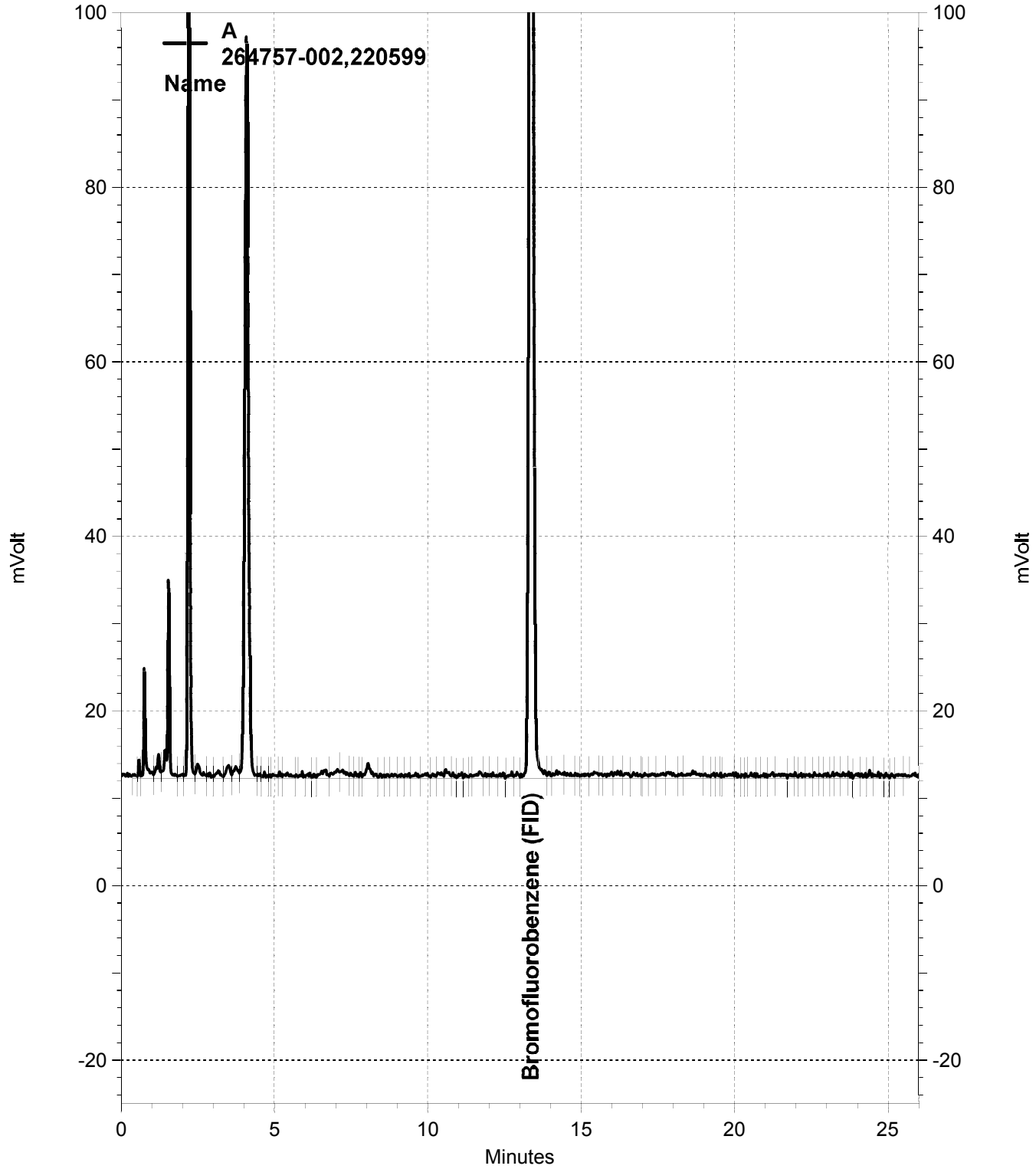

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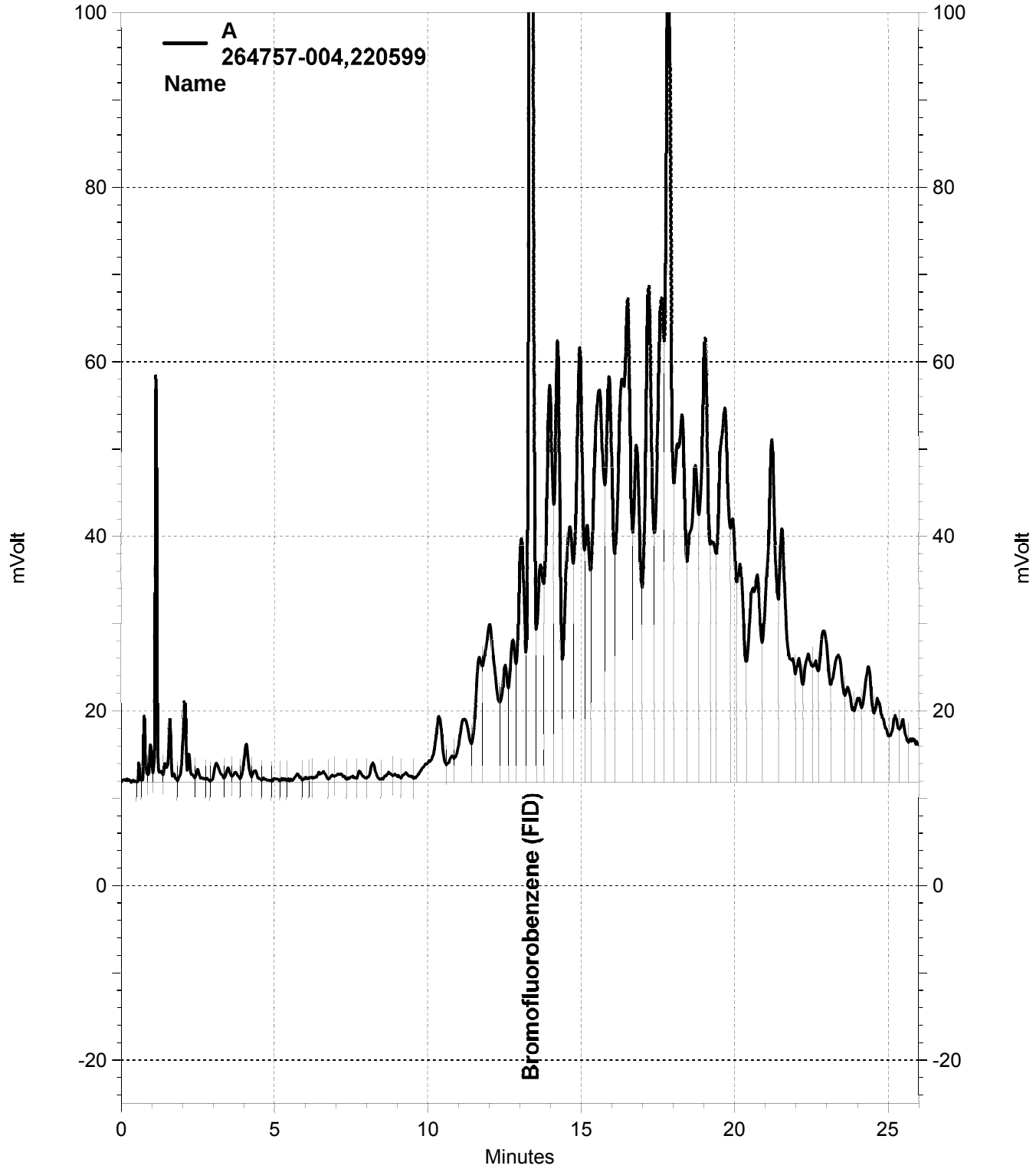

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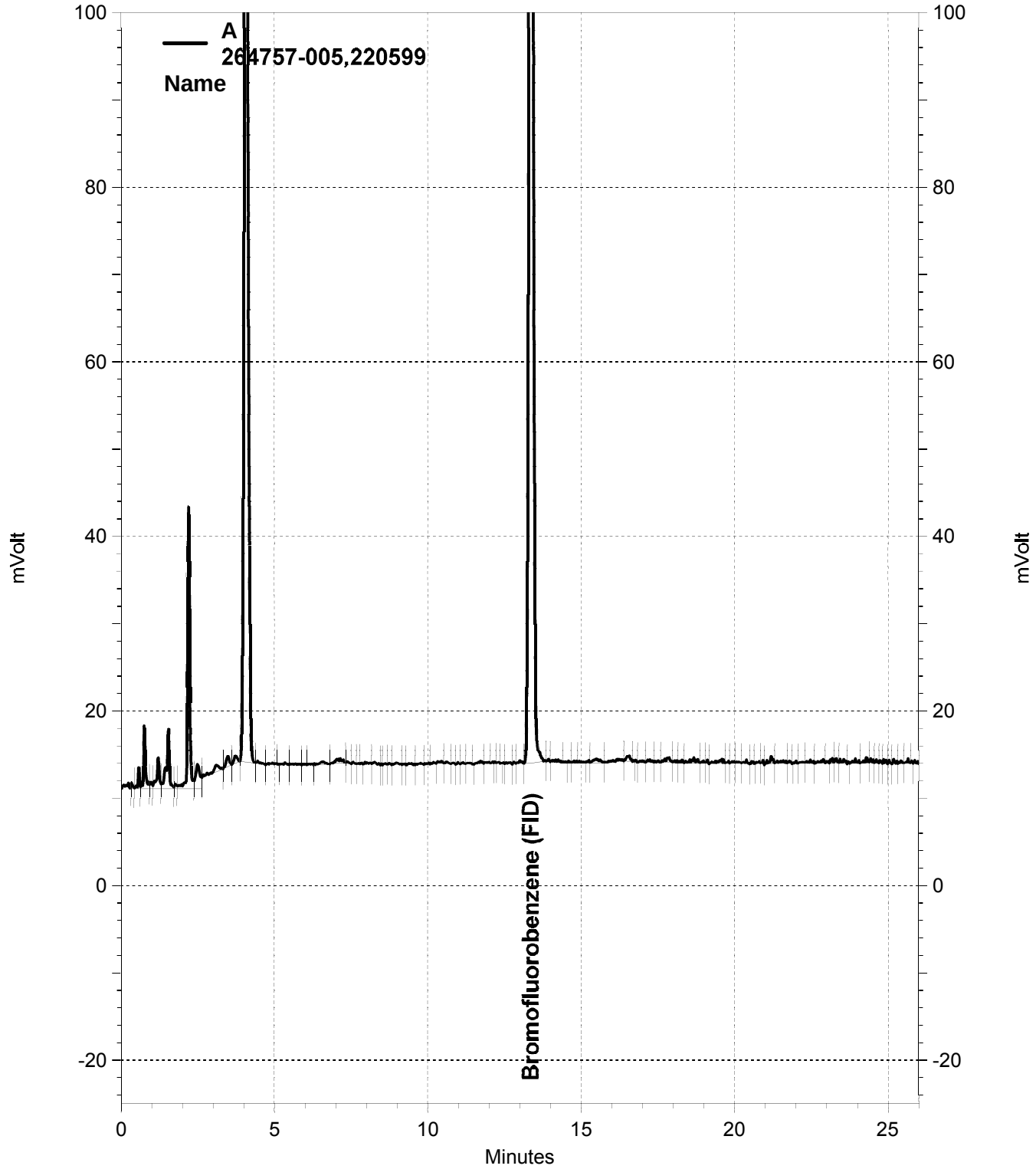

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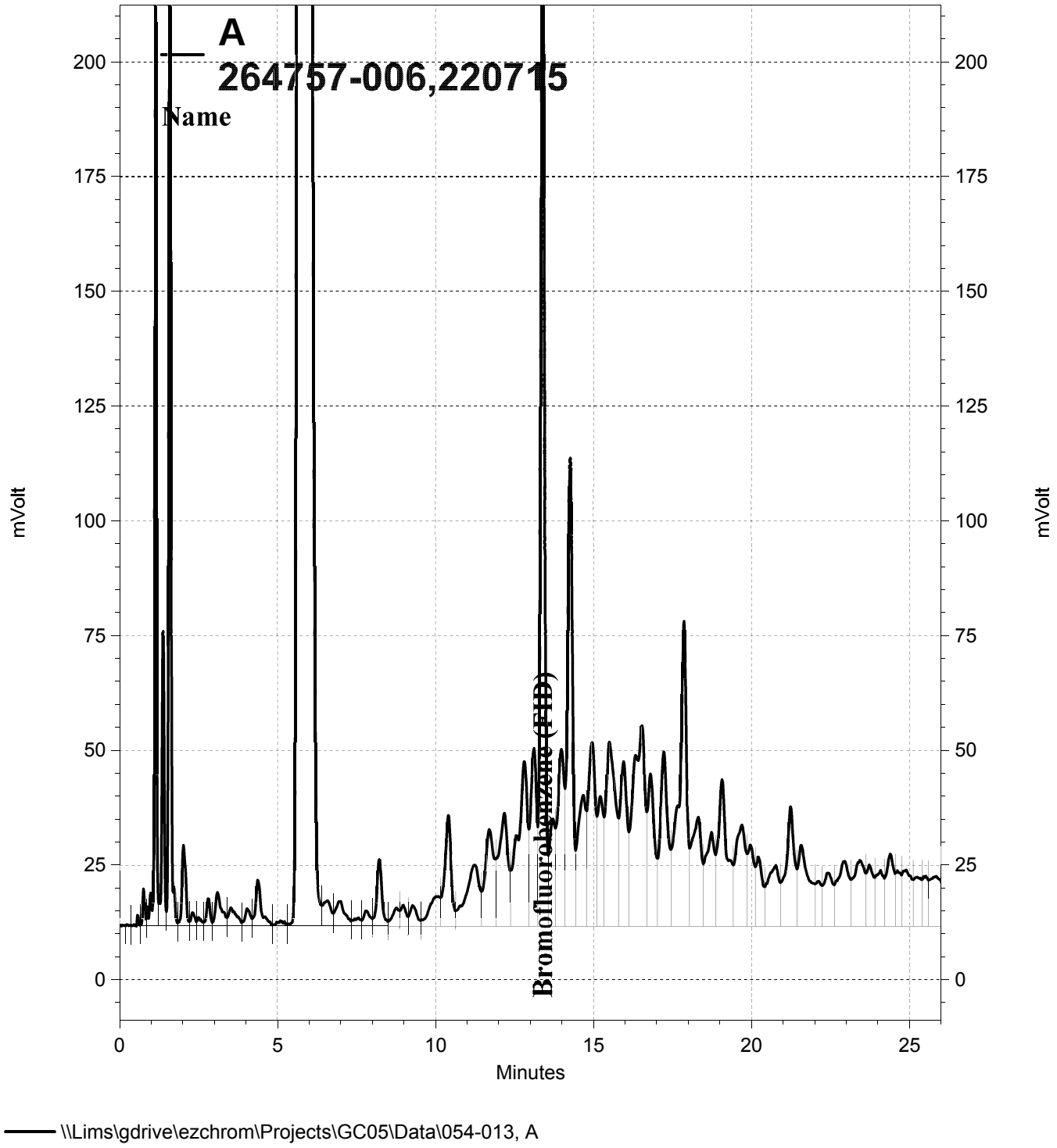
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264757-006,220715
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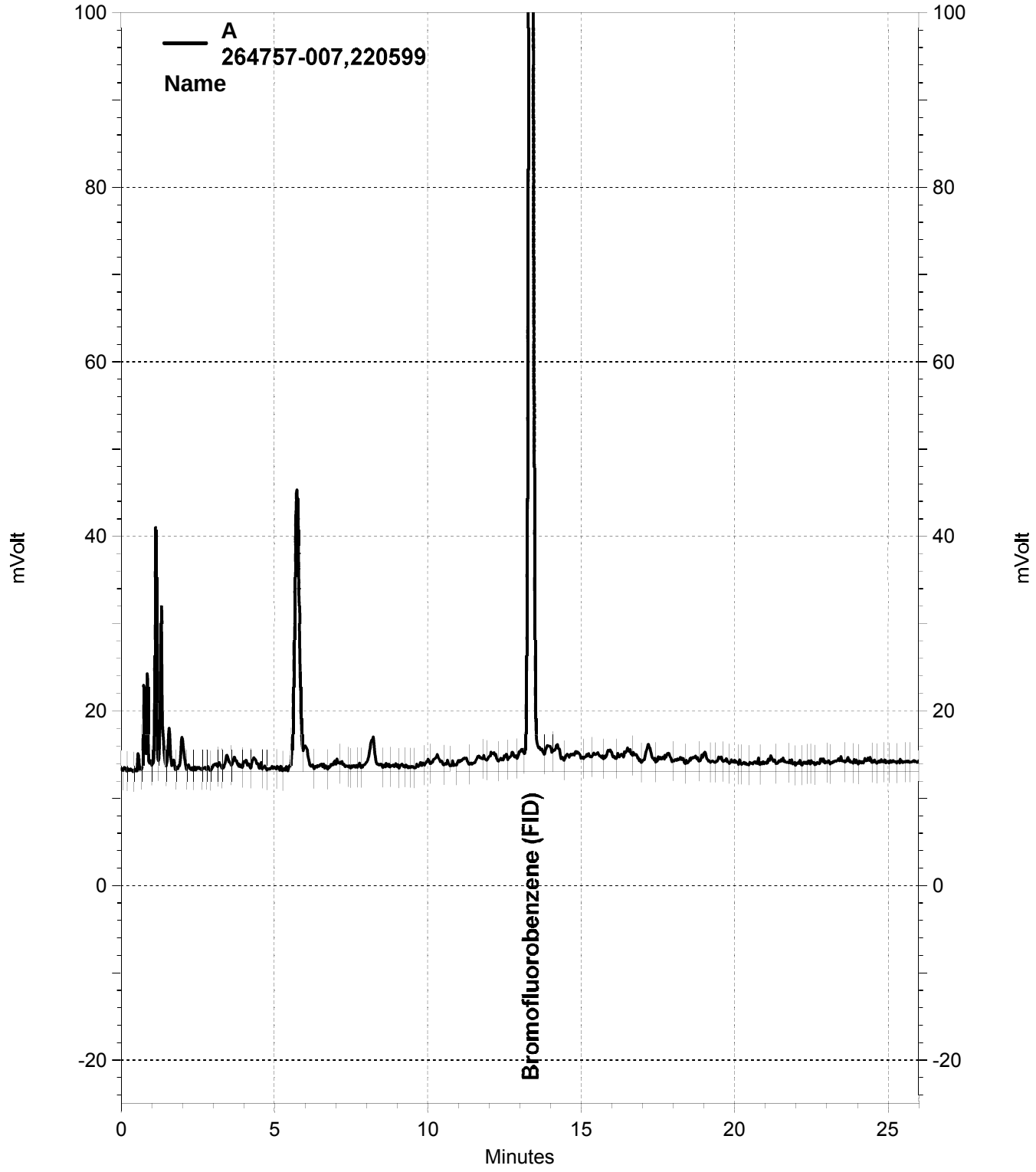

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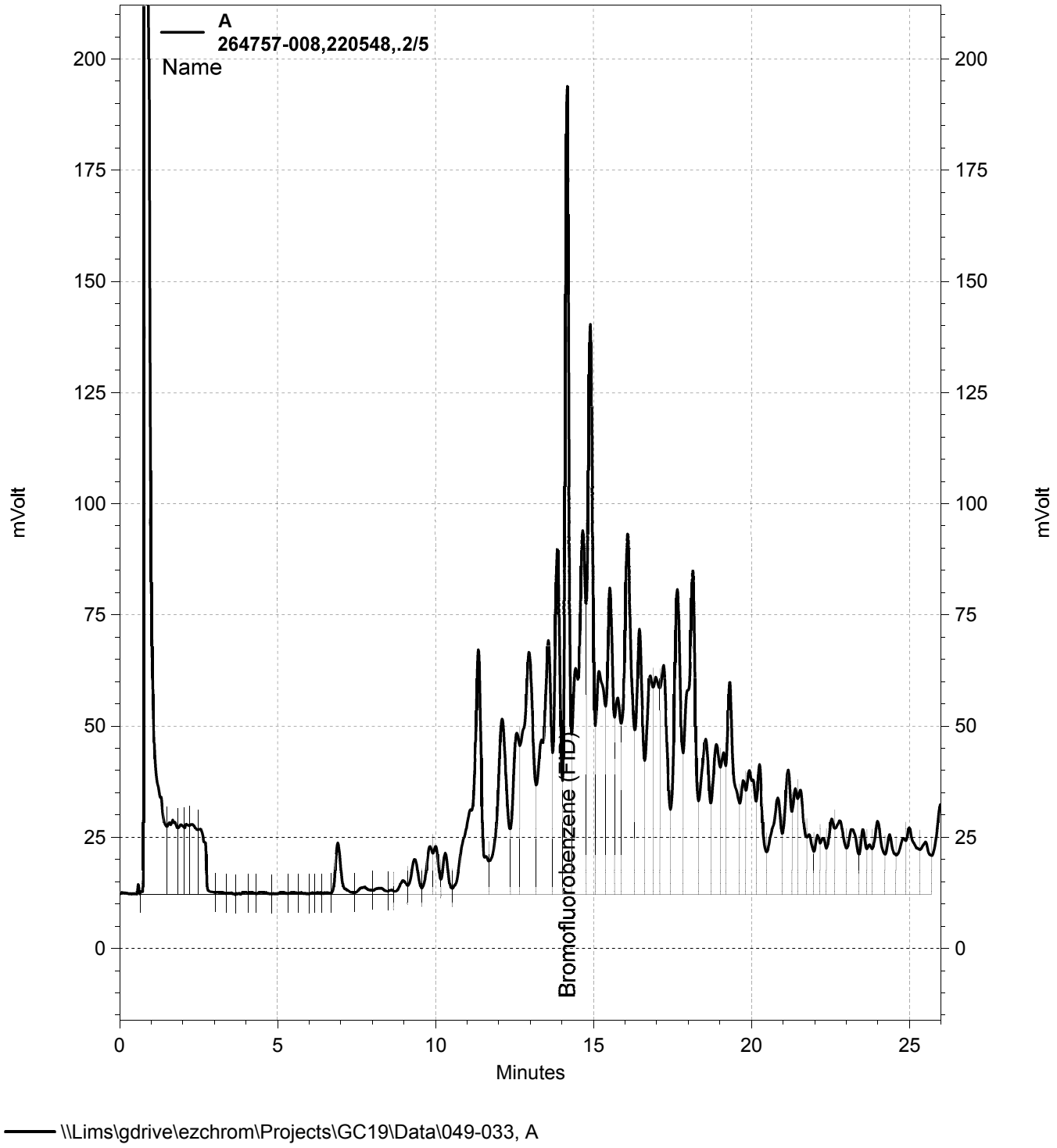

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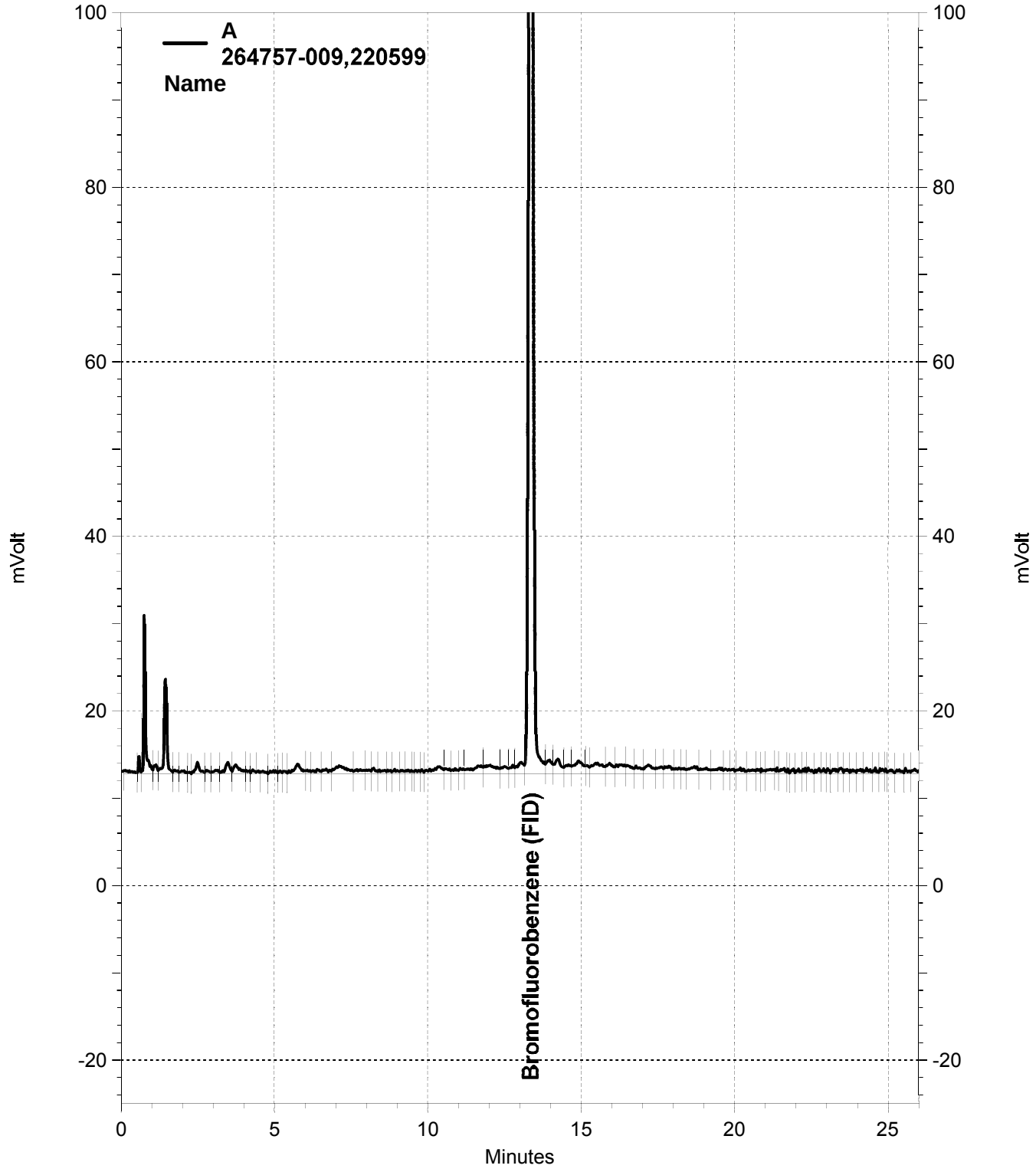

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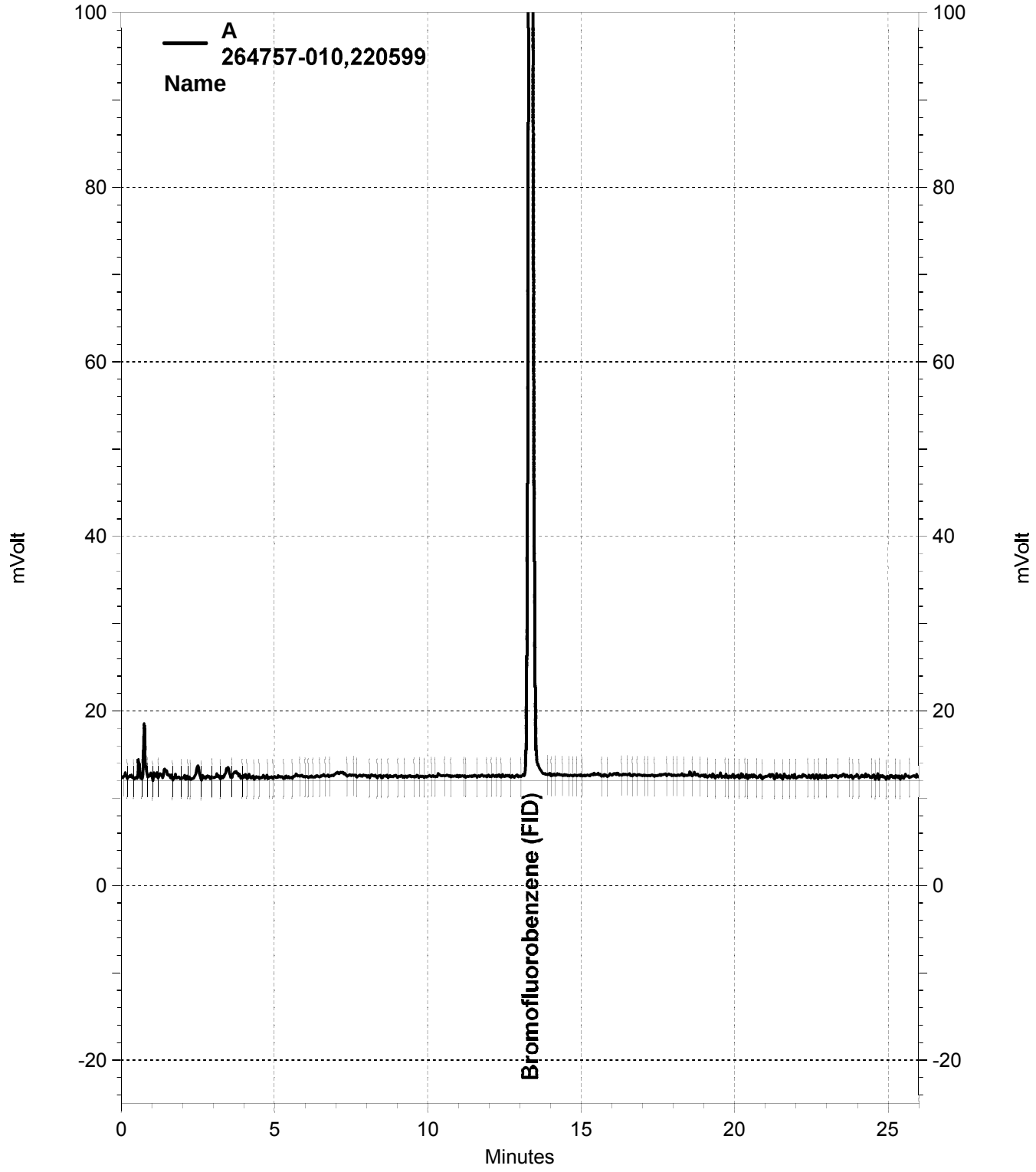

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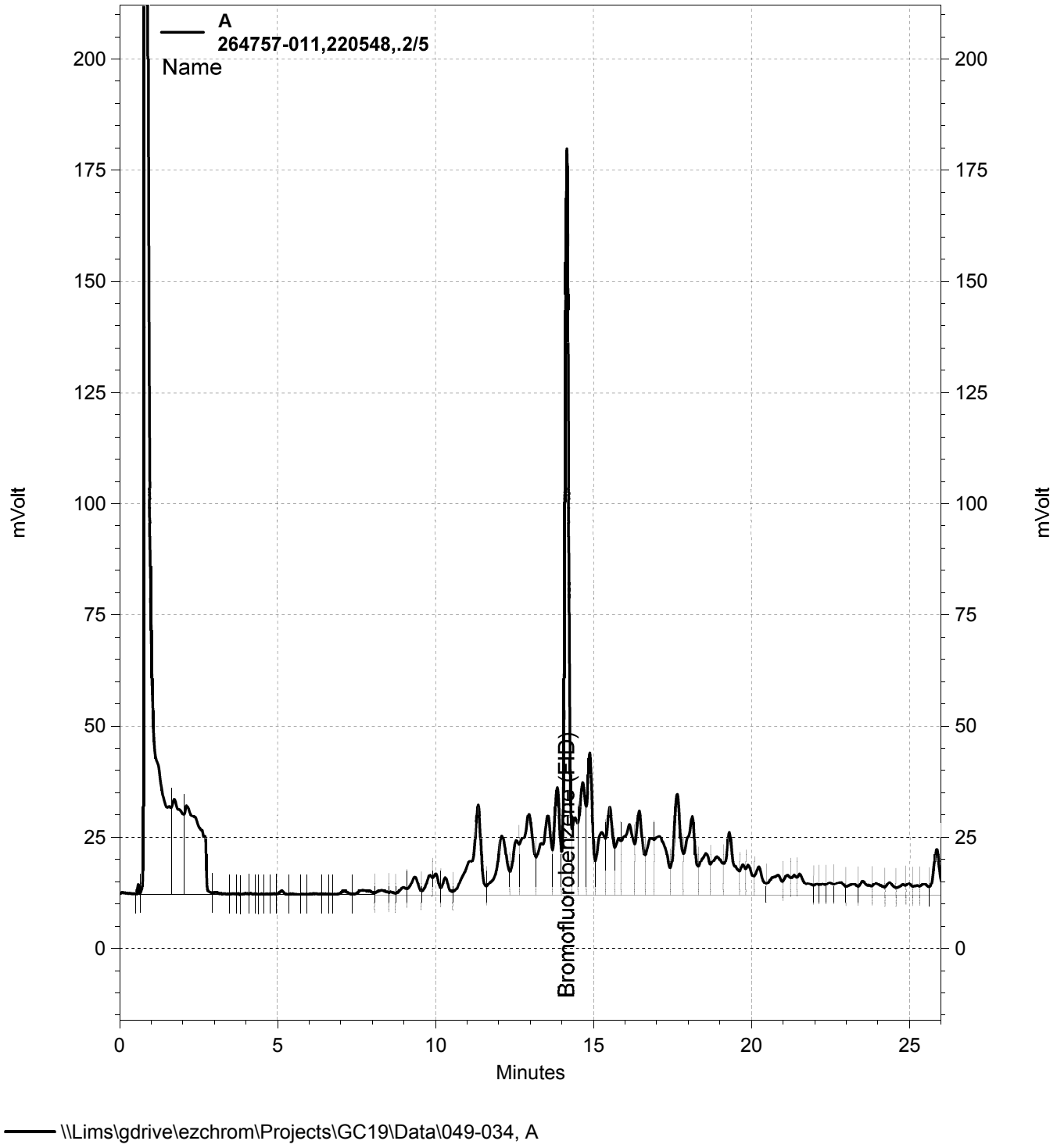

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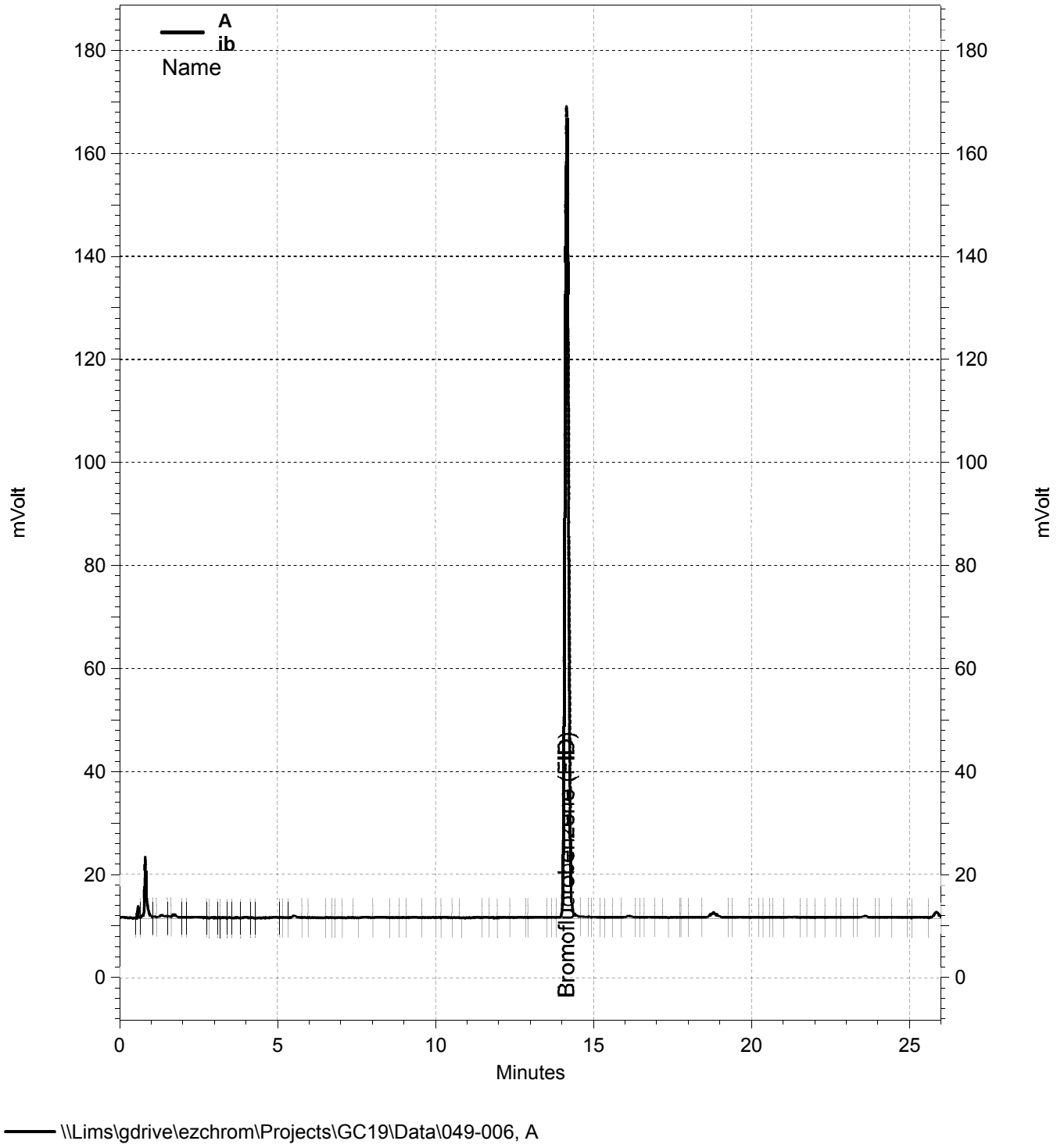

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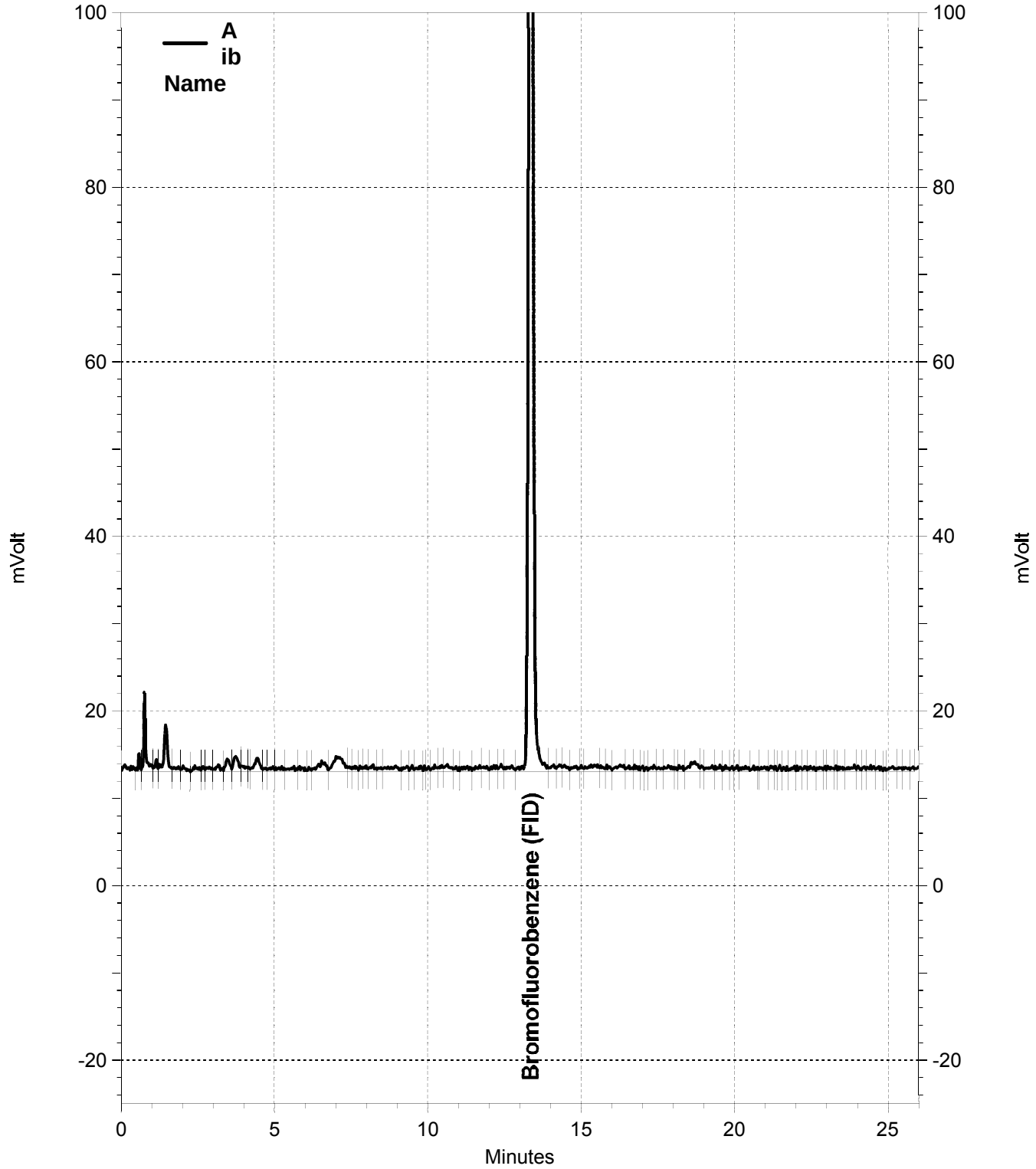

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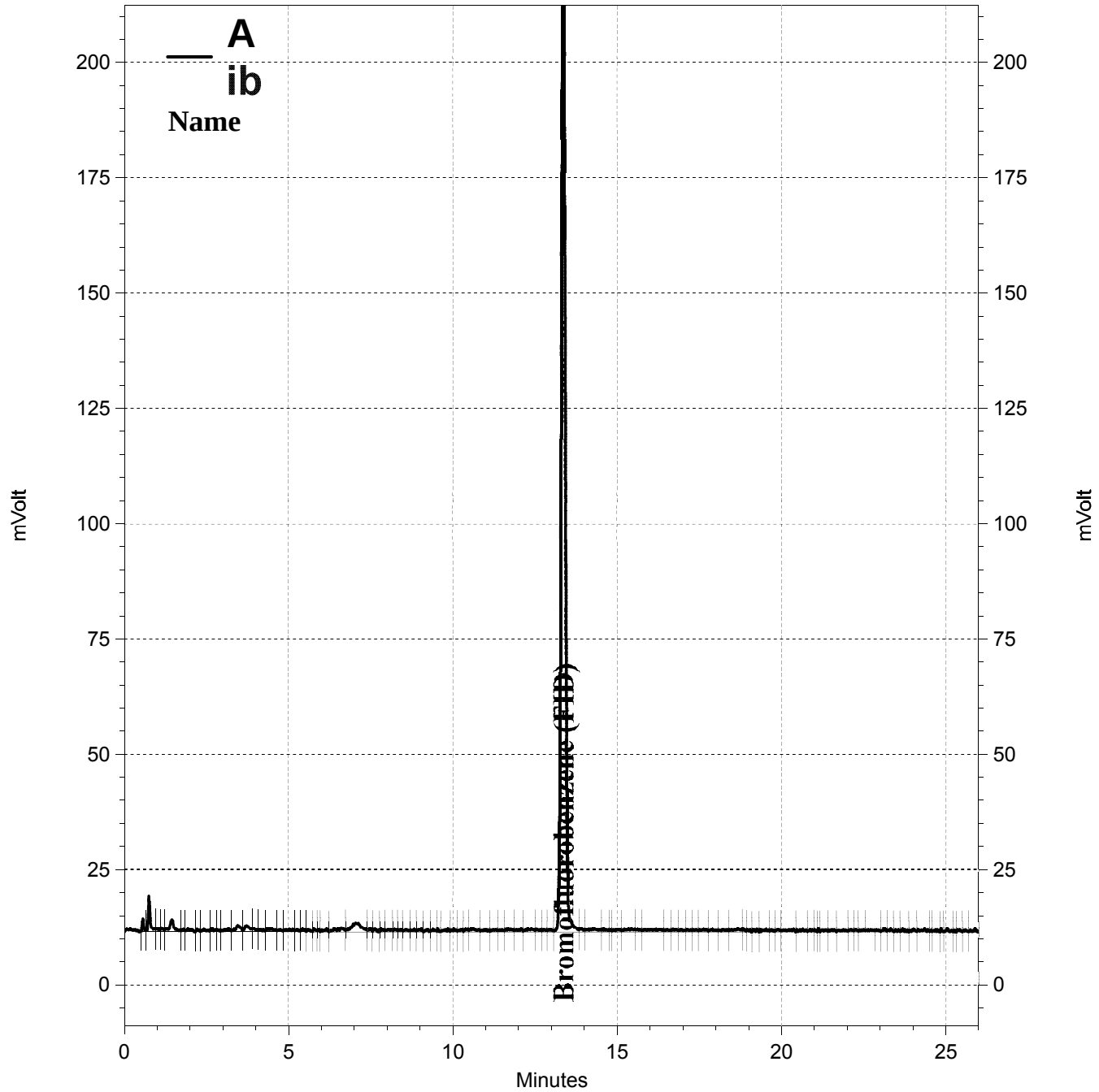

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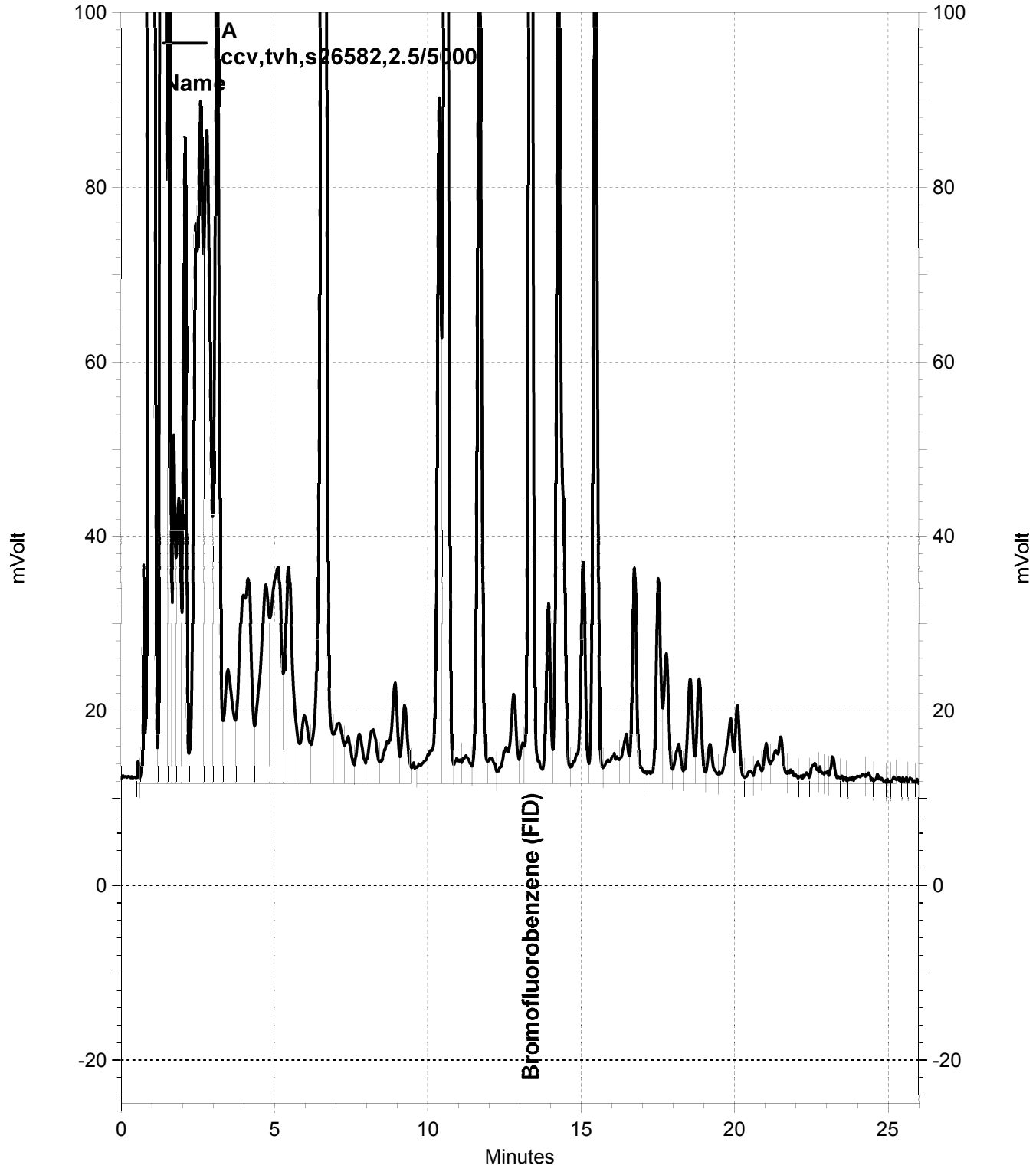

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Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	02/18/15
Units:	mg/Kg	Received:	02/18/15
Basis:	dry		

Field ID:	SB-17-5.0-6.0	Diln Fac:	20.00
Type:	SAMPLE	Batch#:	220732
Lab ID:	264757-001	Prepared:	02/23/15
Moisture:	14%	Analyzed:	02/25/15

Analyte	Result	RL	MDL
Diesel C10-C24	1,600 Y	23	7.1
Motor Oil C24-C36	7,300	120	35

Surrogate	%REC	Limits
o-Terphenyl	DO	59-140

Field ID:	SB-17-9.0-10.0	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	220732
Lab ID:	264757-002	Prepared:	02/23/15
Moisture:	15%	Analyzed:	02/24/15

Analyte	Result	RL	MDL
Diesel C10-C24	18 Y	1.2	0.36
Motor Oil C24-C36	88	5.8	1.8

Surrogate	%REC	Limits
o-Terphenyl	119	59-140

Field ID:	SB-16-3.0-3.5	Diln Fac:	10.00
Type:	SAMPLE	Batch#:	220732
Lab ID:	264757-004	Prepared:	02/23/15
Moisture:	14%	Analyzed:	02/24/15

Analyte	Result	RL	MDL
Diesel C10-C24	310 Y	12	3.6
Motor Oil C24-C36	1,000	58	18

Surrogate	%REC	Limits
o-Terphenyl	DO	59-140

J= Estimated value
Y= Sample exhibits chromatographic pattern which does not resemble standard
DO= Diluted Out
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	02/18/15
Units:	mg/Kg	Received:	02/18/15
Basis:	dry		

Field ID:	SB-16-9.5-10.0	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	220732
Lab ID:	264757-005	Prepared:	02/23/15
Moisture:	14%	Analyzed:	02/24/15

Analyte	Result	RL	MDL
Diesel C10-C24	1.8 Y	1.2	0.36
Motor Oil C24-C36	ND	5.8	1.8

Surrogate	%REC	Limits
o-Terphenyl	109	59-140

Field ID:	SB-15-5.0-5.5	Diln Fac:	10.00
Type:	SAMPLE	Batch#:	220732
Lab ID:	264757-006	Prepared:	02/23/15
Moisture:	17%	Analyzed:	02/24/15

Analyte	Result	RL	MDL
Diesel C10-C24	2,300 Y	12	3.7
Motor Oil C24-C36	3,200	61	18

Surrogate	%REC	Limits
o-Terphenyl	DO	59-140

Field ID:	SB-15-9.5-10.0	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	220732
Lab ID:	264757-007	Prepared:	02/23/15
Moisture:	16%	Analyzed:	02/24/15

Analyte	Result	RL	MDL
Diesel C10-C24	35 Y	1.2	0.37
Motor Oil C24-C36	32	6.0	1.8

Surrogate	%REC	Limits
o-Terphenyl	118	59-140

J= Estimated value
Y= Sample exhibits chromatographic pattern which does not resemble standard
DO= Diluted Out
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	02/18/15
Units:	mg/Kg	Received:	02/18/15
Basis:	dry		

Field ID:	SB-24-3.2-3.8	Diln Fac:	50.00
Type:	SAMPLE	Batch#:	220586
Lab ID:	264757-008	Prepared:	02/19/15
Moisture:	15%	Analyzed:	02/19/15

Analyte	Result	RL	MDL
Diesel C10-C24	4,500	59	18
Motor Oil C24-C36	9,000	290	89

Surrogate	%REC	Limits
o-Terphenyl	DO	59-140

Field ID:	SB-14-4.0-4.5	Diln Fac:	5.000
Type:	SAMPLE	Batch#:	220732
Lab ID:	264757-009	Prepared:	02/23/15
Moisture:	13%	Analyzed:	02/25/15

Analyte	Result	RL	MDL
Diesel C10-C24	360 Y	5.8	1.8
Motor Oil C24-C36	980	29	8.8

Surrogate	%REC	Limits
o-Terphenyl	113	59-140

Field ID:	SB-14-9.5-10.0	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	220732
Lab ID:	264757-010	Prepared:	02/23/15
Moisture:	12%	Analyzed:	02/24/15

Analyte	Result	RL	MDL
Diesel C10-C24	7.1 Y	1.1	0.35
Motor Oil C24-C36	18	5.6	1.7

Surrogate	%REC	Limits
o-Terphenyl	120	59-140

J= Estimated value
Y= Sample exhibits chromatographic pattern which does not resemble standard
DO= Diluted Out
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	02/18/15
Units:	mg/Kg	Received:	02/18/15
Basis:	dry		

Field ID:	SB-24-7.0-7.3	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	220586
Lab ID:	264757-011	Prepared:	02/19/15
Moisture:	15%	Analyzed:	02/19/15

Analyte	Result	RL	MDL
Diesel C10-C24	0.49 J	1.2	0.36
Motor Oil C24-C36	ND	5.8	1.8

Surrogate	%REC	Limits
o-Terphenyl	102	59-140

Type:	BLANK	Batch#:	220586
Lab ID:	QC777824	Prepared:	02/19/15
Diln Fac:	1.000	Analyzed:	02/19/15

Analyte	Result	RL	MDL
Diesel C10-C24	ND	1.0	0.31
Motor Oil C24-C36	ND	5.0	1.5

Surrogate	%REC	Limits
o-Terphenyl	105	59-140

Type:	BLANK	Batch#:	220732
Lab ID:	QC778414	Prepared:	02/23/15
Diln Fac:	1.000	Analyzed:	02/24/15

Analyte	Result	RL	MDL
Diesel C10-C24	ND	1.0	0.31
Motor Oil C24-C36	ND	5.0	1.5

Surrogate	%REC	Limits
o-Terphenyl	98	59-140

J= Estimated value
Y= Sample exhibits chromatographic pattern which does not resemble standard
DO= Diluted Out
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC777825	Batch#:	220586
Matrix:	Soil	Prepared:	02/19/15
Units:	mg/Kg	Analyzed:	02/19/15

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.19	39.68	79	58-137

Surrogate	%REC	Limits
o-Terphenyl	82	59-140

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	220586
MSS Lab ID:	264755-001	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	mg/Kg	Prepared:	02/19/15
Basis:	as received	Analyzed:	02/19/15
Diln Fac:	1.000		

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC777826

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	4.089	50.18	44.54	81	46-154

Surrogate	%REC	Limits
o-Terphenyl	91	59-140

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC777827

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	49.54	37.87	68	46-154	15	50

Surrogate	%REC	Limits
o-Terphenyl	81	59-140

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

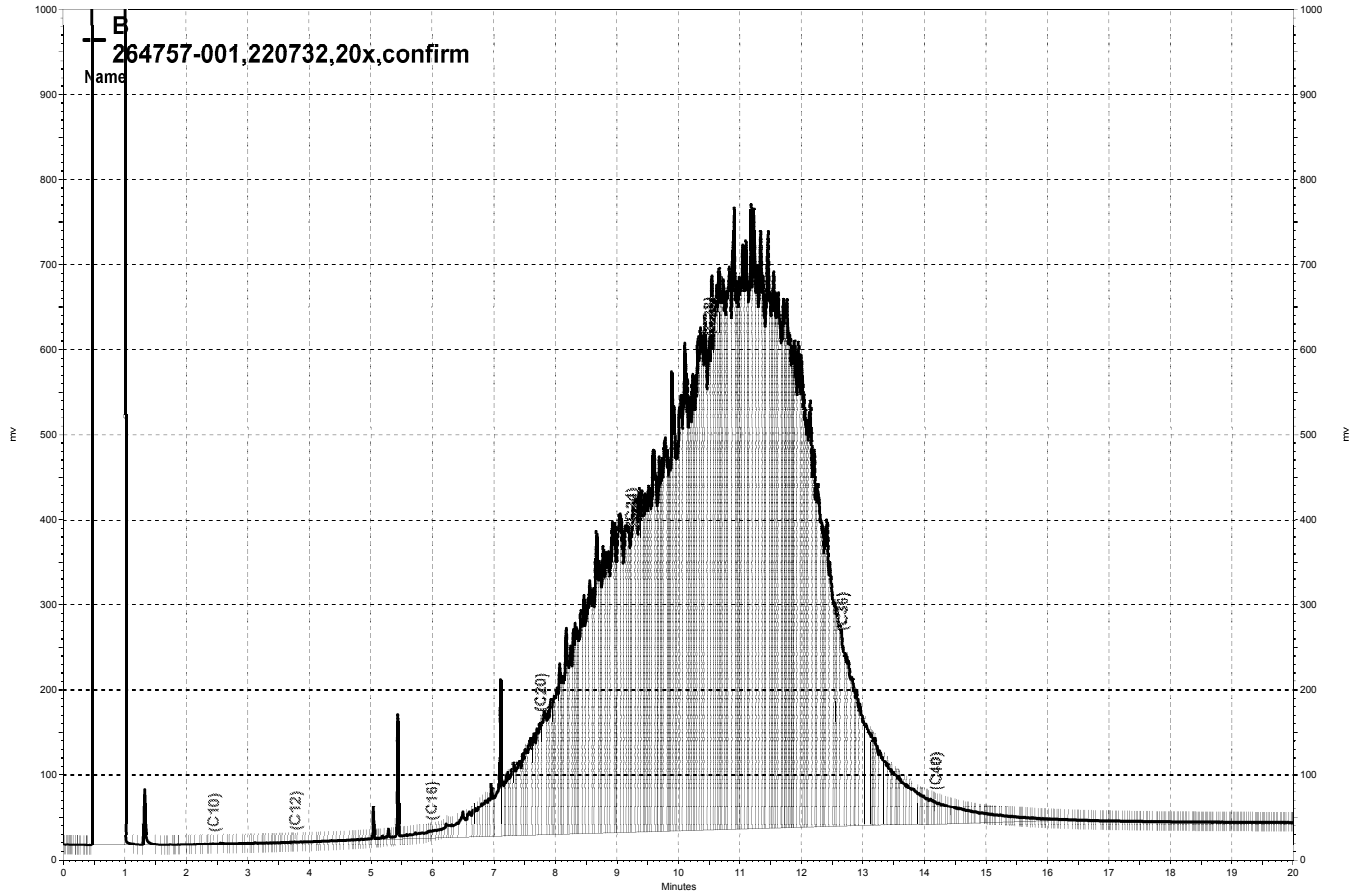
Batch QC Report

Total Extractable Hydrocarbons

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC778415	Batch#:	220732
Matrix:	Soil	Prepared:	02/23/15
Units:	mg/Kg	Analyzed:	02/24/15

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.07	54.06	108	58-137

Surrogate	%REC	Limits
o-Terphenyl	110	59-140



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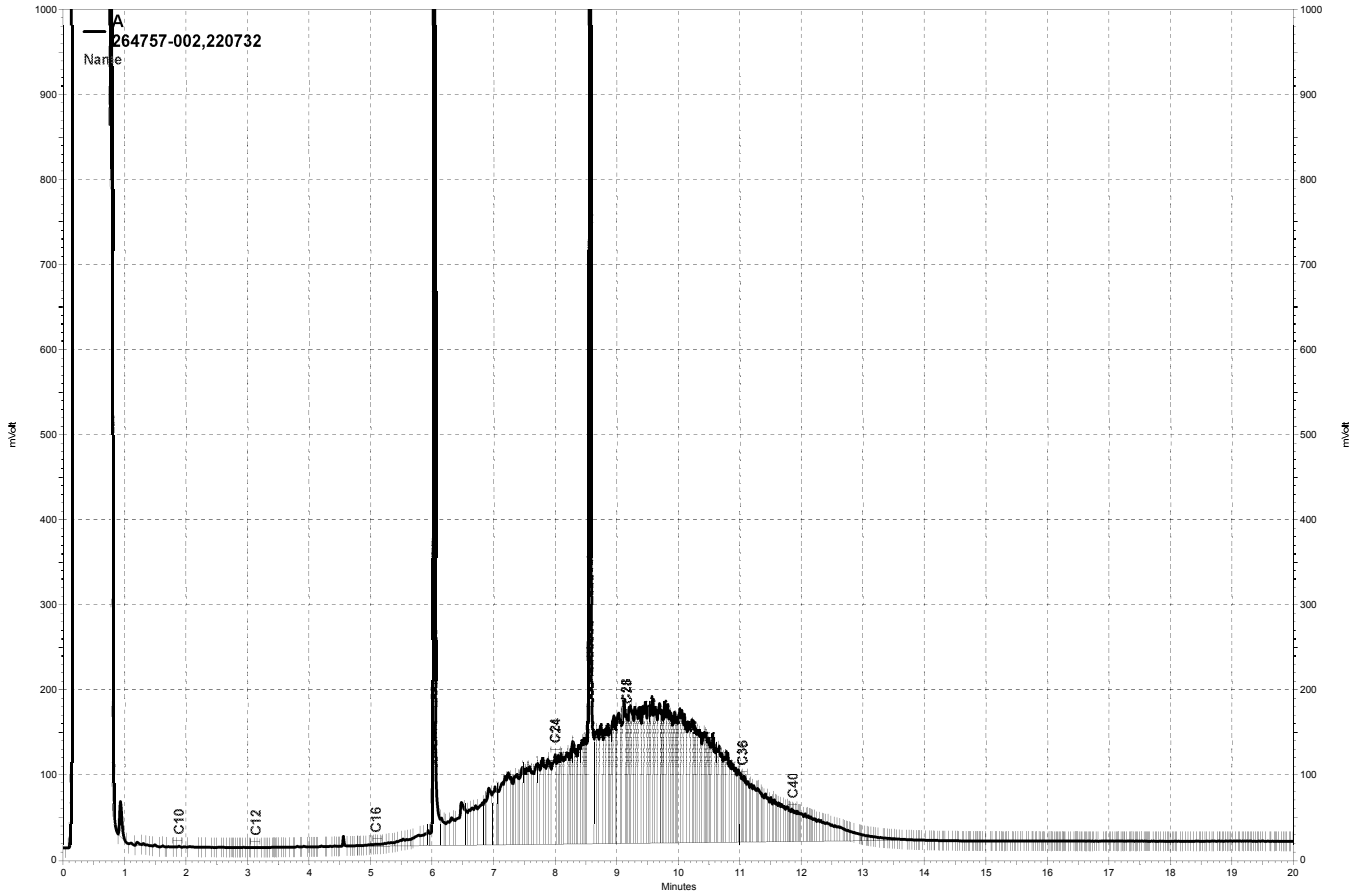

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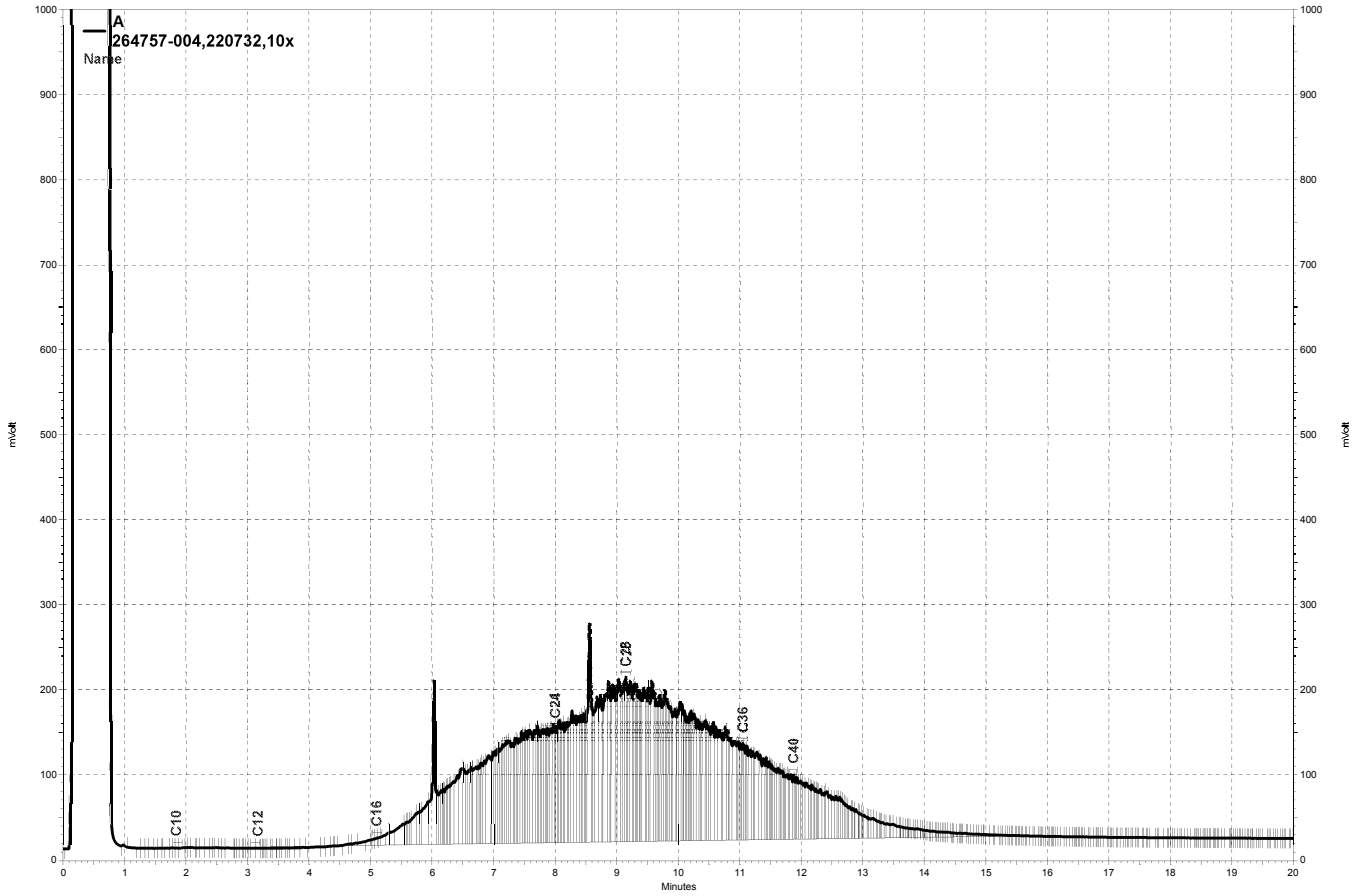

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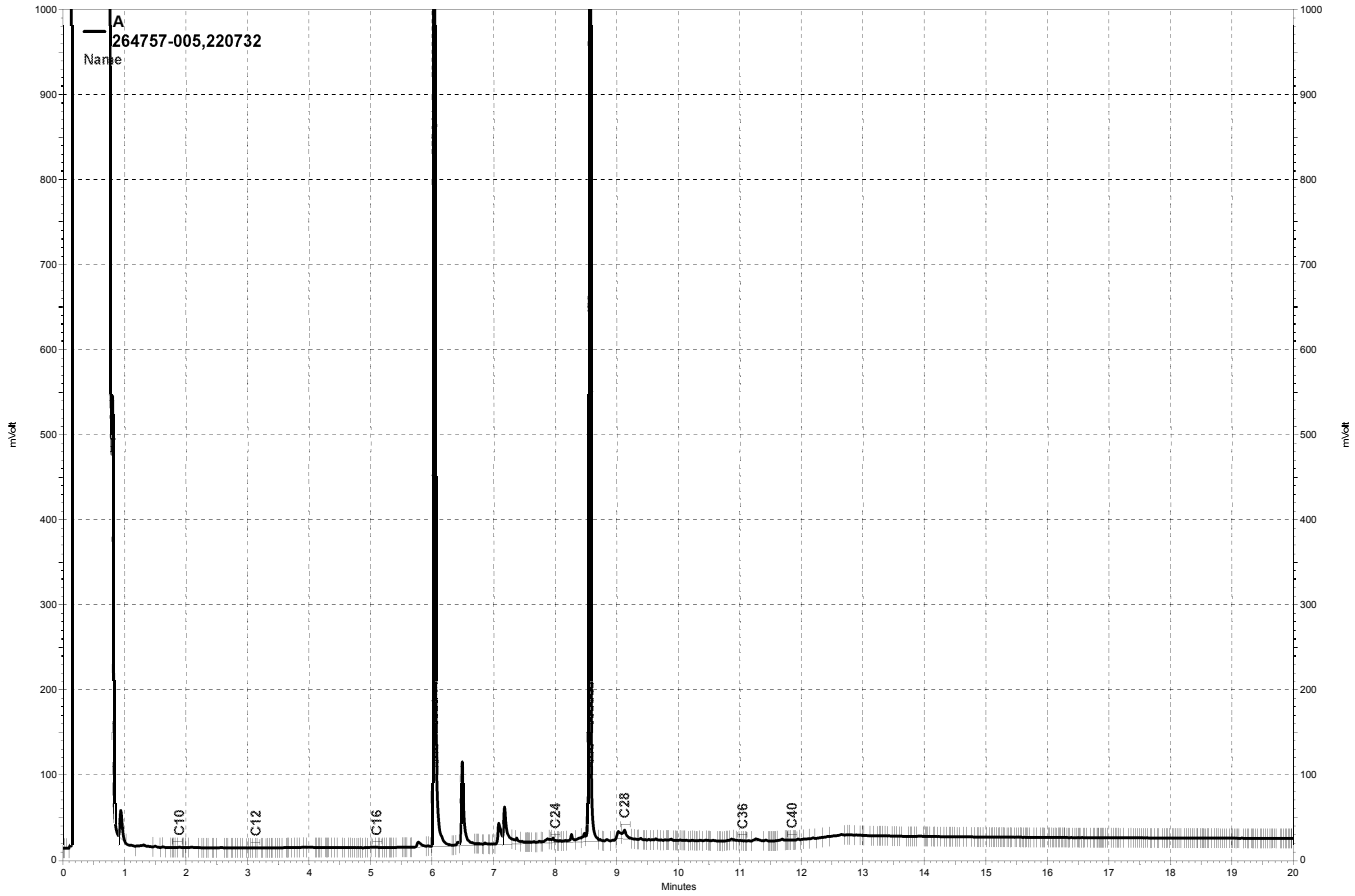

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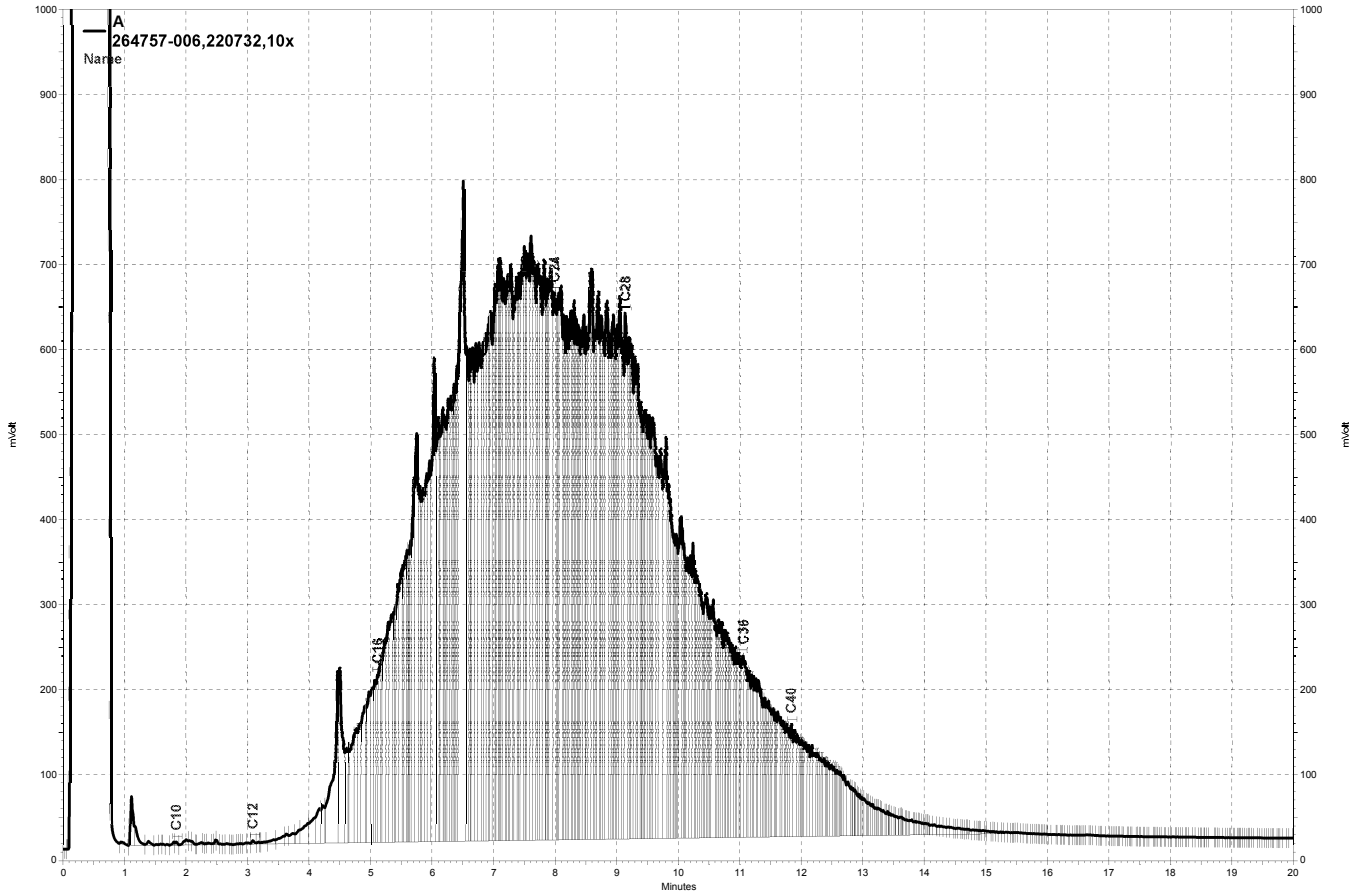

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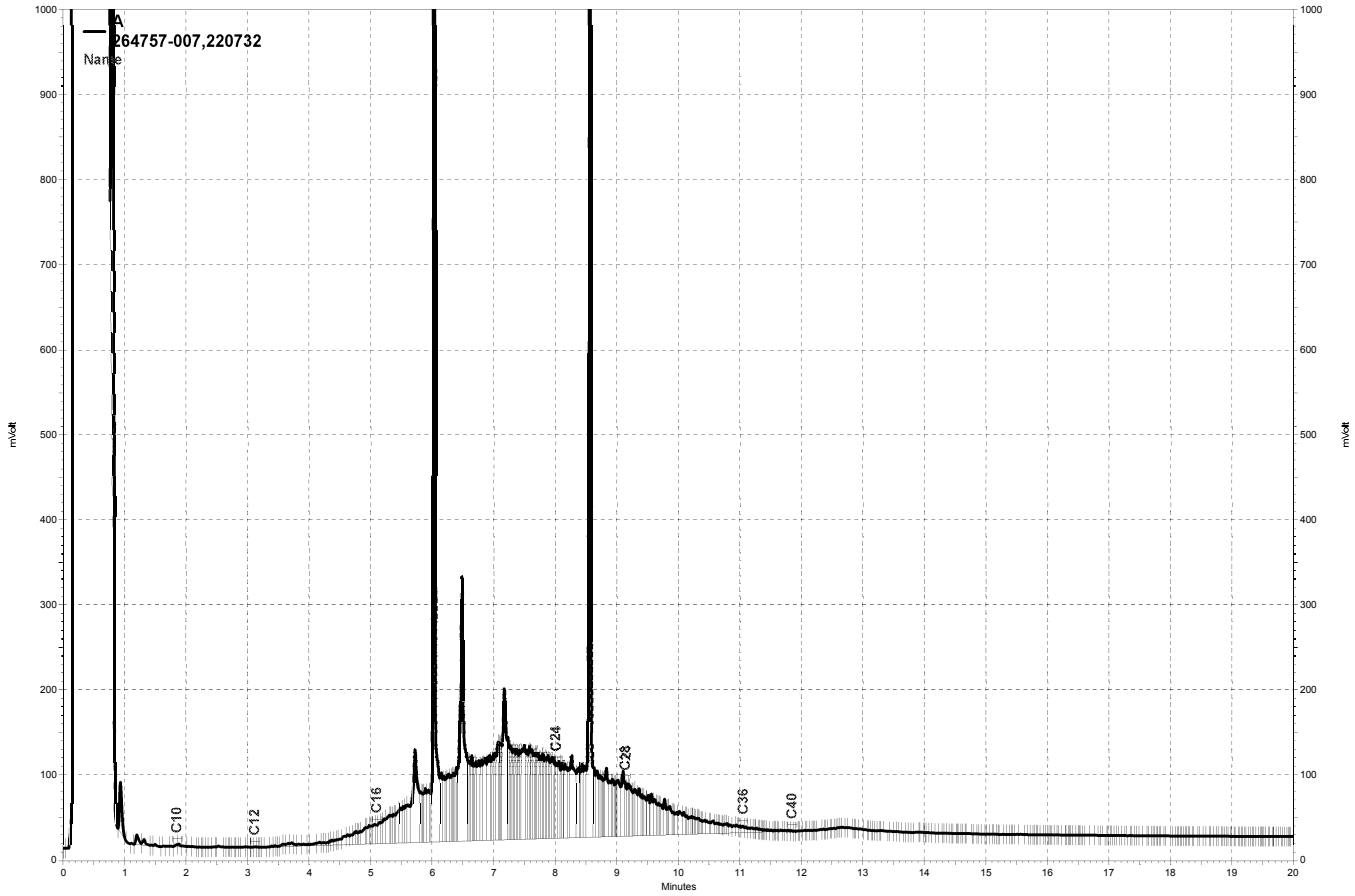

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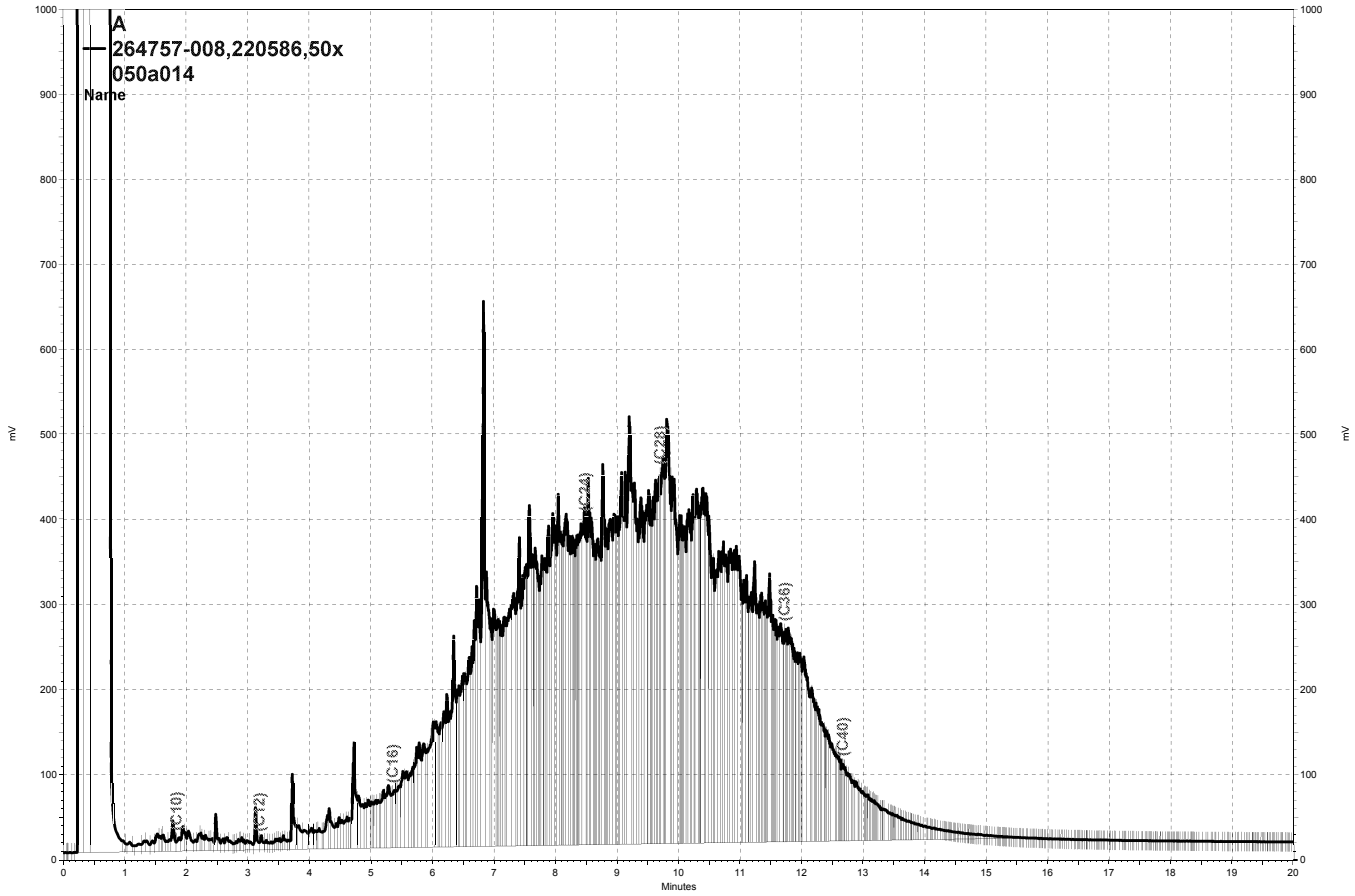

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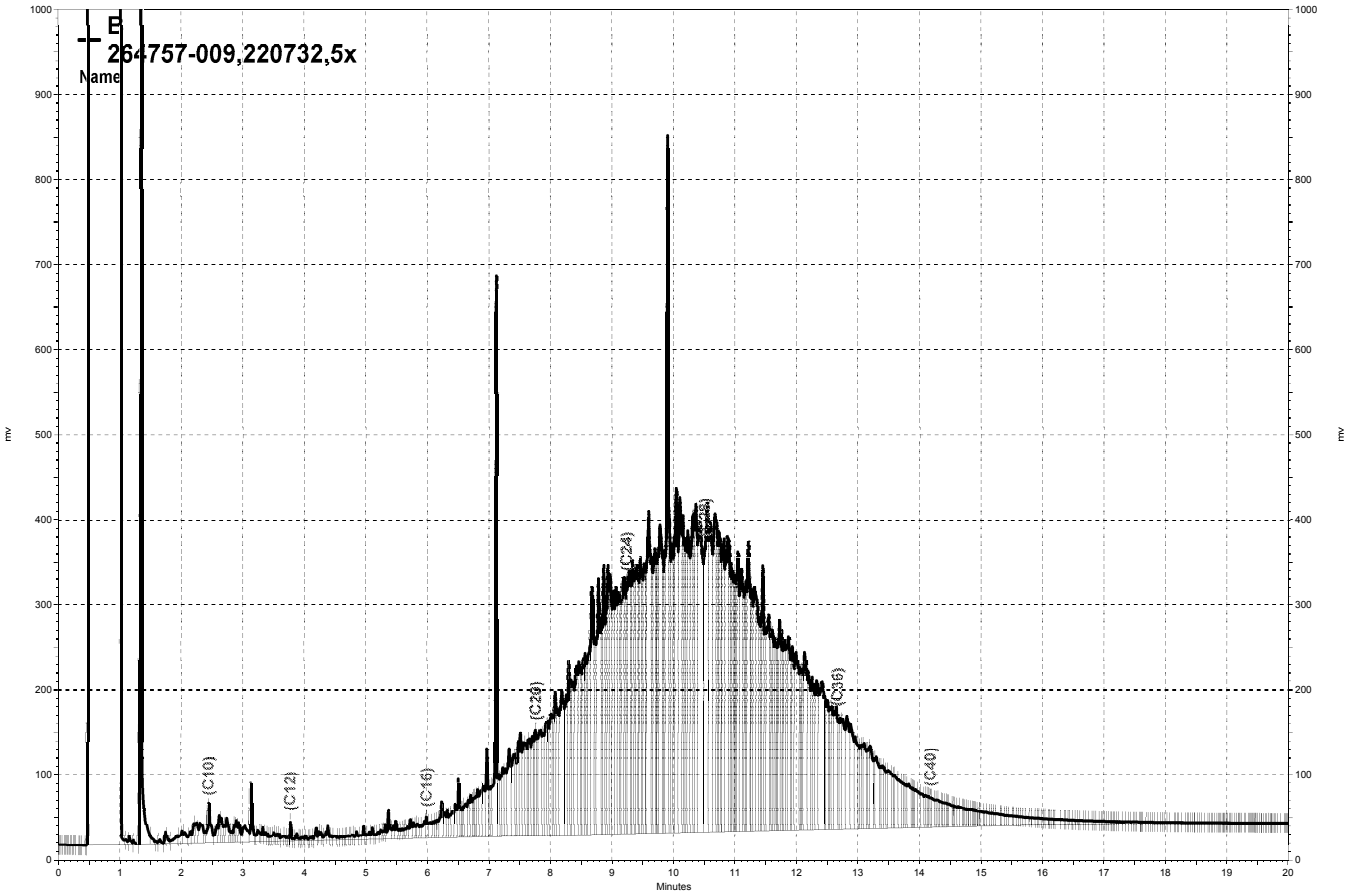

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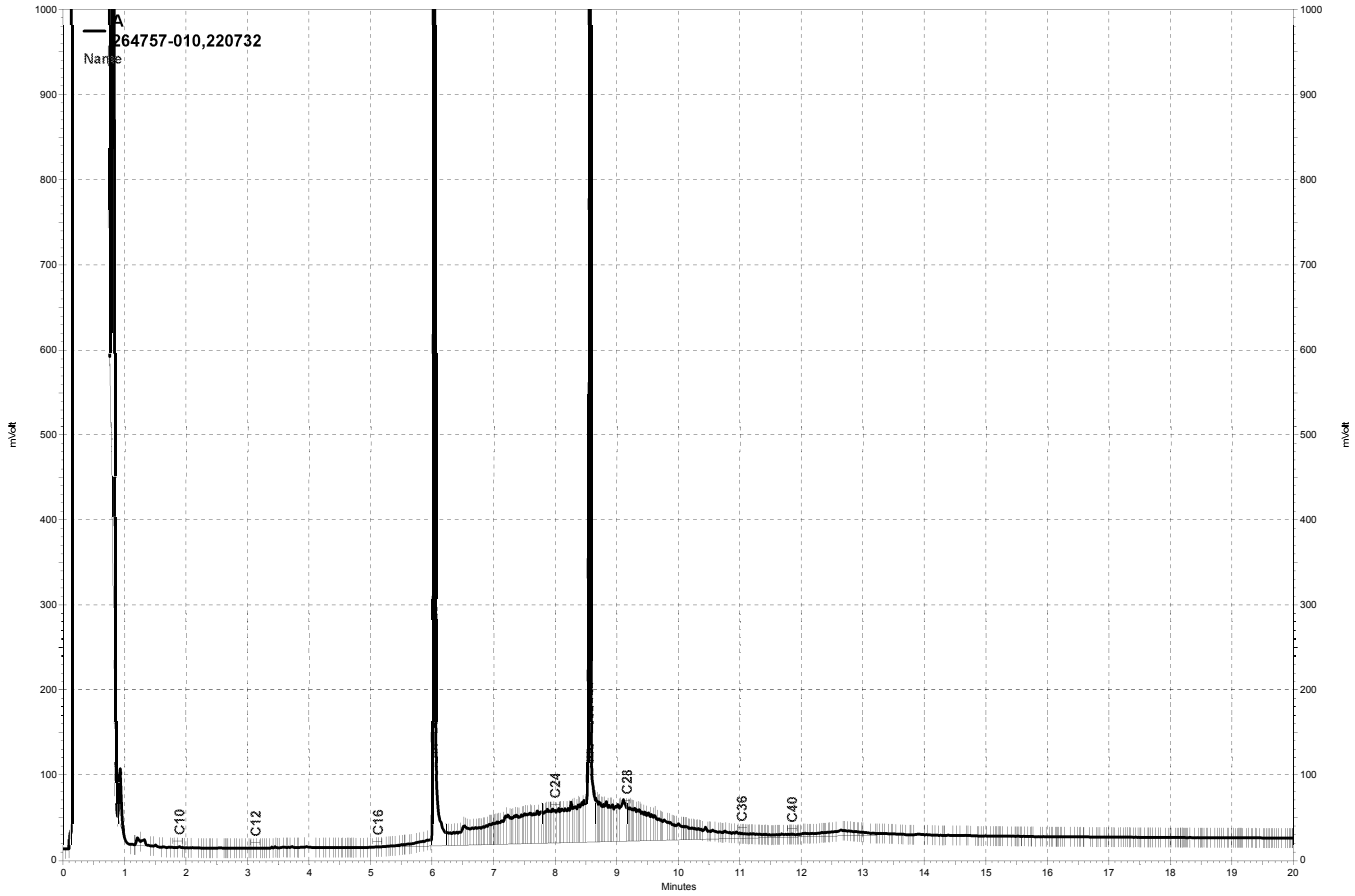

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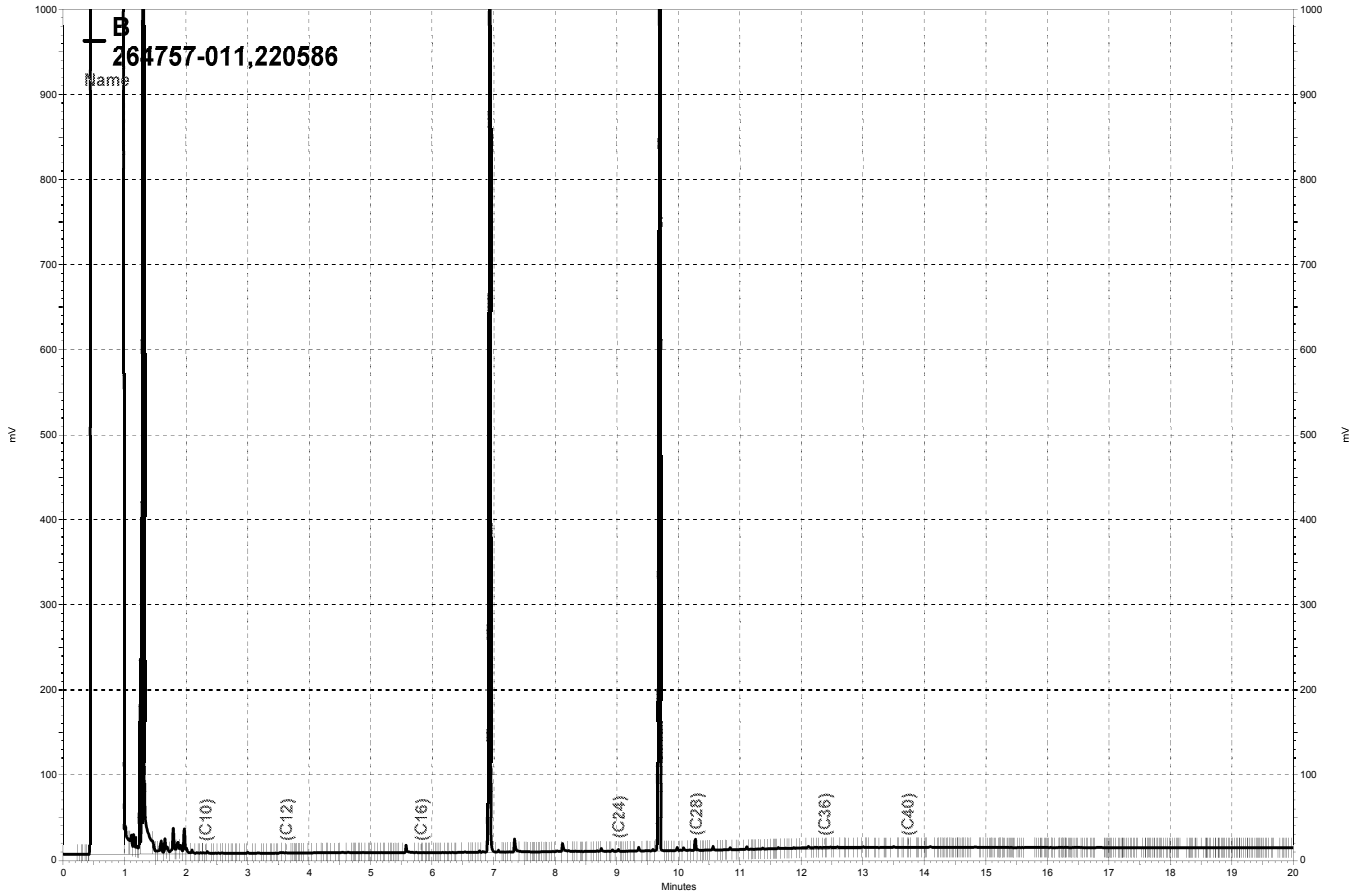

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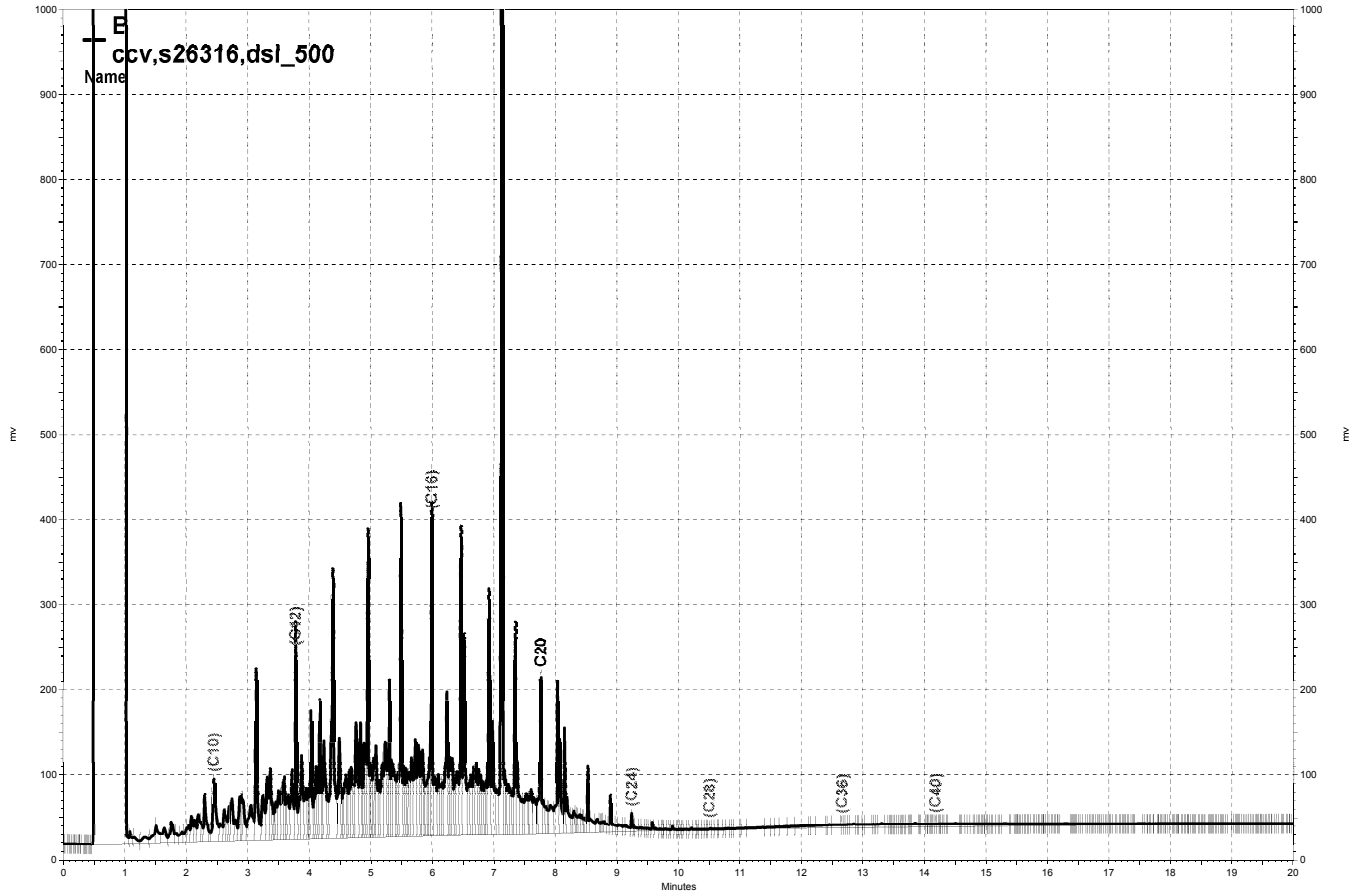

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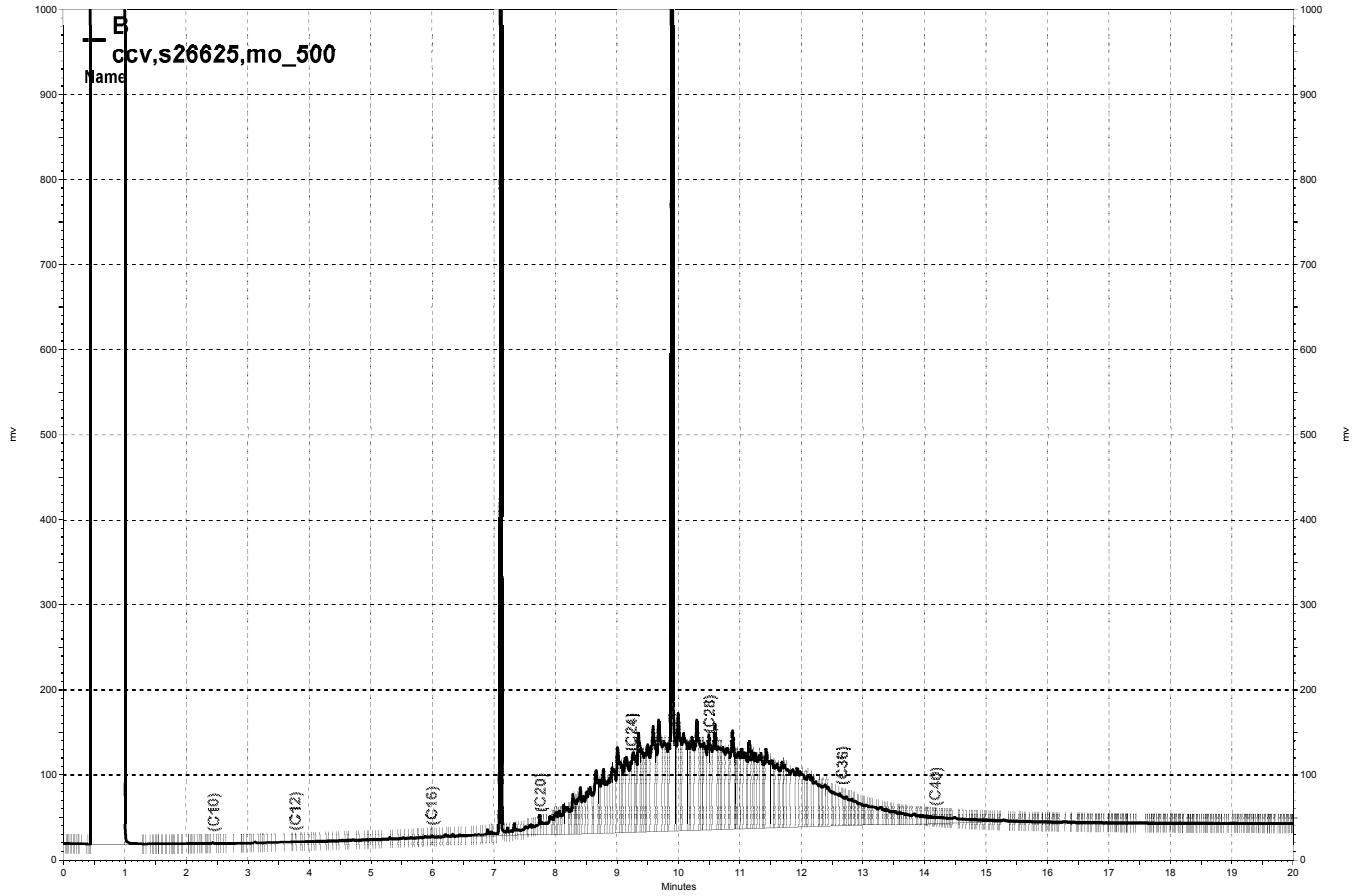

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Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	TB-021815	Batch#:	220571
Lab ID:	264757-003	Sampled:	02/18/15
Matrix:	Water	Received:	02/18/15
Units:	ug/L	Analyzed:	02/19/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.2
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	0.2 J	1.0	0.1
Chloroethane	ND	1.0	0.1
Trichlorofluoromethane	ND	1.0	0.2
Acetone	ND	10	0.6
Freon 113	ND	2.0	0.2
1,1-Dichloroethene	ND	0.5	0.2
Methylene Chloride	ND	10	0.1
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.2
Vinyl Acetate	ND	10	0.5
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.4
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.2
Chloroform	0.1 J	0.5	0.1
Bromochloromethane	ND	0.5	0.1
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.1
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	TB-021815	Batch#:	220571
Lab ID:	264757-003	Sampled:	02/18/15
Matrix:	Water	Received:	02/18/15
Units:	ug/L	Analyzed:	02/19/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.3
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.1
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-128
1,2-Dichloroethane-d4	101	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	94	80-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

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Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	220571
Units:	ug/L	Analyzed:	02/19/15
Diln Fac:	1.000		

Type: BS Lab ID: QC777766

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	11.26	90	66-135
Benzene	12.50	11.89	95	80-123
Trichloroethene	12.50	11.81	94	80-123
Toluene	12.50	12.16	97	80-121
Chlorobenzene	12.50	12.00	96	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-128
1,2-Dichloroethane-d4	102	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	94	80-120

Type: BSD Lab ID: QC777767

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	11.98	96	66-135	6	24
Benzene	12.50	12.42	99	80-123	4	20
Trichloroethene	12.50	12.38	99	80-123	5	20
Toluene	12.50	12.87	103	80-121	6	20
Chlorobenzene	12.50	12.61	101	80-123	5	20

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-128
1,2-Dichloroethane-d4	101	75-139
Toluene-d8	99	80-120
Bromofluorobenzene	93	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777768	Batch#:	220571
Matrix:	Water	Analyzed:	02/19/15
Units:	ug/L		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.2
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.1
Chloroethane	ND	1.0	0.1
Trichlorofluoromethane	ND	1.0	0.2
Acetone	ND	10	0.6
Freon 113	ND	2.0	0.2
1,1-Dichloroethene	ND	0.5	0.2
Methylene Chloride	ND	10	0.1
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.2
Vinyl Acetate	ND	10	0.5
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.4
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.2
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.1
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.1
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1
2-Chlorotoluene	ND	0.5	0.1

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777768	Batch#:	220571
Matrix:	Water	Analyzed:	02/19/15
Units:	ug/L		

Analyte	Result	RL	MDL
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.3
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.1
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-128
1,2-Dichloroethane-d4	100	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	95	80-120

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-17-5.0-6.0	Basis:	dry
Lab ID:	264757-001	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	ug/Kg		

Moisture: 14%

Analyte	Result	RL	MDL	Diln Fac	Batch#	Analyzed
Freon 12	ND	9.0	0.42	0.7740	220597	02/19/15
Chloromethane	ND	9.0	0.45	0.7740	220597	02/19/15
Vinyl Chloride	98	9.0	0.42	0.7740	220597	02/19/15
Bromomethane	ND	9.0	0.96	0.7740	220597	02/19/15
Chloroethane	ND	9.0	0.67	0.7740	220597	02/19/15
Trichlorofluoromethane	ND	4.5	0.23	0.7740	220597	02/19/15
Acetone	ND	900	150	38.82	220786	02/25/15
Freon 113	ND	4.5	0.41	0.7740	220597	02/19/15
1,1-Dichloroethene	ND	4.5	0.40	0.7740	220597	02/19/15
Methylene Chloride	0.49 J	18	0.40	0.7740	220597	02/19/15
Carbon Disulfide	0.48 J	4.5	0.43	0.7740	220597	02/19/15
MTBE	ND	4.5	0.14	0.7740	220597	02/19/15
trans-1,2-Dichloroethene	17	4.5	0.56	0.7740	220597	02/19/15
Vinyl Acetate	ND	45	0.67	0.7740	220597	02/19/15
1,1-Dichloroethane	ND	4.5	0.33	0.7740	220597	02/19/15
2-Butanone	ND	450	35	38.82	220786	02/25/15
cis-1,2-Dichloroethene	40	4.5	0.27	0.7740	220597	02/19/15
2,2-Dichloropropane	ND	4.5	0.32	0.7740	220597	02/19/15
Chloroform	ND	4.5	0.28	0.7740	220597	02/19/15
Bromochloromethane	ND	4.5	0.48	0.7740	220597	02/19/15
1,1,1-Trichloroethane	ND	4.5	0.36	0.7740	220597	02/19/15
1,1-Dichloropropene	ND	4.5	0.23	0.7740	220597	02/19/15
Carbon Tetrachloride	ND	4.5	0.44	0.7740	220597	02/19/15
1,2-Dichloroethane	ND	4.5	0.31	0.7740	220597	02/19/15
Benzene	ND	4.5	0.39	0.7740	220597	02/19/15
Trichloroethene	10	4.5	0.38	0.7740	220597	02/19/15
1,2-Dichloropropane	ND	4.5	0.21	0.7740	220597	02/19/15
Bromodichloromethane	ND	4.5	0.22	0.7740	220597	02/19/15
Dibromomethane	ND	4.5	0.59	0.7740	220597	02/19/15
4-Methyl-2-Pentanone	ND	9.0	0.43	0.7740	220597	02/19/15
cis-1,3-Dichloropropene	ND	4.5	0.26	0.7740	220597	02/19/15
Toluene	0.37 J	4.5	0.29	0.7740	220597	02/19/15
trans-1,3-Dichloropropene	ND	4.5	0.21	0.7740	220597	02/19/15
1,1,2-Trichloroethane	ND	4.5	0.33	0.7740	220597	02/19/15
2-Hexanone	ND	9.0	1.0	0.7740	220597	02/19/15
1,3-Dichloropropane	ND	4.5	0.20	0.7740	220597	02/19/15
Tetrachloroethene	46	4.5	0.22	0.7740	220597	02/19/15
Dibromochloromethane	ND	4.5	0.25	0.7740	220597	02/19/15
1,2-Dibromoethane	ND	4.5	0.19	0.7740	220597	02/19/15
Chlorobenzene	ND	4.5	0.36	0.7740	220597	02/19/15
1,1,1,2-Tetrachloroethane	ND	4.5	0.24	0.7740	220597	02/19/15
Ethylbenzene	ND	4.5	0.34	0.7740	220597	02/19/15
m,p-Xylenes	ND	4.5	0.82	0.7740	220597	02/19/15
o-Xylene	ND	4.5	0.24	0.7740	220597	02/19/15
Styrene	ND	4.5	0.26	0.7740	220597	02/19/15
Bromoform	ND	4.5	0.42	0.7740	220597	02/19/15
Isopropylbenzene	ND	4.5	0.27	0.7740	220597	02/19/15
1,1,2,2-Tetrachloroethane	ND	4.5	0.39	0.7740	220597	02/19/15
1,2,3-Trichloropropane	ND	4.5	0.23	0.7740	220597	02/19/15
Propylbenzene	ND	4.5	0.28	0.7740	220597	02/19/15

*= Value outside of QC limits; see narrative
J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-17-5.0-6.0	Basis:	dry
Lab ID:	264757-001	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	ug/Kg		

Analyte	Result	RL	MDL	Diln Fac	Batch#	Analyzed
Bromobenzene	ND	4.5	0.39	0.7740	220597	02/19/15
1,3,5-Trimethylbenzene	ND	4.5	0.29	0.7740	220597	02/19/15
2-Chlorotoluene	ND	4.5	0.35	0.7740	220597	02/19/15
4-Chlorotoluene	ND	4.5	0.42	0.7740	220597	02/19/15
tert-Butylbenzene	ND	4.5	0.35	0.7740	220597	02/19/15
1,2,4-Trimethylbenzene	ND	4.5	0.25	0.7740	220597	02/19/15
sec-Butylbenzene	ND	4.5	0.23	0.7740	220597	02/19/15
para-Isopropyl Toluene	ND	4.5	0.32	0.7740	220597	02/19/15
1,3-Dichlorobenzene	ND	4.5	0.38	0.7740	220597	02/19/15
1,4-Dichlorobenzene	ND	4.5	0.36	0.7740	220597	02/19/15
n-Butylbenzene	ND	4.5	0.33	0.7740	220597	02/19/15
1,2-Dichlorobenzene	ND	4.5	0.25	0.7740	220597	02/19/15
1,2-Dibromo-3-Chloropropane	ND	4.5	0.92	0.7740	220597	02/19/15
1,2,4-Trichlorobenzene	ND	4.5	0.43	0.7740	220597	02/19/15
Hexachlorobutadiene	ND	4.5	0.59	0.7740	220597	02/19/15
Naphthalene	ND	4.5	0.95	0.7740	220597	02/19/15
1,2,3-Trichlorobenzene	ND	4.5	0.30	0.7740	220597	02/19/15

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	119	78-134	0.7740	220597	02/19/15
1,2-Dichloroethane-d4	120	80-138	0.7740	220597	02/19/15
Toluene-d8	105	80-120	0.7740	220597	02/19/15
Bromofluorobenzene	186 *	78-123	0.7740	220597	02/19/15

*= Value outside of QC limits; see narrative
J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-17-9.0-10.0	Diln Fac:	0.7496
Lab ID:	264757-002	Batch#:	220597
Matrix:	Soil	Sampled:	02/18/15
Units:	ug/Kg	Received:	02/18/15
Basis:	dry	Analyzed:	02/19/15

Moisture: 15%

Analyte	Result	RL	MDL
Freon 12	ND	8.8	0.41
Chloromethane	ND	8.8	0.44
Vinyl Chloride	19	8.8	0.41
Bromomethane	ND	8.8	0.94
Chloroethane	ND	8.8	0.66
Trichlorofluoromethane	ND	4.4	0.23
Acetone	ND	18	2.9
Freon 113	ND	4.4	0.40
1,1-Dichloroethene	0.67 J	4.4	0.39
Methylene Chloride	0.98 J	18	0.40
Carbon Disulfide	ND	4.4	0.42
MTBE	ND	4.4	0.14
trans-1,2-Dichloroethene	5.4	4.4	0.55
Vinyl Acetate	ND	44	0.65
1,1-Dichloroethane	ND	4.4	0.33
2-Butanone	ND	8.8	1.3
cis-1,2-Dichloroethene	39	4.4	0.26
2,2-Dichloropropane	ND	4.4	0.32
Chloroform	ND	4.4	0.27
Bromochloromethane	ND	4.4	0.47
1,1,1-Trichloroethane	ND	4.4	0.35
1,1-Dichloropropene	ND	4.4	0.22
Carbon Tetrachloride	ND	4.4	0.43
1,2-Dichloroethane	ND	4.4	0.30
Benzene	ND	4.4	0.38
Trichloroethene	73	4.4	0.37
1,2-Dichloropropane	ND	4.4	0.20
Bromodichloromethane	ND	4.4	0.21
Dibromomethane	ND	4.4	0.57
4-Methyl-2-Pentanone	ND	8.8	0.43
cis-1,3-Dichloropropene	ND	4.4	0.25
Toluene	ND	4.4	0.28
trans-1,3-Dichloropropene	ND	4.4	0.21
1,1,2-Trichloroethane	ND	4.4	0.33
2-Hexanone	ND	8.8	0.98
1,3-Dichloropropane	ND	4.4	0.19
Tetrachloroethene	1.0 J	4.4	0.21
Dibromochloromethane	ND	4.4	0.25
1,2-Dibromoethane	ND	4.4	0.19
Chlorobenzene	ND	4.4	0.35
1,1,1,2-Tetrachloroethane	ND	4.4	0.24
Ethylbenzene	ND	4.4	0.33
m,p-Xylenes	ND	4.4	0.80
o-Xylene	ND	4.4	0.24
Styrene	ND	4.4	0.26
Bromoform	ND	4.4	0.41
Isopropylbenzene	ND	4.4	0.26
1,1,2,2-Tetrachloroethane	ND	4.4	0.38
1,2,3-Trichloropropane	ND	4.4	0.22
Propylbenzene	ND	4.4	0.27

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-17-9.0-10.0	Diln Fac:	0.7496
Lab ID:	264757-002	Batch#:	220597
Matrix:	Soil	Sampled:	02/18/15
Units:	ug/Kg	Received:	02/18/15
Basis:	dry	Analyzed:	02/19/15

Analyte	Result	RL	MDL
Bromobenzene	ND	4.4	0.38
1,3,5-Trimethylbenzene	ND	4.4	0.28
2-Chlorotoluene	ND	4.4	0.34
4-Chlorotoluene	ND	4.4	0.41
tert-Butylbenzene	ND	4.4	0.34
1,2,4-Trimethylbenzene	ND	4.4	0.25
sec-Butylbenzene	ND	4.4	0.22
para-Isopropyl Toluene	ND	4.4	0.31
1,3-Dichlorobenzene	ND	4.4	0.38
1,4-Dichlorobenzene	ND	4.4	0.35
n-Butylbenzene	ND	4.4	0.32
1,2-Dichlorobenzene	ND	4.4	0.25
1,2-Dibromo-3-Chloropropane	ND	4.4	0.90
1,2,4-Trichlorobenzene	ND	4.4	0.42
Hexachlorobutadiene	ND	4.4	0.58
Naphthalene	ND	4.4	0.93
1,2,3-Trichlorobenzene	ND	4.4	0.29

Surrogate	%REC	Limits
Dibromofluoromethane	106	78-134
1,2-Dichloroethane-d4	116	80-138
Toluene-d8	97	80-120
Bromofluorobenzene	98	78-123

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-16-3.0-3.5	Basis:	dry
Lab ID:	264757-004	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	ug/Kg		

Moisture: 14%

Analyte	Result	RL	MDL	Diln Fac	Batch#	Analyzed
Freon 12	ND	9.0	0.42	0.7764	220597	02/19/15
Chloromethane	ND	9.0	0.45	0.7764	220597	02/19/15
Vinyl Chloride	ND	9.0	0.42	0.7764	220597	02/19/15
Bromomethane	ND	9.0	0.96	0.7764	220597	02/19/15
Chloroethane	ND	9.0	0.68	0.7764	220597	02/19/15
Trichlorofluoromethane	ND	4.5	0.23	0.7764	220597	02/19/15
Acetone	92	16	1.5	0.7072	220845	02/26/15
Freon 113	ND	4.5	0.41	0.7764	220597	02/19/15
1,1-Dichloroethene	ND	4.5	0.40	0.7764	220597	02/19/15
Methylene Chloride	0.61 J	18	0.41	0.7764	220597	02/19/15
Carbon Disulfide	0.61 J	4.5	0.43	0.7764	220597	02/19/15
MTBE	ND	4.5	0.14	0.7764	220597	02/19/15
trans-1,2-Dichloroethene	ND	4.5	0.56	0.7764	220597	02/19/15
Vinyl Acetate	ND	45	0.67	0.7764	220597	02/19/15
1,1-Dichloroethane	ND	4.5	0.33	0.7764	220597	02/19/15
2-Butanone	17	8.2	1.1	0.7072	220845	02/26/15
cis-1,2-Dichloroethene	0.83 J	4.5	0.27	0.7764	220597	02/19/15
2,2-Dichloropropane	ND	4.5	0.33	0.7764	220597	02/19/15
Chloroform	0.84 J	4.5	0.28	0.7764	220597	02/19/15
Bromochloromethane	ND	4.5	0.48	0.7764	220597	02/19/15
1,1,1-Trichloroethane	ND	4.5	0.36	0.7764	220597	02/19/15
1,1-Dichloropropene	ND	4.5	0.23	0.7764	220597	02/19/15
Carbon Tetrachloride	ND	4.5	0.44	0.7764	220597	02/19/15
1,2-Dichloroethane	ND	4.5	0.31	0.7764	220597	02/19/15
Benzene	ND	4.5	0.39	0.7764	220597	02/19/15
Trichloroethene	1.1 J	4.5	0.38	0.7764	220597	02/19/15
1,2-Dichloropropane	ND	4.5	0.21	0.7764	220597	02/19/15
Bromodichloromethane	ND	4.5	0.22	0.7764	220597	02/19/15
Dibromomethane	ND	4.5	0.59	0.7764	220597	02/19/15
4-Methyl-2-Pentanone	2.0 J	9.0	0.44	0.7764	220597	02/19/15
cis-1,3-Dichloropropene	ND	4.5	0.26	0.7764	220597	02/19/15
Toluene	ND	4.5	0.29	0.7764	220597	02/19/15
trans-1,3-Dichloropropene	ND	4.5	0.22	0.7764	220597	02/19/15
1,1,2-Trichloroethane	ND	4.5	0.34	0.7764	220597	02/19/15
2-Hexanone	2.2 J	9.0	1.0	0.7764	220597	02/19/15
1,3-Dichloropropane	ND	4.5	0.20	0.7764	220597	02/19/15
Tetrachloroethene	ND	4.5	0.22	0.7764	220597	02/19/15
Dibromochloromethane	ND	4.5	0.25	0.7764	220597	02/19/15
1,2-Dibromoethane	ND	4.5	0.19	0.7764	220597	02/19/15
Chlorobenzene	ND	4.5	0.36	0.7764	220597	02/19/15
1,1,1,2-Tetrachloroethane	ND	4.5	0.24	0.7764	220597	02/19/15
Ethylbenzene	ND	4.5	0.34	0.7764	220597	02/19/15
m,p-Xylenes	ND	4.5	0.82	0.7764	220597	02/19/15
o-Xylene	ND	4.5	0.24	0.7764	220597	02/19/15
Styrene	0.26 J	4.5	0.26	0.7764	220597	02/19/15
Bromoform	ND	4.5	0.42	0.7764	220597	02/19/15
Isopropylbenzene	ND	4.5	0.27	0.7764	220597	02/19/15
1,1,2,2-Tetrachloroethane	ND	4.5	0.39	0.7764	220597	02/19/15
1,2,3-Trichloropropane	ND	4.5	0.23	0.7764	220597	02/19/15
Propylbenzene	ND	4.5	0.28	0.7764	220597	02/19/15
Bromobenzene	ND	4.5	0.39	0.7764	220597	02/19/15

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-16-3.0-3.5	Basis:	dry
Lab ID:	264757-004	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	ug/Kg		

Analyte	Result	RL	MDL	Diln Fac	Batch#	Analyzed
1,3,5-Trimethylbenzene	ND	4.5	0.29	0.7764	220597	02/19/15
2-Chlorotoluene	ND	4.5	0.35	0.7764	220597	02/19/15
4-Chlorotoluene	ND	4.5	0.42	0.7764	220597	02/19/15
tert-Butylbenzene	ND	4.5	0.35	0.7764	220597	02/19/15
1,2,4-Trimethylbenzene	0.30 J	4.5	0.25	0.7764	220597	02/19/15
sec-Butylbenzene	ND	4.5	0.23	0.7764	220597	02/19/15
para-Isopropyl Toluene	ND	4.5	0.32	0.7764	220597	02/19/15
1,3-Dichlorobenzene	ND	4.5	0.38	0.7764	220597	02/19/15
1,4-Dichlorobenzene	ND	4.5	0.36	0.7764	220597	02/19/15
n-Butylbenzene	ND	4.5	0.33	0.7764	220597	02/19/15
1,2-Dichlorobenzene	ND	4.5	0.25	0.7764	220597	02/19/15
1,2-Dibromo-3-Chloropropane	ND	4.5	0.92	0.7764	220597	02/19/15
1,2,4-Trichlorobenzene	ND	4.5	0.43	0.7764	220597	02/19/15
Hexachlorobutadiene	ND	4.5	0.60	0.7764	220597	02/19/15
Naphthalene	ND	4.5	0.96	0.7764	220597	02/19/15
1,2,3-Trichlorobenzene	ND	4.5	0.30	0.7764	220597	02/19/15

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	108	78-134	0.7764	220597	02/19/15
1,2-Dichloroethane-d4	112	80-138	0.7764	220597	02/19/15
Toluene-d8	100	80-120	0.7764	220597	02/19/15
Bromofluorobenzene	102	78-123	0.7764	220597	02/19/15

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-16-9.5-10.0	Diln Fac:	0.7496
Lab ID:	264757-005	Batch#:	220597
Matrix:	Soil	Sampled:	02/18/15
Units:	ug/Kg	Received:	02/18/15
Basis:	dry	Analyzed:	02/19/15

Moisture: 14%

Analyte	Result	RL	MDL
Freon 12	ND	8.7	0.40
Chloromethane	ND	8.7	0.44
Vinyl Chloride	ND	8.7	0.41
Bromomethane	ND	8.7	0.93
Chloroethane	ND	8.7	0.65
Trichlorofluoromethane	ND	4.4	0.22
Acetone	ND	17	2.9
Freon 113	ND	4.4	0.39
1,1-Dichloroethene	1.1 J	4.4	0.38
Methylene Chloride	1.2 J	17	0.39
Carbon Disulfide	ND	4.4	0.41
MTBE	ND	4.4	0.13
trans-1,2-Dichloroethene	1.9 J	4.4	0.54
Vinyl Acetate	ND	44	0.65
1,1-Dichloroethane	ND	4.4	0.32
2-Butanone	ND	8.7	1.2
cis-1,2-Dichloroethene	13	4.4	0.26
2,2-Dichloropropane	ND	4.4	0.31
Chloroform	ND	4.4	0.27
Bromochloromethane	ND	4.4	0.46
1,1,1-Trichloroethane	ND	4.4	0.35
1,1-Dichloropropene	ND	4.4	0.22
Carbon Tetrachloride	ND	4.4	0.42
1,2-Dichloroethane	ND	4.4	0.30
Benzene	ND	4.4	0.38
Trichloroethene	140	4.4	0.37
1,2-Dichloropropane	ND	4.4	0.20
Bromodichloromethane	ND	4.4	0.21
Dibromomethane	ND	4.4	0.57
4-Methyl-2-Pentanone	ND	8.7	0.42
cis-1,3-Dichloropropene	ND	4.4	0.25
Toluene	ND	4.4	0.28
trans-1,3-Dichloropropene	ND	4.4	0.21
1,1,2-Trichloroethane	ND	4.4	0.32
2-Hexanone	ND	8.7	0.97
1,3-Dichloropropane	ND	4.4	0.19
Tetrachloroethene	ND	4.4	0.21
Dibromochloromethane	ND	4.4	0.24
1,2-Dibromoethane	ND	4.4	0.19
Chlorobenzene	ND	4.4	0.34
1,1,1,2-Tetrachloroethane	ND	4.4	0.24
Ethylbenzene	ND	4.4	0.33
m,p-Xylenes	ND	4.4	0.79
o-Xylene	ND	4.4	0.24
Styrene	ND	4.4	0.25
Bromoform	ND	4.4	0.41
Isopropylbenzene	ND	4.4	0.26
1,1,2,2-Tetrachloroethane	ND	4.4	0.37
1,2,3-Trichloropropane	ND	4.4	0.22
Propylbenzene	ND	4.4	0.27

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

75.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-16-9.5-10.0	Diln Fac:	0.7496
Lab ID:	264757-005	Batch#:	220597
Matrix:	Soil	Sampled:	02/18/15
Units:	ug/Kg	Received:	02/18/15
Basis:	dry	Analyzed:	02/19/15

Analyte	Result	RL	MDL
Bromobenzene	ND	4.4	0.37
1,3,5-Trimethylbenzene	ND	4.4	0.28
2-Chlorotoluene	ND	4.4	0.34
4-Chlorotoluene	ND	4.4	0.40
tert-Butylbenzene	ND	4.4	0.33
1,2,4-Trimethylbenzene	ND	4.4	0.25
sec-Butylbenzene	ND	4.4	0.22
para-Isopropyl Toluene	ND	4.4	0.31
1,3-Dichlorobenzene	ND	4.4	0.37
1,4-Dichlorobenzene	ND	4.4	0.34
n-Butylbenzene	ND	4.4	0.32
1,2-Dichlorobenzene	ND	4.4	0.24
1,2-Dibromo-3-Chloropropane	ND	4.4	0.89
1,2,4-Trichlorobenzene	ND	4.4	0.42
Hexachlorobutadiene	ND	4.4	0.57
Naphthalene	ND	4.4	0.92
1,2,3-Trichlorobenzene	ND	4.4	0.29

Surrogate	%REC	Limits
Dibromofluoromethane	106	78-134
1,2-Dichloroethane-d4	115	80-138
Toluene-d8	98	80-120
Bromofluorobenzene	100	78-123

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

75.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-15-5.0-5.5	Basis:	dry
Lab ID:	264757-006	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	ug/Kg		

Moisture: 17%

Analyte	Result	RL	MDL	Diln Fac	Batch#	Analyzed
Freon 12	ND	580	38	47.99	220630	02/20/15
Chloromethane	ND	580	25	47.99	220630	02/20/15
Vinyl Chloride	ND	580	21	47.99	220630	02/20/15
Bromomethane	ND	580	5.8	47.99	220630	02/20/15
Chloroethane	ND	580	36	47.99	220630	02/20/15
Trichlorofluoromethane	ND	290	7.2	47.99	220630	02/20/15
Acetone	540 J	1,200	190	47.99	220630	02/20/15
Freon 113	ND	290	5.8	47.99	220630	02/20/15
1,1-Dichloroethene	ND	290	7.8	47.99	220630	02/20/15
Methylene Chloride	ND	1,200	160	47.99	220630	02/20/15
Carbon Disulfide	ND	290	8.4	47.99	220630	02/20/15
MTBE	ND	290	6.8	47.99	220630	02/20/15
trans-1,2-Dichloroethene	ND	290	5.8	47.99	220630	02/20/15
Vinyl Acetate	ND	2,900	16	47.99	220630	02/20/15
1,1-Dichloroethane	ND	290	8.8	47.99	220630	02/20/15
2-Butanone	ND	580	25	47.99	220630	02/20/15
cis-1,2-Dichloroethene	ND	290	9.7	47.99	220630	02/20/15
2,2-Dichloropropane	ND	290	16	47.99	220630	02/20/15
Chloroform	ND	290	6.3	47.99	220630	02/20/15
Bromochloromethane	ND	290	8.1	47.99	220630	02/20/15
1,1,1-Trichloroethane	ND	290	7.5	47.99	220630	02/20/15
1,1-Dichloropropene	ND	290	8.0	47.99	220630	02/20/15
Carbon Tetrachloride	ND	290	5.8	47.99	220630	02/20/15
1,2-Dichloroethane	ND	290	5.8	47.99	220630	02/20/15
Benzene	ND	290	5.8	47.99	220630	02/20/15
Trichloroethene	ND	290	5.8	47.99	220630	02/20/15
1,2-Dichloropropane	ND	290	5.8	47.99	220630	02/20/15
Bromodichloromethane	ND	290	5.8	47.99	220630	02/20/15
Dibromomethane	ND	290	5.8	47.99	220630	02/20/15
4-Methyl-2-Pentanone	29,000	2,300	220	191.9	220747	02/24/15
cis-1,3-Dichloropropene	ND	290	6.9	47.99	220630	02/20/15
Toluene	ND	290	58	47.99	220630	02/20/15
trans-1,3-Dichloropropene	ND	290	5.8	47.99	220630	02/20/15
1,1,2-Trichloroethane	ND	290	7.1	47.99	220630	02/20/15
2-Hexanone	ND	580	12	47.99	220630	02/20/15
1,3-Dichloropropane	ND	290	5.8	47.99	220630	02/20/15
Tetrachloroethene	ND	290	5.8	47.99	220630	02/20/15
Dibromochloromethane	ND	290	13	47.99	220630	02/20/15
1,2-Dibromoethane	ND	290	5.8	47.99	220630	02/20/15
Chlorobenzene	ND	290	6.5	47.99	220630	02/20/15
1,1,1,2-Tetrachloroethane	ND	290	5.8	47.99	220630	02/20/15
Ethylbenzene	ND	290	5.8	47.99	220630	02/20/15
m,p-Xylenes	ND	290	5.8	47.99	220630	02/20/15
o-Xylene	ND	290	5.8	47.99	220630	02/20/15
Styrene	ND	290	5.8	47.99	220630	02/20/15
Bromoform	ND	290	11	47.99	220630	02/20/15
Isopropylbenzene	ND	290	7.0	47.99	220630	02/20/15
1,1,2,2-Tetrachloroethane	ND	290	5.8	47.99	220630	02/20/15
1,2,3-Trichloropropane	ND	290	10	47.99	220630	02/20/15
Propylbenzene	ND	290	8.3	47.99	220630	02/20/15
Bromobenzene	ND	290	5.8	47.99	220630	02/20/15

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-15-5.0-5.5	Basis:	dry
Lab ID:	264757-006	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	ug/Kg		

Analyte	Result	RL	MDL	Diln Fac	Batch#	Analyzed
1,3,5-Trimethylbenzene	8.9 J	290	5.7	47.99	220630	02/20/15
2-Chlorotoluene	ND	290	6.5	47.99	220630	02/20/15
4-Chlorotoluene	ND	290	7.0	47.99	220630	02/20/15
tert-Butylbenzene	ND	290	5.8	47.99	220630	02/20/15
1,2,4-Trimethylbenzene	40 J	290	8.5	47.99	220630	02/20/15
sec-Butylbenzene	ND	290	8.8	47.99	220630	02/20/15
para-Isopropyl Toluene	ND	290	8.6	47.99	220630	02/20/15
1,3-Dichlorobenzene	ND	290	7.6	47.99	220630	02/20/15
1,4-Dichlorobenzene	24 J	290	5.8	47.99	220630	02/20/15
n-Butylbenzene	ND	290	11	47.99	220630	02/20/15
1,2-Dichlorobenzene	ND	290	5.8	47.99	220630	02/20/15
1,2-Dibromo-3-Chloropropane	ND	290	24	47.99	220630	02/20/15
1,2,4-Trichlorobenzene	ND	290	5.8	47.99	220630	02/20/15
Hexachlorobutadiene	ND	290	5.8	47.99	220630	02/20/15
Naphthalene	ND	290	11	47.99	220630	02/20/15
1,2,3-Trichlorobenzene	ND	290	6.3	47.99	220630	02/20/15

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	99	78-134	47.99	220630	02/20/15
1,2-Dichloroethane-d4	87	80-138	47.99	220630	02/20/15
Toluene-d8	102	80-120	47.99	220630	02/20/15
Bromofluorobenzene	99	78-123	47.99	220630	02/20/15

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-15-9.5-10.0	Diln Fac:	0.7003
Lab ID:	264757-007	Batch#:	220630
Matrix:	Soil	Sampled:	02/18/15
Units:	ug/Kg	Received:	02/18/15
Basis:	dry	Analyzed:	02/20/15

Moisture: 16%

Analyte	Result	RL	MDL
Freon 12	ND	8.3	0.54
Chloromethane	ND	8.3	0.41
Vinyl Chloride	ND	8.3	0.34
Bromomethane	ND	8.3	0.30
Chloroethane	ND	8.3	0.33
Trichlorofluoromethane	ND	4.2	0.25
Acetone	20	17	2.8
Freon 113	ND	4.2	0.44
1,1-Dichloroethene	ND	4.2	0.50
Methylene Chloride	ND	17	0.90
Carbon Disulfide	ND	4.2	0.55
MTBE	ND	4.2	0.40
trans-1,2-Dichloroethene	ND	4.2	0.57
Vinyl Acetate	ND	42	0.44
1,1-Dichloroethane	ND	4.2	0.64
2-Butanone	1.0 J	8.3	0.56
cis-1,2-Dichloroethene	ND	4.2	0.47
2,2-Dichloropropane	ND	4.2	0.50
Chloroform	ND	4.2	0.58
Bromochloromethane	ND	4.2	0.092
1,1,1-Trichloroethane	ND	4.2	0.55
1,1-Dichloropropene	ND	4.2	0.54
Carbon Tetrachloride	ND	4.2	0.50
1,2-Dichloroethane	ND	4.2	0.52
Benzene	ND	4.2	0.58
Trichloroethene	ND	4.2	0.61
1,2-Dichloropropane	ND	4.2	0.49
Bromodichloromethane	ND	4.2	0.45
Dibromomethane	ND	4.2	0.19
4-Methyl-2-Pentanone	48	8.3	0.50
cis-1,3-Dichloropropene	ND	4.2	0.34
Toluene	ND	4.2	0.64
trans-1,3-Dichloropropene	ND	4.2	0.35
1,1,2-Trichloroethane	ND	4.2	0.40
2-Hexanone	ND	8.3	0.52
1,3-Dichloropropane	ND	4.2	0.42
Tetrachloroethene	ND	4.2	0.53
Dibromochloromethane	ND	4.2	0.41
1,2-Dibromoethane	ND	4.2	0.43
Chlorobenzene	ND	4.2	0.52
1,1,1,2-Tetrachloroethane	ND	4.2	0.44
Ethylbenzene	ND	4.2	0.59
m,p-Xylenes	ND	4.2	1.1
o-Xylene	ND	4.2	0.50
Styrene	ND	4.2	0.43
Bromoform	ND	4.2	0.19
Isopropylbenzene	ND	4.2	0.54
1,1,2,2-Tetrachloroethane	ND	4.2	0.43
1,2,3-Trichloropropane	ND	4.2	0.51
Propylbenzene	ND	4.2	0.55

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-15-9.5-10.0	Diln Fac:	0.7003
Lab ID:	264757-007	Batch#:	220630
Matrix:	Soil	Sampled:	02/18/15
Units:	ug/Kg	Received:	02/18/15
Basis:	dry	Analyzed:	02/20/15

Analyte	Result	RL	MDL
Bromobenzene	ND	4.2	0.19
1,3,5-Trimethylbenzene	ND	4.2	0.54
2-Chlorotoluene	ND	4.2	0.57
4-Chlorotoluene	ND	4.2	0.54
tert-Butylbenzene	ND	4.2	0.59
1,2,4-Trimethylbenzene	ND	4.2	0.52
sec-Butylbenzene	ND	4.2	0.51
para-Isopropyl Toluene	ND	4.2	0.51
1,3-Dichlorobenzene	ND	4.2	0.44
1,4-Dichlorobenzene	ND	4.2	0.40
n-Butylbenzene	ND	4.2	0.49
1,2-Dichlorobenzene	ND	4.2	0.39
1,2-Dibromo-3-Chloropropane	ND	4.2	0.64
1,2,4-Trichlorobenzene	ND	4.2	0.13
Hexachlorobutadiene	ND	4.2	0.53
Naphthalene	ND	4.2	0.82
1,2,3-Trichlorobenzene	ND	4.2	0.13

Surrogate	%REC	Limits
Dibromofluoromethane	107	78-134
1,2-Dichloroethane-d4	94	80-138
Toluene-d8	101	80-120
Bromofluorobenzene	100	78-123

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-24-3.2-3.8	Diln Fac:	77.16
Lab ID:	264757-008	Batch#:	220572
Matrix:	Soil	Sampled:	02/18/15
Units:	ug/Kg	Received:	02/18/15
Basis:	dry	Analyzed:	02/19/15

Moisture: 15%

Analyte	Result	RL	MDL
Freon 12	ND	910	59
Chloromethane	ND	910	40
Vinyl Chloride	ND	910	32
Bromomethane	50 J	910	9.1
Chloroethane	ND	910	57
Trichlorofluoromethane	ND	450	11
Acetone	850 J	1,800	300
Freon 113	ND	450	9.1
1,1-Dichloroethene	ND	450	12
Methylene Chloride	ND	1,800	250
Carbon Disulfide	ND	450	13
MTBE	ND	450	11
trans-1,2-Dichloroethene	ND	450	9.1
Vinyl Acetate	ND	4,500	25
1,1-Dichloroethane	ND	450	14
2-Butanone	ND	910	39
cis-1,2-Dichloroethene	ND	450	15
2,2-Dichloropropane	ND	450	25
Chloroform	ND	450	9.9
Bromochloromethane	ND	450	13
1,1,1-Trichloroethane	ND	450	12
1,1-Dichloropropene	ND	450	13
Carbon Tetrachloride	ND	450	9.1
1,2-Dichloroethane	ND	450	9.1
Benzene	ND	450	9.1
Trichloroethene	ND	450	9.1
1,2-Dichloropropane	ND	450	9.1
Bromodichloromethane	ND	450	9.1
Dibromomethane	ND	450	9.1
4-Methyl-2-Pentanone	700 J	910	19
cis-1,3-Dichloropropene	ND	450	11
Toluene	ND	450	92
trans-1,3-Dichloropropene	ND	450	9.1
1,1,2-Trichloroethane	ND	450	11
2-Hexanone	ND	910	19
1,3-Dichloropropane	ND	450	9.1
Tetrachloroethene	ND	450	9.1
Dibromochloromethane	ND	450	20
1,2-Dibromoethane	ND	450	9.1
Chlorobenzene	ND	450	10
1,1,1,2-Tetrachloroethane	ND	450	9.1
Ethylbenzene	15 J	450	9.1
m,p-Xylenes	52 J	450	9.1
o-Xylene	36 J	450	9.1
Styrene	ND	450	9.1
Bromoform	ND	450	17
Isopropylbenzene	21 J	450	11
1,1,2,2-Tetrachloroethane	ND	450	9.1
1,2,3-Trichloropropane	ND	450	16
Propylbenzene	ND	450	13

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-24-3.2-3.8	Diln Fac:	77.16
Lab ID:	264757-008	Batch#:	220572
Matrix:	Soil	Sampled:	02/18/15
Units:	ug/Kg	Received:	02/18/15
Basis:	dry	Analyzed:	02/19/15

Analyte	Result	RL	MDL
Bromobenzene	ND	450	9.1
1,3,5-Trimethylbenzene	150 J	450	9.0
2-Chlorotoluene	ND	450	10
4-Chlorotoluene	ND	450	11
tert-Butylbenzene	ND	450	9.1
1,2,4-Trimethylbenzene	420 J	450	13
sec-Butylbenzene	ND	450	14
para-Isopropyl Toluene	48 J	450	14
1,3-Dichlorobenzene	ND	450	12
1,4-Dichlorobenzene	ND	450	9.1
n-Butylbenzene	ND	450	17
1,2-Dichlorobenzene	ND	450	9.1
1,2-Dibromo-3-Chloropropane	ND	450	38
1,2,4-Trichlorobenzene	ND	450	9.1
Hexachlorobutadiene	ND	450	9.1
Naphthalene	54 J	450	17
1,2,3-Trichlorobenzene	ND	450	9.9

Surrogate	%REC	Limits
Dibromofluoromethane	103	78-134
1,2-Dichloroethane-d4	88	80-138
Toluene-d8	98	80-120
Bromofluorobenzene	101	78-123

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-14-4.0-4.5	Diln Fac:	0.9158
Lab ID:	264757-009	Batch#:	220630
Matrix:	Soil	Sampled:	02/18/15
Units:	ug/Kg	Received:	02/18/15
Basis:	dry	Analyzed:	02/20/15

Moisture: 13%

Analyte	Result	RL	MDL
Freon 12	ND	11	0.68
Chloromethane	ND	11	0.52
Vinyl Chloride	ND	11	0.43
Bromomethane	ND	11	0.38
Chloroethane	ND	11	0.42
Trichlorofluoromethane	ND	5.3	0.31
Acetone	ND	21	3.5
Freon 113	ND	5.3	0.55
1,1-Dichloroethene	ND	5.3	0.63
Methylene Chloride	ND	21	1.1
Carbon Disulfide	ND	5.3	0.70
MTBE	ND	5.3	0.51
trans-1,2-Dichloroethene	ND	5.3	0.72
Vinyl Acetate	ND	53	0.55
1,1-Dichloroethane	ND	5.3	0.80
2-Butanone	ND	11	0.71
cis-1,2-Dichloroethene	ND	5.3	0.60
2,2-Dichloropropane	ND	5.3	0.63
Chloroform	ND	5.3	0.73
Bromochloromethane	ND	5.3	0.12
1,1,1-Trichloroethane	ND	5.3	0.69
1,1-Dichloropropene	ND	5.3	0.68
Carbon Tetrachloride	ND	5.3	0.63
1,2-Dichloroethane	ND	5.3	0.66
Benzene	ND	5.3	0.73
Trichloroethene	ND	5.3	0.76
1,2-Dichloropropane	ND	5.3	0.62
Bromodichloromethane	ND	5.3	0.57
Dibromomethane	ND	5.3	0.23
4-Methyl-2-Pentanone	ND	11	0.63
cis-1,3-Dichloropropene	ND	5.3	0.42
Toluene	ND	5.3	0.80
trans-1,3-Dichloropropene	ND	5.3	0.44
1,1,2-Trichloroethane	ND	5.3	0.51
2-Hexanone	ND	11	0.65
1,3-Dichloropropane	ND	5.3	0.53
Tetrachloroethene	ND	5.3	0.67
Dibromochloromethane	ND	5.3	0.51
1,2-Dibromoethane	ND	5.3	0.54
Chlorobenzene	ND	5.3	0.66
1,1,1,2-Tetrachloroethane	ND	5.3	0.56
Ethylbenzene	ND	5.3	0.75
m,p-Xylenes	ND	5.3	1.5
o-Xylene	ND	5.3	0.63
Styrene	ND	5.3	0.54
Bromoform	ND	5.3	0.24
Isopropylbenzene	ND	5.3	0.68
1,1,2,2-Tetrachloroethane	ND	5.3	0.55
1,2,3-Trichloropropane	ND	5.3	0.64
Propylbenzene	ND	5.3	0.70
Bromobenzene	ND	5.3	0.23

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-14-4.0-4.5	Diln Fac:	0.9158
Lab ID:	264757-009	Batch#:	220630
Matrix:	Soil	Sampled:	02/18/15
Units:	ug/Kg	Received:	02/18/15
Basis:	dry	Analyzed:	02/20/15

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	5.3	0.68
2-Chlorotoluene	ND	5.3	0.72
4-Chlorotoluene	ND	5.3	0.68
tert-Butylbenzene	ND	5.3	0.74
1,2,4-Trimethylbenzene	ND	5.3	0.66
sec-Butylbenzene	ND	5.3	0.64
para-Isopropyl Toluene	ND	5.3	0.65
1,3-Dichlorobenzene	ND	5.3	0.55
1,4-Dichlorobenzene	ND	5.3	0.50
n-Butylbenzene	ND	5.3	0.62
1,2-Dichlorobenzene	ND	5.3	0.50
1,2-Dibromo-3-Chloropropane	ND	5.3	0.81
1,2,4-Trichlorobenzene	ND	5.3	0.16
Hexachlorobutadiene	ND	5.3	0.67
Naphthalene	ND	5.3	1.0
1,2,3-Trichlorobenzene	ND	5.3	0.17

Surrogate	%REC	Limits
Dibromofluoromethane	107	78-134
1,2-Dichloroethane-d4	93	80-138
Toluene-d8	98	80-120
Bromofluorobenzene	97	78-123

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-14-9.5-10.0	Diln Fac:	0.9728
Lab ID:	264757-010	Batch#:	220630
Matrix:	Soil	Sampled:	02/18/15
Units:	ug/Kg	Received:	02/18/15
Basis:	dry	Analyzed:	02/20/15

Moisture: 12%

Analyte	Result	RL	MDL
Freon 12	ND	11	0.71
Chloromethane	ND	11	0.54
Vinyl Chloride	ND	11	0.45
Bromomethane	ND	11	0.40
Chloroethane	ND	11	0.44
Trichlorofluoromethane	ND	5.5	0.33
Acetone	ND	22	3.6
Freon 113	ND	5.5	0.58
1,1-Dichloroethene	ND	5.5	0.66
Methylene Chloride	ND	22	1.2
Carbon Disulfide	ND	5.5	0.74
MTBE	ND	5.5	0.54
trans-1,2-Dichloroethene	ND	5.5	0.75
Vinyl Acetate	ND	55	0.58
1,1-Dichloroethane	ND	5.5	0.84
2-Butanone	ND	11	0.74
cis-1,2-Dichloroethene	ND	5.5	0.63
2,2-Dichloropropane	ND	5.5	0.66
Chloroform	ND	5.5	0.76
Bromochloromethane	ND	5.5	0.12
1,1,1-Trichloroethane	ND	5.5	0.72
1,1-Dichloropropene	ND	5.5	0.72
Carbon Tetrachloride	ND	5.5	0.66
1,2-Dichloroethane	ND	5.5	0.69
Benzene	ND	5.5	0.77
Trichloroethene	ND	5.5	0.80
1,2-Dichloropropane	ND	5.5	0.65
Bromodichloromethane	ND	5.5	0.59
Dibromomethane	ND	5.5	0.25
4-Methyl-2-Pentanone	ND	11	0.66
cis-1,3-Dichloropropene	ND	5.5	0.45
Toluene	ND	5.5	0.84
trans-1,3-Dichloropropene	ND	5.5	0.46
1,1,2-Trichloroethane	ND	5.5	0.53
2-Hexanone	ND	11	0.68
1,3-Dichloropropane	ND	5.5	0.55
Tetrachloroethene	ND	5.5	0.71
Dibromochloromethane	ND	5.5	0.54
1,2-Dibromoethane	ND	5.5	0.57
Chlorobenzene	ND	5.5	0.69
1,1,1,2-Tetrachloroethane	ND	5.5	0.58
Ethylbenzene	ND	5.5	0.79
m,p-Xylenes	ND	5.5	1.5
o-Xylene	ND	5.5	0.66
Styrene	ND	5.5	0.57
Bromoform	ND	5.5	0.25
Isopropylbenzene	ND	5.5	0.72
1,1,2,2-Tetrachloroethane	ND	5.5	0.57
1,2,3-Trichloropropane	ND	5.5	0.67
Propylbenzene	ND	5.5	0.73
Bromobenzene	ND	5.5	0.25

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-14-9.5-10.0	Diln Fac:	0.9728
Lab ID:	264757-010	Batch#:	220630
Matrix:	Soil	Sampled:	02/18/15
Units:	ug/Kg	Received:	02/18/15
Basis:	dry	Analyzed:	02/20/15

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	5.5	0.72
2-Chlorotoluene	ND	5.5	0.76
4-Chlorotoluene	ND	5.5	0.71
tert-Butylbenzene	ND	5.5	0.78
1,2,4-Trimethylbenzene	ND	5.5	0.69
sec-Butylbenzene	ND	5.5	0.68
para-Isopropyl Toluene	ND	5.5	0.68
1,3-Dichlorobenzene	ND	5.5	0.58
1,4-Dichlorobenzene	ND	5.5	0.53
n-Butylbenzene	ND	5.5	0.65
1,2-Dichlorobenzene	ND	5.5	0.52
1,2-Dibromo-3-Chloropropane	ND	5.5	0.85
1,2,4-Trichlorobenzene	ND	5.5	0.17
Hexachlorobutadiene	ND	5.5	0.71
Naphthalene	ND	5.5	1.1
1,2,3-Trichlorobenzene	ND	5.5	0.18

Surrogate	%REC	Limits
Dibromofluoromethane	104	78-134
1,2-Dichloroethane-d4	94	80-138
Toluene-d8	87	80-120
Bromofluorobenzene	94	78-123

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-24-7.0-7.3	Diln Fac:	35.51
Lab ID:	264757-011	Batch#:	220572
Matrix:	Soil	Sampled:	02/18/15
Units:	ug/Kg	Received:	02/18/15
Basis:	dry	Analyzed:	02/19/15

Moisture: 15%

Analyte	Result	RL	MDL
Freon 12	ND	420	27
Chloromethane	ND	420	18
Vinyl Chloride	ND	420	15
Bromomethane	ND	420	4.2
Chloroethane	ND	420	26
Trichlorofluoromethane	ND	210	5.2
Acetone	210 J	840	140
Freon 113	ND	210	4.2
1,1-Dichloroethene	ND	210	5.7
Methylene Chloride	ND	840	120
Carbon Disulfide	ND	210	6.1
MTBE	ND	210	4.9
trans-1,2-Dichloroethene	ND	210	4.2
Vinyl Acetate	ND	2,100	12
1,1-Dichloroethane	ND	210	6.3
2-Butanone	ND	420	18
cis-1,2-Dichloroethene	ND	210	7.0
2,2-Dichloropropane	ND	210	11
Chloroform	ND	210	4.6
Bromochloromethane	ND	210	5.8
1,1,1-Trichloroethane	ND	210	5.4
1,1-Dichloropropene	ND	210	5.8
Carbon Tetrachloride	ND	210	4.2
1,2-Dichloroethane	ND	210	4.2
Benzene	ND	210	4.2
Trichloroethene	25 J	210	4.2
1,2-Dichloropropane	ND	210	4.2
Bromodichloromethane	ND	210	4.2
Dibromomethane	ND	210	4.2
4-Methyl-2-Pentanone	ND	420	8.6
cis-1,3-Dichloropropene	ND	210	5.0
Toluene	ND	210	42
trans-1,3-Dichloropropene	ND	210	4.2
1,1,2-Trichloroethane	ND	210	5.1
2-Hexanone	ND	420	8.7
1,3-Dichloropropane	ND	210	4.2
Tetrachloroethene	28 J	210	4.2
Dibromochloromethane	ND	210	9.3
1,2-Dibromoethane	ND	210	4.2
Chlorobenzene	ND	210	4.7
1,1,1,2-Tetrachloroethane	ND	210	4.2
Ethylbenzene	ND	210	4.2
m,p-Xylenes	ND	210	4.2
o-Xylene	ND	210	4.2
Styrene	ND	210	4.2
Bromoform	ND	210	7.9
Isopropylbenzene	ND	210	5.1
1,1,2,2-Tetrachloroethane	ND	210	4.2
1,2,3-Trichloropropane	ND	210	7.5
Propylbenzene	ND	210	6.0

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-24-7.0-7.3	Diln Fac:	35.51
Lab ID:	264757-011	Batch#:	220572
Matrix:	Soil	Sampled:	02/18/15
Units:	ug/Kg	Received:	02/18/15
Basis:	dry	Analyzed:	02/19/15

Analyte	Result	RL	MDL
Bromobenzene	ND	210	4.2
1,3,5-Trimethylbenzene	ND	210	4.2
2-Chlorotoluene	ND	210	4.7
4-Chlorotoluene	ND	210	5.0
tert-Butylbenzene	ND	210	4.2
1,2,4-Trimethylbenzene	6.7 J	210	6.1
sec-Butylbenzene	ND	210	6.3
para-Isopropyl Toluene	8.4 J	210	6.2
1,3-Dichlorobenzene	ND	210	5.5
1,4-Dichlorobenzene	ND	210	4.2
n-Butylbenzene	ND	210	7.9
1,2-Dichlorobenzene	ND	210	4.2
1,2-Dibromo-3-Chloropropane	ND	210	17
1,2,4-Trichlorobenzene	ND	210	4.2
Hexachlorobutadiene	ND	210	4.2
Naphthalene	ND	210	7.8
1,2,3-Trichlorobenzene	ND	210	4.6

Surrogate	%REC	Limits
Dibromofluoromethane	105	78-134
1,2-Dichloroethane-d4	88	80-138
Toluene-d8	97	80-120
Bromofluorobenzene	102	78-123

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

11.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Matrix:	Soil	Batch#:	220572
Units:	ug/Kg	Analyzed:	02/19/15
Diln Fac:	1.000		

Type: BS Lab ID: QC777769

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	24.66	99	70-134
Benzene	25.00	27.94	112	80-123
Trichloroethene	25.00	25.77	103	80-128
Toluene	25.00	24.88	100	80-120
Chlorobenzene	25.00	24.40	98	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	104	78-134
1,2-Dichloroethane-d4	90	80-138
Toluene-d8	97	80-120
Bromofluorobenzene	99	78-123

Type: BSD Lab ID: QC777770

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	25.34	101	70-134	3	22
Benzene	25.00	28.58	114	80-123	2	21
Trichloroethene	25.00	25.99	104	80-128	1	23
Toluene	25.00	25.07	100	80-120	1	20
Chlorobenzene	25.00	24.89	100	80-123	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	103	78-134
1,2-Dichloroethane-d4	91	80-138
Toluene-d8	96	80-120
Bromofluorobenzene	97	78-123

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777771	Batch#:	220572
Matrix:	Soil	Analyzed:	02/19/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.64
Chloromethane	ND	10	0.49
Vinyl Chloride	ND	10	0.41
Bromomethane	ND	10	0.36
Chloroethane	ND	10	0.40
Trichlorofluoromethane	ND	5.0	0.30
Acetone	4.8 J	20	3.3
Freon 113	ND	5.0	0.52
1,1-Dichloroethene	ND	5.0	0.60
Methylene Chloride	ND	20	1.1
Carbon Disulfide	ND	5.0	0.67
MTBE	ND	5.0	0.48
trans-1,2-Dichloroethene	ND	5.0	0.68
Vinyl Acetate	ND	50	0.52
1,1-Dichloroethane	ND	5.0	0.76
2-Butanone	ND	10	0.67
cis-1,2-Dichloroethene	ND	5.0	0.57
2,2-Dichloropropane	ND	5.0	0.59
Chloroform	ND	5.0	0.69
Bromochloromethane	ND	5.0	0.11
1,1,1-Trichloroethane	ND	5.0	0.66
1,1-Dichloropropene	ND	5.0	0.65
Carbon Tetrachloride	ND	5.0	0.59
1,2-Dichloroethane	ND	5.0	0.62
Benzene	ND	5.0	0.70
Trichloroethene	ND	5.0	0.73
1,2-Dichloropropane	ND	5.0	0.59
Bromodichloromethane	ND	5.0	0.54
Dibromomethane	ND	5.0	0.22
4-Methyl-2-Pentanone	ND	10	0.59
cis-1,3-Dichloropropene	ND	5.0	0.40
Toluene	ND	5.0	0.76
trans-1,3-Dichloropropene	ND	5.0	0.42
1,1,2-Trichloroethane	ND	5.0	0.48
2-Hexanone	ND	10	0.62
1,3-Dichloropropane	ND	5.0	0.50
Tetrachloroethene	ND	5.0	0.64
Dibromochloromethane	ND	5.0	0.49
1,2-Dibromoethane	ND	5.0	0.51
Chlorobenzene	ND	5.0	0.63
1,1,1,2-Tetrachloroethane	ND	5.0	0.53
Ethylbenzene	ND	5.0	0.71
m,p-Xylenes	ND	5.0	1.4
o-Xylene	ND	5.0	0.60
Styrene	ND	5.0	0.51
Bromoform	ND	5.0	0.23
Isopropylbenzene	ND	5.0	0.65
1,1,2,2-Tetrachloroethane	ND	5.0	0.52
1,2,3-Trichloropropane	ND	5.0	0.61
Propylbenzene	ND	5.0	0.66
Bromobenzene	ND	5.0	0.22
1,3,5-Trimethylbenzene	ND	5.0	0.65

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777771	Batch#:	220572
Matrix:	Soil	Analyzed:	02/19/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	5.0	0.69
4-Chlorotoluene	ND	5.0	0.65
tert-Butylbenzene	ND	5.0	0.70
1,2,4-Trimethylbenzene	ND	5.0	0.62
sec-Butylbenzene	ND	5.0	0.61
para-Isopropyl Toluene	ND	5.0	0.62
1,3-Dichlorobenzene	ND	5.0	0.53
1,4-Dichlorobenzene	ND	5.0	0.48
n-Butylbenzene	ND	5.0	0.59
1,2-Dichlorobenzene	ND	5.0	0.47
1,2-Dibromo-3-Chloropropane	ND	5.0	0.77
1,2,4-Trichlorobenzene	0.17 J	5.0	0.15
Hexachlorobutadiene	ND	5.0	0.64
Naphthalene	ND	5.0	0.98
1,2,3-Trichlorobenzene	0.23 J	5.0	0.16

Surrogate	%REC	Limits
Dibromofluoromethane	105	78-134
1,2-Dichloroethane-d4	90	80-138
Toluene-d8	97	80-120
Bromofluorobenzene	99	78-123

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777863	Batch#:	220597
Matrix:	Soil	Analyzed:	02/19/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.46
Chloromethane	ND	10	0.50
Vinyl Chloride	ND	10	0.47
Bromomethane	ND	10	1.1
Chloroethane	ND	10	0.75
Trichlorofluoromethane	ND	5.0	0.26
Acetone	ND	20	3.3
Freon 113	ND	5.0	0.45
1,1-Dichloroethene	ND	5.0	0.44
Methylene Chloride	ND	20	0.45
Carbon Disulfide	ND	5.0	0.48
MTBE	ND	5.0	0.15
trans-1,2-Dichloroethene	ND	5.0	0.62
Vinyl Acetate	ND	50	0.74
1,1-Dichloroethane	ND	5.0	0.37
2-Butanone	ND	10	1.4
cis-1,2-Dichloroethene	ND	5.0	0.30
2,2-Dichloropropane	ND	5.0	0.36
Chloroform	ND	5.0	0.31
Bromochloromethane	ND	5.0	0.53
1,1,1-Trichloroethane	ND	5.0	0.40
1,1-Dichloropropene	ND	5.0	0.25
Carbon Tetrachloride	ND	5.0	0.49
1,2-Dichloroethane	ND	5.0	0.34
Benzene	ND	5.0	0.44
Trichloroethene	ND	5.0	0.42
1,2-Dichloropropane	ND	5.0	0.23
Bromodichloromethane	ND	5.0	0.24
Dibromomethane	ND	5.0	0.65
4-Methyl-2-Pentanone	ND	10	0.48
cis-1,3-Dichloropropene	ND	5.0	0.28
Toluene	ND	5.0	0.32
trans-1,3-Dichloropropene	ND	5.0	0.24
1,1,2-Trichloroethane	ND	5.0	0.37
2-Hexanone	ND	10	1.1
1,3-Dichloropropane	ND	5.0	0.22
Tetrachloroethene	ND	5.0	0.24
Dibromochloromethane	ND	5.0	0.28
1,2-Dibromoethane	ND	5.0	0.21
Chlorobenzene	ND	5.0	0.40
1,1,1,2-Tetrachloroethane	ND	5.0	0.27
Ethylbenzene	ND	5.0	0.38
m,p-Xylenes	ND	5.0	0.91
o-Xylene	ND	5.0	0.27
Styrene	ND	5.0	0.29
Bromoform	ND	5.0	0.47
Isopropylbenzene	ND	5.0	0.30
1,1,2,2-Tetrachloroethane	ND	5.0	0.43
1,2,3-Trichloropropane	ND	5.0	0.25
Propylbenzene	ND	5.0	0.31
Bromobenzene	ND	5.0	0.43
1,3,5-Trimethylbenzene	ND	5.0	0.32
2-Chlorotoluene	ND	5.0	0.39

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

82.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777863	Batch#:	220597
Matrix:	Soil	Analyzed:	02/19/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
4-Chlorotoluene	ND	5.0	0.46
tert-Butylbenzene	ND	5.0	0.38
1,2,4-Trimethylbenzene	ND	5.0	0.28
sec-Butylbenzene	ND	5.0	0.25
para-Isopropyl Toluene	ND	5.0	0.35
1,3-Dichlorobenzene	ND	5.0	0.43
1,4-Dichlorobenzene	ND	5.0	0.40
n-Butylbenzene	ND	5.0	0.37
1,2-Dichlorobenzene	ND	5.0	0.28
1,2-Dibromo-3-Chloropropane	ND	5.0	1.0
1,2,4-Trichlorobenzene	ND	5.0	0.48
Hexachlorobutadiene	ND	5.0	0.66
Naphthalene	ND	5.0	1.1
1,2,3-Trichlorobenzene	ND	5.0	0.33

Surrogate	%REC	Limits
Dibromofluoromethane	116	78-134
1,2-Dichloroethane-d4	114	80-138
Toluene-d8	104	80-120
Bromofluorobenzene	97	78-123

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Matrix:	Soil	Batch#:	220597
Units:	ug/Kg	Analyzed:	02/19/15
Diln Fac:	1.000		

Type: BS Lab ID: QC777864

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	20.80	104	70-134
Benzene	20.00	19.91	100	80-123
Trichloroethene	20.00	19.37	97	80-128
Toluene	20.00	17.98	90	80-120
Chlorobenzene	20.00	18.01	90	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	110	78-134
1,2-Dichloroethane-d4	111	80-138
Toluene-d8	94	80-120
Bromofluorobenzene	97	78-123

Type: BSD Lab ID: QC777865

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	20.00	20.41	102	70-134	2	22
Benzene	20.00	20.43	102	80-123	3	21
Trichloroethene	20.00	19.90	100	80-128	3	23
Toluene	20.00	18.04	90	80-120	0	20
Chlorobenzene	20.00	17.99	90	80-123	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	108	78-134
1,2-Dichloroethane-d4	112	80-138
Toluene-d8	96	80-120
Bromofluorobenzene	101	78-123

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC778011	Batch#:	220630
Matrix:	Soil	Analyzed:	02/20/15
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	24.70	99	70-134
Benzene	25.00	27.96	112	80-123
Trichloroethene	25.00	25.51	102	80-128
Toluene	25.00	26.08	104	80-120
Chlorobenzene	25.00	25.80	103	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	102	78-134
1,2-Dichloroethane-d4	90	80-138
Toluene-d8	100	80-120
Bromofluorobenzene	98	78-123

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778012	Batch#:	220630
Matrix:	Soil	Analyzed:	02/20/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.64
Chloromethane	ND	10	0.49
Vinyl Chloride	ND	10	0.41
Bromomethane	ND	10	0.36
Chloroethane	ND	10	0.40
Trichlorofluoromethane	ND	5.0	0.30
Acetone	ND	20	3.3
Freon 113	ND	5.0	0.52
1,1-Dichloroethene	ND	5.0	0.60
Methylene Chloride	ND	20	1.1
Carbon Disulfide	ND	5.0	0.67
MTBE	ND	5.0	0.48
trans-1,2-Dichloroethene	ND	5.0	0.68
Vinyl Acetate	ND	50	0.52
1,1-Dichloroethane	ND	5.0	0.76
2-Butanone	ND	10	0.67
cis-1,2-Dichloroethene	ND	5.0	0.57
2,2-Dichloropropane	ND	5.0	0.59
Chloroform	ND	5.0	0.69
Bromochloromethane	ND	5.0	0.11
1,1,1-Trichloroethane	ND	5.0	0.66
1,1-Dichloropropene	ND	5.0	0.65
Carbon Tetrachloride	ND	5.0	0.59
1,2-Dichloroethane	ND	5.0	0.62
Benzene	ND	5.0	0.70
Trichloroethene	ND	5.0	0.73
1,2-Dichloropropane	ND	5.0	0.59
Bromodichloromethane	ND	5.0	0.54
Dibromomethane	ND	5.0	0.22
4-Methyl-2-Pentanone	ND	10	0.59
cis-1,3-Dichloropropene	ND	5.0	0.40
Toluene	ND	5.0	0.76
trans-1,3-Dichloropropene	ND	5.0	0.42
1,1,2-Trichloroethane	ND	5.0	0.48
2-Hexanone	ND	10	0.62
1,3-Dichloropropane	ND	5.0	0.50
Tetrachloroethene	ND	5.0	0.64
Dibromochloromethane	ND	5.0	0.49
1,2-Dibromoethane	ND	5.0	0.51
Chlorobenzene	ND	5.0	0.63
1,1,1,2-Tetrachloroethane	ND	5.0	0.53
Ethylbenzene	ND	5.0	0.71
m,p-Xylenes	ND	5.0	1.4
o-Xylene	ND	5.0	0.60
Styrene	ND	5.0	0.51
Bromoform	ND	5.0	0.23
Isopropylbenzene	ND	5.0	0.65
1,1,2,2-Tetrachloroethane	ND	5.0	0.52
1,2,3-Trichloropropane	ND	5.0	0.61
Propylbenzene	ND	5.0	0.66
Bromobenzene	ND	5.0	0.22
1,3,5-Trimethylbenzene	ND	5.0	0.65

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

85.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778012	Batch#:	220630
Matrix:	Soil	Analyzed:	02/20/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	5.0	0.69
4-Chlorotoluene	ND	5.0	0.65
tert-Butylbenzene	ND	5.0	0.70
1,2,4-Trimethylbenzene	ND	5.0	0.62
sec-Butylbenzene	ND	5.0	0.61
para-Isopropyl Toluene	ND	5.0	0.62
1,3-Dichlorobenzene	ND	5.0	0.53
1,4-Dichlorobenzene	ND	5.0	0.48
n-Butylbenzene	ND	5.0	0.59
1,2-Dichlorobenzene	ND	5.0	0.47
1,2-Dibromo-3-Chloropropane	ND	5.0	0.77
1,2,4-Trichlorobenzene	0.19 J	5.0	0.15
Hexachlorobutadiene	ND	5.0	0.64
Naphthalene	ND	5.0	0.98
1,2,3-Trichlorobenzene	ND	5.0	0.16

Surrogate	%REC	Limits
Dibromofluoromethane	107	78-134
1,2-Dichloroethane-d4	91	80-138
Toluene-d8	99	80-120
Bromofluorobenzene	97	78-123

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

85.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-11-9.5-10.0	Batch#:	220630
MSS Lab ID:	264783-002	Sampled:	02/19/15
Matrix:	Soil	Received:	02/19/15
Units:	ug/Kg	Analyzed:	02/20/15
Basis:	dry		

Type:	MS	Moisture:	14%
Lab ID:	QC778142	Diln Fac:	0.7022

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.5697	40.83	38.49	94	56-133
Benzene	<0.6637	40.83	41.00	100	57-120
Trichloroethene	30.47	40.83	78.63	118	49-145
Toluene	<0.7270	40.83	37.50	92	51-120
Chlorobenzene	<0.5960	40.83	37.25	91	47-120

Surrogate	%REC	Limits
Dibromofluoromethane	100	78-134
1,2-Dichloroethane-d4	95	80-138
Toluene-d8	97	80-120
Bromofluorobenzene	95	78-123

Type:	MSD	Moisture:	14%
Lab ID:	QC778143	Diln Fac:	0.6974

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	40.54	38.65	95	56-133	1	46
Benzene	40.54	40.49	100	57-120	1	44
Trichloroethene	40.54	79.62	121	49-145	2	46
Toluene	40.54	37.64	93	51-120	1	47
Chlorobenzene	40.54	37.16	92	47-120	0	50

Surrogate	%REC	Limits
Dibromofluoromethane	99	78-134
1,2-Dichloroethane-d4	92	80-138
Toluene-d8	98	80-120
Bromofluorobenzene	98	78-123

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778474	Batch#:	220747
Matrix:	Soil	Analyzed:	02/24/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.46
Chloromethane	ND	10	0.50
Vinyl Chloride	ND	10	0.47
Bromomethane	ND	10	1.1
Chloroethane	ND	10	0.75
Trichlorofluoromethane	ND	5.0	0.26
Acetone	ND	20	3.3
Freon 113	ND	5.0	0.45
1,1-Dichloroethene	ND	5.0	0.44
Methylene Chloride	ND	20	0.45
Carbon Disulfide	ND	5.0	0.48
MTBE	ND	5.0	0.15
trans-1,2-Dichloroethene	ND	5.0	0.62
Vinyl Acetate	ND	50	0.74
1,1-Dichloroethane	ND	5.0	0.37
2-Butanone	ND	10	1.4
cis-1,2-Dichloroethene	ND	5.0	0.30
2,2-Dichloropropane	ND	5.0	0.36
Chloroform	ND	5.0	0.31
Bromochloromethane	ND	5.0	0.53
1,1,1-Trichloroethane	ND	5.0	0.40
1,1-Dichloropropene	ND	5.0	0.25
Carbon Tetrachloride	ND	5.0	0.49
1,2-Dichloroethane	ND	5.0	0.34
Benzene	ND	5.0	0.44
Trichloroethene	ND	5.0	0.42
1,2-Dichloropropane	ND	5.0	0.23
Bromodichloromethane	ND	5.0	0.24
Dibromomethane	ND	5.0	0.65
4-Methyl-2-Pentanone	ND	10	0.48
cis-1,3-Dichloropropene	ND	5.0	0.28
Toluene	ND	5.0	0.32
trans-1,3-Dichloropropene	ND	5.0	0.24
1,1,2-Trichloroethane	ND	5.0	0.37
2-Hexanone	ND	10	1.1
1,3-Dichloropropane	ND	5.0	0.22
Tetrachloroethene	ND	5.0	0.24
Dibromochloromethane	ND	5.0	0.28
1,2-Dibromoethane	ND	5.0	0.21
Chlorobenzene	ND	5.0	0.40
1,1,1,2-Tetrachloroethane	ND	5.0	0.27
Ethylbenzene	ND	5.0	0.38
m,p-Xylenes	ND	5.0	0.91
o-Xylene	ND	5.0	0.27
Styrene	ND	5.0	0.29
Bromoform	ND	5.0	0.47
Isopropylbenzene	ND	5.0	0.30
1,1,2,2-Tetrachloroethane	ND	5.0	0.43
1,2,3-Trichloropropane	ND	5.0	0.25
Propylbenzene	ND	5.0	0.31
Bromobenzene	ND	5.0	0.43
1,3,5-Trimethylbenzene	ND	5.0	0.32
2-Chlorotoluene	ND	5.0	0.39

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

89.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778474	Batch#:	220747
Matrix:	Soil	Analyzed:	02/24/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
4-Chlorotoluene	ND	5.0	0.46
tert-Butylbenzene	ND	5.0	0.38
1,2,4-Trimethylbenzene	ND	5.0	0.28
sec-Butylbenzene	ND	5.0	0.25
para-Isopropyl Toluene	ND	5.0	0.35
1,3-Dichlorobenzene	ND	5.0	0.43
1,4-Dichlorobenzene	ND	5.0	0.40
n-Butylbenzene	ND	5.0	0.37
1,2-Dichlorobenzene	ND	5.0	0.28
1,2-Dibromo-3-Chloropropane	ND	5.0	1.0
1,2,4-Trichlorobenzene	ND	5.0	0.48
Hexachlorobutadiene	ND	5.0	0.66
Naphthalene	ND	5.0	1.1
1,2,3-Trichlorobenzene	ND	5.0	0.33

Surrogate	%REC	Limits
Dibromofluoromethane	121	78-134
1,2-Dichloroethane-d4	123	80-138
Toluene-d8	97	80-120
Bromofluorobenzene	99	78-123

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

89.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC778475	Batch#:	220747
Matrix:	Soil	Analyzed:	02/24/15
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	19.12	96	70-134
Benzene	20.00	21.50	108	80-123
Trichloroethene	20.00	19.70	99	80-128
Toluene	20.00	18.10	91	80-120
Chlorobenzene	20.00	17.96	90	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	106	78-134
1,2-Dichloroethane-d4	120	80-138
Toluene-d8	93	80-120
Bromofluorobenzene	97	78-123

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	220747
MSS Lab ID:	264826-004	Sampled:	02/18/15
Matrix:	Soil	Received:	02/20/15
Units:	ug/Kg	Analyzed:	02/25/15
Basis:	as received		

Type: MS Diln Fac: 0.9804
Lab ID: QC778476

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.4340	49.02	46.55	95	56-133
Benzene	<0.4303	49.02	49.26	100	57-120
Trichloroethene	<0.4133	49.02	47.84	98	49-145
Toluene	<0.3125	49.02	42.86	87	51-120
Chlorobenzene	<0.3898	49.02	40.75	83	47-120

Surrogate	%REC	Limits
Dibromofluoromethane	108	78-134
1,2-Dichloroethane-d4	123	80-138
Toluene-d8	93	80-120
Bromofluorobenzene	106	78-123

Type: MSD Diln Fac: 0.9843
Lab ID: QC778477

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	49.21	41.72	85	56-133	11	46
Benzene	49.21	46.63	95	57-120	6	44
Trichloroethene	49.21	45.29	92	49-145	6	46
Toluene	49.21	41.61	85	51-120	3	47
Chlorobenzene	49.21	39.38	80	47-120	4	50

Surrogate	%REC	Limits
Dibromofluoromethane	102	78-134
1,2-Dichloroethane-d4	116	80-138
Toluene-d8	93	80-120
Bromofluorobenzene	104	78-123

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778615	Batch#:	220786
Matrix:	Soil	Analyzed:	02/25/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.40
Chloromethane	ND	10	1.0
Vinyl Chloride	ND	10	0.93
Bromomethane	ND	10	1.2
Chloroethane	ND	10	0.50
Trichlorofluoromethane	ND	5.0	0.70
Acetone	ND	20	1.8
Freon 113	ND	5.0	0.44
1,1-Dichloroethene	ND	5.0	0.94
Methylene Chloride	ND	20	1.1
Carbon Disulfide	ND	5.0	0.87
MTBE	ND	5.0	1.0
trans-1,2-Dichloroethene	ND	5.0	0.84
Vinyl Acetate	ND	50	0.72
1,1-Dichloroethane	ND	5.0	1.2
2-Butanone	ND	10	1.3
cis-1,2-Dichloroethene	ND	5.0	0.87
2,2-Dichloropropane	ND	5.0	1.1
Chloroform	ND	5.0	1.3
Bromochloromethane	ND	5.0	0.93
1,1,1-Trichloroethane	ND	5.0	0.81
1,1-Dichloropropene	ND	5.0	0.63
Carbon Tetrachloride	ND	5.0	0.48
1,2-Dichloroethane	ND	5.0	0.93
Benzene	ND	5.0	0.90
Trichloroethene	ND	5.0	0.84
1,2-Dichloropropane	ND	5.0	0.78
Bromodichloromethane	ND	5.0	0.85
Dibromomethane	ND	5.0	0.77
4-Methyl-2-Pentanone	ND	10	1.0
cis-1,3-Dichloropropene	ND	5.0	0.61
Toluene	ND	5.0	0.71
trans-1,3-Dichloropropene	ND	5.0	0.65
1,1,2-Trichloroethane	ND	5.0	0.62
2-Hexanone	ND	10	0.88
1,3-Dichloropropane	ND	5.0	0.84
Tetrachloroethene	ND	5.0	0.52
Dibromochloromethane	ND	5.0	0.51
1,2-Dibromoethane	ND	5.0	0.65
Chlorobenzene	ND	5.0	0.69
1,1,1,2-Tetrachloroethane	ND	5.0	0.62
Ethylbenzene	ND	5.0	0.68
m,p-Xylenes	ND	5.0	1.3
o-Xylene	ND	5.0	0.63
Styrene	ND	5.0	0.58
Bromoform	ND	5.0	0.39
Isopropylbenzene	ND	5.0	0.50
1,1,2,2-Tetrachloroethane	ND	5.0	0.41
1,2,3-Trichloropropane	ND	5.0	0.58
Propylbenzene	ND	5.0	0.45
Bromobenzene	ND	5.0	0.53
1,3,5-Trimethylbenzene	ND	5.0	0.57
2-Chlorotoluene	ND	5.0	0.68

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

92.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778615	Batch#:	220786
Matrix:	Soil	Analyzed:	02/25/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
4-Chlorotoluene	ND	5.0	0.65
tert-Butylbenzene	ND	5.0	0.40
1,2,4-Trimethylbenzene	ND	5.0	0.60
sec-Butylbenzene	ND	5.0	0.42
para-Isopropyl Toluene	ND	5.0	0.42
1,3-Dichlorobenzene	ND	5.0	0.44
1,4-Dichlorobenzene	ND	5.0	0.54
n-Butylbenzene	ND	5.0	0.38
1,2-Dichlorobenzene	ND	5.0	0.53
1,2-Dibromo-3-Chloropropane	ND	5.0	0.94
1,2,4-Trichlorobenzene	ND	5.0	0.42
Hexachlorobutadiene	ND	5.0	0.30
Naphthalene	ND	5.0	0.31
1,2,3-Trichlorobenzene	ND	5.0	0.43

Surrogate	%REC	Limits
Dibromofluoromethane	104	78-134
1,2-Dichloroethane-d4	110	80-138
Toluene-d8	103	80-120
Bromofluorobenzene	118	78-123

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Matrix:	Soil	Batch#:	220786
Units:	ug/Kg	Analyzed:	02/25/15
Diln Fac:	1.000		

Type: BS Lab ID: QC778616

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	21.01	105	70-134
Benzene	20.00	21.00	105	80-123
Trichloroethene	20.00	20.88	104	80-128
Toluene	20.00	20.85	104	80-120
Chlorobenzene	20.00	20.52	103	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	108	78-134
1,2-Dichloroethane-d4	113	80-138
Toluene-d8	100	80-120
Bromofluorobenzene	102	78-123

Type: BSD Lab ID: QC778617

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	20.00	18.09	90	70-134	15	22
Benzene	20.00	20.98	105	80-123	0	21
Trichloroethene	20.00	21.32	107	80-128	2	23
Toluene	20.00	21.20	106	80-120	2	20
Chlorobenzene	20.00	20.72	104	80-123	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	108	78-134
1,2-Dichloroethane-d4	113	80-138
Toluene-d8	100	80-120
Bromofluorobenzene	103	78-123

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778844	Batch#:	220845
Matrix:	Soil	Analyzed:	02/26/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.40
Chloromethane	ND	10	1.0
Vinyl Chloride	ND	10	0.93
Bromomethane	ND	10	1.2
Chloroethane	ND	10	0.50
Trichlorofluoromethane	ND	5.0	0.70
Acetone	ND	20	1.8
Freon 113	ND	5.0	0.44
1,1-Dichloroethene	ND	5.0	0.94
Methylene Chloride	ND	20	1.1
Carbon Disulfide	ND	5.0	0.87
MTBE	ND	5.0	1.0
trans-1,2-Dichloroethene	ND	5.0	0.84
Vinyl Acetate	ND	50	0.72
1,1-Dichloroethane	ND	5.0	1.2
2-Butanone	ND	10	1.3
cis-1,2-Dichloroethene	ND	5.0	0.87
2,2-Dichloropropane	ND	5.0	1.1
Chloroform	ND	5.0	1.3
Bromochloromethane	ND	5.0	0.93
1,1,1-Trichloroethane	ND	5.0	0.81
1,1-Dichloropropene	ND	5.0	0.63
Carbon Tetrachloride	ND	5.0	0.48
1,2-Dichloroethane	ND	5.0	0.93
Benzene	ND	5.0	0.90
Trichloroethene	ND	5.0	0.84
1,2-Dichloropropane	ND	5.0	0.78
Bromodichloromethane	ND	5.0	0.85
Dibromomethane	ND	5.0	0.77
4-Methyl-2-Pentanone	ND	10	1.0
cis-1,3-Dichloropropene	ND	5.0	0.61
Toluene	ND	5.0	0.71
trans-1,3-Dichloropropene	ND	5.0	0.65
1,1,2-Trichloroethane	ND	5.0	0.62
2-Hexanone	ND	10	0.88
1,3-Dichloropropane	ND	5.0	0.84
Tetrachloroethene	ND	5.0	0.52
Dibromochloromethane	ND	5.0	0.51
1,2-Dibromoethane	ND	5.0	0.65
Chlorobenzene	ND	5.0	0.69
1,1,1,2-Tetrachloroethane	ND	5.0	0.62
Ethylbenzene	ND	5.0	0.68
m,p-Xylenes	ND	5.0	1.3
o-Xylene	ND	5.0	0.63
Styrene	ND	5.0	0.58
Bromoform	ND	5.0	0.39
Isopropylbenzene	ND	5.0	0.50
1,1,2,2-Tetrachloroethane	ND	5.0	0.41
1,2,3-Trichloropropane	ND	5.0	0.58
Propylbenzene	ND	5.0	0.45
Bromobenzene	ND	5.0	0.53
1,3,5-Trimethylbenzene	ND	5.0	0.57
2-Chlorotoluene	ND	5.0	0.68

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

95.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778844	Batch#:	220845
Matrix:	Soil	Analyzed:	02/26/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
4-Chlorotoluene	ND	5.0	0.65
tert-Butylbenzene	ND	5.0	0.40
1,2,4-Trimethylbenzene	ND	5.0	0.60
sec-Butylbenzene	ND	5.0	0.42
para-Isopropyl Toluene	ND	5.0	0.42
1,3-Dichlorobenzene	ND	5.0	0.44
1,4-Dichlorobenzene	ND	5.0	0.54
n-Butylbenzene	ND	5.0	0.38
1,2-Dichlorobenzene	ND	5.0	0.53
1,2-Dibromo-3-Chloropropane	ND	5.0	0.94
1,2,4-Trichlorobenzene	ND	5.0	0.42
Hexachlorobutadiene	ND	5.0	0.30
Naphthalene	ND	5.0	0.31
1,2,3-Trichlorobenzene	ND	5.0	0.43

Surrogate	%REC	Limits
Dibromofluoromethane	104	78-134
1,2-Dichloroethane-d4	116	80-138
Toluene-d8	105	80-120
Bromofluorobenzene	116	78-123

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5035
Project#:	C1374	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC778845	Batch#:	220845
Matrix:	Soil	Analyzed:	02/26/15
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	18.85	94	70-134
Benzene	20.00	20.17	101	80-123
Trichloroethene	20.00	21.48	107	80-128
Toluene	20.00	21.49	107	80-120
Chlorobenzene	20.00	20.17	101	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	104	78-134
1,2-Dichloroethane-d4	116	80-138
Toluene-d8	102	80-120
Bromofluorobenzene	102	78-123

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-17-5.0-6.0	Batch#:	220704
Lab ID:	264757-001	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	ug/Kg	Prepared:	02/23/15
Basis:	dry	Analyzed:	02/25/15
Diln Fac:	10.00		

Moisture: 14%

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	3,800	540
Phenol	ND	3,800	82
bis(2-Chloroethyl)ether	ND	3,800	690
2-Chlorophenol	ND	3,800	85
1,3-Dichlorobenzene	ND	3,800	650
1,4-Dichlorobenzene	ND	3,800	89
Benzyl alcohol	ND	3,800	130
1,2-Dichlorobenzene	ND	3,800	89
2-Methylphenol	ND	3,800	160
bis(2-Chloroisopropyl) ether	ND	3,800	81
4-Methylphenol	ND	3,800	84
N-Nitroso-di-n-propylamine	ND	3,800	91
Hexachloroethane	ND	3,800	80
Nitrobenzene	ND	3,800	130
Isophorone	ND	3,800	78
2-Nitrophenol	ND	7,700	89
2,4-Dimethylphenol	ND	3,800	160
Benzoic acid	ND	19,000	5,000
bis(2-Chloroethoxy)methane	ND	3,800	87
2,4-Dichlorophenol	ND	3,800	95
1,2,4-Trichlorobenzene	ND	3,800	91
Naphthalene	ND	770	89
4-Chloroaniline	ND	3,800	110
Hexachlorobutadiene	ND	3,800	100
4-Chloro-3-methylphenol	ND	3,800	96
2-Methylnaphthalene	ND	770	74
Hexachlorocyclopentadiene	ND	7,700	160
2,4,6-Trichlorophenol	ND	3,800	150
2,4,5-Trichlorophenol	ND	3,800	97
2-Chloronaphthalene	ND	3,800	100
2-Nitroaniline	ND	7,700	120
Dimethylphthalate	ND	3,800	120
Acenaphthylene	ND	770	100
2,6-Dinitrotoluene	ND	3,800	100
3-Nitroaniline	ND	7,700	87
Acenaphthene	ND	770	95
2,4-Dinitrophenol	ND	7,700	740
4-Nitrophenol	ND	7,700	820
Dibenzofuran	ND	3,800	120
2,4-Dinitrotoluene	ND	3,800	110
Diethylphthalate	ND	3,800	130
Fluorene	ND	770	110
4-Chlorophenyl-phenylether	ND	3,800	110
4-Nitroaniline	ND	7,700	93
4,6-Dinitro-2-methylphenol	ND	7,700	890
N-Nitrosodiphenylamine	ND	3,800	120
Azobenzene	ND	3,800	99
4-Bromophenyl-phenylether	ND	3,800	120

J= Estimated value
DO= Diluted Out
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-17-5.0-6.0	Batch#:	220704
Lab ID:	264757-001	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	ug/Kg	Prepared:	02/23/15
Basis:	dry	Analyzed:	02/25/15
Diln Fac:	10.00		

Analyte	Result	RL	MDL
Hexachlorobenzene	ND	3,800	120
Pentachlorophenol	ND	7,700	1,500
Phenanthrene	ND	770	120
Anthracene	ND	770	130
Di-n-butylphthalate	ND	3,800	140
Fluoranthene	ND	770	120
Pyrene	ND	770	130
Butylbenzylphthalate	ND	3,800	120
3,3'-Dichlorobenzidine	ND	7,700	80
Benzo(a)anthracene	ND	770	120
Chrysene	ND	770	130
bis(2-Ethylhexyl)phthalate	370 J	3,800	150
Di-n-octylphthalate	ND	3,800	84
Benzo(b)fluoranthene	ND	770	100
Benzo(k)fluoranthene	ND	770	110
Benzo(a)pyrene	ND	770	100
Indeno(1,2,3-cd)pyrene	ND	770	100
Dibenz(a,h)anthracene	ND	770	110
Benzo(g,h,i)perylene	ND	770	120

Surrogate	%REC	Limits
2-Fluorophenol	DO	25-120
Phenol-d5	DO	36-120
2,4,6-Tribromophenol	DO	27-120
Nitrobenzene-d5	DO	44-120
2-Fluorobiphenyl	DO	47-120
Terphenyl-d14	DO	49-120

J= Estimated value
DO= Diluted Out
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-17-9.0-10.0	Batch#:	220704
Lab ID:	264757-002	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	ug/Kg	Prepared:	02/23/15
Basis:	dry	Analyzed:	02/24/15
Diln Fac:	1.000		

Moisture: 15%

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	390	55
Phenol	ND	390	8.2
bis(2-Chloroethyl)ether	ND	390	69
2-Chlorophenol	ND	390	8.6
1,3-Dichlorobenzene	ND	390	66
1,4-Dichlorobenzene	ND	390	9.0
Benzyl alcohol	ND	390	13
1,2-Dichlorobenzene	ND	390	8.9
2-Methylphenol	ND	390	16
bis(2-Chloroisopropyl) ether	ND	390	8.2
4-Methylphenol	ND	390	8.4
N-Nitroso-di-n-propylamine	ND	390	9.2
Hexachloroethane	ND	390	8.0
Nitrobenzene	ND	390	13
Isophorone	ND	390	7.9
2-Nitrophenol	ND	780	8.9
2,4-Dimethylphenol	ND	390	16
Benzoic acid	ND	1,900	510
bis(2-Chloroethoxy)methane	ND	390	8.8
2,4-Dichlorophenol	ND	390	9.5
1,2,4-Trichlorobenzene	ND	390	9.2
Naphthalene	ND	78	9.0
4-Chloroaniline	ND	390	11
Hexachlorobutadiene	ND	390	10
4-Chloro-3-methylphenol	ND	390	9.7
2-Methylnaphthalene	ND	78	7.4
Hexachlorocyclopentadiene	ND	780	16
2,4,6-Trichlorophenol	ND	390	15
2,4,5-Trichlorophenol	ND	390	9.7
2-Chloronaphthalene	ND	390	10
2-Nitroaniline	ND	780	13
Dimethylphthalate	ND	390	12
Acenaphthylene	ND	78	10
2,6-Dinitrotoluene	ND	390	10
3-Nitroaniline	ND	780	8.8
Acenaphthene	ND	78	9.6
2,4-Dinitrophenol	ND	780	75
4-Nitrophenol	ND	780	83
Dibenzofuran	ND	390	12
2,4-Dinitrotoluene	ND	390	11
Diethylphthalate	ND	390	13
Fluorene	ND	78	12
4-Chlorophenyl-phenylether	ND	390	11
4-Nitroaniline	ND	780	9.4
4,6-Dinitro-2-methylphenol	ND	780	89
N-Nitrosodiphenylamine	ND	390	12
Azobenzene	ND	390	10
4-Bromophenyl-phenylether	ND	390	12
Hexachlorobenzene	ND	390	12

*= Value outside of QC limits; see narrative
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-17-9.0-10.0	Batch#:	220704
Lab ID:	264757-002	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	ug/Kg	Prepared:	02/23/15
Basis:	dry	Analyzed:	02/24/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Pentachlorophenol	ND	780	150
Phenanthrene	ND	78	12
Anthracene	ND	78	13
Di-n-butylphthalate	ND	390	14
Fluoranthene	ND	78	12
Pyrene	ND	78	13
Butylbenzylphthalate	ND	390	12
3,3'-Dichlorobenzidine	ND	780	8.1
Benzo(a)anthracene	ND	78	12
Chrysene	ND	78	13
bis(2-Ethylhexyl)phthalate	ND	390	15
Di-n-octylphthalate	ND	390	8.4
Benzo(b)fluoranthene	ND	78	10
Benzo(k)fluoranthene	ND	78	11
Benzo(a)pyrene	ND	78	10
Indeno(1,2,3-cd)pyrene	ND	78	10
Dibenz(a,h)anthracene	ND	78	11
Benzo(g,h,i)perylene	ND	78	12

Surrogate	%REC	Limits
2-Fluorophenol	47	25-120
Phenol-d5	44	36-120
2,4,6-Tribromophenol	52	27-120
Nitrobenzene-d5	39 *	44-120
2-Fluorobiphenyl	47	47-120
Terphenyl-d14	49	49-120

*= Value outside of QC limits; see narrative
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-16-3.0-3.5	Batch#:	220704
Lab ID:	264757-004	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	ug/Kg	Prepared:	02/23/15
Basis:	dry	Analyzed:	02/25/15
Diln Fac:	3.000		

Moisture: 14%

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	1,200	160
Phenol	ND	1,200	25
bis(2-Chloroethyl)ether	ND	1,200	210
2-Chlorophenol	ND	1,200	26
1,3-Dichlorobenzene	ND	1,200	200
1,4-Dichlorobenzene	ND	1,200	27
Benzyl alcohol	ND	1,200	38
1,2-Dichlorobenzene	ND	1,200	27
2-Methylphenol	ND	1,200	47
bis(2-Chloroisopropyl) ether	ND	1,200	25
4-Methylphenol	ND	1,200	25
N-Nitroso-di-n-propylamine	ND	1,200	27
Hexachloroethane	ND	1,200	24
Nitrobenzene	ND	1,200	38
Isophorone	ND	1,200	24
2-Nitrophenol	ND	2,300	27
2,4-Dimethylphenol	ND	1,200	49
Benzoic acid	ND	5,800	1,500
bis(2-Chloroethoxy)methane	ND	1,200	26
2,4-Dichlorophenol	ND	1,200	29
1,2,4-Trichlorobenzene	ND	1,200	28
Naphthalene	ND	230	27
4-Chloroaniline	ND	1,200	33
Hexachlorobutadiene	ND	1,200	31
4-Chloro-3-methylphenol	ND	1,200	29
2-Methylnaphthalene	ND	230	22
Hexachlorocyclopentadiene	ND	2,300	47
2,4,6-Trichlorophenol	ND	1,200	44
2,4,5-Trichlorophenol	ND	1,200	29
2-Chloronaphthalene	ND	1,200	31
2-Nitroaniline	ND	2,300	38
Dimethylphthalate	ND	1,200	35
Acenaphthylene	ND	230	31
2,6-Dinitrotoluene	ND	1,200	31
3-Nitroaniline	ND	2,300	26
Acenaphthene	ND	230	29
2,4-Dinitrophenol	ND	2,300	220
4-Nitrophenol	ND	2,300	250
Dibenzofuran	ND	1,200	36
2,4-Dinitrotoluene	ND	1,200	34
Diethylphthalate	ND	1,200	39
Fluorene	ND	230	34
4-Chlorophenyl-phenylether	ND	1,200	34
4-Nitroaniline	ND	2,300	28
4,6-Dinitro-2-methylphenol	ND	2,300	270
N-Nitrosodiphenylamine	ND	1,200	37
Azobenzene	ND	1,200	30
4-Bromophenyl-phenylether	ND	1,200	37
Hexachlorobenzene	ND	1,200	37

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-16-3.0-3.5	Batch#:	220704
Lab ID:	264757-004	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	ug/Kg	Prepared:	02/23/15
Basis:	dry	Analyzed:	02/25/15
Diln Fac:	3.000		

Analyte	Result	RL	MDL
Pentachlorophenol	ND	2,300	450
Phenanthrene	62 J	230	37
Anthracene	ND	230	40
Di-n-butylphthalate	50 J	1,200	42
Fluoranthene	120 J	230	36
Pyrene	85 J	230	38
Butylbenzylphthalate	ND	1,200	35
3,3'-Dichlorobenzidine	ND	2,300	24
Benzo(a)anthracene	65 J	230	36
Chrysene	60 J	230	39
bis(2-Ethylhexyl)phthalate	520 J	1,200	45
Di-n-octylphthalate	ND	1,200	25
Benzo(b)fluoranthene	55 J	230	31
Benzo(k)fluoranthene	ND	230	33
Benzo(a)pyrene	ND	230	31
Indeno(1,2,3-cd)pyrene	ND	230	31
Dibenz(a,h)anthracene	ND	230	33
Benzo(g,h,i)perylene	ND	230	35

Surrogate	%REC	Limits
2-Fluorophenol	56	25-120
Phenol-d5	53	36-120
2,4,6-Tribromophenol	59	27-120
Nitrobenzene-d5	45	44-120
2-Fluorobiphenyl	53	47-120
Terphenyl-d14	52	49-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-16-9.5-10.0	Batch#:	220704
Lab ID:	264757-005	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	ug/Kg	Prepared:	02/23/15
Basis:	dry	Analyzed:	02/25/15
Diln Fac:	1.000		

Moisture: 14%

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	390	56
Phenol	ND	390	8.3
bis(2-Chloroethyl)ether	ND	390	70
2-Chlorophenol	ND	390	8.7
1,3-Dichlorobenzene	ND	390	67
1,4-Dichlorobenzene	ND	390	9.1
Benzyl alcohol	ND	390	13
1,2-Dichlorobenzene	ND	390	9.0
2-Methylphenol	ND	390	16
bis(2-Chloroisopropyl) ether	ND	390	8.3
4-Methylphenol	ND	390	8.5
N-Nitroso-di-n-propylamine	ND	390	9.3
Hexachloroethane	ND	390	8.1
Nitrobenzene	ND	390	13
Isophorone	ND	390	8.0
2-Nitrophenol	ND	790	9.1
2,4-Dimethylphenol	ND	390	16
Benzoic acid	ND	2,000	520
bis(2-Chloroethoxy)methane	ND	390	8.9
2,4-Dichlorophenol	ND	390	9.7
1,2,4-Trichlorobenzene	ND	390	9.3
Naphthalene	ND	79	9.1
4-Chloroaniline	ND	390	11
Hexachlorobutadiene	ND	390	10
4-Chloro-3-methylphenol	ND	390	9.8
2-Methylnaphthalene	ND	79	7.5
Hexachlorocyclopentadiene	ND	790	16
2,4,6-Trichlorophenol	ND	390	15
2,4,5-Trichlorophenol	ND	390	9.9
2-Chloronaphthalene	ND	390	11
2-Nitroaniline	ND	790	13
Dimethylphthalate	ND	390	12
Acenaphthylene	ND	79	11
2,6-Dinitrotoluene	ND	390	11
3-Nitroaniline	ND	790	8.9
Acenaphthene	ND	79	9.7
2,4-Dinitrophenol	ND	790	76
4-Nitrophenol	ND	790	84
Dibenzofuran	ND	390	12
2,4-Dinitrotoluene	ND	390	11
Diethylphthalate	ND	390	13
Fluorene	ND	79	12
4-Chlorophenyl-phenylether	ND	390	11
4-Nitroaniline	ND	790	9.5
4,6-Dinitro-2-methylphenol	ND	790	91
N-Nitrosodiphenylamine	ND	390	12
Azobenzene	ND	390	10
4-Bromophenyl-phenylether	ND	390	12
Hexachlorobenzene	ND	390	13
Pentachlorophenol	ND	790	150

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-16-9.5-10.0	Batch#:	220704
Lab ID:	264757-005	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	ug/Kg	Prepared:	02/23/15
Basis:	dry	Analyzed:	02/25/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Phenanthrene	ND	79	12
Anthracene	ND	79	13
Di-n-butylphthalate	ND	390	14
Fluoranthene	ND	79	12
Pyrene	ND	79	13
Butylbenzylphthalate	ND	390	12
3,3'-Dichlorobenzidine	ND	790	8.2
Benzo(a)anthracene	ND	79	12
Chrysene	ND	79	13
bis(2-Ethylhexyl)phthalate	ND	390	15
Di-n-octylphthalate	ND	390	8.5
Benzo(b)fluoranthene	ND	79	11
Benzo(k)fluoranthene	ND	79	11
Benzo(a)pyrene	ND	79	10
Indeno(1,2,3-cd)pyrene	ND	79	10
Dibenz(a,h)anthracene	ND	79	11
Benzo(g,h,i)perylene	ND	79	12

Surrogate	%REC	Limits
2-Fluorophenol	72	25-120
Phenol-d5	69	36-120
2,4,6-Tribromophenol	72	27-120
Nitrobenzene-d5	58	44-120
2-Fluorobiphenyl	66	47-120
Terphenyl-d14	60	49-120

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-15-5.0-5.5	Batch#:	220704
Lab ID:	264757-006	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	ug/Kg	Prepared:	02/23/15
Basis:	dry	Analyzed:	02/25/15
Diln Fac:	10.00		

Moisture: 17%

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	4,000	570
Phenol	ND	4,000	85
bis(2-Chloroethyl)ether	ND	4,000	720
2-Chlorophenol	ND	4,000	88
1,3-Dichlorobenzene	ND	4,000	680
1,4-Dichlorobenzene	ND	4,000	93
Benzyl alcohol	ND	4,000	130
1,2-Dichlorobenzene	ND	4,000	92
2-Methylphenol	ND	4,000	160
bis(2-Chloroisopropyl) ether	ND	4,000	85
4-Methylphenol	ND	4,000	87
N-Nitroso-di-n-propylamine	ND	4,000	95
Hexachloroethane	ND	4,000	83
Nitrobenzene	ND	4,000	130
Isophorone	ND	4,000	81
2-Nitrophenol	ND	8,000	92
2,4-Dimethylphenol	ND	4,000	170
Benzoic acid	ND	20,000	5,300
bis(2-Chloroethoxy)methane	ND	4,000	91
2,4-Dichlorophenol	ND	4,000	99
1,2,4-Trichlorobenzene	ND	4,000	95
Naphthalene	ND	800	93
4-Chloroaniline	ND	4,000	110
Hexachlorobutadiene	ND	4,000	110
4-Chloro-3-methylphenol	410 J	4,000	100
2-Methylnaphthalene	ND	800	77
Hexachlorocyclopentadiene	ND	8,000	160
2,4,6-Trichlorophenol	ND	4,000	150
2,4,5-Trichlorophenol	ND	4,000	100
2-Chloronaphthalene	ND	4,000	110
2-Nitroaniline	ND	8,000	130
Dimethylphthalate	ND	4,000	120
Acenaphthylene	ND	800	110
2,6-Dinitrotoluene	ND	4,000	110
3-Nitroaniline	ND	8,000	91
Acenaphthene	ND	800	99
2,4-Dinitrophenol	ND	8,000	770
4-Nitrophenol	ND	8,000	860
Dibenzofuran	ND	4,000	120
2,4-Dinitrotoluene	ND	4,000	120
Diethylphthalate	ND	4,000	140
Fluorene	ND	800	120
4-Chlorophenyl-phenylether	ND	4,000	120
4-Nitroaniline	ND	8,000	97
4,6-Dinitro-2-methylphenol	ND	8,000	920
N-Nitrosodiphenylamine	ND	4,000	130
Azobenzene	ND	4,000	100
4-Bromophenyl-phenylether	ND	4,000	130

J= Estimated value
DO= Diluted Out
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-15-5.0-5.5	Batch#:	220704
Lab ID:	264757-006	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	ug/Kg	Prepared:	02/23/15
Basis:	dry	Analyzed:	02/25/15
Diln Fac:	10.00		

Analyte	Result	RL	MDL
Hexachlorobenzene	ND	4,000	130
Pentachlorophenol	ND	8,000	1,500
Phenanthrene	ND	800	130
Anthracene	ND	800	140
Di-n-butylphthalate	150 J	4,000	150
Fluoranthene	ND	800	120
Pyrene	ND	800	130
Butylbenzylphthalate	ND	4,000	120
3,3'-Dichlorobenzidine	ND	8,000	84
Benzo(a)anthracene	ND	800	120
Chrysene	ND	800	140
bis(2-Ethylhexyl)phthalate	830 J	4,000	160
Di-n-octylphthalate	ND	4,000	87
Benzo(b)fluoranthene	ND	800	110
Benzo(k)fluoranthene	ND	800	110
Benzo(a)pyrene	ND	800	110
Indeno(1,2,3-cd)pyrene	ND	800	110
Dibenz(a,h)anthracene	ND	800	110
Benzo(g,h,i)perylene	ND	800	120

Surrogate	%REC	Limits
2-Fluorophenol	DO	25-120
Phenol-d5	DO	36-120
2,4,6-Tribromophenol	DO	27-120
Nitrobenzene-d5	DO	44-120
2-Fluorobiphenyl	DO	47-120
Terphenyl-d14	DO	49-120

J= Estimated value
DO= Diluted Out
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-15-9.5-10.0	Batch#:	220704
Lab ID:	264757-007	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	ug/Kg	Prepared:	02/23/15
Basis:	dry	Analyzed:	02/25/15
Diln Fac:	1.000		

Moisture: 16%

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	400	56
Phenol	ND	400	8.4
bis(2-Chloroethyl)ether	ND	400	71
2-Chlorophenol	ND	400	8.8
1,3-Dichlorobenzene	ND	400	67
1,4-Dichlorobenzene	ND	400	9.2
Benzyl alcohol	ND	400	13
1,2-Dichlorobenzene	ND	400	9.1
2-Methylphenol	ND	400	16
bis(2-Chloroisopropyl) ether	ND	400	8.4
4-Methylphenol	ND	400	8.6
N-Nitroso-di-n-propylamine	ND	400	9.4
Hexachloroethane	ND	400	8.2
Nitrobenzene	ND	400	13
Isophorone	ND	400	8.1
2-Nitrophenol	ND	790	9.1
2,4-Dimethylphenol	ND	400	17
Benzoic acid	ND	2,000	520
bis(2-Chloroethoxy)methane	ND	400	9.0
2,4-Dichlorophenol	ND	400	9.8
1,2,4-Trichlorobenzene	ND	400	9.4
Naphthalene	ND	79	9.2
4-Chloroaniline	ND	400	11
Hexachlorobutadiene	ND	400	11
4-Chloro-3-methylphenol	46 J	400	9.9
2-Methylnaphthalene	ND	79	7.6
Hexachlorocyclopentadiene	ND	790	16
2,4,6-Trichlorophenol	ND	400	15
2,4,5-Trichlorophenol	ND	400	10
2-Chloronaphthalene	ND	400	11
2-Nitroaniline	ND	790	13
Dimethylphthalate	ND	400	12
Acenaphthylene	ND	79	11
2,6-Dinitrotoluene	ND	400	11
3-Nitroaniline	ND	790	9.0
Acenaphthene	ND	79	9.8
2,4-Dinitrophenol	ND	790	76
4-Nitrophenol	ND	790	85
Dibenzofuran	ND	400	12
2,4-Dinitrotoluene	ND	400	11
Diethylphthalate	ND	400	13
Fluorene	ND	79	12
4-Chlorophenyl-phenylether	ND	400	11
4-Nitroaniline	ND	790	9.6
4,6-Dinitro-2-methylphenol	ND	790	91
N-Nitrosodiphenylamine	ND	400	13
Azobenzene	ND	400	10
4-Bromophenyl-phenylether	ND	400	13
Hexachlorobenzene	ND	400	13

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-15-9.5-10.0	Batch#:	220704
Lab ID:	264757-007	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	ug/Kg	Prepared:	02/23/15
Basis:	dry	Analyzed:	02/25/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Pentachlorophenol	ND	790	150
Phenanthrene	ND	79	13
Anthracene	ND	79	14
Di-n-butylphthalate	ND	400	14
Fluoranthene	ND	79	12
Pyrene	ND	79	13
Butylbenzylphthalate	ND	400	12
3,3'-Dichlorobenzidine	ND	790	8.3
Benzo(a)anthracene	ND	79	12
Chrysene	ND	79	13
bis(2-Ethylhexyl)phthalate	ND	400	16
Di-n-octylphthalate	ND	400	8.6
Benzo(b)fluoranthene	ND	79	11
Benzo(k)fluoranthene	ND	79	11
Benzo(a)pyrene	ND	79	10
Indeno(1,2,3-cd)pyrene	ND	79	11
Dibenz(a,h)anthracene	ND	79	11
Benzo(g,h,i)perylene	ND	79	12

Surrogate	%REC	Limits
2-Fluorophenol	59	25-120
Phenol-d5	56	36-120
2,4,6-Tribromophenol	80	27-120
Nitrobenzene-d5	46	44-120
2-Fluorobiphenyl	63	47-120
Terphenyl-d14	69	49-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-24-3.2-3.8	Batch#:	220582
Lab ID:	264757-008	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	ug/Kg	Prepared:	02/19/15
Basis:	dry	Analyzed:	02/20/15
Diln Fac:	150.0		

Moisture: 15%

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	59,000	8,400
Phenol	ND	59,000	1,300
bis(2-Chloroethyl)ether	ND	59,000	11,000
2-Chlorophenol	ND	59,000	1,300
1,3-Dichlorobenzene	ND	59,000	10,000
1,4-Dichlorobenzene	ND	59,000	1,400
Benzyl alcohol	ND	59,000	1,900
1,2-Dichlorobenzene	ND	59,000	1,400
2-Methylphenol	ND	59,000	2,400
bis(2-Chloroisopropyl) ether	ND	59,000	1,200
4-Methylphenol	ND	59,000	1,300
N-Nitroso-di-n-propylamine	ND	59,000	1,400
Hexachloroethane	ND	59,000	1,200
Nitrobenzene	ND	59,000	1,900
Isophorone	ND	59,000	1,200
2-Nitrophenol	ND	120,000	1,400
2,4-Dimethylphenol	ND	59,000	2,500
Benzoic acid	ND	300,000	77,000
bis(2-Chloroethoxy)methane	ND	59,000	1,300
2,4-Dichlorophenol	ND	59,000	1,500
1,2,4-Trichlorobenzene	ND	59,000	1,400
Naphthalene	ND	12,000	1,400
4-Chloroaniline	ND	59,000	1,700
Hexachlorobutadiene	ND	59,000	1,600
4-Chloro-3-methylphenol	26,000 J	59,000	1,500
2-Methylnaphthalene	ND	12,000	1,100
Hexachlorocyclopentadiene	ND	120,000	2,400
2,4,6-Trichlorophenol	ND	59,000	2,200
2,4,5-Trichlorophenol	ND	59,000	1,500
2-Chloronaphthalene	ND	59,000	1,600
2-Nitroaniline	ND	120,000	1,900
Dimethylphthalate	ND	59,000	1,800
Acenaphthylene	ND	12,000	1,600
2,6-Dinitrotoluene	ND	59,000	1,600
3-Nitroaniline	ND	120,000	1,300
Acenaphthene	ND	12,000	1,500
2,4-Dinitrophenol	ND	120,000	11,000
4-Nitrophenol	ND	120,000	13,000
Dibenzofuran	ND	59,000	1,800
2,4-Dinitrotoluene	ND	59,000	1,700
Diethylphthalate	ND	59,000	2,000
Fluorene	ND	12,000	1,800
4-Chlorophenyl-phenylether	ND	59,000	1,700
4-Nitroaniline	ND	120,000	1,400
4,6-Dinitro-2-methylphenol	ND	120,000	14,000
N-Nitrosodiphenylamine	ND	59,000	1,900
Azobenzene	ND	59,000	1,500
4-Bromophenyl-phenylether	ND	59,000	1,900

J= Estimated value
DO= Diluted Out
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-24-3.2-3.8	Batch#:	220582
Lab ID:	264757-008	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	ug/Kg	Prepared:	02/19/15
Basis:	dry	Analyzed:	02/20/15
Diln Fac:	150.0		

Analyte	Result	RL	MDL
Hexachlorobenzene	ND	59,000	1,900
Pentachlorophenol	ND	120,000	23,000
Phenanthrene	ND	12,000	1,900
Anthracene	ND	12,000	2,000
Di-n-butylphthalate	ND	59,000	2,100
Fluoranthene	ND	12,000	1,800
Pyrene	ND	12,000	1,900
Butylbenzylphthalate	ND	59,000	1,800
3,3'-Dichlorobenzidine	ND	120,000	1,200
Benzo(a)anthracene	ND	12,000	1,800
Chrysene	ND	12,000	2,000
bis(2-Ethylhexyl)phthalate	6,100 J	59,000	2,300
Di-n-octylphthalate	ND	59,000	1,300
Benzo(b)fluoranthene	ND	12,000	1,600
Benzo(k)fluoranthene	ND	12,000	1,700
Benzo(a)pyrene	ND	12,000	1,600
Indeno(1,2,3-cd)pyrene	ND	12,000	1,600
Dibenz(a,h)anthracene	ND	12,000	1,700
Benzo(g,h,i)perylene	ND	12,000	1,800

Surrogate	%REC	Limits
2-Fluorophenol	DO	25-120
Phenol-d5	DO	36-120
2,4,6-Tribromophenol	DO	27-120
Nitrobenzene-d5	DO	44-120
2-Fluorobiphenyl	DO	47-120
Terphenyl-d14	DO	49-120

J= Estimated value
DO= Diluted Out
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-14-4.0-4.5	Batch#:	220704
Lab ID:	264757-009	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	ug/Kg	Prepared:	02/23/15
Basis:	dry	Analyzed:	02/25/15
Diln Fac:	2.000		

Moisture: 13%

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	770	110
Phenol	ND	770	16
bis(2-Chloroethyl)ether	ND	770	140
2-Chlorophenol	ND	770	17
1,3-Dichlorobenzene	ND	770	130
1,4-Dichlorobenzene	ND	770	18
Benzyl alcohol	ND	770	25
1,2-Dichlorobenzene	ND	770	18
2-Methylphenol	ND	770	32
bis(2-Chloroisopropyl) ether	ND	770	16
4-Methylphenol	ND	770	17
N-Nitroso-di-n-propylamine	ND	770	18
Hexachloroethane	ND	770	16
Nitrobenzene	ND	770	25
Isophorone	ND	770	16
2-Nitrophenol	ND	1,500	18
2,4-Dimethylphenol	ND	770	32
Benzoic acid	ND	3,900	1,000
bis(2-Chloroethoxy)methane	ND	770	18
2,4-Dichlorophenol	ND	770	19
1,2,4-Trichlorobenzene	ND	770	18
Naphthalene	ND	150	18
4-Chloroaniline	ND	770	22
Hexachlorobutadiene	ND	770	21
4-Chloro-3-methylphenol	280 J	770	19
2-Methylnaphthalene	ND	150	15
Hexachlorocyclopentadiene	ND	1,500	32
2,4,6-Trichlorophenol	ND	770	29
2,4,5-Trichlorophenol	ND	770	19
2-Chloronaphthalene	ND	770	21
2-Nitroaniline	ND	1,500	25
Dimethylphthalate	ND	770	23
Acenaphthylene	ND	150	21
2,6-Dinitrotoluene	ND	770	21
3-Nitroaniline	ND	1,500	18
Acenaphthene	ND	150	19
2,4-Dinitrophenol	ND	1,500	150
4-Nitrophenol	ND	1,500	170
Dibenzofuran	ND	770	24
2,4-Dinitrotoluene	ND	770	22
Diethylphthalate	ND	770	26
Fluorene	ND	150	23
4-Chlorophenyl-phenylether	ND	770	22
4-Nitroaniline	ND	1,500	19
4,6-Dinitro-2-methylphenol	ND	1,500	180
N-Nitrosodiphenylamine	ND	770	25
Azobenzene	ND	770	20
4-Bromophenyl-phenylether	ND	770	24
Hexachlorobenzene	ND	770	25

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-14-4.0-4.5	Batch#:	220704
Lab ID:	264757-009	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	ug/Kg	Prepared:	02/23/15
Basis:	dry	Analyzed:	02/25/15
Diln Fac:	2.000		

Analyte	Result	RL	MDL
Pentachlorophenol	ND	1,500	300
Phenanthrene	ND	150	24
Anthracene	ND	150	26
Di-n-butylphthalate	72 J	770	28
Fluoranthene	ND	150	24
Pyrene	ND	150	25
Butylbenzylphthalate	ND	770	23
3,3'-Dichlorobenzidine	ND	1,500	16
Benzo(a)anthracene	ND	150	24
Chrysene	ND	150	26
bis(2-Ethylhexyl)phthalate	300 J	770	30
Di-n-octylphthalate	ND	770	17
Benzo(b)fluoranthene	ND	150	21
Benzo(k)fluoranthene	ND	150	22
Benzo(a)pyrene	ND	150	20
Indeno(1,2,3-cd)pyrene	ND	150	20
Dibenz(a,h)anthracene	ND	150	22
Benzo(g,h,i)perylene	ND	150	24

Surrogate	%REC	Limits
2-Fluorophenol	64	25-120
Phenol-d5	62	36-120
2,4,6-Tribromophenol	65	27-120
Nitrobenzene-d5	54	44-120
2-Fluorobiphenyl	64	47-120
Terphenyl-d14	70	49-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

67.0

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-14-9.5-10.0	Batch#:	220704
Lab ID:	264757-010	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	ug/Kg	Prepared:	02/23/15
Basis:	dry	Analyzed:	02/25/15
Diln Fac:	1.000		

Moisture: 12%

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	380	54
Phenol	ND	380	8.0
bis(2-Chloroethyl)ether	ND	380	68
2-Chlorophenol	ND	380	8.4
1,3-Dichlorobenzene	ND	380	64
1,4-Dichlorobenzene	ND	380	8.8
Benzyl alcohol	ND	380	12
1,2-Dichlorobenzene	ND	380	8.7
2-Methylphenol	ND	380	15
bis(2-Chloroisopropyl) ether	ND	380	8.0
4-Methylphenol	ND	380	8.2
N-Nitroso-di-n-propylamine	ND	380	8.9
Hexachloroethane	ND	380	7.8
Nitrobenzene	ND	380	12
Isophorone	ND	380	7.7
2-Nitrophenol	ND	760	8.7
2,4-Dimethylphenol	ND	380	16
Benzoic acid	ND	1,900	500
bis(2-Chloroethoxy)methane	ND	380	8.6
2,4-Dichlorophenol	ND	380	9.3
1,2,4-Trichlorobenzene	ND	380	9.0
Naphthalene	ND	76	8.7
4-Chloroaniline	ND	380	11
Hexachlorobutadiene	ND	380	10
4-Chloro-3-methylphenol	ND	380	9.5
2-Methylnaphthalene	ND	76	7.2
Hexachlorocyclopentadiene	ND	760	15
2,4,6-Trichlorophenol	ND	380	14
2,4,5-Trichlorophenol	ND	380	9.5
2-Chloronaphthalene	ND	380	10
2-Nitroaniline	ND	760	12
Dimethylphthalate	ND	380	11
Acenaphthylene	ND	76	10
2,6-Dinitrotoluene	ND	380	10
3-Nitroaniline	ND	760	8.6
Acenaphthene	ND	76	9.3
2,4-Dinitrophenol	ND	760	73
4-Nitrophenol	ND	760	81
Dibenzofuran	ND	380	12
2,4-Dinitrotoluene	ND	380	11
Diethylphthalate	ND	380	13
Fluorene	ND	76	11
4-Chlorophenyl-phenylether	ND	380	11
4-Nitroaniline	ND	760	9.1
4,6-Dinitro-2-methylphenol	ND	760	87
N-Nitrosodiphenylamine	ND	380	12
Azobenzene	ND	380	9.7
4-Bromophenyl-phenylether	ND	380	12
Hexachlorobenzene	ND	380	12
Pentachlorophenol	ND	760	150

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-14-9.5-10.0	Batch#:	220704
Lab ID:	264757-010	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	ug/Kg	Prepared:	02/23/15
Basis:	dry	Analyzed:	02/25/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Phenanthrene	ND	76	12
Anthracene	ND	76	13
Di-n-butylphthalate	ND	380	14
Fluoranthene	ND	76	12
Pyrene	ND	76	12
Butylbenzylphthalate	ND	380	11
3,3'-Dichlorobenzidine	ND	760	7.9
Benzo(a)anthracene	ND	76	12
Chrysene	ND	76	13
bis(2-Ethylhexyl)phthalate	ND	380	15
Di-n-octylphthalate	ND	380	8.2
Benzo(b)fluoranthene	ND	76	10
Benzo(k)fluoranthene	ND	76	11
Benzo(a)pyrene	ND	76	10
Indeno(1,2,3-cd)pyrene	ND	76	10
Dibenz(a,h)anthracene	ND	76	11
Benzo(g,h,i)perylene	ND	76	12

Surrogate	%REC	Limits
2-Fluorophenol	62	25-120
Phenol-d5	59	36-120
2,4,6-Tribromophenol	66	27-120
Nitrobenzene-d5	50	44-120
2-Fluorobiphenyl	65	47-120
Terphenyl-d14	65	49-120

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-24-7.0-7.3	Batch#:	220582
Lab ID:	264757-011	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	ug/Kg	Prepared:	02/19/15
Basis:	dry	Analyzed:	02/20/15
Diln Fac:	1.000		

Moisture: 15%

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	390	56
Phenol	ND	390	8.4
bis(2-Chloroethyl)ether	ND	390	70
2-Chlorophenol	ND	390	8.7
1,3-Dichlorobenzene	ND	390	67
1,4-Dichlorobenzene	ND	390	9.1
Benzyl alcohol	ND	390	13
1,2-Dichlorobenzene	ND	390	9.1
2-Methylphenol	ND	390	16
bis(2-Chloroisopropyl) ether	ND	390	8.3
4-Methylphenol	ND	390	8.6
N-Nitroso-di-n-propylamine	ND	390	9.3
Hexachloroethane	ND	390	8.2
Nitrobenzene	ND	390	13
Isophorone	ND	390	8.0
2-Nitrophenol	ND	790	9.1
2,4-Dimethylphenol	ND	390	17
Benzoic acid	ND	2,000	520
bis(2-Chloroethoxy)methane	ND	390	9.0
2,4-Dichlorophenol	ND	390	9.7
1,2,4-Trichlorobenzene	ND	390	9.3
Naphthalene	ND	79	9.1
4-Chloroaniline	ND	390	11
Hexachlorobutadiene	ND	390	11
4-Chloro-3-methylphenol	ND	390	9.9
2-Methylnaphthalene	ND	79	7.5
Hexachlorocyclopentadiene	ND	790	16
2,4,6-Trichlorophenol	ND	390	15
2,4,5-Trichlorophenol	ND	390	9.9
2-Chloronaphthalene	ND	390	11
2-Nitroaniline	ND	790	13
Dimethylphthalate	ND	390	12
Acenaphthylene	ND	79	11
2,6-Dinitrotoluene	ND	390	11
3-Nitroaniline	ND	790	8.9
Acenaphthene	ND	79	9.7
2,4-Dinitrophenol	ND	790	76
4-Nitrophenol	ND	790	84
Dibenzofuran	ND	390	12
2,4-Dinitrotoluene	ND	390	11
Diethylphthalate	ND	390	13
Fluorene	ND	79	12
4-Chlorophenyl-phenylether	ND	390	11
4-Nitroaniline	ND	790	9.5
4,6-Dinitro-2-methylphenol	ND	790	91
N-Nitrosodiphenylamine	ND	390	13
Azobenzene	ND	390	10
4-Bromophenyl-phenylether	ND	390	12
Hexachlorobenzene	ND	390	13
Pentachlorophenol	ND	790	150

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	SB-24-7.0-7.3	Batch#:	220582
Lab ID:	264757-011	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	ug/Kg	Prepared:	02/19/15
Basis:	dry	Analyzed:	02/20/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Phenanthrene	ND	79	12
Anthracene	ND	79	13
Di-n-butylphthalate	ND	390	14
Fluoranthene	ND	79	12
Pyrene	ND	79	13
Butylbenzylphthalate	ND	390	12
3,3'-Dichlorobenzidine	ND	790	8.2
Benzo(a)anthracene	ND	79	12
Chrysene	ND	79	13
bis(2-Ethylhexyl)phthalate	ND	390	15
Di-n-octylphthalate	ND	390	8.6
Benzo(b)fluoranthene	ND	79	11
Benzo(k)fluoranthene	ND	79	11
Benzo(a)pyrene	ND	79	10
Indeno(1,2,3-cd)pyrene	ND	79	10
Dibenz(a,h)anthracene	ND	79	11
Benzo(g,h,i)perylene	ND	79	12

Surrogate	%REC	Limits
2-Fluorophenol	55	25-120
Phenol-d5	56	36-120
2,4,6-Tribromophenol	69	27-120
Nitrobenzene-d5	46	44-120
2-Fluorobiphenyl	54	47-120
Terphenyl-d14	74	49-120

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777813	Batch#:	220582
Matrix:	Soil	Prepared:	02/19/15
Units:	ug/Kg	Analyzed:	02/19/15

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	340	13
Phenol	ND	340	17
bis(2-Chloroethyl)ether	ND	340	13
2-Chlorophenol	ND	340	17
1,3-Dichlorobenzene	ND	340	7.6
1,4-Dichlorobenzene	ND	340	10
Benzyl alcohol	ND	340	16
1,2-Dichlorobenzene	ND	340	9.5
2-Methylphenol	ND	340	15
bis(2-Chloroisopropyl) ether	ND	340	18
4-Methylphenol	ND	340	18
N-Nitroso-di-n-propylamine	ND	340	11
Hexachloroethane	ND	340	8.3
Nitrobenzene	ND	340	7.8
Isophorone	ND	340	11
2-Nitrophenol	ND	670	10
2,4-Dimethylphenol	ND	340	14
Benzoic acid	ND	1,700	310
bis(2-Chloroethoxy)methane	ND	340	12
2,4-Dichlorophenol	ND	340	13
1,2,4-Trichlorobenzene	ND	340	9.7
Naphthalene	ND	67	8.8
4-Chloroaniline	ND	340	17
Hexachlorobutadiene	ND	340	61
4-Chloro-3-methylphenol	ND	340	15
2-Methylnaphthalene	ND	67	9.9
Hexachlorocyclopentadiene	ND	670	61
2,4,6-Trichlorophenol	ND	340	14
2,4,5-Trichlorophenol	ND	340	8.8
2-Chloronaphthalene	ND	340	56
2-Nitroaniline	ND	670	8.1
Dimethylphthalate	ND	340	9.4
Acenaphthylene	ND	67	8.6
2,6-Dinitrotoluene	ND	340	8.8
3-Nitroaniline	ND	670	11
Acenaphthene	ND	67	7.0
2,4-Dinitrophenol	ND	670	42
4-Nitrophenol	ND	670	69
Dibenzofuran	ND	340	8.8
2,4-Dinitrotoluene	ND	340	9.7
Diethylphthalate	ND	340	8.6
Fluorene	ND	67	9.0
4-Chlorophenyl-phenylether	ND	340	9.8
4-Nitroaniline	ND	670	8.0
4,6-Dinitro-2-methylphenol	ND	670	42
N-Nitrosodiphenylamine	ND	340	56
Azobenzene	ND	340	7.2
4-Bromophenyl-phenylether	ND	340	59
Hexachlorobenzene	ND	340	7.3
Pentachlorophenol	ND	670	150
Phenanthrene	ND	67	9.6
Anthracene	ND	67	7.0
Di-n-butylphthalate	ND	340	8.4

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777813	Batch#:	220582
Matrix:	Soil	Prepared:	02/19/15
Units:	ug/Kg	Analyzed:	02/19/15

Analyte	Result	RL	MDL
Fluoranthene	ND	67	8.7
Pyrene	ND	67	9.4
Butylbenzylphthalate	ND	340	8.4
3,3'-Dichlorobenzidine	ND	670	43
Benzo(a)anthracene	ND	67	8.7
Chrysene	ND	67	6.8
bis(2-Ethylhexyl)phthalate	ND	340	8.8
Di-n-octylphthalate	ND	340	8.5
Benzo(b)fluoranthene	ND	67	8.3
Benzo(k)fluoranthene	ND	67	8.7
Benzo(a)pyrene	ND	67	8.7
Indeno(1,2,3-cd)pyrene	ND	67	8.2
Dibenz(a,h)anthracene	ND	67	6.9
Benzo(g,h,i)perylene	ND	67	8.7

Surrogate	%REC	Limits
2-Fluorophenol	76	25-120
Phenol-d5	90	36-120
2,4,6-Tribromophenol	52	27-120
Nitrobenzene-d5	58	44-120
2-Fluorobiphenyl	62	47-120
Terphenyl-d14	75	49-120

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC777814	Batch#:	220582
Matrix:	Soil	Prepared:	02/19/15
Units:	ug/Kg	Analyzed:	02/19/15

Analyte	Spiked	Result	%REC	Limits
Phenol	2,671	2,961	111	42-120
2-Chlorophenol	2,671	2,683	100	45-120
1,4-Dichlorobenzene	2,671	2,128	80	48-120
N-Nitroso-di-n-propylamine	2,671	2,667	100	27-123
1,2,4-Trichlorobenzene	2,671	2,048	77	50-120
4-Chloro-3-methylphenol	2,671	1,836	69	59-120
Acenaphthene	1,002	798.7	80	53-120
4-Nitrophenol	2,671	2,044	77	47-120
2,4-Dinitrotoluene	2,671	2,188	82	55-120
Pentachlorophenol	2,671	1,067	40	32-120
Pyrene	1,002	801.0	80	52-120

Surrogate	%REC	Limits
2-Fluorophenol	98	25-120
Phenol-d5	108	36-120
2,4,6-Tribromophenol	74	27-120
Nitrobenzene-d5	75	44-120
2-Fluorobiphenyl	72	47-120
Terphenyl-d14	73	49-120

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Field ID:	ZZZZZZZZZZ	Batch#:	220582
MSS Lab ID:	264640-046	Sampled:	02/12/15
Matrix:	Soil	Received:	02/12/15
Units:	ug/Kg	Prepared:	02/19/15
Basis:	as received	Analyzed:	02/20/15
Diln Fac:	1.000		

Type: MS Lab ID: QC777815

Analyte	MSS Result	Spiked	Result	%REC	Limits
Phenol	<15.10	2,640	2,958	112	47-120
2-Chlorophenol	<14.03	2,640	2,699	102	44-120
1,4-Dichlorobenzene	<7.366	2,640	1,878	71	49-120
N-Nitroso-di-n-propylamine	<15.28	2,640	2,669	101	42-120
1,2,4-Trichlorobenzene	<8.531	2,640	1,901	72	54-120
4-Chloro-3-methylphenol	<8.718	2,640	1,802	68	55-120
Acenaphthene	<6.732	990.1	777.1	78	51-120
4-Nitrophenol	<7.127	2,640	2,150	81	36-120
2,4-Dinitrotoluene	<8.384	2,640	2,146	81	52-120
Pentachlorophenol	<103.2	2,640	1,655	63	14-120
Pyrene	<7.360	990.1	821.8	83	46-124

Surrogate	%REC	Limits
2-Fluorophenol	99	25-120
Phenol-d5	110	36-120
2,4,6-Tribromophenol	70	27-120
Nitrobenzene-d5	73	44-120
2-Fluorobiphenyl	72	47-120
Terphenyl-d14	77	49-120

Type: MSD Lab ID: QC777816

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Phenol	2,631	3,074	117	47-120	4	39
2-Chlorophenol	2,631	2,877	109	44-120	7	38
1,4-Dichlorobenzene	2,631	2,095	80	49-120	11	45
N-Nitroso-di-n-propylamine	2,631	2,701	103	42-120	2	40
1,2,4-Trichlorobenzene	2,631	2,062	78	54-120	8	38
4-Chloro-3-methylphenol	2,631	1,884	72	55-120	5	41
Acenaphthene	986.5	854.9	87	51-120	10	47
4-Nitrophenol	2,631	2,241	85	36-120	5	41
2,4-Dinitrotoluene	2,631	2,315	88	52-120	8	40
Pentachlorophenol	2,631	1,481	56	14-120	11	53
Pyrene	986.5	871.6	88	46-124	6	50

Surrogate	%REC	Limits
2-Fluorophenol	106	25-120
Phenol-d5	115	36-120
2,4,6-Tribromophenol	73	27-120
Nitrobenzene-d5	80	44-120
2-Fluorobiphenyl	77	47-120
Terphenyl-d14	81	49-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778348	Batch#:	220704
Matrix:	Soil	Prepared:	02/23/15
Units:	ug/Kg	Analyzed:	02/23/15

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	330	46
Phenol	ND	330	7.0
bis(2-Chloroethyl)ether	ND	330	59
2-Chlorophenol	ND	330	7.3
1,3-Dichlorobenzene	ND	330	56
1,4-Dichlorobenzene	ND	330	7.6
Benzyl alcohol	ND	330	11
1,2-Dichlorobenzene	ND	330	7.6
2-Methylphenol	ND	330	13
bis(2-Chloroisopropyl) ether	ND	330	6.9
4-Methylphenol	ND	330	7.1
N-Nitroso-di-n-propylamine	ND	330	7.8
Hexachloroethane	ND	330	6.8
Nitrobenzene	ND	330	11
Isophorone	ND	330	6.7
2-Nitrophenol	ND	660	7.6
2,4-Dimethylphenol	ND	330	14
Benzoic acid	ND	1,600	430
bis(2-Chloroethoxy)methane	ND	330	7.5
2,4-Dichlorophenol	ND	330	8.1
1,2,4-Trichlorobenzene	ND	330	7.8
Naphthalene	ND	66	7.6
4-Chloroaniline	ND	330	9.3
Hexachlorobutadiene	ND	330	8.8
4-Chloro-3-methylphenol	ND	330	8.2
2-Methylnaphthalene	ND	66	6.3
Hexachlorocyclopentadiene	ND	660	13
2,4,6-Trichlorophenol	ND	330	12
2,4,5-Trichlorophenol	ND	330	8.2
2-Chloronaphthalene	ND	330	8.8
2-Nitroaniline	ND	660	11
Dimethylphthalate	ND	330	9.9
Acenaphthylene	ND	66	8.8
2,6-Dinitrotoluene	ND	330	8.8
3-Nitroaniline	ND	660	7.4
Acenaphthene	ND	66	8.1
2,4-Dinitrophenol	ND	660	63
4-Nitrophenol	ND	660	70
Dibenzofuran	ND	330	10
2,4-Dinitrotoluene	ND	330	9.5
Diethylphthalate	ND	330	11
Fluorene	ND	66	9.7
4-Chlorophenyl-phenylether	ND	330	9.5
4-Nitroaniline	ND	660	7.9
4,6-Dinitro-2-methylphenol	ND	660	76
N-Nitrosodiphenylamine	ND	330	10
Azobenzene	ND	330	8.4
4-Bromophenyl-phenylether	ND	330	10
Hexachlorobenzene	ND	330	11
Pentachlorophenol	ND	660	130
Phenanthrene	ND	66	10
Anthracene	ND	66	11
Di-n-butylphthalate	ND	330	12

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778348	Batch#:	220704
Matrix:	Soil	Prepared:	02/23/15
Units:	ug/Kg	Analyzed:	02/23/15

Analyte	Result	RL	MDL
Fluoranthene	ND	66	10
Pyrene	ND	66	11
Butylbenzylphthalate	ND	330	9.9
3,3'-Dichlorobenzidine	ND	660	6.8
Benzo(a)anthracene	ND	66	10
Chrysene	ND	66	11
bis(2-Ethylhexyl)phthalate	ND	330	13
Di-n-octylphthalate	ND	330	7.1
Benzo(b)fluoranthene	ND	66	8.9
Benzo(k)fluoranthene	ND	66	9.4
Benzo(a)pyrene	ND	66	8.6
Indeno(1,2,3-cd)pyrene	ND	66	8.7
Dibenz(a,h)anthracene	ND	66	9.2
Benzo(g,h,i)perylene	ND	66	10

Surrogate	%REC	Limits
2-Fluorophenol	51	25-120
Phenol-d5	49	36-120
2,4,6-Tribromophenol	50	27-120
Nitrobenzene-d5	45	44-120
2-Fluorobiphenyl	54	47-120
Terphenyl-d14	57	49-120

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8270C
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC778349	Batch#:	220704
Matrix:	Soil	Prepared:	02/23/15
Units:	ug/Kg	Analyzed:	02/24/15

Analyte	Spiked	Result	%REC	Limits
Phenol	2,672	1,549	58	42-120
2-Chlorophenol	2,672	1,617	61	45-120
1,4-Dichlorobenzene	2,672	1,660	62	48-120
N-Nitroso-di-n-propylamine	2,672	1,609	60	27-123
1,2,4-Trichlorobenzene	2,672	1,661	62	50-120
4-Chloro-3-methylphenol	2,672	1,840	69	59-120
Acenaphthene	1,002	618.1	62	53-120
4-Nitrophenol	2,672	1,821	68	47-120
2,4-Dinitrotoluene	2,672	1,567	59	55-120
Pentachlorophenol	2,672	1,702	64	32-120
Pyrene	1,002	669.8	67	52-120

Surrogate	%REC	Limits
2-Fluorophenol	52	25-120
Phenol-d5	58	36-120
2,4,6-Tribromophenol	63	27-120
Nitrobenzene-d5	58	44-120
2-Fluorobiphenyl	52	47-120
Terphenyl-d14	54	49-120

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	02/18/15
Units:	ug/Kg	Received:	02/18/15
Basis:	dry		

Field ID:	SB-17-5.0-6.0	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	220711
Lab ID:	264757-001	Prepared:	02/23/15
Moisture:	14%	Analyzed:	02/23/15

Analyte	Result	RL
Aroclor-1016	ND	14
Aroclor-1221	ND	28
Aroclor-1232	ND	14
Aroclor-1242	ND	14
Aroclor-1248	ND	14
Aroclor-1254	ND	14
Aroclor-1260	ND	14

Surrogate	%REC	Limits
TCMX	92	46-141
Decachlorobiphenyl	58	25-135

Field ID:	SB-17-9.0-10.0	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	220711
Lab ID:	264757-002	Prepared:	02/23/15
Moisture:	15%	Analyzed:	02/23/15

Analyte	Result	RL	MDL
Aroclor-1016	ND	14	3.5
Aroclor-1221	ND	28	9.4
Aroclor-1232	ND	14	4.6
Aroclor-1242	ND	14	4.2
Aroclor-1248	ND	14	4.5
Aroclor-1254	ND	14	3.6
Aroclor-1260	ND	14	2.3

Surrogate	%REC	Limits
TCMX	118	46-141
Decachlorobiphenyl	123	25-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	02/18/15
Units:	ug/Kg	Received:	02/18/15
Basis:	dry		

Field ID:	SB-16-3.0-3.5	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	220711
Lab ID:	264757-004	Prepared:	02/23/15
Moisture:	14%	Analyzed:	02/23/15

Analyte	Result	RL	MDL
Aroclor-1016	ND	14	3.5
Aroclor-1221	ND	28	9.4
Aroclor-1232	ND	14	4.6
Aroclor-1242	ND	14	4.2
Aroclor-1248	ND	14	4.5
Aroclor-1254	ND	14	3.6
Aroclor-1260	ND	14	2.3

Surrogate	%REC	Limits
TCMX	108	46-141
Decachlorobiphenyl	98	25-135

Field ID:	SB-16-9.5-10.0	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	220711
Lab ID:	264757-005	Prepared:	02/23/15
Moisture:	14%	Analyzed:	02/23/15

Analyte	Result	RL	MDL
Aroclor-1016	ND	14	3.4
Aroclor-1221	ND	28	9.3
Aroclor-1232	ND	14	4.5
Aroclor-1242	ND	14	4.2
Aroclor-1248	ND	14	4.4
Aroclor-1254	ND	14	3.6
Aroclor-1260	ND	14	2.3

Surrogate	%REC	Limits
TCMX	109	46-141
Decachlorobiphenyl	123	25-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	02/18/15
Units:	ug/Kg	Received:	02/18/15
Basis:	dry		

Field ID:	SB-15-5.0-5.5	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	220711
Lab ID:	264757-006	Prepared:	02/23/15
Moisture:	17%	Analyzed:	02/23/15

Analyte	Result	RL	MDL
Aroclor-1016	ND	14	3.5
Aroclor-1221	ND	29	9.5
Aroclor-1232	ND	14	4.6
Aroclor-1242	ND	14	4.3
Aroclor-1248	ND	14	4.5
Aroclor-1254	ND	14	3.6
Aroclor-1260	ND	14	2.3

Surrogate	%REC	Limits
TCMX	87	46-141
Decachlorobiphenyl	80	25-135

Field ID:	SB-15-9.5-10.0	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	220711
Lab ID:	264757-007	Prepared:	02/23/15
Moisture:	16%	Analyzed:	02/23/15

Analyte	Result	RL	MDL
Aroclor-1016	ND	14	3.5
Aroclor-1221	ND	29	9.5
Aroclor-1232	ND	14	4.7
Aroclor-1242	ND	14	4.3
Aroclor-1248	ND	14	4.6
Aroclor-1254	ND	14	3.6
Aroclor-1260	ND	14	2.3

Surrogate	%REC	Limits
TCMX	104	46-141
Decachlorobiphenyl	111	25-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	02/18/15
Units:	ug/Kg	Received:	02/18/15
Basis:	dry		

Field ID:	SB-24-3.2-3.8	Diln Fac:	5.000
Type:	SAMPLE	Batch#:	220598
Lab ID:	264757-008	Prepared:	02/19/15
Moisture:	15%	Analyzed:	02/19/15

Analyte	Result	RL	MDL
Aroclor-1016	ND	39	14
Aroclor-1221	ND	78	37
Aroclor-1232	ND	39	18
Aroclor-1242	ND	39	17
Aroclor-1248	ND	39	18
Aroclor-1254	ND	39	14
Aroclor-1260	ND	39	9.0

Surrogate	%REC	Limits
TCMX	60	46-141
Decachlorobiphenyl	66	25-135

Field ID:	SB-14-4.0-4.5	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	220711
Lab ID:	264757-009	Prepared:	02/23/15
Moisture:	13%	Analyzed:	02/23/15

Analyte	Result	RL	MDL
Aroclor-1016	ND	14	3.4
Aroclor-1221	ND	28	9.3
Aroclor-1232	ND	14	4.5
Aroclor-1242	ND	14	4.2
Aroclor-1248	ND	14	4.4
Aroclor-1254	ND	14	3.5
Aroclor-1260	ND	14	2.2

Surrogate	%REC	Limits
TCMX	101	46-141
Decachlorobiphenyl	89	25-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	02/18/15
Units:	ug/Kg	Received:	02/18/15
Basis:	dry		

Field ID:	SB-14-9.5-10.0	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	220711
Lab ID:	264757-010	Prepared:	02/23/15
Moisture:	12%	Analyzed:	02/23/15

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	3.3
Aroclor-1221	ND	27	8.9
Aroclor-1232	ND	13	4.4
Aroclor-1242	ND	13	4.0
Aroclor-1248	ND	13	4.3
Aroclor-1254	ND	13	3.4
Aroclor-1260	ND	13	2.2

Surrogate	%REC	Limits
TCMX	95	46-141
Decachlorobiphenyl	100	25-135

Field ID:	SB-24-7.0-7.3	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	220598
Lab ID:	264757-011	Prepared:	02/19/15
Moisture:	15%	Analyzed:	02/19/15

Analyte	Result	RL	MDL
Aroclor-1016	ND	11	2.8
Aroclor-1221	ND	23	7.5
Aroclor-1232	ND	11	3.6
Aroclor-1242	ND	11	3.4
Aroclor-1248	ND	11	3.6
Aroclor-1254	ND	11	2.9
Aroclor-1260	ND	11	1.8

Surrogate	%REC	Limits
TCMX	104	46-141
Decachlorobiphenyl	113	25-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	02/18/15
Units:	ug/Kg	Received:	02/18/15
Basis:	dry		

Type:	BLANK	Batch#:	220598
Lab ID:	QC777866	Prepared:	02/19/15
Diln Fac:	1.000	Analyzed:	02/19/15

Analyte	Result	RL	MDL
Aroclor-1016	ND	9.6	2.4
Aroclor-1221	ND	19	6.3
Aroclor-1232	ND	9.6	3.1
Aroclor-1242	ND	9.6	2.9
Aroclor-1248	ND	9.6	3.0
Aroclor-1254	ND	9.6	2.4
Aroclor-1260	ND	9.6	1.5

Surrogate	%REC	Limits
TCMX	107	46-141
Decachlorobiphenyl	109	25-135

Type:	BLANK	Batch#:	220711
Lab ID:	QC778321	Prepared:	02/23/15
Diln Fac:	1.000	Analyzed:	02/23/15

Analyte	Result	RL	MDL
Aroclor-1016	ND	12	3.0
Aroclor-1221	ND	24	8.0
Aroclor-1232	ND	12	3.9
Aroclor-1242	ND	12	3.6
Aroclor-1248	ND	12	3.8
Aroclor-1254	ND	12	3.1
Aroclor-1260	ND	12	1.9

Surrogate	%REC	Limits
TCMX	101	46-141
Decachlorobiphenyl	108	25-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC777867	Batch#:	220598
Matrix:	Soil	Prepared:	02/19/15
Units:	ug/Kg	Analyzed:	02/19/15

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	166.6	185.0	111	64-140
Aroclor-1260	166.6	203.0	122	65-146

Surrogate	%REC	Limits
TCMX	106	46-141
Decachlorobiphenyl	118	25-135

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC778322	Batch#:	220711
Matrix:	Soil	Prepared:	02/23/15
Units:	ug/Kg	Analyzed:	02/23/15

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	168.2	175.3	104	64-140
Aroclor-1260	168.2	183.1	109	65-146

Surrogate	%REC	Limits
TCMX	95	46-141
Decachlorobiphenyl	111	25-135

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Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3550B
Project#:	C1374	Analysis:	EPA 8082
Field ID:	SB-17-5.0-6.0	Batch#:	220711
MSS Lab ID:	264757-001	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	ug/Kg	Prepared:	02/23/15
Basis:	dry	Analyzed:	02/23/15
Diln Fac:	1.000		

Type: MS Moisture: 14%
Lab ID: QC778323

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	ND	193.5	183.7	95	60-161
Aroclor-1260	ND	193.5	167.6	87	42-166

Surrogate	%REC	Limits
TCMX	92	46-141
Decachlorobiphenyl	62	25-135

Type: MSD Moisture: 14%
Lab ID: QC778324

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	194.6	189.2	97	60-161	2	43
Aroclor-1260	194.6	176.7	91	42-166	5	51

Surrogate	%REC	Limits
TCMX	92	46-141
Decachlorobiphenyl	64	25-135

ND= Not Detected
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	264757	Project#:	C1374
Client:	Integral Consulting, Inc.	Location:	Allied Engineering
Field ID:	SB-17-5.0-6.0	Basis:	dry
Lab ID:	264757-001	Diln Fac:	1.000
Matrix:	Soil	Sampled:	02/18/15
Units:	mg/Kg	Received:	02/18/15

Moisture: 14%

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	4.1	0.58	0.17	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Arsenic	1.3	0.29	0.084	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Barium	53	0.29	0.062	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Beryllium	0.32	0.12	0.014	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Cadmium	0.60	0.29	0.030	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Chromium	44	0.29	0.073	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Cobalt	3.3	0.29	0.035	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Copper	9.3	0.29	0.097	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Lead	1.7	0.29	0.081	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Mercury	0.034	0.021	0.0014	220691	02/22/15	02/23/15	METHOD	EPA 7471A
Molybdenum	0.16 J	0.29	0.057	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Nickel	37	0.29	0.077	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Selenium	ND	0.58	0.19	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Silver	ND	0.29	0.046	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Thallium	ND	0.58	0.16	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Vanadium	25	0.29	0.066	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Zinc	23	1.2	0.065	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	264757	Project#:	C1374
Client:	Integral Consulting, Inc.	Location:	Allied Engineering
Field ID:	SB-17-9.0-10.0	Basis:	dry
Lab ID:	264757-002	Diln Fac:	1.000
Matrix:	Soil	Sampled:	02/18/15
Units:	mg/Kg	Received:	02/18/15

Moisture: 15%

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	4.7	0.59	0.18	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Arsenic	4.1	0.30	0.086	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Barium	63	0.30	0.064	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Beryllium	0.34	0.12	0.015	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Cadmium	0.67	0.30	0.030	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Chromium	54	0.30	0.075	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Cobalt	5.0	0.30	0.036	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Copper	12	0.30	0.099	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Lead	2.3	0.30	0.083	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Mercury	0.062	0.020	0.0013	220691	02/22/15	02/23/15	METHOD	EPA 7471A
Molybdenum	0.090 J	0.30	0.058	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Nickel	31	0.30	0.078	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Selenium	ND	0.59	0.19	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Silver	ND	0.30	0.047	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Thallium	ND	0.59	0.17	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Vanadium	36	0.30	0.068	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Zinc	28	1.2	0.067	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	264757	Project#:	C1374
Client:	Integral Consulting, Inc.	Location:	Allied Engineering
Field ID:	SB-16-3.0-3.5	Basis:	dry
Lab ID:	264757-004	Diln Fac:	1.000
Matrix:	Soil	Sampled:	02/18/15
Units:	mg/Kg	Received:	02/18/15

Moisture: 14%

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	9.7	0.54	0.16	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Arsenic	2.2	0.27	0.079	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Barium	100	0.27	0.058	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Beryllium	0.25	0.11	0.013	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Cadmium	1.8	0.27	0.028	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Chromium	170	0.27	0.068	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Cobalt	21	0.27	0.033	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Copper	180	0.27	0.091	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Lead	51	0.27	0.076	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Mercury	0.021	0.018	0.0012	220691	02/22/15	02/23/15	METHOD	EPA 7471A
Molybdenum	10	0.27	0.053	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Nickel	98	0.27	0.072	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Selenium	ND	0.54	0.17	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Silver	0.52	0.27	0.043	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Thallium	ND	0.54	0.15	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Vanadium	29	0.27	0.062	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Zinc	100	1.1	0.061	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	264757	Project#:	C1374
Client:	Integral Consulting, Inc.	Location:	Allied Engineering
Field ID:	SB-16-9.5-10.0	Basis:	dry
Lab ID:	264757-005	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	mg/Kg		

Moisture: 14%

Analyte	Result	RL	MDL	Diln Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	5.8	0.53	0.16	1.000	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Arsenic	13	0.26	0.077	1.000	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Barium	1,100	26	5.7	100.0	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Beryllium	0.36	0.11	0.013	1.000	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Cadmium	1.0	0.26	0.027	1.000	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Chromium	53	0.26	0.067	1.000	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Cobalt	20	0.26	0.032	1.000	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Copper	15	0.26	0.088	1.000	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Lead	3.3	0.26	0.074	1.000	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Mercury	0.029	0.020	0.0013	1.000	220694	02/22/15	02/23/15	METHOD	EPA 7471A
Molybdenum	0.78	0.26	0.052	1.000	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Nickel	75	0.26	0.070	1.000	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Selenium	0.88	0.53	0.17	1.000	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Silver	ND	0.26	0.042	1.000	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Thallium	ND	0.53	0.15	1.000	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Vanadium	67	0.26	0.060	1.000	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Zinc	34	1.1	0.059	1.000	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	264757	Project#:	C1374
Client:	Integral Consulting, Inc.	Location:	Allied Engineering
Field ID:	SB-15-5.0-5.5	Basis:	dry
Lab ID:	264757-006	Diln Fac:	1.000
Matrix:	Soil	Sampled:	02/18/15
Units:	mg/Kg	Received:	02/18/15

Moisture: 17%

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	4.5	0.55	0.16	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Arsenic	3.5	0.27	0.080	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Barium	96	0.27	0.059	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Beryllium	0.36	0.11	0.014	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Cadmium	0.79	0.27	0.028	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Chromium	53	0.27	0.069	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Cobalt	26	0.27	0.033	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Copper	18	0.27	0.091	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Lead	12	0.27	0.076	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Mercury	0.036	0.019	0.0013	220694	02/22/15	02/23/15	METHOD	EPA 7471A
Molybdenum	0.33	0.27	0.053	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Nickel	51	0.27	0.072	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Selenium	ND	0.55	0.17	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Silver	1.3	0.27	0.044	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Thallium	ND	0.55	0.15	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Vanadium	31	0.27	0.062	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Zinc	47	1.1	0.061	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	264757	Project#:	C1374
Client:	Integral Consulting, Inc.	Location:	Allied Engineering
Field ID:	SB-15-9.5-10.0	Basis:	dry
Lab ID:	264757-007	Diln Fac:	1.000
Matrix:	Soil	Sampled:	02/18/15
Units:	mg/Kg	Received:	02/18/15

Moisture: 16%

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	7.4	0.57	0.17	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Arsenic	12	0.29	0.083	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Barium	230	0.29	0.061	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Beryllium	0.49	0.11	0.014	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Cadmium	1.1	0.29	0.029	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Chromium	66	0.29	0.072	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Cobalt	11	0.29	0.034	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Copper	17	0.29	0.095	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Lead	5.5	0.29	0.080	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Mercury	0.050	0.021	0.0013	220694	02/22/15	02/23/15	METHOD	EPA 7471A
Molybdenum	0.40	0.29	0.056	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Nickel	58	0.29	0.075	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Selenium	ND	0.57	0.18	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Silver	ND	0.29	0.046	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Thallium	ND	0.57	0.16	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Vanadium	57	0.29	0.065	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Zinc	48	1.1	0.064	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	264757	Project#:	C1374
Client:	Integral Consulting, Inc.	Location:	Allied Engineering
Field ID:	SB-24-3.2-3.8	Sampled:	02/18/15
Lab ID:	264757-008	Received:	02/18/15
Matrix:	Soil	Prepared:	02/19/15
Units:	mg/Kg	Analyzed:	02/19/15
Basis:	dry		

Moisture: 15%

Analyte	Result	RL	MDL	Diln Fac	Batch#	Prep	Analysis
Antimony	0.48 J	0.63	0.19	1.000	220573	EPA 3050B	EPA 6010B
Arsenic	1.6	0.32	0.092	1.000	220573	EPA 3050B	EPA 6010B
Barium	120	0.32	0.068	1.000	220573	EPA 3050B	EPA 6010B
Beryllium	0.27	0.13	0.016	1.000	220573	EPA 3050B	EPA 6010B
Cadmium	0.25 J	0.32	0.032	1.000	220573	EPA 3050B	EPA 6010B
Chromium	23	0.32	0.080	1.000	220573	EPA 3050B	EPA 6010B
Cobalt	5.3	0.32	0.038	1.000	220573	EPA 3050B	EPA 6010B
Copper	9.6	0.32	0.11	1.000	220573	EPA 3050B	EPA 6010B
Lead	14	0.32	0.088	1.000	220573	EPA 3050B	EPA 6010B
Mercury	0.024 J	0.10	0.0056	5.000	220591	METHOD	EPA 7471A
Molybdenum	0.19 J	0.32	0.062	1.000	220573	EPA 3050B	EPA 6010B
Nickel	18	0.32	0.083	1.000	220573	EPA 3050B	EPA 6010B
Selenium	ND	0.63	0.20	1.000	220573	EPA 3050B	EPA 6010B
Silver	ND	0.32	0.050	1.000	220573	EPA 3050B	EPA 6010B
Thallium	0.22 J	0.63	0.18	1.000	220573	EPA 3050B	EPA 6010B
Vanadium	20	0.32	0.072	1.000	220573	EPA 3050B	EPA 6010B
Zinc	20	1.3	0.071	1.000	220573	EPA 3050B	EPA 6010B

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	264757	Project#:	C1374
Client:	Integral Consulting, Inc.	Location:	Allied Engineering
Field ID:	SB-14-4.0-4.5	Basis:	dry
Lab ID:	264757-009	Diln Fac:	1.000
Matrix:	Soil	Sampled:	02/18/15
Units:	mg/Kg	Received:	02/18/15

Moisture: 13%

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	3.4	0.57	0.17	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Arsenic	2.6	0.28	0.083	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Barium	71	0.28	0.061	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Beryllium	0.30	0.11	0.014	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Cadmium	0.50	0.28	0.029	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Chromium	51	0.28	0.072	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Cobalt	6.6	0.28	0.034	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Copper	11	0.28	0.095	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Lead	2.3	0.28	0.079	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Mercury	0.040	0.018	0.0012	220694	02/22/15	02/23/15	METHOD	EPA 7471A
Molybdenum	0.12 J	0.28	0.056	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Nickel	33	0.28	0.075	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Selenium	ND	0.57	0.18	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Silver	ND	0.28	0.045	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Thallium	ND	0.57	0.16	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Vanadium	30	0.28	0.065	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Zinc	24	1.1	0.064	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	264757	Project#:	C1374
Client:	Integral Consulting, Inc.	Location:	Allied Engineering
Field ID:	SB-14-9.5-10.0	Basis:	dry
Lab ID:	264757-010	Diln Fac:	1.000
Matrix:	Soil	Sampled:	02/18/15
Units:	mg/Kg	Received:	02/18/15

Moisture: 12%

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	4.4	0.57	0.17	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Arsenic	3.4	0.29	0.083	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Barium	69	0.29	0.062	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Beryllium	0.33	0.11	0.014	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Cadmium	0.62	0.29	0.029	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Chromium	48	0.29	0.072	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Cobalt	5.6	0.29	0.034	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Copper	6.6	0.29	0.096	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Lead	1.7	0.29	0.080	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Mercury	0.030	0.020	0.0013	220694	02/22/15	02/23/15	METHOD	EPA 7471A
Molybdenum	0.15 J	0.29	0.056	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Nickel	50	0.29	0.076	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Selenium	ND	0.57	0.18	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Silver	ND	0.29	0.046	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Thallium	ND	0.57	0.16	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Vanadium	33	0.29	0.065	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B
Zinc	29	1.1	0.064	220699	02/23/15	02/24/15	EPA 3050B	EPA 6010B

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	264757	Project#:	C1374
Client:	Integral Consulting, Inc.	Location:	Allied Engineering
Field ID:	SB-24-7.0-7.3	Sampled:	02/18/15
Lab ID:	264757-011	Received:	02/18/15
Matrix:	Soil	Prepared:	02/19/15
Units:	mg/Kg	Analyzed:	02/19/15
Basis:	dry		

Moisture: 15%

Analyte	Result	RL	MDL	Diln Fac	Batch#	Prep	Analysis
Antimony	2.0	0.58	0.17	1.000	220573	EPA 3050B	EPA 6010B
Arsenic	11	0.29	0.084	1.000	220573	EPA 3050B	EPA 6010B
Barium	93	0.29	0.062	1.000	220573	EPA 3050B	EPA 6010B
Beryllium	0.33	0.12	0.014	1.000	220573	EPA 3050B	EPA 6010B
Cadmium	0.76	0.29	0.029	1.000	220573	EPA 3050B	EPA 6010B
Chromium	51	0.29	0.073	1.000	220573	EPA 3050B	EPA 6010B
Cobalt	6.9	0.29	0.035	1.000	220573	EPA 3050B	EPA 6010B
Copper	11	0.29	0.096	1.000	220573	EPA 3050B	EPA 6010B
Lead	1.6	0.29	0.080	1.000	220573	EPA 3050B	EPA 6010B
Mercury	0.045 J	0.11	0.0059	5.000	220591	METHOD	EPA 7471A
Molybdenum	ND	0.29	0.056	1.000	220573	EPA 3050B	EPA 6010B
Nickel	41	0.29	0.076	1.000	220573	EPA 3050B	EPA 6010B
Selenium	ND	0.58	0.18	1.000	220573	EPA 3050B	EPA 6010B
Silver	ND	0.29	0.046	1.000	220573	EPA 3050B	EPA 6010B
Thallium	ND	0.58	0.16	1.000	220573	EPA 3050B	EPA 6010B
Vanadium	37	0.29	0.066	1.000	220573	EPA 3050B	EPA 6010B
Zinc	33	1.2	0.065	1.000	220573	EPA 3050B	EPA 6010B

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3050B
Project#:	C1374	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777772	Batch#:	220573
Matrix:	Soil	Prepared:	02/19/15
Units:	mg/Kg	Analyzed:	02/19/15

Analyte	Result	RL	MDL
Antimony	ND	0.50	0.15
Arsenic	ND	0.25	0.073
Barium	ND	0.25	0.054
Beryllium	ND	0.10	0.012
Cadmium	ND	0.25	0.026
Chromium	ND	0.25	0.063
Cobalt	ND	0.25	0.030
Copper	ND	0.25	0.083
Lead	ND	0.25	0.070
Molybdenum	ND	0.25	0.049
Nickel	ND	0.25	0.066
Selenium	ND	0.50	0.16
Silver	ND	0.25	0.040
Thallium	ND	0.50	0.14
Vanadium	ND	0.25	0.057
Zinc	0.19 J	1.0	0.056

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3050B
Project#:	C1374	Analysis:	EPA 6010B
Matrix:	Soil	Batch#:	220573
Units:	mg/Kg	Prepared:	02/19/15
Diln Fac:	5.000	Analyzed:	02/19/15

Type: BS Lab ID: QC777773

Analyte	Spiked	Result	%REC	Limits
Antimony	50.00	49.64	99	80-120
Arsenic	50.00	49.24	98	80-120
Barium	50.00	50.02	100	80-120
Beryllium	50.00	50.24	100	80-120
Cadmium	50.00	52.33	105	80-120
Chromium	50.00	50.62	101	80-120
Cobalt	50.00	48.49	97	80-120
Copper	50.00	48.84	98	80-120
Lead	50.00	46.13	92	80-120
Molybdenum	50.00	48.94	98	80-120
Nickel	50.00	49.40	99	80-120
Selenium	50.00	48.58	97	80-120
Silver	50.00	49.97	100	80-120
Thallium	50.00	48.94	98	80-120
Vanadium	50.00	52.34	105	80-120
Zinc	50.00	49.61	99	80-120

Type: BSD Lab ID: QC777774

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	50.00	49.98	100	80-120	1	20
Arsenic	50.00	49.93	100	80-120	1	20
Barium	50.00	50.72	101	80-120	1	20
Beryllium	50.00	51.50	103	80-120	2	20
Cadmium	50.00	53.25	107	80-120	2	20
Chromium	50.00	51.50	103	80-120	2	20
Cobalt	50.00	49.08	98	80-120	1	20
Copper	50.00	49.28	99	80-120	1	20
Lead	50.00	46.16	92	80-120	0	20
Molybdenum	50.00	49.21	98	80-120	1	20
Nickel	50.00	50.28	101	80-120	2	20
Selenium	50.00	48.86	98	80-120	1	20
Silver	50.00	50.60	101	80-120	1	20
Thallium	50.00	50.42	101	80-120	3	20
Vanadium	50.00	53.21	106	80-120	2	20
Zinc	50.00	50.65	101	80-120	2	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3050B
Project#:	C1374	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	220573
MSS Lab ID:	264669-001	Sampled:	02/11/15
Matrix:	Soil	Received:	02/13/15
Units:	mg/Kg	Prepared:	02/19/15
Basis:	dry	Analyzed:	02/19/15
Diln Fac:	5.000		

Type: MS Moisture: 12%
Lab ID: QC777775

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	2.711	59.81	18.55	26	15-120
Arsenic	4.563	59.81	57.72	89	69-120
Barium	210.6	59.81	271.9	103	35-154
Beryllium	0.4262	59.81	55.73	92	75-120
Cadmium	0.9872	59.81	57.53	95	71-120
Chromium	45.90	59.81	119.6	123	57-133
Cobalt	10.52	59.81	63.61	89	56-125
Copper	21.53	59.81	74.86	89	54-144
Lead	6.865	59.81	56.58	83	53-125
Molybdenum	0.2966	59.81	51.10	85	66-120
Nickel	57.67	59.81	117.1	99	44-141
Selenium	<0.1871	59.81	46.39	78	61-120
Silver	<0.04671	59.81	53.96	90	69-120
Thallium	<0.1645	59.81	51.67	86	59-120
Vanadium	39.27	59.81	100.9	103	52-144
Zinc	59.35	59.81	116.1	95	45-145

Type: MSD Moisture: 12%
Lab ID: QC777776

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	58.58	16.67	24	15-120	9	41
Arsenic	58.58	56.23	88	69-120	1	35
Barium	58.58	257.0	79	35-154	5	36
Beryllium	58.58	54.55	92	75-120	0	20
Cadmium	58.58	56.66	95	71-120	1	25
Chromium	58.58	100.5	93	57-133	16	33
Cobalt	58.58	61.01	86	56-125	2	36
Copper	58.58	72.85	88	54-144	1	38
Lead	58.58	55.95	84	53-125	1	42
Molybdenum	58.58	49.96	85	66-120	0	20
Nickel	58.58	111.2	91	44-141	4	39
Selenium	58.58	46.52	79	61-120	2	33
Silver	58.58	52.71	90	69-120	0	22
Thallium	58.58	51.83	88	59-120	2	27
Vanadium	58.58	94.68	95	52-144	5	29
Zinc	58.58	110.1	87	45-145	4	39

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	220591
Lab ID:	QC777839	Prepared:	02/19/15
Matrix:	Soil	Analyzed:	02/19/15
Units:	mg/Kg		

Result	RL	MDL
ND	0.017	0.00093

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Type:	LCS	Batch#:	220591
Lab ID:	QC777840	Prepared:	02/19/15
Matrix:	Soil	Analyzed:	02/19/15
Units:	mg/Kg		

Spiked	Result	%REC	Limits
0.2083	0.2135	102	80-120

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	220591
MSS Lab ID:	264755-001	Sampled:	02/18/15
Matrix:	Soil	Received:	02/18/15
Units:	mg/Kg	Prepared:	02/19/15
Basis:	as received	Analyzed:	02/19/15

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC777841	0.01591	0.2049	0.2139	97	69-142		
MSD	QC777842		0.1894	0.1918	93	69-142	4	36

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	220691
Lab ID:	QC778238	Prepared:	02/22/15
Matrix:	Soil	Analyzed:	02/23/15
Units:	mg/Kg		

Result	RL	MDL
0.0035 J	0.017	0.0011

J= Estimated value
RL= Reporting Limit
MDL= Method Detection Limit

52.0

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7471A
Analyte:	Mercury	Batch#:	220691
Matrix:	Soil	Prepared:	02/22/15
Units:	mg/Kg	Analyzed:	02/23/15
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC778239	0.2083	0.2144	103	80-120		
BSD	QC778240	0.2083	0.2144	103	80-120	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	220691
MSS Lab ID:	264762-001	Sampled:	02/18/15
Matrix:	Soil	Received:	02/19/15
Units:	mg/Kg	Prepared:	02/22/15
Basis:	as received	Analyzed:	02/23/15

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC778241	0.06611	0.2016	0.2904	111	69-142		
MSD	QC778242		0.2083	0.3136	119	69-142	5	36

RPD= Relative Percent Difference

54.0

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	220694
Lab ID:	QC778253	Prepared:	02/22/15
Matrix:	Soil	Analyzed:	02/23/15
Units:	mg/Kg		

Result	RL	MDL
0.0035 J	0.017	0.0011

J= Estimated value
RL= Reporting Limit
MDL= Method Detection Limit

45.0

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7471A
Analyte:	Mercury	Batch#:	220694
Matrix:	Soil	Prepared:	02/22/15
Units:	mg/Kg	Analyzed:	02/23/15
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC778254	0.2083	0.2099	101	80-120		
BSD	QC778255	0.2083	0.2081	100	80-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	220694
MSS Lab ID:	264693-021	Sampled:	02/16/15
Matrix:	Soil	Received:	02/17/15
Units:	mg/Kg	Prepared:	02/22/15
Basis:	as received	Analyzed:	02/23/15

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC778256	0.03628	0.1953	0.2543	112	69-142		
MSD	QC778257		0.2016	0.2433	103	69-142	7	36

RPD= Relative Percent Difference

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Batch QC Report

California Title 22 Metals

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3050B
Project#:	C1374	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778275	Batch#:	220699
Matrix:	Soil	Prepared:	02/23/15
Units:	mg/Kg	Analyzed:	02/23/15

Analyte	Result	RL	MDL
Antimony	ND	0.50	0.16
Arsenic	ND	0.25	0.083
Barium	ND	0.25	0.049
Beryllium	ND	0.10	0.019
Cadmium	ND	0.25	0.016
Chromium	ND	0.25	0.021
Cobalt	ND	0.25	0.019
Copper	ND	0.26	0.086
Lead	ND	0.25	0.073
Molybdenum	ND	0.25	0.056
Nickel	ND	0.25	0.068
Selenium	ND	0.50	0.15
Silver	ND	0.25	0.075
Thallium	ND	0.50	0.16
Vanadium	ND	0.25	0.025
Zinc	0.37 J	1.0	0.098

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3050B
Project#:	C1374	Analysis:	EPA 6010B
Matrix:	Soil	Batch#:	220699
Units:	mg/Kg	Prepared:	02/23/15
Diln Fac:	5.000	Analyzed:	02/23/15

Type: BS Lab ID: QC778276

Analyte	Spiked	Result	%REC	Limits
Antimony	50.00	44.64	89	80-120
Arsenic	50.00	45.34	91	80-120
Barium	50.00	47.08	94	80-120
Beryllium	50.00	45.33	91	80-120
Cadmium	50.00	48.10	96	80-120
Chromium	50.00	46.52	93	80-120
Cobalt	50.00	44.96	90	80-120
Copper	50.00	41.81	84	80-120
Lead	50.00	43.08	86	80-120
Molybdenum	50.00	45.19	90	80-120
Nickel	50.00	45.56	91	80-120
Selenium	50.00	46.76	94	80-120
Silver	50.00	45.22	90	80-120
Thallium	50.00	45.14	90	80-120
Vanadium	50.00	48.50	97	80-120
Zinc	50.00	47.35	95	80-120

Type: BSD Lab ID: QC778277

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	50.00	49.03	98	80-120	9	20
Arsenic	50.00	49.11	98	80-120	8	20
Barium	50.00	50.87	102	80-120	8	20
Beryllium	50.00	49.00	98	80-120	8	20
Cadmium	50.00	52.13	104	80-120	8	20
Chromium	50.00	48.56	97	80-120	4	20
Cobalt	50.00	47.38	95	80-120	5	20
Copper	50.00	45.48	91	80-120	8	20
Lead	50.00	47.45	95	80-120	10	20
Molybdenum	50.00	49.50	99	80-120	9	20
Nickel	50.00	47.94	96	80-120	5	20
Selenium	50.00	50.39	101	80-120	7	20
Silver	50.00	48.79	98	80-120	8	20
Thallium	50.00	49.47	99	80-120	9	20
Vanadium	50.00	52.83	106	80-120	9	20
Zinc	50.00	49.98	100	80-120	5	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3050B
Project#:	C1374	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	220699
MSS Lab ID:	264816-001	Sampled:	02/20/15
Matrix:	Soil	Received:	02/20/15
Units:	mg/Kg	Prepared:	02/23/15
Basis:	as received	Analyzed:	02/23/15
Diln Fac:	5.000		

Type: MS Lab ID: QC778278

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	3.647	50.51	32.64	57	15-120
Arsenic	11.55	50.51	61.69	99	69-120
Barium	152.1	50.51	228.4	151	35-154
Beryllium	0.5164	50.51	49.98	98	75-120
Cadmium	1.090	50.51	53.18	103	71-120
Chromium	29.53	50.51	83.51	107	57-133
Cobalt	9.362	50.51	58.32	97	56-125
Copper	49.25	50.51	109.0	118	54-144
Lead	76.09	50.51	83.07	14 *	53-125
Molybdenum	2.701	50.51	50.18	94	66-120
Nickel	26.54	50.51	84.02	114	44-141
Selenium	<0.1463	50.51	49.04	97	61-120
Silver	<0.07475	50.51	48.47	96	69-120
Thallium	<0.1630	50.51	47.70	94	59-120
Vanadium	50.52	50.51	113.1	124	52-144
Zinc	436.6	50.51	453.6	34 NM	45-145

Type: MSD Lab ID: QC778279

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	47.17	32.84	62	15-120	7	41
Arsenic	47.17	60.54	104	69-120	4	35
Barium	47.17	256.1	221 *	35-154	13	36
Beryllium	47.17	52.10	109	75-120	11	20
Cadmium	47.17	55.24	115	71-120	10	25
Chromium	47.17	87.95	124	57-133	9	33
Cobalt	47.17	59.16	106	56-125	7	36
Copper	47.17	104.6	117	54-144	1	38
Lead	47.17	82.27	13 *	53-125	2	42
Molybdenum	47.17	51.08	103	66-120	8	20
Nickel	47.17	79.49	112	44-141	1	39
Selenium	47.17	50.50	107	61-120	10	33
Silver	47.17	51.20	109	69-120	12	22
Thallium	47.17	49.58	105	59-120	11	27
Vanadium	47.17	124.3	156 *	52-144	13	29
Zinc	47.17	424.9	-25 NM	45-145	6	39

*= Value outside of QC limits; see narrative
NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Hexavalent Chromium

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3060A
Project#:	C1374	Analysis:	EPA 7196A
Analyte:	Hexavalent Chromium	Basis:	dry
Matrix:	Soil	Diln Fac:	1.000
Units:	mg/Kg	Received:	02/18/15

Field ID	Type	Lab ID	Result	RL	Moisture	Batch#	Sampled	Prepared	Analyzed
SB-17-5.0-6.0	SAMPLE	264757-001	ND	0.47	14%	220830	02/18/15 09:15	02/26/15 11:00	02/26/15 16:10
SB-17-9.0-10.0	SAMPLE	264757-002	0.53	0.48	15%	220830	02/18/15 09:50	02/26/15 11:00	02/26/15 16:10
SB-16-3.0-3.5	SAMPLE	264757-004	ND	0.48	14%	220830	02/18/15 12:05	02/26/15 11:00	02/26/15 16:10
SB-16-9.5-10.0	SAMPLE	264757-005	0.83	0.45	14%	220830	02/18/15 12:20	02/26/15 11:00	02/26/15 16:10
SB-15-5.0-5.5	SAMPLE	264757-006	ND	0.48	17%	220830	02/18/15 14:00	02/26/15 11:00	02/26/15 16:10
SB-15-9.5-10.0	SAMPLE	264757-007	0.80	0.46	16%	220830	02/18/15 14:15	02/26/15 11:00	02/26/15 16:10
SB-24-3.2-3.8	SAMPLE	264757-008	ND	0.47	15%	220578	02/18/15 15:20	02/19/15 11:40	02/19/15 16:04
SB-14-4.0-4.5	SAMPLE	264757-009	0.62	0.44	13%	220830	02/18/15 15:40	02/26/15 11:00	02/26/15 16:10
SB-14-9.5-10.0	SAMPLE	264757-010	ND	0.47	12%	220830	02/18/15 15:50	02/26/15 11:00	02/26/15 16:10
SB-24-7.0-7.3	SAMPLE	264757-011	0.64	0.46	15%	220578	02/18/15 16:00	02/19/15 11:40	02/19/15 16:04
	BLANK	QC777798	ND	0.41		220578		02/19/15 11:40	02/19/15 16:04
	BLANK	QC778785	ND	0.41		220830		02/26/15 11:00	02/26/15 16:10

ND= Not Detected
RL= Reporting Limit

21.1

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Batch QC Report

Hexavalent Chromium

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3060A
Project#:	C1374	Analysis:	EPA 7196A
Analyte:	Hexavalent Chromium	Basis:	dry
Matrix:	Soil	Diln Fac:	1.000
Units:	mg/Kg		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	Moisture	RPD	Lim	Batch#	Sampled	Received	Prepared	Analyzed
	LCS		QC777799		39.06	38.40		98	80-120				220578			02/19/15 11:40	02/19/15 16:04
SB-24-7.0-7.3	SDUP	264757-011	QC777800	0.6353		0.8353	0.4941			15%	26	30	220578	02/18/15 16:00	02/18/15	02/19/15 11:40	02/19/15 16:04
SB-24-7.0-7.3	SSPIKE	264757-011	QC777801	0.6353	45.95	40.02		86	85-115	15%			220578	02/18/15 16:00	02/18/15	02/19/15 11:40	02/19/15 16:04
	LCS		QC778786		39.06	37.97		97	80-120				220830			02/26/15 11:00	02/26/15 16:10
ZZZZZZZZZZ	SSPIKE	264672-001	QC778787	<0.4824	45.25	31.32		69 *	85-115	15%			220830	02/12/15 09:35	02/13/15	02/26/15 11:00	02/26/15 16:10
ZZZZZZZZZZ	SDUP	264672-001	QC778788	<0.4824		<0.4824	0.4824			15%	NC	30	220830	02/12/15 09:35	02/13/15	02/26/15 11:00	02/26/15 16:10

*= Value outside of QC limits; see narrative
NC= Not Calculated
RL= Reporting Limit
RPD= Relative Percent Difference

22.1

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Moisture

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	ASTM D2216/CLP
Analyte:	Moisture, Percent	Batch#:	220565
Matrix:	Soil	Sampled:	02/18/15
Units:	%	Received:	02/18/15
Diln Fac:	1.000	Analyzed:	02/18/15

Field ID	Lab ID	Result	RL
SB-17-5.0-6.0	264757-001	14	1
SB-17-9.0-10.0	264757-002	15	1
SB-16-3.0-3.5	264757-004	14	1
SB-16-9.5-10.0	264757-005	14	1
SB-15-5.0-5.5	264757-006	17	1
SB-15-9.5-10.0	264757-007	16	1
SB-24-3.2-3.8	264757-008	15	1
SB-14-4.0-4.5	264757-009	13	1
SB-14-9.5-10.0	264757-010	12	1
SB-24-7.0-7.3	264757-011	15	1

RL= Reporting Limit

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Batch QC Report

Moisture

Lab #:	264757	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	METHOD
Project#:	C1374	Analysis:	ASTM D2216/CLP
Analyte:	Moisture, Percent	Units:	%
Field ID:	SB-24-7.0-7.3	Diln Fac:	1.000
Type:	SDUP	Batch#:	220565
MSS Lab ID:	264757-011	Sampled:	02/18/15
Lab ID:	QC777749	Received:	02/18/15
Matrix:	Soil	Analyzed:	02/18/15

MSS Result	Result	RL	RPD	Lim
14.72	14.42	1.000	2	26

RL= Reporting Limit
RPD= Relative Percent Difference

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2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 264758
ANALYTICAL REPORT

Integral Consulting, Inc.	Project : C1374
115 Sansome Street	Location : Allied Engineering
San Francisco, CA 94104	Level : II

Sample ID	Lab ID
SB-17-GW	264758-001
DUP-021815	264758-002
SB-16-GW	264758-003
SB-15-GW	264758-004

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Tracy Babjar Date: 02/27/2015

Tracy Babjar
Project Manager
tracy.babjar@ctberk.com
(510) 204-2226

CA ELAP# 2896, NELAP# 4044-001

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CASE NARRATIVE

Laboratory number:	**264758**
Client:	**Integral Consulting, Inc.**
Project:	**C1374**
Location:	**Allied Engineering**
Request Date:	**02/18/15**
Samples Received:	**02/18/15**

This data package contains sample and QC results for four water samples, requested for the above referenced project on 02/18/15. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):
Gasoline C7-C12 was detected between the MDL and the RL in the method blank for batch 220655; this analyte was not detected in samples at or above the RL. Gasoline C7-C12 was detected between the MDL and the RL in the method blank for batch 220721; this analyte was detected in the sample at a level at least 10 times that of the blank. No other analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
Diesel C10-C24 was detected between the MDL and the RL in the method blank for batch 220612. No other analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
1,2,3-trichlorobenzene was detected between the MDL and the RL in the method blank for batch 220579; this analyte was not detected in the sample at or above the RL. A number of analytes were detected between the MDL and the RL in the method blank for batch 220666; these analytes were not detected in the sample at or above the RL. No other analytical problems were encountered.

Semivolatile Organics by GC/MS (EPA 8270C):
Low recovery was observed for pyrene in the MSD of SB-23-GW (lab # 264791-001); the LCS was within limits. High RPD was also observed for pyrene in the MS/MSD of SB-23-GW (lab # 264791-001); this analyte was not detected at or above the RL in the associated samples. Low surrogate recoveries were observed for terphenyl-d14 in SB-16-GW (lab # 264758-003) and the MSD of SB-23-GW (lab # 264791-001). No other analytical problems were encountered.

PCBs (EPA 8082):
All samples underwent sulfuric acid cleanup using EPA Method 3665A. All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. No analytical problems were encountered.

Metals (EPA 6010B and EPA 7470A):
Low recoveries were observed for copper, molybdenum, and lead in the MS/MSD for batch 220663; the parent sample was not a project sample, the BS/BSD were within limits, and the associated RPDs were within limits. High recoveries were observed for chromium and selenium in the MSD for batch 220663; the

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CASE NARRATIVE

Laboratory number:	**264758**
Client:	**Integral Consulting, Inc.**
Project:	**C1374**
Location:	**Allied Engineering**
Request Date:	**02/18/15**
Samples Received:	**02/18/15**

Metals (EPA 6010B and EPA 7470A):

BS/BSD were within limits, the associated RPDs were within limits, and these analytes were not detected at or above the RL in the associated samples. Copper and antimony were detected between the MDL and the RL in the method blank for batch 220663; these analytes were not detected in samples at or above the RL. Zinc was detected between the MDL and the RL in the method blank for batch 220663; this analyte was not detected in samples at or above the RL. No other analytical problems were encountered.

Hexavalent Chromium (EPA 7196A):

No analytical problems were encountered.

CHAIN OF CUSTODY

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2323 Fifth Street
Berkeley, CA 94710

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C&T LOGIN # 264758

Chain of Custody #

Project No: C1374 (formerly C1361)
Project Name: Allied Engineering
Project P. O. No: C1374 Task 2
EDD Format: Report Level ☐ II ☐ III ☐ IV
Turnaround Time: ☐ RUSH ☒ Standard

Sampler: C. Lyler
Report To: B DeShields
Company: Integral Consulting Inc
Telephone:
Email: bdeshields@integral-corp.com

Lab No.	Sample ID.	Sampling: Date Collected	Sampling: Time Collected	Matrix: Water	Matrix: Solid	# of Containers	Chemical Preservative: HCl	H2SO4	HNO3	NaOH	None	TPH-g by 8015	TPH-d by 8015	TPH-mo by 8015	Field list of WCs by 8260	SVOCs by 8270	Dissolved Title 22 metals (filter in lab)	Cr VI by 7196	PCBs by 8082
1	SB-17-GW	2/18/15	1030	X		13	6				7	X	X	X	X	X	X	X	X
2	DUP-021815	2/18/15	0000	X		13	6				7	X	X	X	X	X	X	X	X
3	SB-16-GW	2/18/15	1420	X		13	6				7	X	→	→	→	→	→	→	→
4	SB-15-GW	2/18/15	1445	X		13	6				7	X	→	→	→	→	→	→	→

Notes:
- lab to filter dissolved metals
- Report all to MDL
- EDF required

SAMPLE RECEIPT
☐ Intact
☐ Cold
☐ On Ice
☐ Ambient

RELINQUISHED BY:
DATE: 2/18/15 TIME: 1616
DATE: 2/18/15 TIME: 1648
DATE: TIME:

RECEIVED BY:
DATE: 2/18/15 TIME: 1616
DATE: 2/18 TIME: 1715
DATE: TIME:

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 264758 Date Received 2/18/15 Number of coolers 2
Client Integral Project Allied Engineering

Date Opened 2/18 By (print) SC (sign)
Date Logged in 2/18 By (print) BC (sign)

1. Did cooler come with a shipping slip (airbill, etc) _____ YES NO
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO N/A
3. Were custody papers dry and intact when received? _____ YES NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ___ YES NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☒ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☒ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) _____

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES NO
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ YES NO
10. Are there any missing / extra samples? _____ YES NO
11. Are samples in the appropriate containers for indicated tests? _____ YES NO
12. Are sample labels present, in good condition and complete? _____ YES NO
13. Do the sample labels agree with custody papers? _____ YES NO
14. Was sufficient amount of sample sent for tests requested? _____ YES NO
15. Are the samples appropriately preserved? _____ YES NO N/A
16. Did you check preservatives for all bottles for each sample? _____ YES NO N/A
17. Did you document your preservative check? _____ YES NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO N/A
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO N/A
20. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A
21. Was the client contacted concerning this sample delivery? _____ YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

Rev 10, 9/12

Curtis & Tompkins, Ltd.

Detections Summary for 264758

Results for any subcontracted analyses are not included in this summary.

Client : Integral Consulting, Inc.
Project : C1374
Location : Allied Engineering

Client Sample ID : SB-17-GW Laboratory Sample ID : 264758-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	27	J	50	11	ug/L	As Recd	1.000	EPA 8015B	EPA 5030B
Diesel C10-C24	130	Y	50	16	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
Motor Oil C24-C36	1,000		300	96	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
Vinyl Chloride	1.0		0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Acetone	2.9	J	10	1.6	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
MTBE	0.8		0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
trans-1,2-Dichloroethene	0.3	J	0.5	0.2	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
2-Butanone	0.5	J	10	0.4	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	1.8		0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Trichloroethene	0.4	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Tetrachloroethene	0.6		0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
bis(2-Ethylhexyl)phthalate	24		10	1.7	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
Barium	57		5.0	1.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Molybdenum	14		5.0	0.40	ug/L	DISS.	1.000	EPA 6010B	METHOD
Nickel	2.5	J	5.0	0.71	ug/L	DISS.	1.000	EPA 6010B	METHOD
Vanadium	4.0	J	5.0	0.67	ug/L	DISS.	1.000	EPA 6010B	METHOD

Client Sample ID : DUP-021815 Laboratory Sample ID : 264758-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	20	J	50	11	ug/L	As Recd	1.000	EPA 8015B	EPA 5030B
Diesel C10-C24	130	Y	50	16	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
Motor Oil C24-C36	1,000		300	96	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
Vinyl Chloride	0.2	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
MTBE	0.7		0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
bis(2-Ethylhexyl)phthalate	8.5	J	10	1.7	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
Barium	65		5.0	1.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Molybdenum	13		5.0	0.40	ug/L	DISS.	1.000	EPA 6010B	METHOD
Nickel	1.4	J	5.0	0.71	ug/L	DISS.	1.000	EPA 6010B	METHOD
Vanadium	4.7	J	5.0	0.67	ug/L	DISS.	1.000	EPA 6010B	METHOD

Curtis & Tompkins, Ltd.

Client Sample ID : SB-16-GW Laboratory Sample ID : 264758-003

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	26	J	50	11	ug/L	As Recd	1.000	EPA 8015B	EPA 5030B
Diesel C10-C24	380	Y	50	16	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
Motor Oil C24-C36	1,500		300	96	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
MTBE	3.7		0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
2-Butanone	0.5	J	10	0.2	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	1.4		0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Trichloroethene	12		0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
bis(2-Ethylhexyl)phthalate	45		10	1.7	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
Barium	56		5.0	1.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Molybdenum	52		5.0	0.40	ug/L	DISS.	1.000	EPA 6010B	METHOD
Nickel	6.7		5.0	0.71	ug/L	DISS.	1.000	EPA 6010B	METHOD
Vanadium	1.2	J	5.0	0.67	ug/L	DISS.	1.000	EPA 6010B	METHOD

Client Sample ID : SB-15-GW Laboratory Sample ID : 264758-004

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	160	Y,Z	50	5.7	ug/L	As Recd	1.000	EPA 8015B	EPA 5030B
Diesel C10-C24	690	Y	50	16	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
Motor Oil C24-C36	420		300	96	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
Acetone	4.2	J	10	3.3	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
MTBE	0.4	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
2-Butanone	0.3	J	10	0.2	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
4-Methyl-2-Pentanone	280		50	0.5	ug/L	As Recd	5.000	EPA 8260B	EPA 5030B
4-Methylphenol	7.5	J	10	1.2	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
Benzoic acid	8.4	J	50	6.9	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
bis(2-Ethylhexyl)phthalate	7.7	J	10	1.9	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
Barium	72		5.0	1.0	ug/L	DISS.	1.000	EPA 6010B	METHOD
Molybdenum	13		5.0	0.40	ug/L	DISS.	1.000	EPA 6010B	METHOD
Nickel	4.5	J	5.0	0.71	ug/L	DISS.	1.000	EPA 6010B	METHOD
Vanadium	3.3	J	5.0	0.67	ug/L	DISS.	1.000	EPA 6010B	METHOD

J = Estimated value

Y = Sample exhibits chromatographic pattern which does not resemble standard

Z = Sample exhibits unknown single peak or peaks

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	264758	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	02/18/15
Units:	ug/L	Received:	02/18/15
Diln Fac:	1.000		

Field ID:	SB-17-GW	Batch#:	220655
Type:	SAMPLE	Analyzed:	02/20/15
Lab ID:	264758-001		

Analyte	Result	RL	MDL
Gasoline C7-C12	27 J	50	11

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	98	80-132

Field ID:	DUP-021815	Batch#:	220655
Type:	SAMPLE	Analyzed:	02/20/15
Lab ID:	264758-002		

Analyte	Result	RL	MDL
Gasoline C7-C12	20 J	50	11

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	99	80-132

Field ID:	SB-16-GW	Batch#:	220655
Type:	SAMPLE	Analyzed:	02/20/15
Lab ID:	264758-003		

Analyte	Result	RL	MDL
Gasoline C7-C12	26 J	50	11

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	98	80-132

J= Estimated value
Y= Sample exhibits chromatographic pattern which does not resemble standard
Z= Sample exhibits unknown single peak or peaks
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	264758	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	02/18/15
Units:	ug/L	Received:	02/18/15
Diln Fac:	1.000		

Field ID:	SB-15-GW	Batch#:	220721
Type:	SAMPLE	Analyzed:	02/23/15
Lab ID:	264758-004		

Analyte	Result	RL	MDL
Gasoline C7-C12	160 Y Z	50	5.7

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	110	80-132

Type:	BLANK	Batch#:	220655
Lab ID:	QC778112	Analyzed:	02/20/15

Analyte	Result	RL	MDL
Gasoline C7-C12	20 J	50	11

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	93	80-132

Type:	BLANK	Batch#:	220721
Lab ID:	QC778371	Analyzed:	02/23/15

Analyte	Result	RL	MDL
Gasoline C7-C12	13 J	50	5.7

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	92	80-132

J= Estimated value
Y= Sample exhibits chromatographic pattern which does not resemble standard
Z= Sample exhibits unknown single peak or peaks
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	264758	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC778111	Batch#:	220655
Matrix:	Water	Analyzed:	02/20/15
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,002	100	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	87	80-132

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	264758	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	220655
MSS Lab ID:	264767-001	Sampled:	02/18/15
Matrix:	Water	Received:	02/19/15
Units:	ug/L	Analyzed:	02/20/15
Diln Fac:	1.000		

Type: MS Lab ID: QC778113

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	24.97	2,000	1,938	96	76-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	94	80-132

Type: MSD Lab ID: QC778114

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,983	98	76-120	2	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	94	80-132

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	264758	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC778370	Batch#:	220721
Matrix:	Water	Analyzed:	02/23/15
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	876.9	88	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	89	80-132

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	264758	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8015B
Field ID:	SB-23-GW	Batch#:	220721
MSS Lab ID:	264791-001	Sampled:	02/19/15
Matrix:	Water	Received:	02/19/15
Units:	ug/L	Analyzed:	02/23/15
Diln Fac:	1.000		

Type: MS Lab ID: QC778372

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	32.93	2,000	1,842	90	76-120

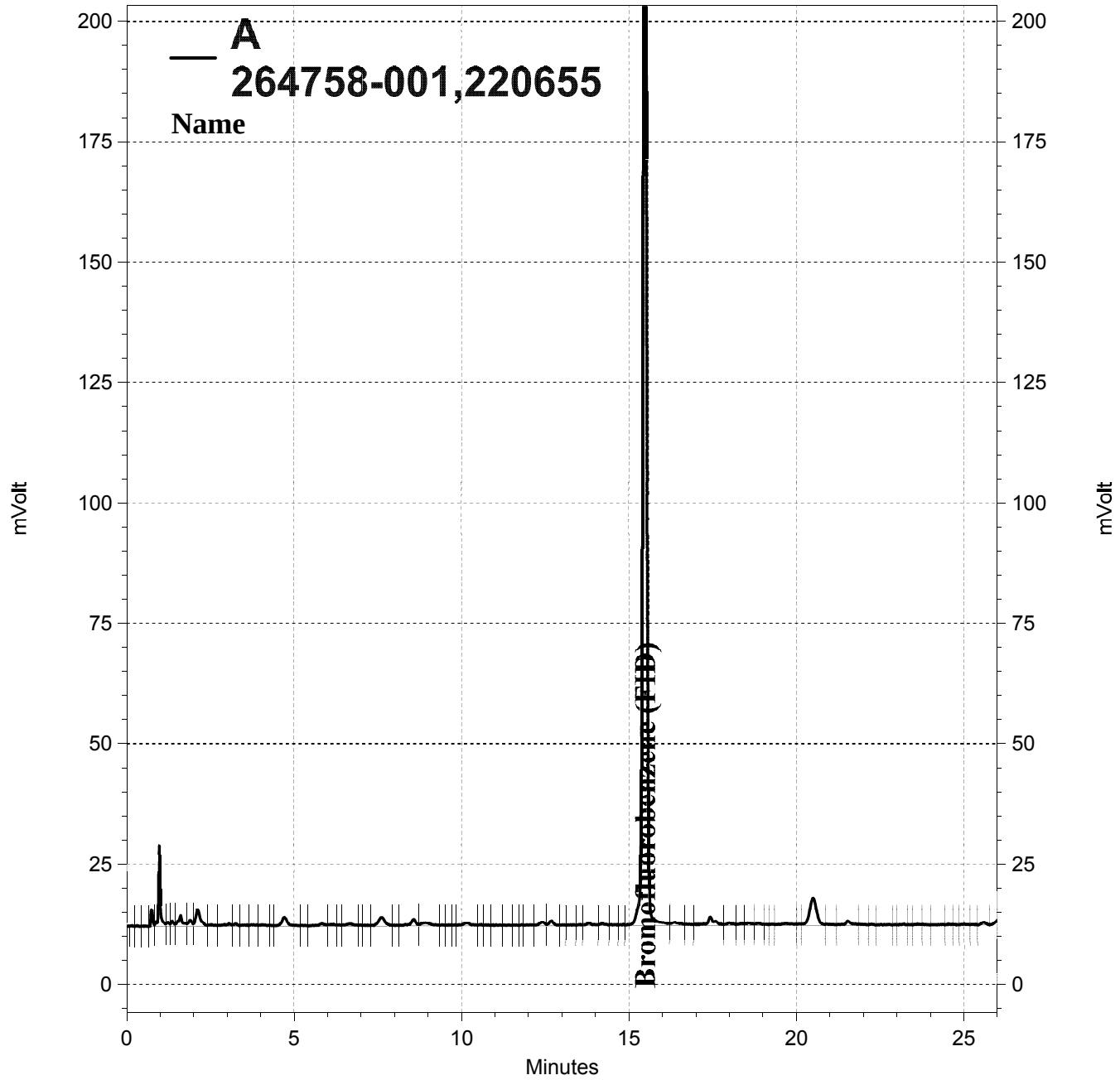
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	117	80-132

Type: MSD Lab ID: QC778373

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,813	89	76-120	2	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	110	80-132

RPD= Relative Percent Difference



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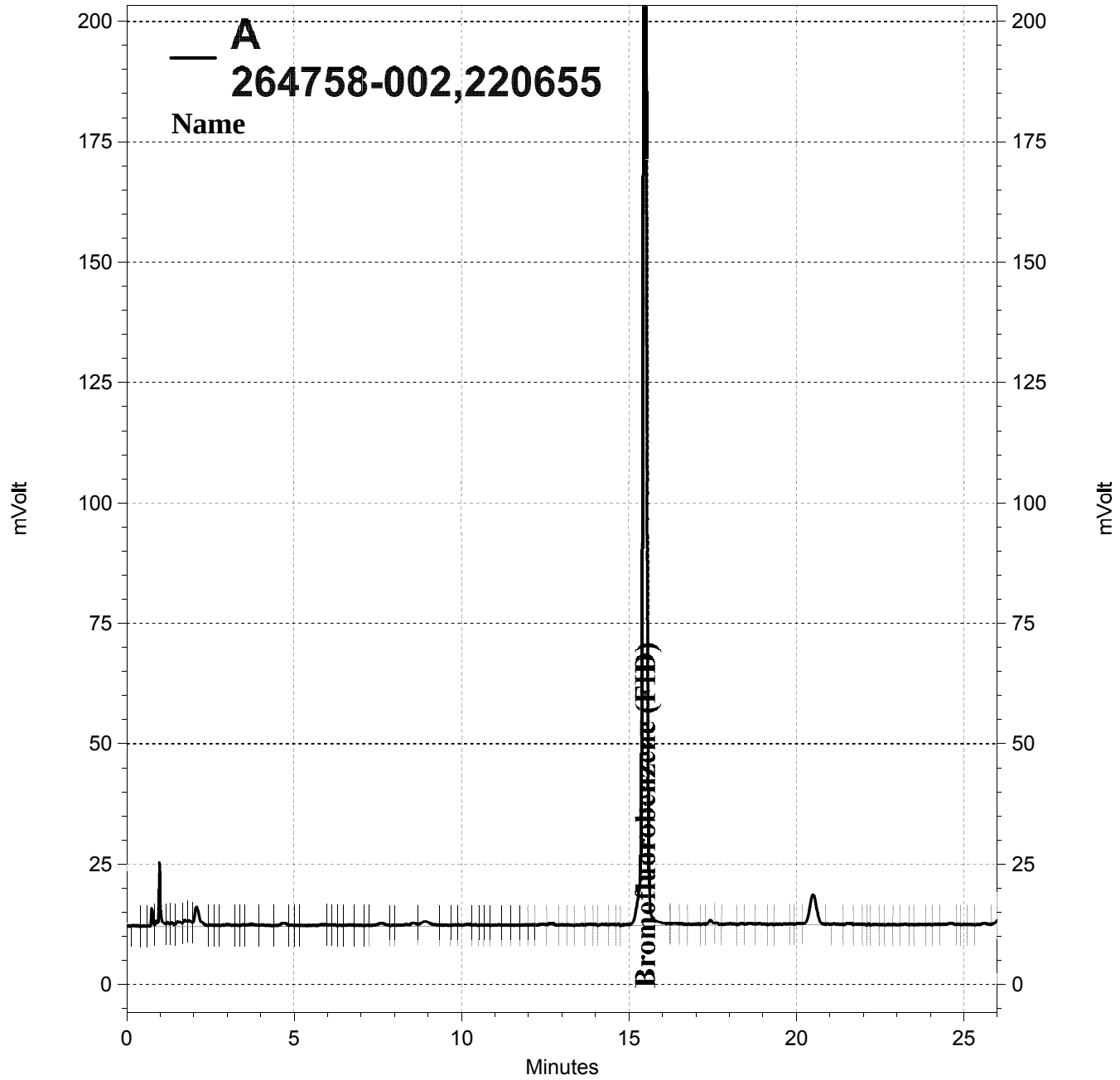

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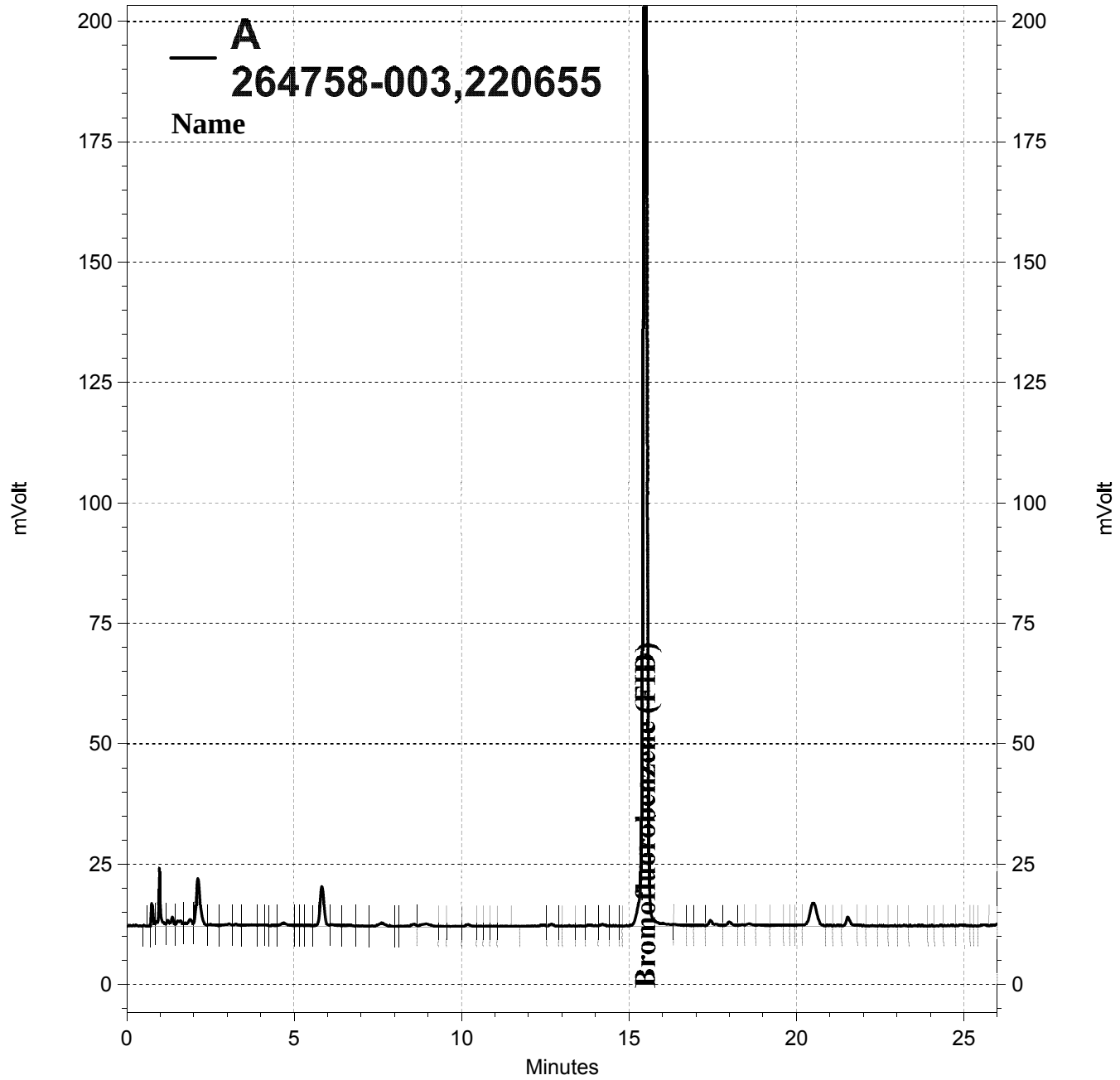

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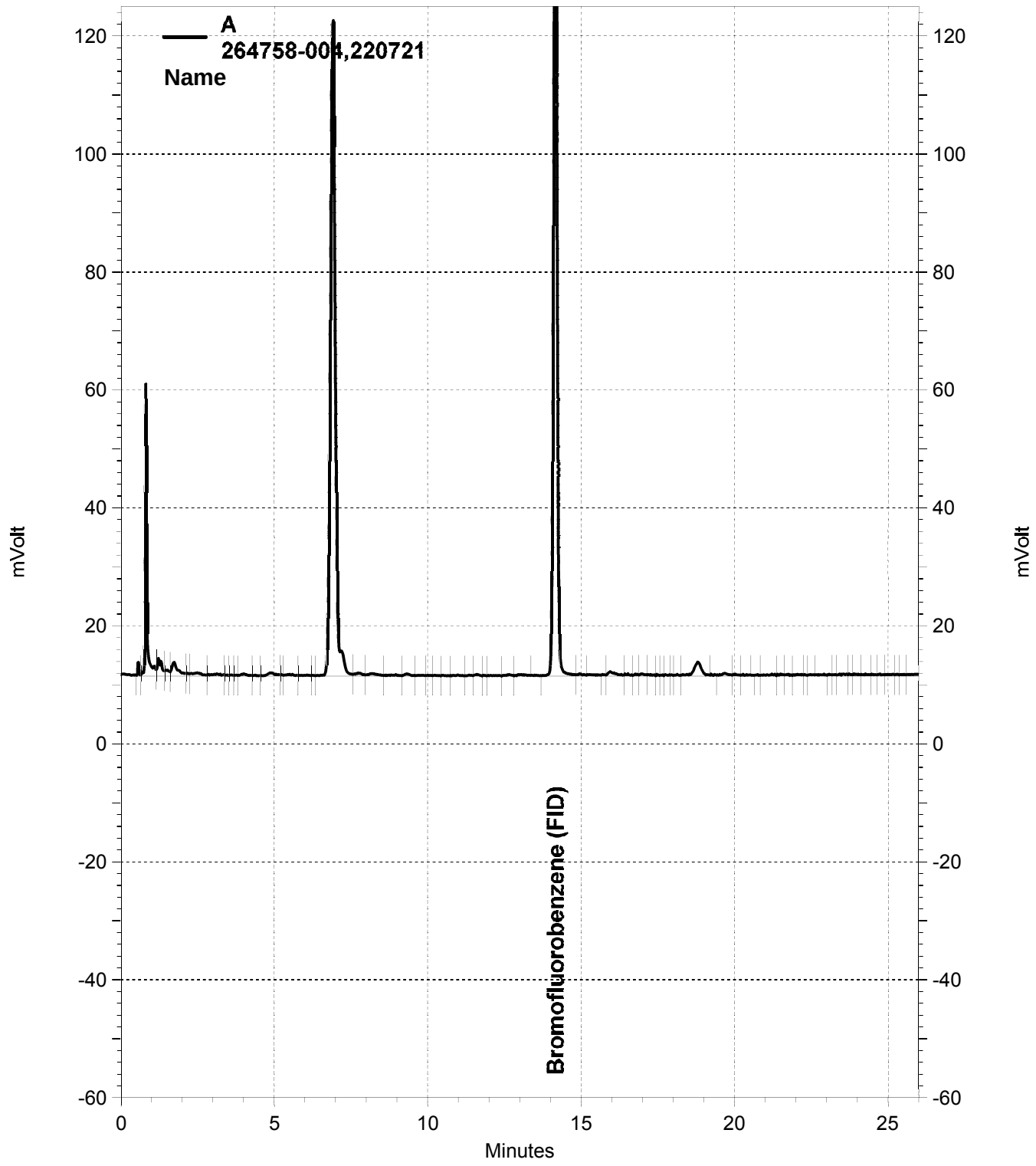

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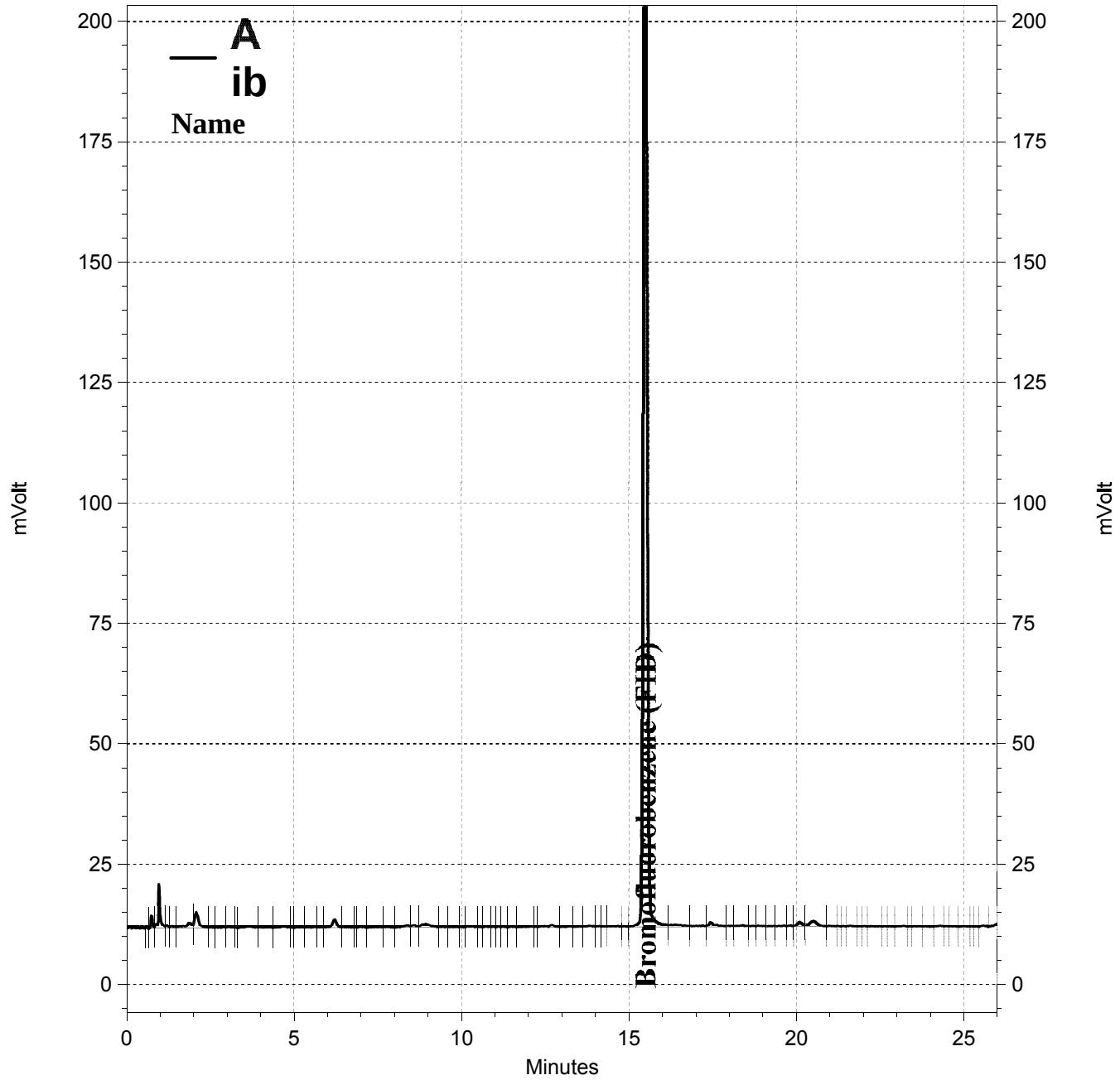

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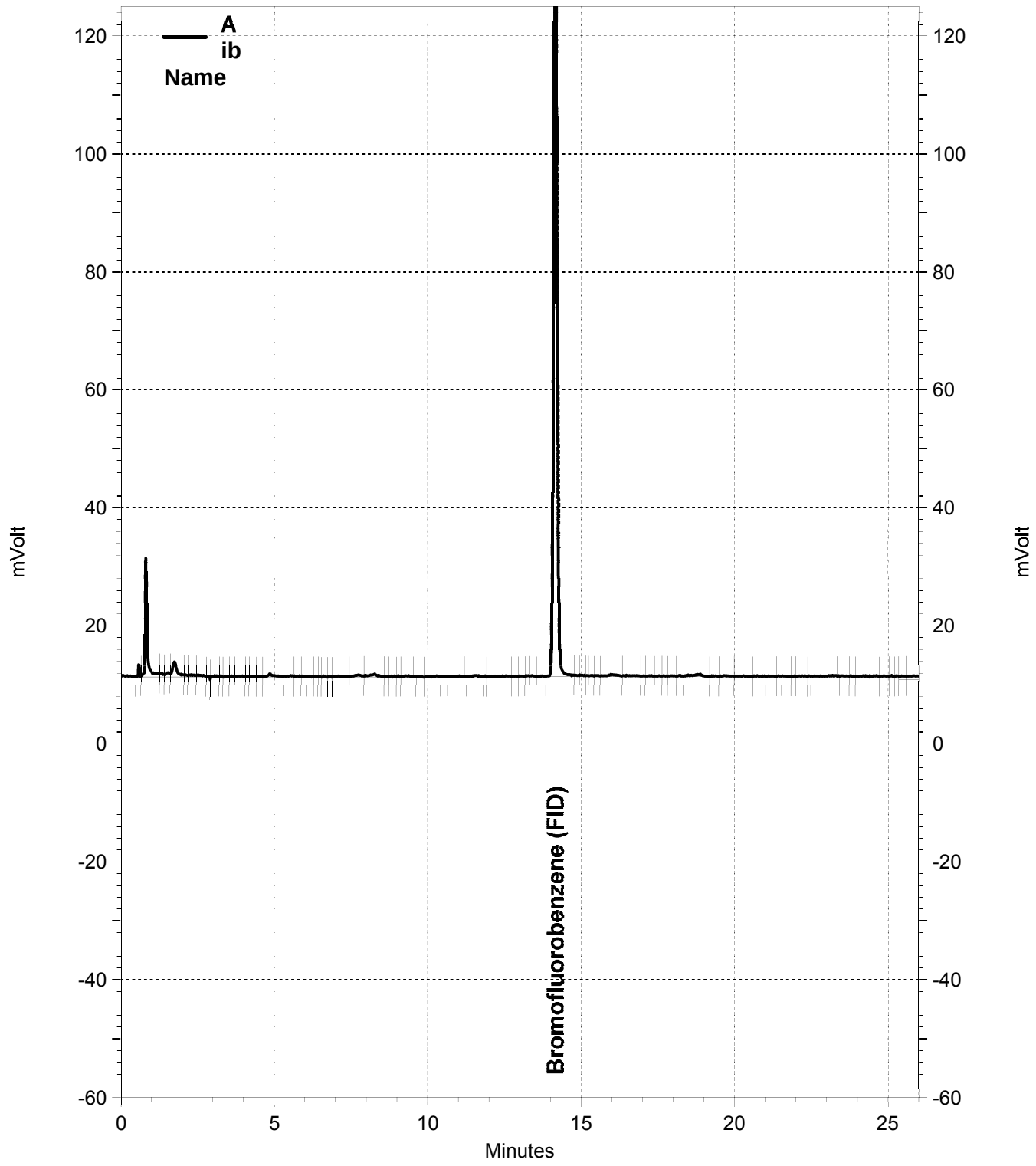

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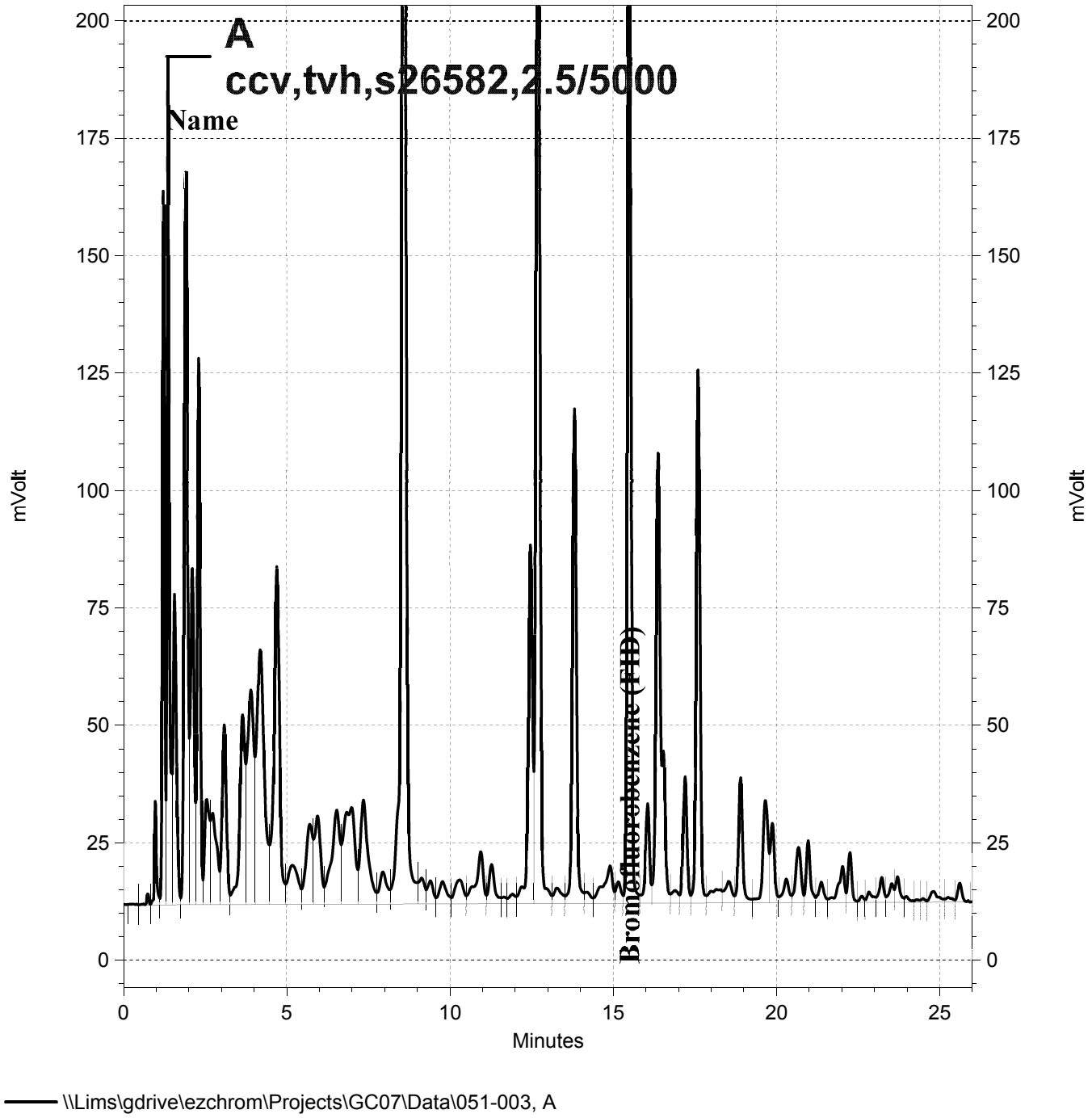
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Name
Bromofluorobenzene (FID)
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75
100
125
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20
25
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Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	264758	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	02/18/15
Units:	ug/L	Received:	02/18/15
Diln Fac:	1.000	Prepared:	02/19/15
Batch#:	220612		

Field ID:	SB-17-GW	Lab ID:	264758-001
Type:	SAMPLE	Analyzed:	02/23/15

Analyte	Result	RL	MDL
Diesel C10-C24	130 Y	50	16
Motor Oil C24-C36	1,000	300	96

Surrogate	%REC	Limits
o-Terphenyl	89	67-136

Field ID:	DUP-021815	Lab ID:	264758-002
Type:	SAMPLE	Analyzed:	02/23/15

Analyte	Result	RL	MDL
Diesel C10-C24	130 Y	50	16
Motor Oil C24-C36	1,000	300	96

Surrogate	%REC	Limits
o-Terphenyl	85	67-136

Field ID:	SB-16-GW	Lab ID:	264758-003
Type:	SAMPLE	Analyzed:	02/23/15

Analyte	Result	RL	MDL
Diesel C10-C24	380 Y	50	16
Motor Oil C24-C36	1,500	300	96

Surrogate	%REC	Limits
o-Terphenyl	71	67-136

J= Estimated value
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	264758	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	02/18/15
Units:	ug/L	Received:	02/18/15
Diln Fac:	1.000	Prepared:	02/19/15
Batch#:	220612		

Field ID:	SB-15-GW	Lab ID:	264758-004
Type:	SAMPLE	Analyzed:	02/23/15

Analyte	Result	RL	MDL
Diesel C10-C24	690 Y	50	16
Motor Oil C24-C36	420	300	96

Surrogate	%REC	Limits
o-Terphenyl	80	67-136

Type:	BLANK	Analyzed:	02/20/15
Lab ID:	QC777928		

Analyte	Result	RL	MDL
Diesel C10-C24	23 J	50	16
Motor Oil C24-C36	ND	300	96

Surrogate	%REC	Limits
o-Terphenyl	94	67-136

J= Estimated value
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	264758	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 3520C
Project#:	C1374	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	220612
Units:	ug/L	Prepared:	02/19/15
Diln Fac:	1.000	Analyzed:	02/20/15

Type: BS Lab ID: QC777929

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,540	102	60-121

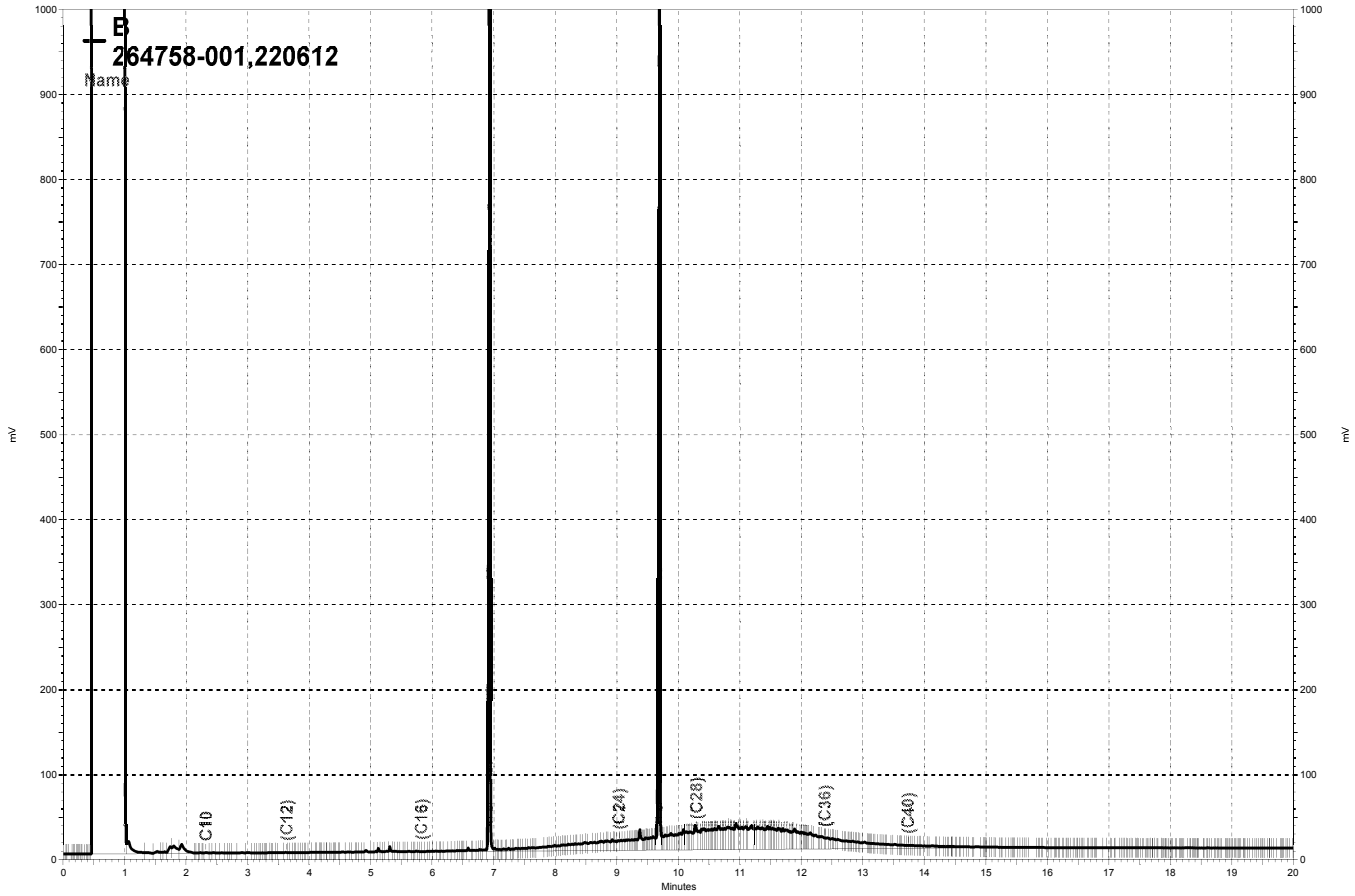
Surrogate	%REC	Limits
o-Terphenyl	100	67-136

Type: BSD Lab ID: QC777930

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,495	100	60-121	2	32

Surrogate	%REC	Limits
o-Terphenyl	103	67-136

RPD= Relative Percent Difference



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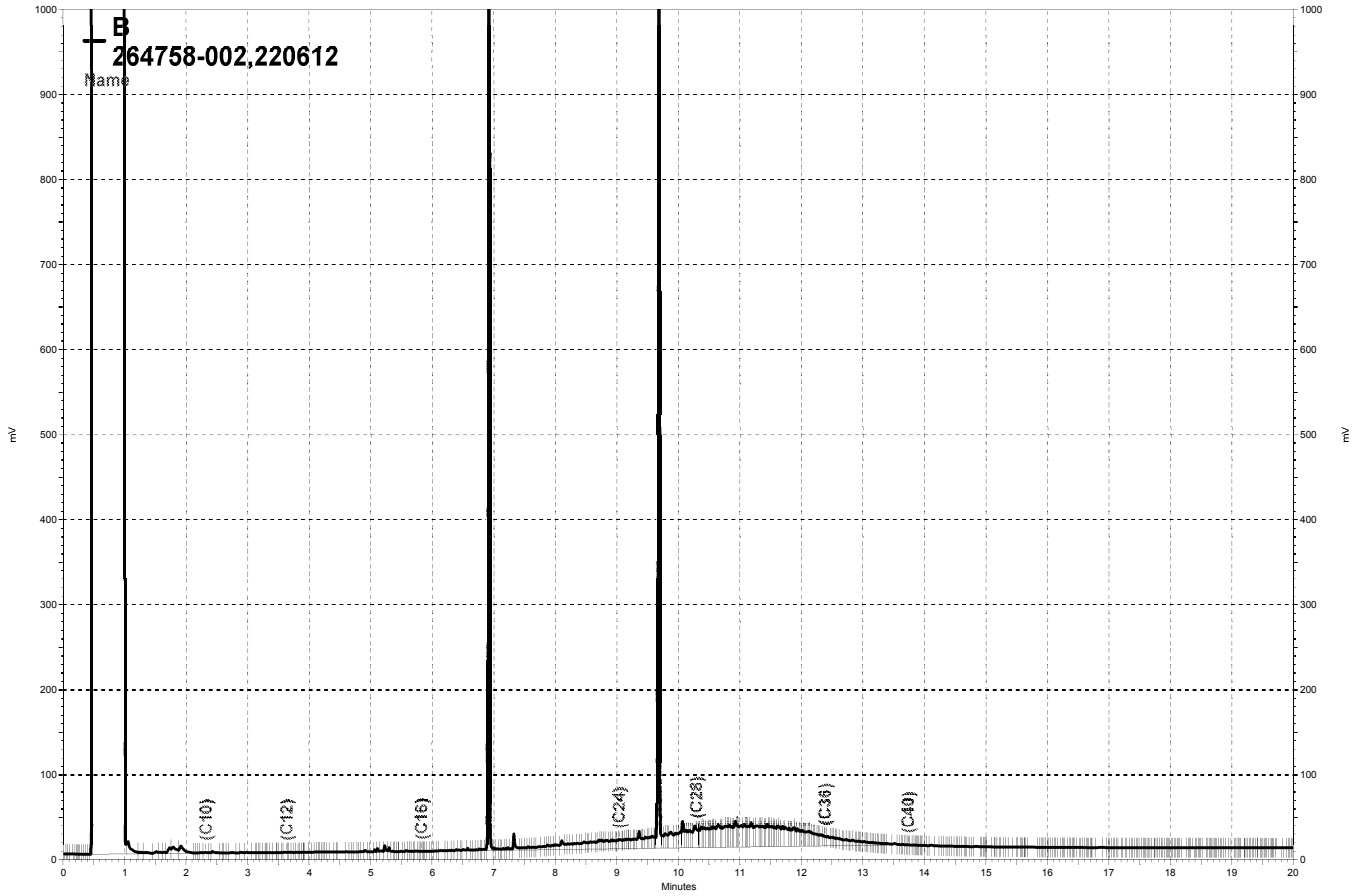

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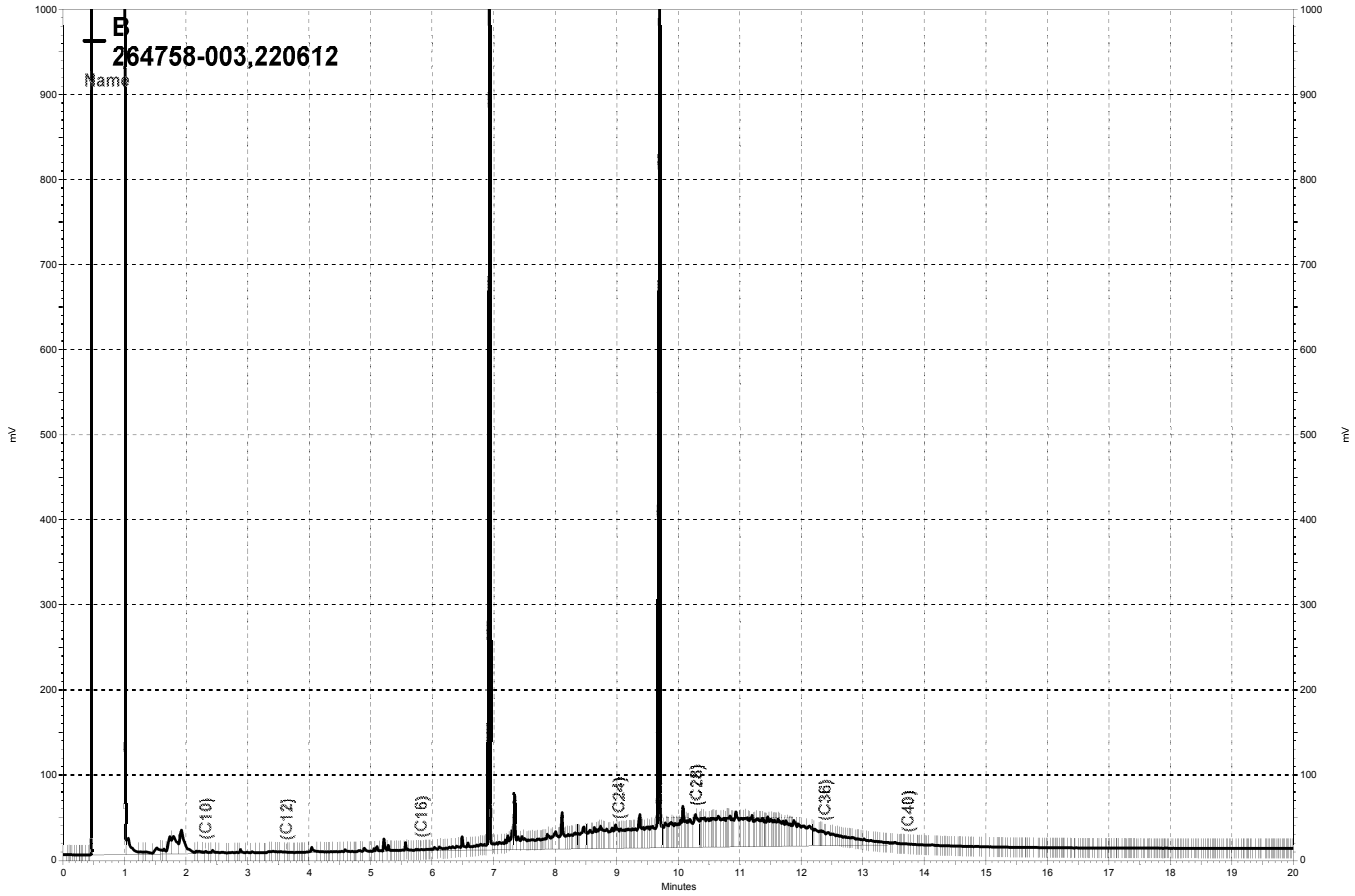

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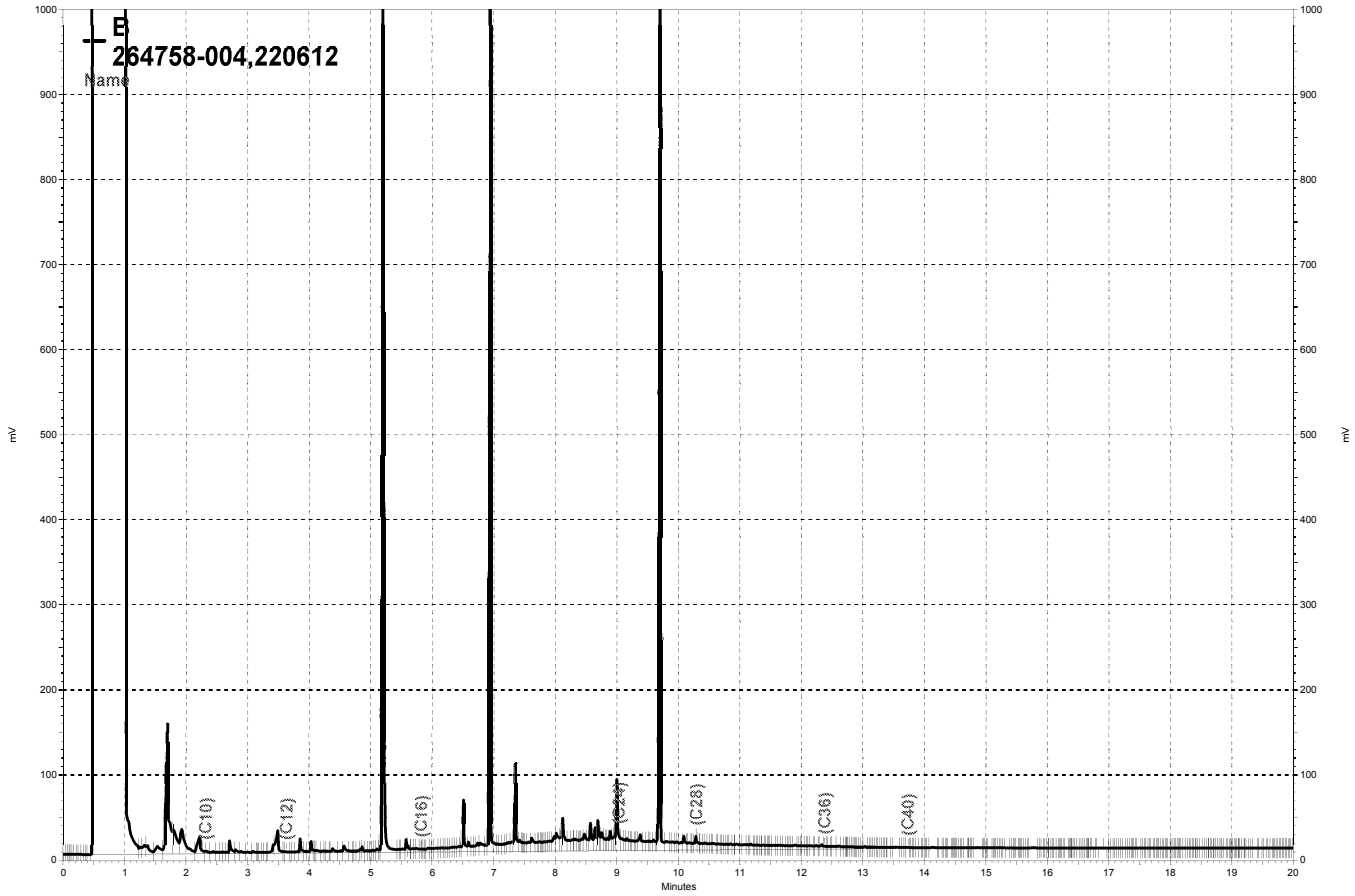

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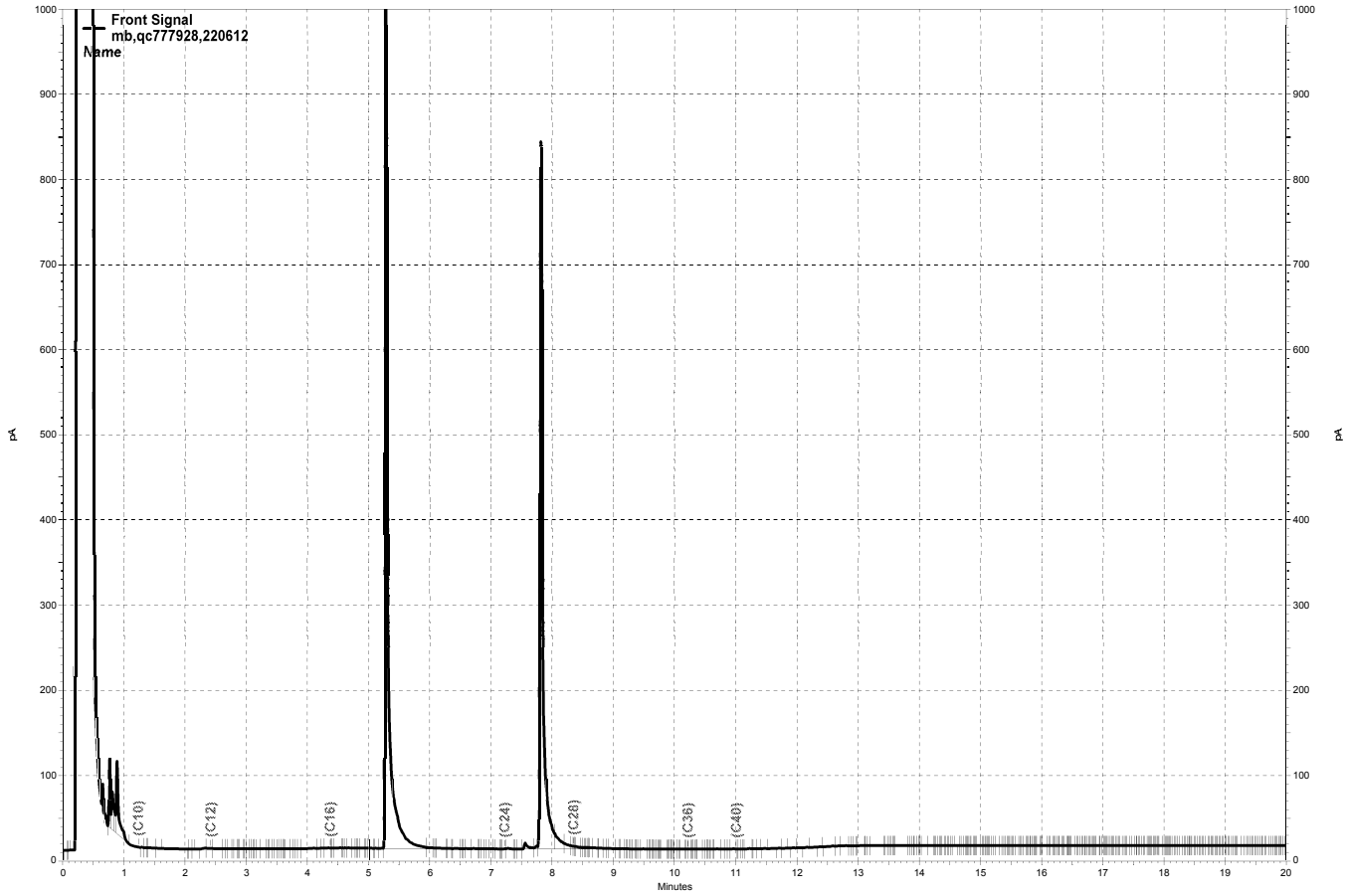

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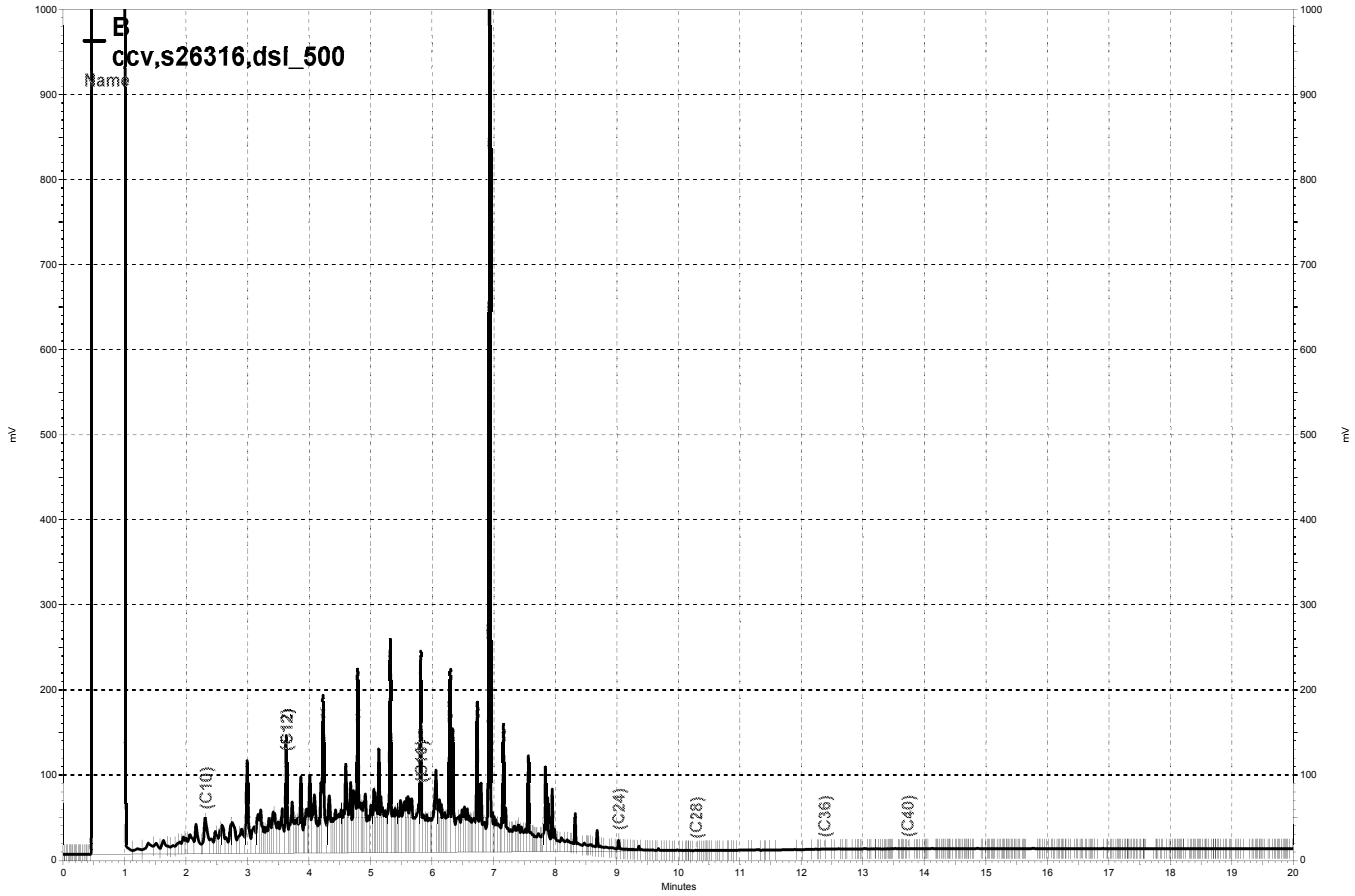

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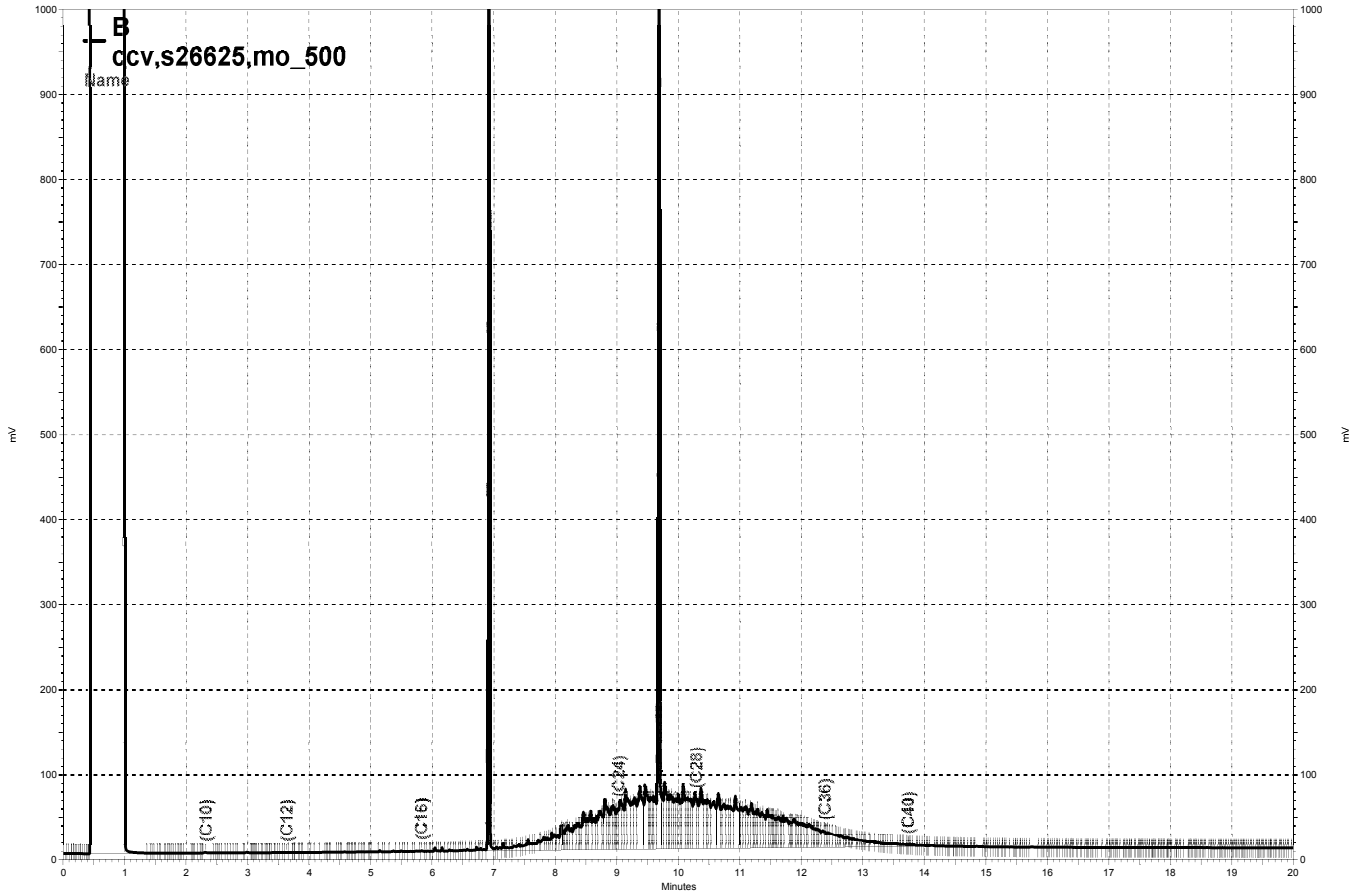

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Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264758	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-17-GW	Batch#:	220579
Lab ID:	264758-001	Sampled:	02/18/15
Matrix:	Water	Received:	02/18/15
Units:	ug/L	Analyzed:	02/19/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.3
Vinyl Chloride	1.0	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.3
Trichlorofluoromethane	ND	1.0	0.2
Acetone	2.9 J	10	1.6
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.2
Methylene Chloride	ND	10	0.2
Carbon Disulfide	ND	0.5	0.1
MTBE	0.8	0.5	0.1
trans-1,2-Dichloroethene	0.3 J	0.5	0.2
Vinyl Acetate	ND	10	1.1
1,1-Dichloroethane	ND	0.5	0.2
2-Butanone	0.5 J	10	0.4
cis-1,2-Dichloroethene	1.8	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.1
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	0.4 J	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.7
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.2
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	0.6	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.2
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264758	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-17-GW	Batch#:	220579
Lab ID:	264758-001	Sampled:	02/18/15
Matrix:	Water	Received:	02/18/15
Units:	ug/L	Analyzed:	02/19/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.2
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.1
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-128
1,2-Dichloroethane-d4	108	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	102	80-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

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Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264758	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	DUP-021815	Batch#:	220580
Lab ID:	264758-002	Sampled:	02/18/15
Matrix:	Water	Received:	02/18/15
Units:	ug/L	Analyzed:	02/19/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.1
Vinyl Chloride	0.2 J	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.1
Trichlorofluoromethane	ND	1.0	0.1
Acetone	ND	10	3.3
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.1
Carbon Disulfide	ND	0.5	0.1
MTBE	0.7	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.1
Vinyl Acetate	ND	10	0.2
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.2
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.2
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.2
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.2
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264758	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	DUP-021815	Batch#:	220580
Lab ID:	264758-002	Sampled:	02/18/15
Matrix:	Water	Received:	02/18/15
Units:	ug/L	Analyzed:	02/19/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.2
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.2
Naphthalene	ND	2.0	0.2
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-128
1,2-Dichloroethane-d4	92	75-139
Toluene-d8	103	80-120
Bromofluorobenzene	92	80-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264758	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-16-GW	Batch#:	220580
Lab ID:	264758-003	Sampled:	02/18/15
Matrix:	Water	Received:	02/18/15
Units:	ug/L	Analyzed:	02/19/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.1
Trichlorofluoromethane	ND	1.0	0.1
Acetone	ND	10	3.3
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.1
Carbon Disulfide	ND	0.5	0.1
MTBE	3.7	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.1
Vinyl Acetate	ND	10	0.2
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	0.5 J	10	0.2
cis-1,2-Dichloroethene	1.4	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.2
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	12	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.2
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.2
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264758	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-16-GW	Batch#:	220580
Lab ID:	264758-003	Sampled:	02/18/15
Matrix:	Water	Received:	02/18/15
Units:	ug/L	Analyzed:	02/19/15
Diln Fac:	1.000		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.2
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.2
Naphthalene	ND	2.0	0.2
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-128
1,2-Dichloroethane-d4	92	75-139
Toluene-d8	103	80-120
Bromofluorobenzene	98	80-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264758	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-15-GW	Units:	ug/L
Lab ID:	264758-004	Sampled:	02/18/15
Matrix:	Water	Received:	02/18/15

Analyte	Result	RL	MDL	Diln Fac	Batch#	Analyzed
Freon 12	ND	1.0	0.1	1.000	220580	02/19/15
Chloromethane	ND	1.0	0.1	1.000	220580	02/19/15
Vinyl Chloride	ND	0.5	0.1	1.000	220580	02/19/15
Bromomethane	ND	1.0	0.2	1.000	220580	02/19/15
Chloroethane	ND	1.0	0.1	1.000	220580	02/19/15
Trichlorofluoromethane	ND	1.0	0.1	1.000	220580	02/19/15
Acetone	4.2 J	10	3.3	1.000	220580	02/19/15
Freon 113	ND	2.0	0.1	1.000	220580	02/19/15
1,1-Dichloroethene	ND	0.5	0.1	1.000	220580	02/19/15
Methylene Chloride	ND	10	0.1	1.000	220580	02/19/15
Carbon Disulfide	ND	0.5	0.1	1.000	220580	02/19/15
MTBE	0.4 J	0.5	0.1	1.000	220580	02/19/15
trans-1,2-Dichloroethene	ND	0.5	0.1	1.000	220580	02/19/15
Vinyl Acetate	ND	10	0.2	1.000	220580	02/19/15
1,1-Dichloroethane	ND	0.5	0.1	1.000	220580	02/19/15
2-Butanone	0.3 J	10	0.2	1.000	220580	02/19/15
cis-1,2-Dichloroethene	ND	0.5	0.1	1.000	220580	02/19/15
2,2-Dichloropropane	ND	0.5	0.1	1.000	220580	02/19/15
Chloroform	ND	0.5	0.1	1.000	220580	02/19/15
Bromochloromethane	ND	0.5	0.2	1.000	220580	02/19/15
1,1,1-Trichloroethane	ND	0.5	0.1	1.000	220580	02/19/15
1,1-Dichloropropene	ND	0.5	0.1	1.000	220580	02/19/15
Carbon Tetrachloride	ND	0.5	0.1	1.000	220580	02/19/15
1,2-Dichloroethane	ND	0.5	0.1	1.000	220580	02/19/15
Benzene	ND	0.5	0.1	1.000	220580	02/19/15
Trichloroethene	ND	0.5	0.1	1.000	220580	02/19/15
1,2-Dichloropropane	ND	0.5	0.1	1.000	220580	02/19/15
Bromodichloromethane	ND	0.5	0.1	1.000	220580	02/19/15
Dibromomethane	ND	0.5	0.1	1.000	220580	02/19/15
4-Methyl-2-Pentanone	280	50	0.5	5.000	220666	02/20/15
cis-1,3-Dichloropropene	ND	0.5	0.1	1.000	220580	02/19/15
Toluene	ND	0.5	0.1	1.000	220580	02/19/15
trans-1,3-Dichloropropene	ND	0.5	0.1	1.000	220580	02/19/15
1,1,2-Trichloroethane	ND	0.5	0.1	1.000	220580	02/19/15
2-Hexanone	ND	10	0.2	1.000	220580	02/19/15
1,3-Dichloropropane	ND	0.5	0.1	1.000	220580	02/19/15
Tetrachloroethene	ND	0.5	0.1	1.000	220580	02/19/15

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264758	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Field ID:	SB-15-GW	Units:	ug/L
Lab ID:	264758-004	Sampled:	02/18/15
Matrix:	Water	Received:	02/18/15

Analyte	Result	RL	MDL	Diln Fac	Batch#	Analyzed
Dibromochloromethane	ND	0.5	0.1	1.000	220580	02/19/15
1,2-Dibromoethane	ND	0.5	0.1	1.000	220580	02/19/15
Chlorobenzene	ND	0.5	0.1	1.000	220580	02/19/15
1,1,1,2-Tetrachloroethane	ND	0.5	0.1	1.000	220580	02/19/15
Ethylbenzene	ND	0.5	0.1	1.000	220580	02/19/15
m,p-Xylenes	ND	0.5	0.1	1.000	220580	02/19/15
o-Xylene	ND	0.5	0.1	1.000	220580	02/19/15
Styrene	ND	0.5	0.2	1.000	220580	02/19/15
Bromoform	ND	1.0	0.1	1.000	220580	02/19/15
Isopropylbenzene	ND	0.5	0.1	1.000	220580	02/19/15
1,1,2,2-Tetrachloroethane	ND	0.5	0.1	1.000	220580	02/19/15
1,2,3-Trichloropropane	ND	0.5	0.1	1.000	220580	02/19/15
Propylbenzene	ND	0.5	0.1	1.000	220580	02/19/15
Bromobenzene	ND	0.5	0.1	1.000	220580	02/19/15
1,3,5-Trimethylbenzene	ND	0.5	0.1	1.000	220580	02/19/15
2-Chlorotoluene	ND	0.5	0.1	1.000	220580	02/19/15
4-Chlorotoluene	ND	0.5	0.1	1.000	220580	02/19/15
tert-Butylbenzene	ND	0.5	0.1	1.000	220580	02/19/15
1,2,4-Trimethylbenzene	ND	0.5	0.1	1.000	220580	02/19/15
sec-Butylbenzene	ND	0.5	0.1	1.000	220580	02/19/15
para-Isopropyl Toluene	ND	0.5	0.1	1.000	220580	02/19/15
1,3-Dichlorobenzene	ND	0.5	0.1	1.000	220580	02/19/15
1,4-Dichlorobenzene	ND	0.5	0.1	1.000	220580	02/19/15
n-Butylbenzene	ND	0.5	0.1	1.000	220580	02/19/15
1,2-Dichlorobenzene	ND	0.5	0.1	1.000	220580	02/19/15
1,2-Dibromo-3-Chloropropane	ND	2.0	0.2	1.000	220580	02/19/15
1,2,4-Trichlorobenzene	ND	0.5	0.1	1.000	220580	02/19/15
Hexachlorobutadiene	ND	2.0	0.2	1.000	220580	02/19/15
Naphthalene	ND	2.0	0.2	1.000	220580	02/19/15
1,2,3-Trichlorobenzene	ND	0.5	0.1	1.000	220580	02/19/15

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	95	80-128	1.000	220580	02/19/15
1,2-Dichloroethane-d4	93	75-139	1.000	220580	02/19/15
Toluene-d8	107	80-120	1.000	220580	02/19/15
Bromofluorobenzene	94	80-120	1.000	220580	02/19/15

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264758	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	220579
Units:	ug/L	Analyzed:	02/19/15
Diln Fac:	1.000		

Type: BS Lab ID: QC777802

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	13.24	106	66-135
Benzene	12.50	13.45	108	80-123
Trichloroethene	12.50	13.39	107	80-123
Toluene	12.50	13.33	107	80-121
Chlorobenzene	12.50	13.35	107	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-128
1,2-Dichloroethane-d4	100	75-139
Toluene-d8	95	80-120
Bromofluorobenzene	95	80-120

Type: BSD Lab ID: QC777803

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	12.71	102	66-135	4	24
Benzene	12.50	12.77	102	80-123	5	20
Trichloroethene	12.50	13.30	106	80-123	1	20
Toluene	12.50	12.96	104	80-121	3	20
Chlorobenzene	12.50	13.31	106	80-123	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-128
1,2-Dichloroethane-d4	102	75-139
Toluene-d8	94	80-120
Bromofluorobenzene	95	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264758	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777804	Batch#:	220579
Matrix:	Water	Analyzed:	02/19/15
Units:	ug/L		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.3
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.3
Trichlorofluoromethane	ND	1.0	0.2
Acetone	ND	10	1.6
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.2
Methylene Chloride	ND	10	0.2
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.2
Vinyl Acetate	ND	10	1.1
1,1-Dichloroethane	ND	0.5	0.2
2-Butanone	ND	10	0.4
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.1
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.7
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.2
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.2
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264758	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777804	Batch#:	220579
Matrix:	Water	Analyzed:	02/19/15
Units:	ug/L		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.2
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.1
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	0.2 J	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-128
1,2-Dichloroethane-d4	107	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	99	80-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264758	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	220580
Units:	ug/L	Analyzed:	02/19/15
Diln Fac:	1.000		

Type: BS Lab ID: QC777805

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	11.22	90	66-135
Benzene	12.50	12.00	96	80-123
Trichloroethene	12.50	11.70	94	80-123
Toluene	12.50	12.19	98	80-121
Chlorobenzene	12.50	12.72	102	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-128
1,2-Dichloroethane-d4	95	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	89	80-120

Type: BSD Lab ID: QC777806

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	10.95	88	66-135	2	24
Benzene	12.50	11.54	92	80-123	4	20
Trichloroethene	12.50	11.13	89	80-123	5	20
Toluene	12.50	12.15	97	80-121	0	20
Chlorobenzene	12.50	12.52	100	80-123	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-128
1,2-Dichloroethane-d4	93	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	90	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264758	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777807	Batch#:	220580
Matrix:	Water	Analyzed:	02/19/15
Units:	ug/L		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.1
Trichlorofluoromethane	ND	1.0	0.1
Acetone	ND	10	3.3
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.1
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.1
Vinyl Acetate	ND	10	0.2
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.2
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.2
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.2
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.2
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1
2-Chlorotoluene	ND	0.5	0.1

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264758	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC777807	Batch#:	220580
Matrix:	Water	Analyzed:	02/19/15
Units:	ug/L		

Analyte	Result	RL	MDL
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.2
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.2
Naphthalene	ND	2.0	0.2
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-128
1,2-Dichloroethane-d4	93	75-139
Toluene-d8	104	80-120
Bromofluorobenzene	95	80-120

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264758	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	220666
Units:	ug/L	Analyzed:	02/20/15
Diln Fac:	1.000		

Type: BS Lab ID: QC778159

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	15.00	14.26	95	66-135
Benzene	15.00	14.92	99	80-123
Trichloroethene	15.00	14.38	96	80-123
Toluene	15.00	15.02	100	80-121
Chlorobenzene	15.00	14.97	100	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-128
1,2-Dichloroethane-d4	98	75-139
Toluene-d8	99	80-120
Bromofluorobenzene	96	80-120

Type: BSD Lab ID: QC778160

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	15.00	12.67	84	66-135	12	24
Benzene	15.00	13.49	90	80-123	10	20
Trichloroethene	15.00	12.88	86	80-123	11	20
Toluene	15.00	13.59	91	80-121	10	20
Chlorobenzene	15.00	14.04	94	80-123	6	20

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-128
1,2-Dichloroethane-d4	94	75-139
Toluene-d8	99	80-120
Bromofluorobenzene	96	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264758	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778161	Batch#:	220666
Matrix:	Water	Analyzed:	02/20/15
Units:	ug/L		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.2
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.2
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.2
Trichlorofluoromethane	ND	1.0	0.1
Acetone	ND	10	0.4
Freon 113	ND	2.0	0.2
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.1
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.1
Vinyl Acetate	ND	10	0.2
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.4
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.1
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.1
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264758	Location:	Allied Engineering
Client:	Integral Consulting, Inc.	Prep:	EPA 5030B
Project#:	C1374	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC778161	Batch#:	220666
Matrix:	Water	Analyzed:	02/20/15
Units:	ug/L		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	0.3 J	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.3
1,2,4-Trichlorobenzene	0.2 J	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.2
Naphthalene	0.1 J	2.0	0.1
1,2,3-Trichlorobenzene	0.1 J	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-128
1,2-Dichloroethane-d4	98	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	106	80-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit