CTEH CENTER FOR TOXICOLOGY AND ENVIRONMENTAL HEALTH, LLC

Spill Response Summary Report

March 9 – June 30, 2013

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Prepared for:

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1.0 INTRODUCTION

The purpose of this document is to summarize the event and actions taken for the crude oil release at the Lion Oil Trading & Transportation, Inc. (LOTT) facility. Such action may include but not limited to mitigation of any and all potential environmental impacts; community air monitoring; identify, characterize and disposal of all waste generated as a result of the event at the LOTT facility in Magnolia, AR which occurred on March 9, 2013.

2.0 SITE DESCRIPTION

The LOTT project site is located at 600 Columbia 25, Magnolia, AR 71753, Latitude: 33.2405560 Longitude: -93.1469440. The facility acts as an Intermediate Gathering System site with a storage capacity of 170,500 barrels for crude oil collected from various oil wells in the area.

On Saturday, March 9, 2013, a release of crude oil (MSDS provided in Attachment A) occurred at the Magnolia, AR facility. Onsite and offsite areas were impacted by the release. As a result, collection of materials for disposal was conducted.

A site diagram, which shows the location of the LOTT facility and the area of operations, is provided in Attachment B.

The site is owned by SALA Gathering Systems, LLC and operated by Delek Logistics Operating, LLC. Mailing address for these companies is 1001 School Street, El Dorado, AR, 71730-7418.

3.0 SUMMARY OF EVENTS

3.1 Initial Release

A leak was found inside Magnolia Station on the morning of March 9, 2013. The leak was discovered by a LOTT employee when he arrived at the pump station to begin his normal duties at approximately 09:00. Spilled crude oil had accumulated in the onsite containment pond and overflow had begun to flow to a drainage ditch on the southeast side of the pump station. The leak was determined to be near the suction piping of #6 pump. Closing the suction valve did not stop the leak. The leak stopped when the discharge valve on #6 pump was also closed. Initial volume of crude oil released was estimated at 1,500 bbls.

3.2 Initial Actions Taken

LOTT maintenance personnel were called to help contain the leak. LOTT personnel found the spilled crude oil to have flowed down a steep embankment to an ephemeral stream and then to a no-name stream that empties into Little Cornie Bayou. The end of the spill plume was found to be in the Little Cornie Bayou about 3 miles downstream of the initial leak site. The spill path was through a rural wooded area with no nearby inhabited buildings. A telephonic report was made to the National Response Center at approximately 11:00 the morning of March 9, 2013. Recovery of spilled crude oil began the same morning and TAS Environmental, an OSRO listed in the facility's spill response manual, was also called to help with the spill recovery and remediation efforts.

LOTT personnel and individuals from TAS installed two dirt underflow weirs, multiple vinyl booms, and multiple absorbent booms. Multiple collection sites were established along the stream to allow vacuum trucks and skimmers to recover the oil.

3.3 Duration of the Event

The follow table provides a brief outline of the events corresponding to the above referenced crude oil spill.

Table 3.3 Outline of Events

Date	*Event Description*
3/9/13	At approximately 09:00 the release of crude oil was discovered.
3/9/13	At approximately 11:00 the release was reported via telephone to the National Response Center
3/9/13	LOTT maintenance and TAS Environmental personnel were sent to the site to begin containment and mitigation efforts.
3/14/13	The Center for Toxicology and Environmental Health (CTEH®) was mobilized to the site to provide community air monitoring, worker monitoring, and Incident Command System (ICS) support.
4/2/13	Active crude oil mitigation operations were completed and an Absorbent/Containment Boom Maintenance plan was implemented.
6/19/13	Chris Voss (ADEQ) and Mark Hays (USEPA Region 6) visit the site and advised LOTT that all absorbent and containment boom could be removed permanently. With the exception of the absorbent boom located at the culvert at County Road 34 (CR 34). This boom could be removed permanently in mid-July.
7/19/13	LOTT has scheduled the removal of the final sections of boom from the culvert at CR 34.

3.4 Cause of the Spill

LOTT personnel performed an internal investigation as to the nature of the release of crude oil. A pump section strainer to #6 pump burst allowing crude oil to leak onto the ground inside the Magnolia Station. The metal wall of the strainer showed signs of heavy pitting and metal loss on the inside surface. It is likely that the metal loss was due to biological induced corrosion in the liquid space above accumulated dirt and debris in the bottom of the strainer. A discharge check valve on #6 pump was also determined to have failed partially open. Failure of the discharge check valve combined with a check valve in #6 pump suction piping allowed high pressure from #4 pump to reach the suction strainer on #6 pump. The unusually high pressure on the suction strainer caused the strainer to burst at the weakened corroded area of the strainer.

The location of the leak was between metered leak detection systems on the incoming pipelines and metered leak detection systems on the outgoing pipelines. The location of the leak site combined with the limited instrumentation (no pressure transmitter) on the suction piping to #6 pump did not yield enough information to allow the El Dorado SCADA operator to detect a leak. The leak was stopped by the station operator by manually closing both the discharge and suction valves on #6 pump.

4.0 ENVIRONMENTAL MONITORING AND SAMPLING

On March 14, 2013, CTEH® was contacted to conduct a site assessment and provide observations and recommendations for successful management/operations of the response. Based on the initial observations provided by CTEH® following the March 15, 2013 site walk/reconnaissance, additional resources were requisitioned through the ICS process to conduct a more thorough environmental assessment and characterization of the site.

4.1 Environmental Assessments

CTEH® performed two main forms of environmental assessments during the Magnolia, AR response. The environmental assessments consisted of a modified form of the Shoreline Cleanup and Assessment Technique (SCAT) and surface water sampling and analysis, each of which is described in greater detail in subsequent sections.

4.1.1 Shoreline Assessment (SA)

A traditional SCAT program was not conducted during this incident for three reasons:

1) The shoreline types and degree of oiling along Little Cornie Bayou were very uniform making a detailed SCAT evaluation unnecessary.

2) No state or federal representatives were available to participate in the SCAT process.

3) Cleanup activities were underway for approximately nine days prior to the onset of any EU shoreline observations.

Cleanup activities between March 9 and March 18 included, but were not limited to:

- the removal of pooled oil and affected soil from the onsite detention pond
- significant work in the inactive beaver pond (located approximately 200 meters from the detention pond), including, but was not limited to, the removal of gross oil by flushing to collection points with low pressure ambient temperature water (skimmers, etc.) and removal of oiled debris
- removal of the majority of woody debris in Little Cornie Bayou and the ditch connecting the inactive beaver pond with Little Cornie Bayou to facilitate the movement of oil through the ditch/stream system to collection points
- flushing affected stream banks with ambient water to remove affected soil (flushing was conducted in a manner that minimized the removal of unaffected soil)

Instead of SCAT, a Shoreline Assessment (SA) was employed for this incident. The goal of the SA process was to track cleanup progress and to assist operations by providing cleanup guidance. The SA process was initiated on March 18, 2013, (approximately nine days after the release and the start of cleanup activities). Consequently, the results of the first SA evaluations did not indicate maximum shoreline oiling but rather the shoreline oiling condition on March 18 through March 22. Subsequent SA evaluations were conducted on March 28 and March 29, as well as April 2 and April 4 to monitor the progress of the clean-up and to direct operations to areas where oil might remain.

4.1.2 Shoreline Assessment Objectives

Shoreline Assessment objectives for this event were as follows:

- outline the SA program for this response
- outline operational cleanup goals, acceptable cleanup methodologies, and the environmental constraints associated with these cleanup methodologies
- communicate the shoreline cleanup methodologies and suggested endpoints to Operations
- outline a shoreline inspection process with the participation of the land owner/manager, local (state) government representative, and/or resource trustee/manager

4.1.3 Shoreline Assessment Protocol

During the first shoreline assessment (March 18 to March 22), the SAT crews traversed all three response divisions and stopped every 30 feet to make shoreline and surface water observations and to photo-document the stream. At each observation point, the crew made an ocular evaluation of the condition of the stream and surface water and placed these resources into one of six categories (see below). The SAT crew also took specific notes pertaining to each observation point. The shoreline oiling categories used in the first SAT evaluation are provided in Table 4.1.3a.

Table 4.1.3a Shoreline Oiling Categories

Category	*Condition of Surface Water*	*Condition of Shoreline*	*Color on Shoreline Assessment Map*
0	No visible oil	No visible oil	Blue
1	Discontinuous light sheen	Very light shoreline impact	Green
2	Discontinuous heavy sheen	Light shoreline impact/light staining	Yellow
3	Continuous moderate to heavy sheen	Vegetation staining and some product covering shoreline	Orange
4	Patchy heavy product/thick black oil/possible streamers	Moderate to heavy shoreline impact	Maroon
5	Heavy product (black oil) covering 75 – 80 % of the surface of the stream	Heavy shoreline impact	Red

Subsequent Shoreline Assessments were conducted at an approximate interval of 90 ft (~30 meters). For each segment the SCAT team recorded the average width and percent distribution of the affected shoreline area. Photographs of the segment were taken as well as general notes associated with the shoreline. GPS coordinates from the middle of the 90 ft. shoreline segment were recorded. The average width of the oil band on the shoreline (in inches) and the percent oil distribution are presented in Table 4.1.3b to determine shoreline oiling category for each 90 ft segment.

Table 4.1.3b Shoreline Oiling Matrix to be used in future Shoreline Assessments

Width of Oil Band on Shoreline Segment (inches)					
Percent Oil Distribution		9 – 12	6 – 9	3 – 6	1 – 3
	81 – 100 %	Heavy	Heavy	Moderate	Light
	61 – 80 %	Heavy	Heavy	Moderate	Light
	41 – 60 %	Moderate	Moderate	Light	Very Light
	21 – 40 %	Light	Light	Very Light	Very Light
	1 – 20 %	Very Light	Very Light	Very Light	Very Light

4.2 Results

The results of the shoreline assessments are presented below by date of assessment.

Table 4.2a Shoreline Assessment Results March 18 – 22, 2013

Shoreline Oiling Category	*Number of Shoreline Observations*	*Percentage of Shoreline Observations*
0 - No Oil Observed	27	7.0
1 - Sporadic Oil	53	13.8
2 - Patchy Light Oil	60	15.6
3 - Continuous Light Oil	101	26.2
4 - Patchy Heavy Oil	125	32.5
5 - Continuous Heavy Oil	19	4.9
TOTAL	385	100.0

Table 4.2b Shoreline Assessment Results March 28 – 29, 2013

Shoreline Oiling Category	*Number of Shoreline Observations*	*Percentage of Shoreline Observations*
0 - No Oil Observed	51	19.1
1 - Sporadic Oil	185	69.3
2 - Patchy Light Oil	26	9.7
3 - Continuous Light Oil	4	1.5
4 - Patchy Heavy Oil	1	0.4
5 - Continuous Heavy Oil	0	0.0
TOTAL	267	100.0

Table 4.2c Shoreline Assessment Results April 2 – 4, 2013

Shoreline Oiling Category	*Number of Shoreline Observations*	*Percentage of Shoreline Observations*
0 - No Oil Observed	156	68.1
1 - Sporadic Oil	73	31.9
2 - Patchy Light Oil	0	0.0
3 - Continuous Light Oil	0	0.0
4 - Patchy Heavy Oil	0	0.0
5 - Continuous Heavy Oil	0	0.0
TOTAL	229	100.0

Overall, this data reflects the efficacy of the cleanup efforts by operations personnel. The results of the first SA evaluation indicate that a total of 63.6 % of the shoreline observation were in the heaviest oiling categories (categories 3, 4, and 5). This value decreased to 1.9 % by the second SA evaluation and was down to 0.0 % by the third evaluation. By the third evaluation period, no oil was observed for 68.1 % of the shoreline observations with 31.9 % of these observations indicate sporadic oil.

4.3 Endpoint Determination

Once the Operations Section Chief considered a shoreline segment to meet the operational cleanup endpoint listed in Table 4.3, a pre-inspection of the segment by the Environmental Unit (EU) of Incident Command (IC) was requested. An EU representative then evaluated the segment to ensure that the operational clean-up goals were met prior to scheduling a sign-off inspection with the United States Environmental Protection Agency (USEPA) and the Arkansas Department of Environmental Quality (ADEQ).

Table 4.3 General Cleanup Guidelines and Goals

Habitat Type or Feature	*Operational Cleanup Goals*	*Operational Cleanup Methods*	*Constraints*	*Cleanup Objective*
Retention Pond	Remove all oiled water and soil from the retention pond.	Vacuum up all remaining oily water for appropriate disposal. Use heavy equipment to excavate soil/sediment to the point where no visual oil remains.	No environmental constraints for this area.	*Meet Operational Clean-up Goals.
Wetlands/Inactive Beaver Pond	Removal of bulk oil and oiled debris on the ground surface to the point where only sheen remains. No recoverable or potentially mobile oil. Oil on remaining vegetation does not wipe off easily on contact.	Ambient, high volume / low pressure flushing of bulk oil to collection points (skimmers, etc.). Use ambient, high volume / low pressure flushing of tree trunks or scrape heavy oil accumulations with a shovel - do not remove bark. Use rakes and shovels to collect affected leaves and twigs. Use sorbent pads where appropriate. Additional alternatives should be discussed with the EU prior to implementation.	Minimize entry to essential personnel. No damage to large trees (greater than two inches in diameter) or cypress knees. Minimize the removal of clean soil/sediment. Minimize walking on product and driving into the sediment. Report all affected wildlife to the EU (Scott Wiggins, 870-814-7564).	*Meet Operational Clean-up Goals **Additional clean-up activities may damage the environment; result in soil erosion, and significant adverse habitat impact.
Little Cornie Bayou and unnamed stream the leads from the inactive Beaver Pond to Little Cornie Bayou	Removal of bulk oil to the point where only sheen remains so that it no longer releases oil that can re-oil adjacent habitats or affect highly sensitive areas.	Use flushing with ambient water to remove oil from affected stream bank and move floating oil to collection points (skimmers, etc.). Manual removal of oil on sandy areas. Skimming and vacuum of floating oil on the water surface. Manual removal of dead/oiled vegetation from the stream and stream bank. Manual cutting of affected live vegetation less than 2 inches in diameter. Removal of affected live roots should be on a case-by-case basis and should be discussed with the EU. Where remaining oil poses a significant threat to wildlife, sorbent snare may be deployed. Such areas will be identified by the EU. Additional alternatives should be discussed with the EU prior to implementation.	No damage to large trees (greater than 2 inches in diameter) or cypress knees. Minimize the removal of clean soil/sediment. Minimize stream bank removal as much as possible. Minimize walking on product and driving into the sediment. Report all affected wildlife to the EU (Scott Wiggins, 870-814-7564).	*Meet Operational Clean-up Goals **Additional clean-up activities may damage the environment; result in soil erosion, and significant adverse habitat impact.

Once the EU agreed that a shoreline segment met the operational cleanup endpoints, a sign-off inspection survey was scheduled with USEPA and ADEQ. A Survey Inspection Report (SIR) form was used during the shoreline sign-off/inspection process and included the section of shoreline that was examined, names of the people on the inspection team, team recommendations and comment, and an indication as to whether the segment met the specified endpoints.

4.4 Surface Water Sampling and Analysis

4.4.1 Rationale

The main objectives for the surface water sampling conducted in response for this incident were as follows:

- to collect a sample downstream of the impacted zone to coarsely delineate areas of potential impact and assess the need for, and effectiveness of, the containment and cleanup activities
- to collect a sample upstream of the impacted zone to develop the range of potential background concentrations for comparative purposes and distinguish between hydrocarbons related to this incident and historic, non-related hydrocarbons

4.4.2 Sample Locations

Two sample locations, one downstream of the impacted zone and one upstream of the impacted zone were selected to meet the surface water sampling objectives. The downstream sample location was collected from Little Cornie Creek, downstream of all work activity and all product containment measures. The background sample location was collected from Little Cornie Bayou on oilfield property, upstream of the impacted site.

A third sample was collected from the onsite containment pond to determine whether it could be used as an alternative water source should flushing of the impacted areas be warranted.

4.4.3 Sample Frequency

The downstream location was sampled daily between March 17 and April 3, 2013, inclusive. The background sample was collected a single time on March 22, 2013. The onsite containment pond was sampled a single time on March 31, 2013. A map of the sampling locations is attached as Attachment C.

4.4.4 Sample Methodology

Surface water samples were collected from the surface six inches of the water column using laboratory supplied glassware, which were filled via decanting. Samples were submitted to either Pace Analytical Services, Inc. in St. Rose, Louisiana (surface water background samples) or Ana-Lab

Corp. in Kilgore, Texas (containment pond sample) for analysis. Samples were analyzed by the methods listed in Table 4.4.4, below.

Table 4.4.4 Surface Water Methods

Analyte	*Method*
Volatile Organic Compounds (VOCs)	USEPA 8260
Semi-Volatile Organic Compounds (SVOCs) low-level	USEPA 8270sim
Semi-Volatile Organic Compounds (SVOCs)	USEPA 8270
Priority Pollutant List Metals	USEPA 6010
Total Petroleum Hydrocarbons (TPH) Gas Range Organics (GRO)	USEPA 8015
Total Petroleum Hydrocarbons (TPH) Oil Range Organics (ORO)	USEPA 8015
Total Petroleum Hydrocarbons (TPH) Diesel Range Organics (DRO)	USEPA 8015

4.5 Analytical Surface Water Sampling Results

The results of the surface water sampling are provided in Table 4.5. Results were compared to USEPA Regional Screening Levels (RSLs), where ever available. Concentrations of gasoline range organics (GROs), diesel range organics (DROs), 2-methylnaphthalene, naphthalene, fluorene, m&p-xylene, and phenanthrene exceeded their respective concentrations found in the background water sample. These increased concentrations were detected between the dates of March 17 and April 1, 2013; no concentration increases were detected in the samples collected on April 2 or April 3, 2013.

Table 4.5 Surface Water Sampling Results*

		17-Mar	18-Mar	19-Mar	20-Mar	21-Mar	22-Mar		23-Mar	24-Mar	25-Mar	26-Mar	27-Mar	28-Mar	29-Mar	1-Apr	2-Apr	3-Apr
		MAAR0317SW001A	MAAR0318SW002A	MAAR0319SW003A	MAAR0320SW005A	MAAR0321SW006A	MAAR0322SW007A	MAAR0322SW008BK	MAAR0323SW009A	MAAR0324SW010A	MAAR0325SW011A	MAAR0326SW012A	MAAR0327SW013A	MAAR0328SW014A	MAAR0329SW015A	MAAR0401SW016A	MAAR0402SW017A	MAAR0403SW018A
Analyte	Analytical_Method																	
2-Methylnaphthalene	EPA 8270	3.46 J	2.38 J	1.31 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	EPA 8270 SIM	**2.81**	**1.89**	**0.72**	-	**0.14**	-	-	0.09 J	-	**0.42**	**0.23**	**0.29**	**0.1**	-	**0.13**	-	-
Acenaphthene	EPA 8270 SIM	0.112 J	0.0928 J	-	-	-	-	-	0.06 J	-	-	-	-	-	-	-	-	-
Arsenic	EPA 6010	1.91 J	2.73 J	1.1 J	1.62 J	-	-	-	-	1.42 J	-	1.91 J	1.24 J	-	-	-	-	1.45 J
Benzene	EPA 8260	2.46 J	1.1 J	0.55 J	-	1.07 J	-	-	2 J	4.38 J	1.59 J	0.96 J	0.83 J	0.71 J	-	0.97 J	0.52 J	-
Benzoic acid	EPA 8270	-	-	2.19 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beryllium	EPA 6010	0.57 J	0.492 J	0.509 J	0.408 J	0.384 J	0.327 J	0.467 J	0.495 J	0.504 J	0.488 J	0.699 J	0.513 J	0.559 J	0.531 J	0.366 J	0.646 J	0.521 J
bis(2-Ethylhexyl)phthalate	EPA 8270 SIM	-	-	-	-	-	-	-	-	2.69 J	1.83 J	-	-	-	-	-	-	-
Cadmium	EPA 6010	-	-	-	-	-	-	-	-	-	-	0.438 J	-	-	-	-	-	-
Chromium	EPA 6010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.38 J	2.07 J	2.92 J
Copper	EPA 6010	-	-	-	-	-	-	-	-	-	3.4 J	-	-	-	-	-	-	-
Diesel Range Organics	EPA 8015 Mod	**256** -	-	-	-	-	-	-	**R** 250 UJ	**369** -	-	-	-	-	-	-	-	-
Di-n-butylphthalate	EPA 8270	-	-	-	-	-	-	-	-	-	-	1.15 J	-	-	-	-	-	-
Ethylbenzene	EPA 8260	2.73 J	1.27 J	0.85 J	-	0.73 J	-	-	1.61 J	3.83 J	0.99 J	0.67 J	0.66 J	0.54 J	-	0.87 J	0.6 J	-
Fluorene	EPA 8270 SIM	**0.45**	**0.402**	**0.25**	**0.12**	**0.14**	-	-	**0.26**	-	**0.13**	**0.1**	**0.14**	0.09 J	-	-	-	-
Gasoline Range Organics(C6-10	EPA 8015/8021	**92.4**	**57**	-	-	-	-	-	**73.9**	**114**	**50**	-	-	-	-	-	28.2 J	28.6 J
Isopropylbenzene	EPA 8260	0.6 J	-	-	-	-	-	-	-	0.54 J	-	-	-	-	-	-	-	-
Lead	EPA 6010	1.33 J	1.79 J	2.02 J	2.79 J	2.71 J	2.16 J	1.99 J	4.35 J	3.63 J	2.71 J	-	-	2.26 J	2.9 J	-	1.97 J	2.92 J
m&p-Xylene	EPA 8260	**6.67**	2.83 J	1.68 J	-	1.81 J	-	-	2.49 J	**5.2**	1.62 J	0.98 J	0.95 J	-	-	1.46 J	-	-
Methylene chloride	EPA 8260	-	-	-	-	-	-	-	-	-	-	-	-	4.52 J	-	-	-	-
Naphthalene	EPA 8270	4.12 J	2.45 J	1.39 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	EPA 8270 SIM	**3.46**	**2**	**0.72**	**0.12**	**0.18**	-	-	0.08 J	-	**0.33**	**0.2**	**0.27**	**0.13**	-	**0.16**	-	-
Nickel	EPA 6010	7.57 J	7.01 J	7.17 J	6.01 J	6.35 J	3.82 J	6.5 J	6.88 J	5.88 J	6.55 J	8.14 J	7.57 J	7.23 J	6.71 J	7.63 J	-	-
Oil Range Organics	EPA 8015 Mod	-	-	-	-	-	-	-	**R** 500 UJ	-	-	-	-	-	-	-	-	-
o-Xylene	EPA 8260	4.34 J	1.84 J	1.47 J	-	1.31 J	-	-	1.98 J	2.96 J	0.93 J	-	0.71 J	0.69 J	-	0.87 J	-	-
Phenanthrene	EPA 8270 SIM	**0.588**	**0.485**	**0.29**	**0.1**	0.07 J	-	-	**0.14**	-	**0.17**	**0.11**	**0.14**	0.07 J	-	0.05 J	-	-
Thallium	EPA 6010	1.92 J	-	1.58 J	-	-	-	-	-	-	-	-	1.09 J	-	-	-	-	-
Toluene	EPA 8260	-	-	-	-	1.52 J	-	-	-	**5.51**	-	1.14 J	1.01 J	0.83 J	-	1.21 J	0.57 J	0.64 J
Zinc	EPA 6010	18.3 J	15 J	16.1 J	13.7 J	16.7 J	7.92 J	**24.8**	19.3 J	**22.6**	**22.2**	**21.9**	**20.8**	19.2 J	14.8 J	**26.7**	**22.4**	**20.9**

*All detections are listed in µg/l (micrograms per liter)

4.6 Discussion of Results

Downstream concentrations of naphthalene, 2-methylnaphthalene, fluorene, and m&p-xylene did not exceed their respective RSLs. Downstream concentrations of GROs, DROs, 2-methylnaphthalene, naphthalene, fluorene, m&p-xylene, and phenanthrene increased slightly during work operations, but were not statistically different from their respective background concentrations following the completion of onsite work operations.

No significant concentrations of product constituents were found in the surface water containment pond, allowing for it to be used for flushing, as needed.

No further actions are anticipated. A copy of the lab report from Pace Analytical Services is provided in Attachment D. A copy of the lab report from Ana-Lab Corp. is provided in Attachment E.

5.0 AIR MONITORING AND SAMPING

CTEH® conducted personal analytical air sampling on individuals performing repair operations and clean-up activities in the work area. Real-time air monitoring was provided in the community (defined as any area outside of the designated work area) and at areas adjacent to the work area. Manually-logged real-time monitoring in the work area was conducted from March 16 to March 18 for volatile organic compounds (VOCs), lower explosive limit (LEL), and hydrogen sulfide (H_2S). A real-time assessment for benzene was conducted but further monitoring was not performed as an analytical method was being employed in the work area to provide information on possible concentrations. Manually-logged real-time monitoring in the community began on March 16 for VOCs, LEL, H_2S, and benzene and concluded on March 24. Personal sampling for BTEX compounds (benzene, toluene, ethylbenzene, and xylene) was conducted from March 16 through 28 and on April 1 and 2. An equipment description of the air monitoring and sampling instruments is provided in Attachment F.

Air monitoring and sampling ceased on April 2, 2013 as primary cleanup operations came to an end. CTEH® was released from site at this time.

5.1 Manually-Logged Real-Time Data

CTEH® recorded a total of 997 manually-logged real-time readings during strainer repair activities and product cleanup. Real-time monitoring began on March 16 at 09:05 and concluded on March 24 at 18:44. A map of the manually-logged real-time data locations is provided in Attachment G.

A total of 969 handheld real-time readings were collected in the community. No concentrations of benzene, H_2S, LEL, or VOCs were detected.

A total of 28 handheld real-time readings were collected in areas adjacent to the work area. No LEL, VOC, or H_2S concentrations were detected.

A complete summary of manually-logged real-time data collected in the work area and the community is provided in Attachment H.

5.2 AreaRAE Air Monitoring Results

Monitoring using a roaming AreaRAE instrument was conducted in the community for approximately eight hours each day from March 18 to March 24. A total of 39,879 readings were recorded in the community. A map of the AreaRAE monitoring is provided in Attachment G. Table 5.2 provides a detection summary of the real-time readings recorded by the roaming AreaRAE unit.

Table 5.2 AreaRAE Detections Summary

AreaRAE Unit	Analyte	Number of Readings	Number of Detections	Concentration Range
Roamer Unit	H_2S	13,293	225	0.1 – 0.2 ppm
	LEL	13,293	38	1 – 3.2 %
	VOCs	13,293	0	NA

NA = Not Applicable

No VOC concentrations were detected.

A total of 38 detections of LEL were recorded, though they are unlikely source related as no corresponding VOC concentrations were detected in the community or at the work site. These detections are likely a result of electronic drift. Drift is defined as interference in the electrochemical sensor's ability to accurately report the concentration of a chemical in the atmosphere, resulting in sustained "false positive" readings. Humidity and temperature changes throughout the monitoring period are typical sources of drift.

Concentrations of H_2S were recorded. These detections were not verified, but are likely a result of electronic drift as no H_2S concentrations were detected in the community using handheld instruments and no potential source was noted.

AreaRAE data graphs are provided in Attachment I.

5.3 Personal Sampling Results

In accordance with the Occupational Safety and Health Administration (OSHA) benzene standard 29 CFR 1910.1028, personal air samples were collected to assess worker exposure to benzene as a constituent of crude oil. Eight hour permissible exposure limit (PEL) samples were collected on personnel in the work area performing excavation and strainer repair operations from March 16 to March 28, and from April 1 to April 2. Table 5.3 provides a detection summary for these samples.

Table 5.3 Personal Sampling Detection Summary

Chemical	*Total Number of Detections*	*Concentration Range (ppm)*	*OSHA PEL-TWA (ppm)*[a]	*ACGIH TLV-TWA (ppm)*[b]
Benzene	6	0.03 – 0.06	1	0.5
Toluene	6	0.06 – 0.36	200	20
Ethylbenzene	1	0.1	100	20
Xylene	1	0.52	100	100

a. OSHA PEL-TWA = Permissible Exposure Limit – Time Weighted Average (PEL-TWA). Permissible concentration in air of a substance that shall not be exceeded in any 8 – hour work shift of a 40 – hour work week. (OSHA 29 CFR: 1910.1000).

b. ACGIH TLV-TWA = Threshold Limit Value – Time Weighted Average (TLV-TWA). The TWA concentration for a conventional 8 – hour work day and a 40 – hour workweek, to which it is believed that nearly all workers may be repeatedly exposed, day after day, without adverse effect (ACGIH, 2013b).

A total of 103 personal samples and 15 field blanks were collected and analyzed according to method NIOSH 1501. Seven samples detected BTEX concentrations above laboratory reporting limits; however, no concentrations detected exceeded their respective OSHA PEL standards or ACGIH TLV guidelines. Final laboratory reports from Galson Laboratories are available upon request.

6.0 WASTE DISPOSAL

This section describes the procedures that were used to manage wastes generated from spill response activities from Saturday, March 9, 2013 – Sunday, June 30, 2013. Waste streams generated include but are not limited to impacted water, debris, soil, trash, and miscellaneous other small volume materials. All waste manifests can be found in Attachment J. Waste Analytical Data Reports can be found in Attachment K. A detailed Waste Tracking Log is included in Attachment L. A photo log of the project can be viewed in Attachment M.

6.1 Waste Generation and Shipment Information

Table 6.1 is a summary of waste shipments that occurred over the course of the project. The processes that generate each waste stream are discussed further in the sections that follow. The following table provides a summary of the cumulative amount of each waste generated during response exercises through Sunday, June 30, 2013.

Table 6.1 Summary of Waste Shipments

Waste Description Measure	*Shipping Location*	*Quantity Shipped*	*Unit*
Non-Hazardous Debris	Union County RDF 3083 Smackover Highway El Dorado, AR 71730 (870) 725-3821 MSW Permit #: 248-F1-R4	125.86	Tons
Non-Hazardous Soil	Webster Parish Landfill (Republic Waste) 493 Landfill Road Minden, LA 71058 (318) 377-9193 LDEQ Permit #: P-0165	373.51	Tons
Non-Hazardous Sludge	Webster Parish Landfill (Republic Waste) 493 Landfill Road Minden, LA 71058 (318) 377-9193 LDEQ Permit #: P-0165	15.45	Tons
Non-Hazardous Water	Lion Oil Refining 1000 McHenry St. El Dorado, AR 71730 NPDES Permit #: AR0000647 (870) 862-8111	339,200	Gallons

6.1.1 Recovered Oil

Recovered oil is no longer being generated from response activities. During the initial phase of the project, a total of 136,290 gallons of oil were segregated and recovered. The recovered oil was temporarily stored in onsite Frac tanks and /or transferred to the onsite bulk storage tank T-1003. This oil was utilized in LOTT's normal process.

6.1.2 Oily Debris

Oily debris was segregated from non-oil debris and stored in lined, 20 cubic yard roll-off boxes. Various methods have been used to manage oily debris roll-offs during the course of the response. Oily debris roll-offs were transported from the area / site at which they were generated to the roll-off staging area until they were properly characterized. Beginning on March 26, 2013, roll-offs were transported to WCA Landfill in El Dorado, AR for disposal. Roll-off boxes continue to be generated through the end of June 2013.

As per the LOTT Waste Management Plan, for waste characterization purposes, one composite sample for every ten (10) roll-off containers was collected. The composite sample was comprised of 2-3 discreet samples from each roll-off and combined into the composite sample.

6.1.3 Municipal Solid Waste (MSW)

Non-oily municipal solid waste generated at field locations originally was anticipated to be segregated from oily debris. Due to the minimal amount generated, a shortage of roll-offs, and to ensure that there was no oily debris mixed in, MSW was comingled with the oily debris in the roll-offs.

6.1.4 Soil

Oil impacted soil was excavated and stockpiled on and covered with poly sheeting at an area near the source of the spill. Once complete, soil piles were sampled following established protocol in the LOTT Waste Management Plan. Disposal arrangements were made based on analytical data. Non-hazardous soil was disposed of at Webster Parish (Republic Waste) Landfill in Minden, LA.

6.1.5 Oil/Water Mixture

Recovered crude oil & water mixture collected at the LOTT Magnolia, AR release site was transported to LOTT's Magnolia, AR facility starting with the initial response activities and concluding on approximately March 23, 2013. This recovered mix of crude oil and water collected from various work sites was off-loaded at the LOTT Magnolia facility and piped into the onsite bulk storage Tank 1003 (T1003). Samples of the water fraction were drawn from the tank on various dates by LOTT and analyzed by Lion Oil Refining's in-house laboratory. Results of the sampling demonstrated the water was

non-hazardous. As a result, the water was managed as a non-hazardous waste and was shipped to Lion Oil Refining's facility in El Dorado, AR and managed in their onsite system under NPDES Permit #: AR0000647. As of March 25, 2013, a total of 339,200 gallons of wastewater has been shipped to Lion Oil Refining's facility in El Dorado, AR. T1003 held the recovered crude oil collected at the Magnolia, AR release site and transferred to Lion Oil Refining's El Dorado, AR facility starting with the initial response activities.

6.1.6 Recovered Oil Calculations

The quantity of oil contained in waste materials has been calculated since the onset of the project. The quantity of oil is based on the amount of oil recovered, the concentration of oil in the waste and the total amount of waste shipped. A recovered oil summary through June 30, 2013 is provided in Attachment N.

6.1.7 Mass Balance Introduction

The mass balance for the Magnolia Station oil release is summarized in Table 1, provided in Attachment N. The sources and assumptions associated with this mass balance are presented in this document.

This mass balance is divided into onsite and offsite components. The onsite area is defined as the area inside of the Magnolia Station perimeter fence and the offsite area is defined as the area located outside the perimeter fence. The offsite area includes: 1) the drainage ditch that extends from the fence line to the inactive beaver pond,2) the inactive beaver pond, 3) the unnamed tributary connecting the inactive beaver pond to Little Cornie Bayou, and 4) Little Cornie Bayou.

With the exception of the API gravity and the density, the characteristics of the released oil are described on the material safety data sheet (Lion Oil Company MSDS No. LO0018). An API gravity of 34.7 (60 degrees centigrade) was provided to CTEH® by Lion Oil Company. This API gravity was used in conjunction with the engineeringtoolbox.com web site to identify a likely product density of 7.1 lbs/gallon.

6.1.8 Total Volume Released

The total volume released during this event was 247,422 gallons (5,891 bbls). This release volume was determined by John Warren (Vice President, Delek Logistics Partners) and was communicated to CTEH® in an email dated April 12, 2013.

6.1.9 Onsite Mass Balance

Spill volume captured in onsite detention pond - The oil captured in the onsite detention pond was removed from the pond via vacuum truck. The contents of the vacuum truck loads were placed in Tank 1003 located onsite. The volume of oil recovered from the

onsite detention pond was estimated by recording the number and volume of vacuum truck loads placed in this tank.

Evaporation of Oil - The more volatile fractions of the released oil were expected to be lost to the atmosphere. Best professional judgment was used to estimate this component of the mass balance at 2 % of the total oil volume captured in the onsite detention pond (Table 1). This evaporation rate is considerably lower than the rate predicted by the National Oceanographic and Atmospheric Administration's (NOAA) Automated Data Inquiry for Oil Spills (ADIOS2) model. The ADIOS2 model predicts an evaporative loss of 34 % (five days post-release for oil with an API gravity of 35).

Dispersion of Oil - Dispersion refers to the tendency for a portion of released oil to break up into small droplets of varying sizes which become mixed into the upper layers of the water column. Best professional judgment was used to estimate this component of the oil budget at 1 % of the total oil volume captured in the onsite detention pond (Table 1). This dispersion rate is lower than the rate predicted by ADIOS2 for oil with an API gravity of 35 (5 % of volume lost by five days post-release). Dissolution - the tendency for a portion of the released oil to dissolve into the water column - was not estimated for this mass balance as the majority of the light fraction was assumed to be lost to evaporation.

Spill volume associated with affected onsite soil - Onsite soil in the vicinity of the failed suction pump and detention pond was affected by the release. This affected soil was removed from the site for appropriate disposal. In general, the spill volume associated with affected onsite soil was estimated using the total mass of the collected soil and the average total petroleum hydrocarbon (TPH) concentration from several representative soil samples (Table 5A and 5B). The methodology used to estimate this component of the mass balance was replicated from the mass balance conducted in association with the Enbridge Line 6B release that occurred on July 26, 2010 near Marshall, Michigan on Talmadge Creek and the Kalamazoo River.

6.1.10 Offsite Mass Balance

Offsite spill volume captured and placed in Tank 1003 - Oil that was collected from affected offsite surface water bodies was also stored in Tank 1003. The volume of this oil was estimated by subtracting the volume of oil known to be recovered from onsite from the total volume of oil in Tank 1003 (Table 2). As Tank 1003 contained some oil prior to the release, this pre-release volume (708 bbls) was also subtracted from the total volume for this estimate.

Evaporation of Oil - Best professional judgment was used to estimate the percent evaporation of off-site oil as 2 %.

Dispersion of Oil - Best professional judgment was used to estimate the dispersion of offsite oil as 1 %. The dissolution of released oil into offsite surface water bodies (drainage ditch, inactive beaver pond, unnamed tributary to Little Cornie Bayou, and Little Cornie Bayou) was considered negligible.

Spill volume associated with decanted water from Tank 1003 - The spill volume associated with water decanted from Tank 1003 was 6.9 gallons. This volume was estimated using the volume of oily water, the average oil and grease content and the product density (Tables 3A and 3B).

Spill volume associated with offsite oiled debris and sorbent - The solid waste collected from offsite cleanup operations was segregated into two categories: 1) oily sorbents, and 2) oily debris (mostly woody debris). The spill volume associated with each of these waste categories was estimated using the total mass of disposed sorbent and debris, the estimated weight percent of oil associated with the debris or sorbent (on a wet weight basis), and the product density. As the debris and sorbents from this release were not subjected to laboratory analysis, the estimated weight percent of oiling for each waste category was based on best professional judgment and information from the Enbridge Line 6B release mass balance. The weight percent of oiling on affected debris (not sorbents) from the Enbridge release ranged from 0.02 % to 4.64 %. A value of 2 % was selected for this evaluation. The weight percent of oiling on sorbents was assumed to be 10 %. This value is higher than the estimated weight percent for debris as sorbent is designed to collect oil.

Spill volume associated with the fractionation tanks located at Weir 1 & Weir 2 - Two weirs were constructed in Little Cornie Bayou to restrict oil migration and to facilitate the removal of the oil from the environment. Fractionation tanks were placed adjacent to each weir and, over time, were filled with oily water and sludge as a result of cleanup activities. The spill volume associated with the fractionation tanks was estimated using the total mass of oil water/sludge, the estimated percentage of this weight that is TPH, and the product density (Table 6A and 6B, provided in Attachment N).

6.1.11 Estimated Amount of Oil Collected and Unaccounted For

As shown on Table 1, the volume of collected onsite and offsite oil was estimated to be 247,081 gallons (5,883 bbls). Given the total release volume of 247,422 gallons (5,891 bbls), the volume of unaccounted for oil was estimated at 341 gallons (8.11 bbls).

ATTACHMENT A - CRUDE OIL MSDS

Lion Oil Company

Product: Crude Oil **Revision No. 7**

MSDS No. LO0018 **Date of Preparation: 6-08-09**

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: Crude Oil
Chemical Formula: Mixture
CAS Number: 8002-05-9
Synonyms: Crude, Sweet Crude, Sour Crude
Description: Amber to black viscous liquid with a mild sulfur odor.
Manufacturer or Distributor: Lion Oil Co., 1000 McHenry St., El Dorado, AR 71730; (870) 862-8111
24-hr Emergency Phone Number: "FOR CHEMICAL EMERGENCY" Spill, Leak, Fire, Exposure or Accident
CALL CHEMTREC – Day or Night 800-424-9300
MSDS CONTACT: Beverly McFarland – 870-862-3703

Section 2 - Hazards Identification

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

DANGER!

HMIS	
H	1*
F	4
PH	0
PPE† †Sec. 8	

Health
Flammability
Physical Hazard

Volatile and Flammable Liquid

Keep away from ignition sources. Crude oil vapors are heavier than air and may travel some distance to an ignition source and flash back.
Contains Benzene - long term, prolonged or repeated skin contact may increase the risk of skin cancer, blood and nervous system damage.
May contain hydrogen sulfide gas (H_2S).
HARMFUL OR FATAL IF SWALLOWED – Can enter lungs and cause damage.
May cause eye and skin irritation.
Spills may create a slip hazard.

☆☆☆☆☆ Potential Health Effects ☆☆☆☆☆

Primary Entry Routes: Inhalation, Skin Absorption, Ingestion, Skin and/or Eye contact.
Target Organs: Eyes, Skin, Respiratory System, Central Nervous System, Liver, and Kidneys
Carcinogenicity: Contains Benzene which has been designated a carcinogen by IARC (group 1), NPT, and OSHA.
Medical Conditions Aggravated By Long-Term Exposure:
Benzene – Individuals with liver disease may be more susceptible to toxic effects.
Hexane – Individuals with neurological disease should avoid exposure.
Petroleum Hydrocarbons – Skin contact may aggravate an existing dermatitis.

Acute Effects

Inhalation: Inhalation causes irritation of mouth, throat, and respiratory tract. Can cause headaches, dizziness, drowsiness, convulsions, coma, cyanosis and generalized depression. Large amounts in lungs could cause chemical pneumonitis, which can be fatal. This material may contain hydrogen sulfide (H_2S) which has rotten – egg odor. Continued exposure to H_2S may deaden a person's sense of smell. If the rotten – egg odor has stopped, this may not mean that H_2S is no longer present. High levels of H_2S can cause shock, convulsions, coma, and death.
Eye: Eye contact causes tearing, redness and severe irritation.
Skin: Skin contact from prolonged or frequent exposure to liquids or vapors can cause irritation and dermatitis.
Ingestion: Do Not Induce Vomiting because of danger of aspirating liquid into lungs. May be harmful or fatal if swallowed. Ingestion can cause blurred vision, vertigo, vomiting and cyanosis. Seek medical attention.

Chronic Effects

Benzene has been classified as a leukemogen and may produce anemia, leukemia from repeated or prolonged exposure to high concentrations. **Section Ref. (10)**

Section 3 - Composition / Information on Ingredients

Ingredient Name	CAS Number	% wt
Crude oil, including:	8002-05-9	100
Benzene	71-43-2	0.1-1.5
Toluene	108-88-3	0.1-1.5
Xylenes (mixed isomers)	1330-20-7	0.1-1.5
Cyclohexane	110-82-7	0.01-0.5
Ethylbenzene	100-41-4	0.01-0.5
Hexane	110-54-3	0-3.0
Trimethylbenzene	95-63-6	0-0.2
Naphthalene	91-20-3	0-0.2
Cumene	98-82-8	0-0.2
Hydrogen Sulfide	7783-06-4	<0.001

Section 4 - First Aid Measures

Inhalation: Move to fresh air. If overcome by vapor, remove from exposure and call a physician immediately. If breathing is irregular or has stopped, start resuscitation, administer oxygen, if available. Seek medical attention.
Eye Contact: Flush with water for 15 minutes. Contact doctor for additional advice.
Skin Contact: Remove any contaminated clothing and wash skin with soap and water, launder or dry-clean clothing before reuse.
Ingestion: Do not induce vomiting because of danger of aspirating liquid into lungs. Large amounts in lungs could cause chemical pneumonitis, which can be fatal. If spontaneous vomiting is about to occur, place victim's head below knees. Seek medical attention.
After first aid, get appropriate in-plant, paramedic, or community medical support. **Section Ref. (10)**

Section 5 - Fire-Fighting Measures

Flash Point: <0° F
Flash Point Method: TCC
Autoignition Temperature: 536° F (gasoline)
LEL: 1.4 %
UEL: 7.6 %
Emergency Response Guide: Guide No. 128
Flammability Classification: Flammable Liquid Class 1B

NFPA rating®	
H	1
F	4
R	0

Extinguishing Media: Dry chemical, Halon, CO2, foam, water. Water may not be effective and water fog can be used to cool containers. Water may splash and spread flaming liquid.
Unusual Fire or Explosion Hazards: Keep away from heat, sources of ignition and strong oxidizers. Can react violently with oxidizing agents.
Hazardous Combustion Products: Fumes, smoke, carbon monoxide, sulfur oxides, and other decomposition products, in the case of incomplete combustion
Special Fire-Fighting Procedures: Vapors can readily form explosive mixtures with air. Heavier than air vapors can flow along surfaces to ignition sources and flash back. Used self-contained breathing in enclosed areas.
Section Ref. (4, 10)

Section 6 - Accidental Release Measures

"FOR CHEMICAL EMERGENCY" Spill, Leak, Fire, Exposure or Accident
CALL CHEMTREC – Day or Night 800-424-9300

Spill /Leak Procedures: Danger, Flammable, eliminate all ignition sources. Equipment used in spill cleanup must be grounded to prevent sparking.
Small Spills: Take up with an absorbent material and place in containers, seal tightly for proper disposal.

Large Spills: Isolate the hazard area and restrict entry to unnecessary personnel. Shut off source of leak only if it can be done safely or dike and contain the spill. Wear appropriate respirator and protective clothing. Water fog may be useful in suppressing vapor cloud, contain run-off. Remove with vacuum trucks. Soak up residue with sand or other suitable material, place in containers for proper disposal. Flush with water and dispose of flushing solutions as above. Local, state and federal disposal regulations must be followed.
Contact state and local environmental or health authorities. If spilled material could reach any surface waters, then notify The National Response Center (800) 424-8802.
Regulatory Requirements: This material or materials contaminated by crude oil may meet the criteria of a hazardous waste as defined by the EPA under RCRA or other state and local regulations. Analysis of the material may be needed to make a correct determination.

Section Ref. (4)

Section 7 - Handling and Storage

Handling Precautions: Do not get in eyes, on skin or on clothing. Do not breathe vapors, mists or fumes. Wear protective equipment described in section 8 if exposure conditions warrant. Use only with adequate ventilation.
Storage Requirements: Keep away from open flame, high temperatures, sparks, pilot lights, static electricity, open flames and other sources of ignition. Store in well ventilated area. Store in tightly closed containers. Bond and ground containers during transfer of Crude Oil.
Other Precautions: Toxic amounts of Hydrogen Sulfide (H_2S) may be present in storage tanks and bulk transportation vessels that have contained crude or still contain crude. **Do Not Enter these Compartments** until the Hydrogen Sulfide (H_2S) level has been determined, and the proper exposure controls are in place to meet the exposure values listed in Section 8.

Section 8 - Exposure Controls / Personal Protection

Ingredient	OSHA PEL TWA	OSHA PEL STEL	ACGIH TLV TWA	ACGIH TLV STEL	NIOSH REL TWA	NIOSH REL STEL	NIOSH IDLH
Crude Oil	500 ppm		5mg/m^3 oil mist		350 ppm		1100 ppm
Benzene	1 ppm	5 ppm	0.5 ppm	2.5 ppm	0.1 ppm	1.0 ppm	500 ppm
Toluene	200 ppm	300 ppm	50 ppm		100 ppm	150 ppm	500 ppm
Xylenes (mixed isomers)	100 ppm		100 ppm	150 ppm	100 ppm	150 ppm	900 ppm
Cyclohexane	300 ppm		300 ppm		300 ppm		2000 ppm
Ethylbenzene	100 ppm		100 ppm	125 ppm	100 ppm	125 ppm	800 ppm (10% LEL)
Hexane	500 ppm		50 ppm		50 ppm		1100 ppm (10% LEL)
Trimethylbenzene	N. D.		25 ppm		25 ppm		N. D.
Naphthalene	10 ppm		10 ppm	15 ppm	10 ppm	15 ppm	250 ppm
Cumene	50 ppm		50 ppm		50 ppm		900 ppm (10% LEL)
Hydrogen Sulfide		20 ppm	10 ppm	15 ppm		10 ppm	100 ppm

(LEL) – Lower Explosion Limit

Engineering Controls
Ventilation: Provide explosion proof ventilation to meet TLV requirements in enclosed work areas.
Protective Clothing/Equipment
Gloves: Use chemical resistant gloves to prevent skin contact.
Goggles: Wear chemical goggles if eye contact is likely.
Respiratory: Use organic vapor cartridge respirators for exposures over TLV up to 1000 ppm. Use fresh air or self-contained breathing equipment for unknown or high concentrations.
Contaminated Equipment: Launder or dry-clean contaminated clothing before reuse. **Section Ref. (2, 3)**

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Appearance and Odor: Amber to black viscous liquid with a mild sulfur odor.
Odor Threshold: No Data
Vapor Pressure: 1.5 – 9.0 psi @ 100° F
Vapor Density (Air=1): 3 - 4
Formula Weight: No Data
Density: No Data
Specific Gravity (H_2O=1, at 4 °C): 0.78 – 0.93
pH: NA

Water Solubility: Negligible
Other Solubilities: No Data
Boiling Point: 0 – 1500° F
Freezing/Melting Point: NA
Viscosity: 1.0 – 400 cst @ 100° F
Refractive Index: No Data
Surface Tension: No Data
% Volatile: 25 – 95%
Evaporation Rate: No Data

Section 10 - Stability and Reactivity

Stability: This Material is Stable.
Polymerization: Hazardous Polymerization will not occur.
Chemical Incompatibilities: Keep away from Oxidizing agents.
Conditions to Avoid: Keep away from open flame, high temperatures, and other sources of ignition.
Hazardous Decomposition Products: Fumes, smoke, carbon monoxide, sulfur oxides, and other decomposition products, in the case of incomplete combustion

Section 11- Toxicological Information

Carcinogenicity: Contains Benzene, IARC known carcinogen to humans, rating 1
Crude oil, IARC limited evidence in animals and inadequate evidence in humans, rating 3

Chronic Effects: Contains polynuclear aromatics (PAH's) which have been shown to cause skin cancer after prolong and repeated contact with the skin of test animals.

Crude oil:
Skin-Mouse TDLo: 3744 mg/kg/2Y-I: Carcinogenic effects
Skin-Mouse TD: 12,480 mg/kg/2Y-I: Carcinogenic effects
National Technical Information Service (Springfield, VA 22161) (Formerly U.S. Clearinghouse for Scientific and Technical Information) NTIS** CONF-790334-3
Skin-Mouse TD: 40 g/kg/10W-I: Equivocal tumorigenic agent
British Empire Cancer Campaign Annual Report (Cancer Research Campaign, 2 Carlton House Terrace, London SW1Y 5AR, England) V.1- 1924-BECCAN 39, 420 , 61
Skin-Mouse TD: 21,216 mg/kg/2Y-I: Carcinogenic effects
Skin-Mouse TD: 210 mg/kg/2Y-I: Carcinogenic effects
National Technical Information Service (Springfield, VA 22161) (Formerly U.S. Clearinghouse for Scientific and Technical Information) NTIS** CONF-801143
Skin-Mouse TD: 3744 mg/kg/2Y-I: Neoplastic effects
Journal of Occupational Medicine (American Occupational Medical Association, 150 N. Wacker Dr., Chicago, IL 60606) V.1- 1959-JOCMA7 21,614,79
Microsomal Mutageniticity Assay-Salmonella typhimurium 1 mg/plate
Carcinogenesis (Information Retrieval, 1911 Jefferson Davis Highway, Arlington, VA 22202) V.1- 1980-CRNGDP 3, 21, 78

HYDROGEN SULFIDE (7783-06-4)
Inhalation-Rat LC50: 444 ppm
Personal Communication from Mr. H.B. Lackey, Chemical Products Div., Crown Zellerbach, Camas, WA 98607, to Dr. H.E. Christensen, NIOSH, Rockville, MD 20852, June 9, 1978LacHB# 09JUN78
Inhalation-Mouse LC50: 634 ppm/1H
Aerospace Medical Research Laboratory Report. (Aerospace Technical Div., Air Force Systems Command, Wright-Patterson Air Force Base, OH 45433)AMRL** TR-72-62,72

Inhalation-Rat TCLo: 20 ppm (female 6-22D post) Reproductive effects
Toxicology. (Elsevier Scientific Pub. Ireland, Ltd., POB 85, Limerick, Ireland) V.1- 1973-TXCYAC 6,389,90
Inhalation-Human LCLo: 600 ppm/30M
"Practical Toxicology of Plastics" Lefaux, R., Cleveland, OH, Chemical Rubber Company, 196829ZWAE -,207,68
Inhalation-Man LDLo: 5700 mg/kg: Central nervous system effects, Pulmonary system effects
Archives des Maladies Professionnelles de Medecine du Travail et de Securite Sociale. (Masson et Cie, Editeurs, 120 Blvd. Saint-Germain, P-75280, Paris 06, France) V.7- 1946-AMPMAR 44,483,83
Inhalation-Human LCLo: 800 ppm/5M
Tabulae Biologicae. (The Hague, Netherlands) V.1-22, 1925-63. Discontinued TABIA2 3,231,33
Inhalation-Mammal LCLo: 800 ppm/5M
Naunyn-Schmiedeberg's Archiv fuer Experimentelle Pathologie und Pharmakologie. (Berlin, Germany) V.110-253, 1925-66. For publisher information, see NSAPCCAEPPAE 138,65,28
Other human data for H_2S: It has been reported that 170 to 300 ppm is the maximum concentration that can be endured for 1 hour without serious consequences [Henderson and Haggard 1943] and that olfactory fatigue occurs at 100 ppm [Poda 1966]. It has also been reported that 50 to 100 ppm causes mild conjunctivitis and respiratory irritation after 1 hour; 500 to 700 ppm may be dangerous in 0.5 to 1 hour; 700 to 1,000 ppm results in rapid unconsciousness, cessation of respiration, and death; and 1,000 to 2,000 ppm results in unconsciousness, cessation of respiration, and death in a few minutes [Yant 1930].

Henderson Y, Haggard HW [1943]. Noxious gases, 2nd ed.; New York, NY; Reinhold Publishing Corp. pg 245
Poda GA [1966]. Hydrogen sulfide can be handled safely. Arch Environ Health *12*:795800.
Yant WP [1930]. Hydrogen sulfide in industry: occurrence, effects and treatment. Am J Public Health *20*:598608.

Section Ref. (5, 10)

Section 12 - Ecological Information

Aquatic Toxicity: This material is toxic to aquatic organisms and should be kept out of all bodies of water. If spilled material could reach any surface waters, then notify The National Response Center (800) 424-8802. May be dangerous if it enters water intakes. Notify local health and pollution control officials. Notify operators of nearby water intakes. **Section Ref. (10)**

Section 13 - Disposal Considerations

Disposal: Local, state and federal disposal regulations must be followed.
Disposal Regulatory Requirements: This material or materials contaminated by crude oil may meet the criteria of a hazardous waste as defined by the EPA under RCRA or other state and local regulations. Analysis of the material may be needed to make a correct determination.

Container Cleaning and Disposal: "Empty" Container Warning: "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

Section 14 - Transport Information

DOT Transportation Data (49 CFR 172.101):

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description information.

DOT Shipping Name: Petroleum Crude Oil
DOT Hazard Class: 3
DOT ID No.: UN1267
DOT Packing Group: I
Hazard Label: Flammable Liquid

Section 15 - Regulatory Information

EPA Regulations:

RCRA Hazardous Waste Classification (40 CFR 261): This material or materials contaminated by crude oil may meet the criteria of a hazardous waste as defined by the EPA under RCRA or other state and local regulations. Analysis of the material may be needed to make a correct determination.

CERCLA Reportable Quantity (RQ) (40 CFR 302.4):

Compound	CAS Number	RQ
Benzene	71-43-2	10
Toluene	108-88-3	1000
Xylenes (mixed isomers)	1330-20-7	100
Cyclohexane	110-82-7	1000
Ethylbenzene	100-41-4	1000
Hexane	110-54-3	5000
Trimethylbenzene	95-63-6	-----
Naphthalene	91-20-3	100
Cumene	98-82-8	5000
Hydrogen Sulfide	7783-06-4	100
Benzo(a)pyrene	50-32-8	1
Benzo(a)anthracene	56-55-3	10
Dibenz(a,h)anthracene	53-70-3	1
3-Methylcholanthrene	56-49-5	10
7,12-Dimethylbenz(a)anthracene	57-97-6	1
Naphthalene	91-20-3	100
Biphenyl	92-52-4	100
Anthracene	120-12-7	5000
Benzo(rst)pentaphene	189-55-9	10
Phenanthrene	85-01-8	5000
Benzo(g,h,I)perylene	191-24-2	5000
Indeno(1,2,3-cd)pyrene	193-39-5	100
Benzo(b)fluoranthene	205-99-2	1
Fluoranthene	206-44-0	100
Benzo(k)fluoranthene	207-08-9	5000
Benzo(a)phenanthene	218-01-9	100

SARA 311/312 Codes (40 CFR 370 / 29 CFR 1910.1200):

Fire	YES
Pressure	NO
Reactivity	NO
Immediate (acute)	YES
Delayed (chronic)	YES

SARA Toxic Chemical (40 CFR 372) Section 313:
Chemicals of Special Concern (40 CFR 372.28)*

Compound	CAS Number	Concentration %
Benzene	71-43-2	0.1-1.5
Toluene	108-88-3	0.1-1.5
Xylenes (mixed isomers)	1330-20-7	0.1-1.5
Cyclohexane	110-82-7	0.01-0.5
Ethylbenzene	100-41-4	0.01-0.5
Hexane	110-54-3	0-3.0
Trimethylbenzene	95-63-6	0-0.2
Naphthalene	91-20-3	0-0.2

Cumene	98-82-8	0-0.2
Hydrogen Sulfide	7783-06-4	<10 ppm
Benzo(a)pyrene	50-32-8	<50 ppm
Benzo(a)anthracene	56-55-3	<50 ppm
Dibenz(a,h)anthracene	53-70-3	<100 ppm
3-Methylcholanthrene*	56-49-5	<50 ppm
7,12-Dimethylbenz(a)anthracene	57-97-6	<24 ppm
Naphthalene	91-20-3	190 ppm
Biphenyl	92-52-4	<240 ppm
Anthracene	120-12-7	60 ppm
Benzo(rst)pentaphene	189-55-9	<50 ppm
Dibenzo(a,h)pyrene	189-64-0	<50 ppm
Phenanthrene	85-01-8	60 ppm
Benzo(g,h,I)perylene	191-24-2	<100 ppm
Dibenzo(a,l)pyrene	191-30-0	<50 ppm
Dibenzo(a,e)pyrene	192-65-4	<50 ppm
Indeno(1,2,3-cd)pyrene	193-39-5	<100 ppm
7,H-dibenzo(c,g)carbazole	194-59-2	<24 ppm
Benzo(b)fluoranthene	205-99-2	<50 ppm
Benzo(j)fluoranthene	205-82-3	<50 ppm
Fluoranthene*	206-44-0	<50 ppm
Benzo(k)fluoranthene	207-08-9	<50 ppm
Benzo(a)phenanthene	218-01-9	<50 ppm
Dibenz(a,j)acridine	224-42-0	<24 ppm
Dibenz(a,h)acridine	226-36-8	<24 ppm
Dibenzo(a,e)fluoranthene	5385-75-1	<50 ppm
1-Nitropyrene	5522-43-0	<50 ppm
5-Methylchrysene	3697-24-3	<50 ppm

Crude Oil may contain trace metals which are listed in section 313.

SARA EHS (Extremely Hazardous Substance) (40 CFR 355):

Compound	CAS Number	RQ
Hydrogen Sulfide	7783-06-4	100

TSCA (40 CFR 710): This product and its components are listed on the Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

State Regulations: The following chemicals are specifically listed by individual states, for details on each states regulatory requirements you should contact the appropriate agency in that state.

Compound	CAS Number	States
Benzene	71-43-2	CA, CA65, MA, NY, NJ, TX, FL, Il, PA
Toluene	108-88-3	CA, CA65, MA, NJ, TX, FL, IL, PA
Xylenes (mixed isomers)	1330-20-7	CA, MA, NY, NJ, TX, FL, IL, PA
Cyclohexane	110-82-7	CA, MA, NJ, TX, FL, IL, PA
Ethylbenzene	100-41-4	CA, MA, NJ, TX, FL, IL, PA
Hexane	110-54-3	CA, MA, TX, FL, IL, PA
Trimethylbenzene	95-63-6	MA, TX, FL, PA
Naphthalene	91-20-3	CA, MA, NJ, TX, FL, IL, PA
Cumene	98-82-8	CA, MA, NJ, TX, FL, IL, PA
Hydrogen Sulfide	7783-06-4	CA, MA, NJ, NY, FL, IL, PA, TX
Crude Oil	8002-05-9	MA, FL, PA, TX

CA – CALIFORNIA STATE SUPERFUND HAZARDOUS SUBSTANCE
CA65 – CALIFORNIA PROPOSITION 65 CARCINOGENS OR REPRODUCTIVE TOXINS
MA – MASSACHUSETTS SUBSTANCE LIST
NY – NEW YORK HAZARDOUS SUBSTANCE BULK STORAGE LIST
NJ – NEW JERSEY RIGHT TO KNOW HAZARDOUS SUBSTANCE
TX – TEXAS AIR CONTAMINANTS WITH HEALTH EFFECTS SCREENING LEVEL
FL – FLORIDA TOXIC SUBSTANCE LIST
IL – TOXIC SUBSTANCE DISCLOSURE TO EMPLOYEES LIST
PA – PENNSYLVANIA HAZARDOUS SUBSTANCE LIST

Section Ref. (6)

SECTION 16 - Other Information

Prepared By: Tommy Rowland – 6-8-09
Revision Notes: Moved Hazard Identification to Section 2 and Composition/ Information on Ingredients to Section 3. Updated Sections 5, 11 and 16.

Hazardous Materials Information System (U.S.A.)

HMIS	
H	1*
F	3
PH	0
PPE†	
†Sec. 8	

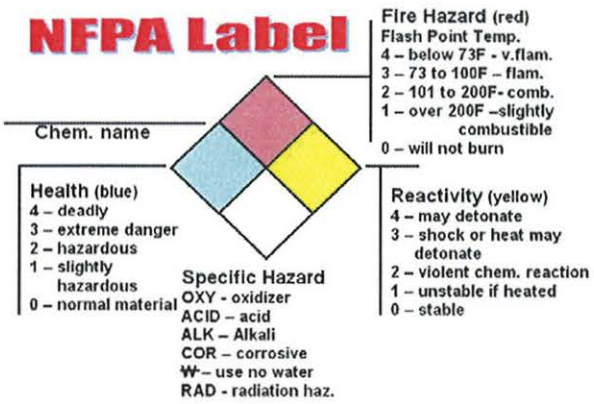
Hazard Ratings

H – Health
F – Fire Hazard
PH – Physical Hazard

4 – Extreme
3 – Serious
2 – Moderate
1 – Slight
0 – Minimal

*** Chronic Hazard -** Chronic (long-term) health effects may result from repeated over exposure.

National Fire Protection Association



ATTACHMENT B - SITE DIAGRAM

Legend

Incident Site

Incident Site Map

0 100 200 400 600 800 1,000
Yards

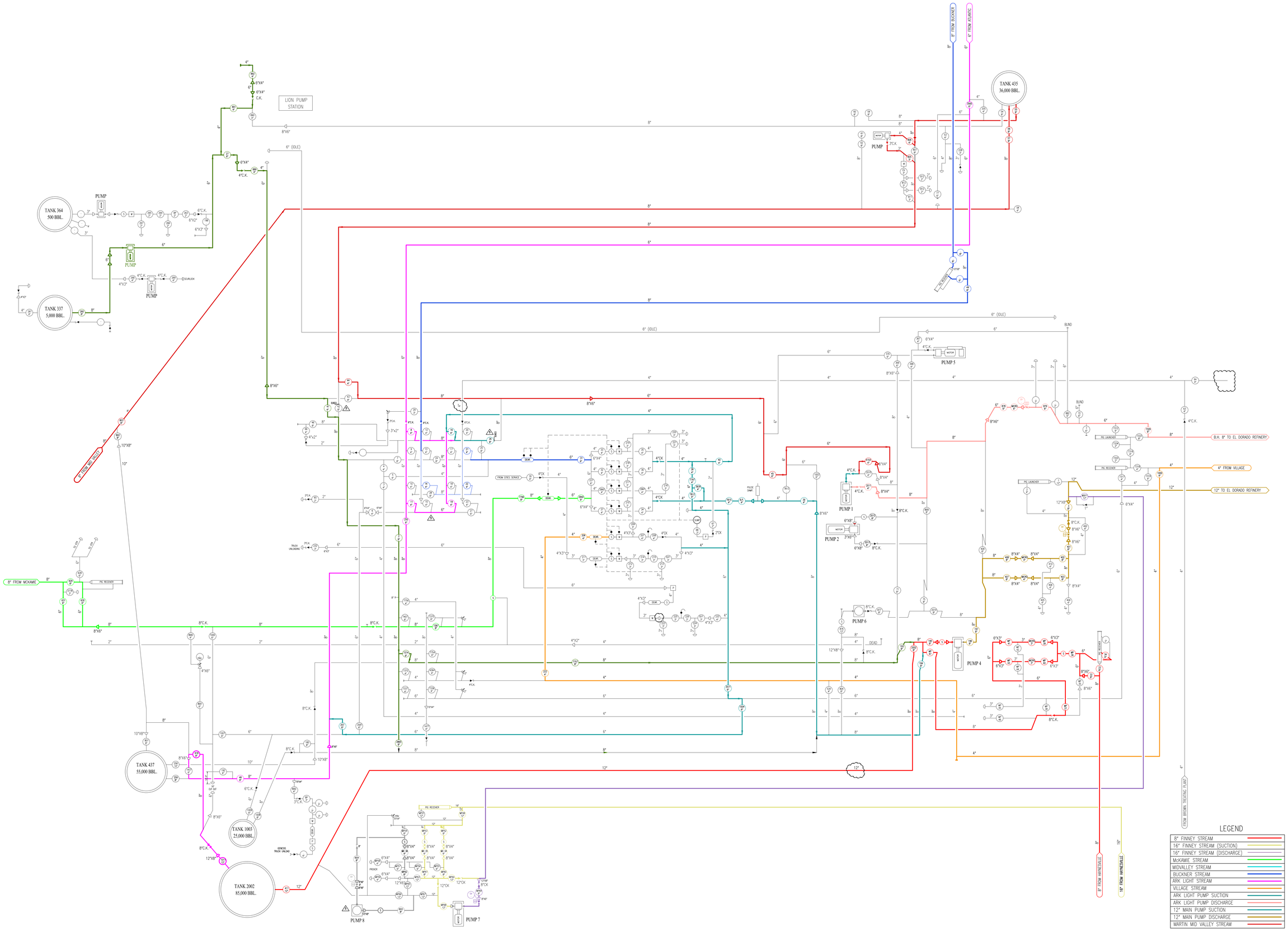
N

CTEH®

Project No.	40432
	Delek US Holdings
	Magnolia, AR
	Columbia County
	Print Date: 7/25/2013

Center for Toxicology and Environmental Health, L.L.C.
5120 North Shore Drive North Little Rock, AR 72118 Phone: 501.801.8500 Fax: 501.801.8501 www.cteh.com

Facility Aerial View	**Magnolia, Arkansas**



NOTES:

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	BY	CHK'D
3	10/19/10	UPDATED VALVE #'S	JTC	
4	8/5/11	REVISED PER MARTIN MIDVALLEY STRM	JTC	
5	8/22/11	REVISED PER PUMP 8 & MARKUPS	JTC	
1	4/17/08	REVISED PER NEW 16" FINNEY METERS	JTC	
2	4/6/10	BLIND MID VALLEY LINE TO TANK 435	JTC	

LION OIL TRADING & TRANSPORTATION, INC.
EL DORADO, ARKANSAS

AREA: | AUTH. NO.

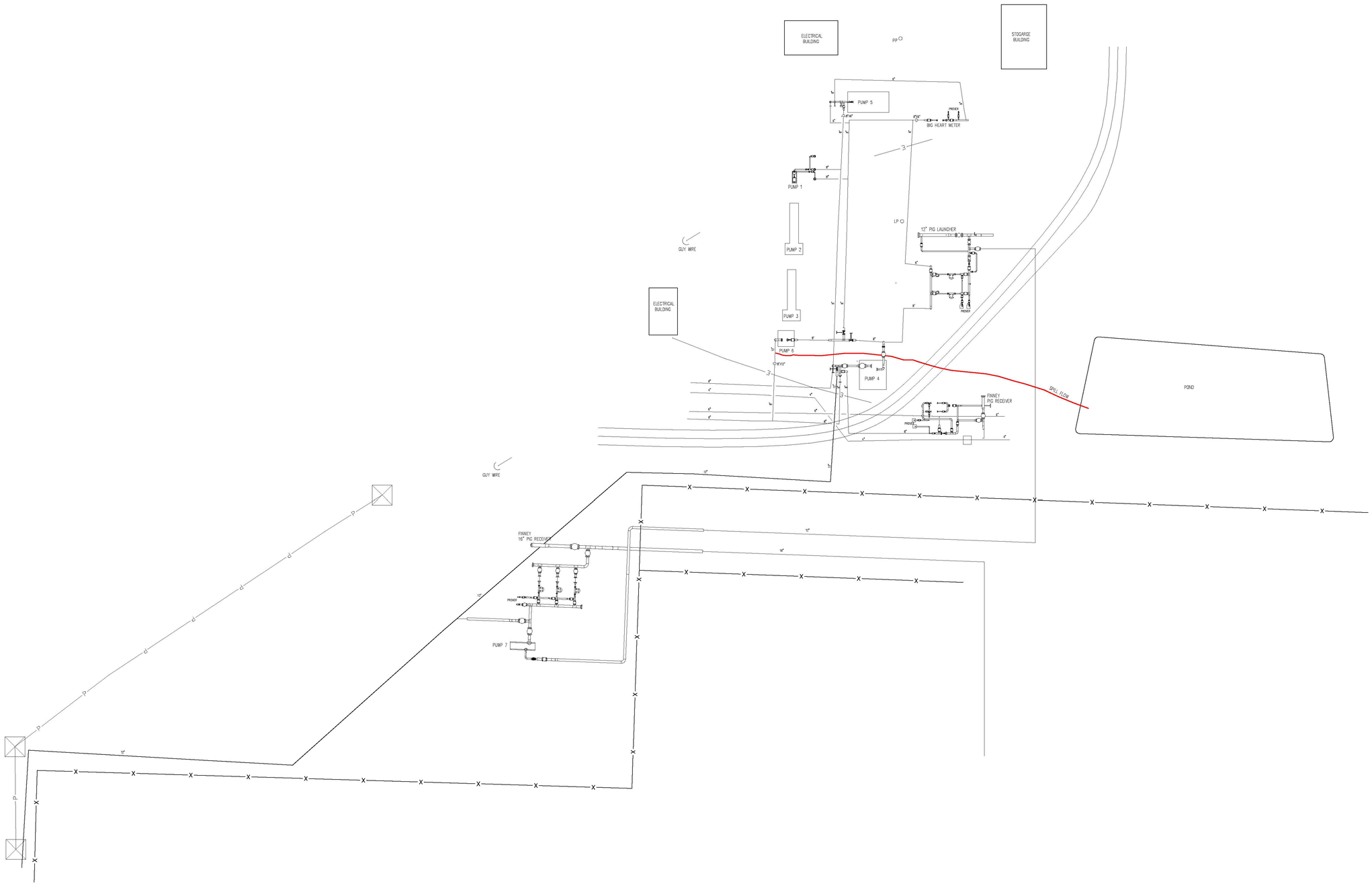
GATE MAP
LOTT PIPELINE SYSTEMS
MAGNOLIA STATION

DRAWN BY	CHK'D BY
JTC	
DATE	DATE
8/31/05	
SCALE	S.F.
NONE	

MECH	C / S	E & I	PROCESS	MAINT DEPT	OPERATIONS

JOB NO. | DRAWING NUMBER | REV.

E-01-126 | 5



NOTES:

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	BY	CHK'D
0	3/12/13	ISSUED		

LION OIL TRADING & TRANSPORTATION, INC.

EL DORADO, ARKANSAS

PIPELINE CO: LOTT	PIPELINE: MAGNOLIA

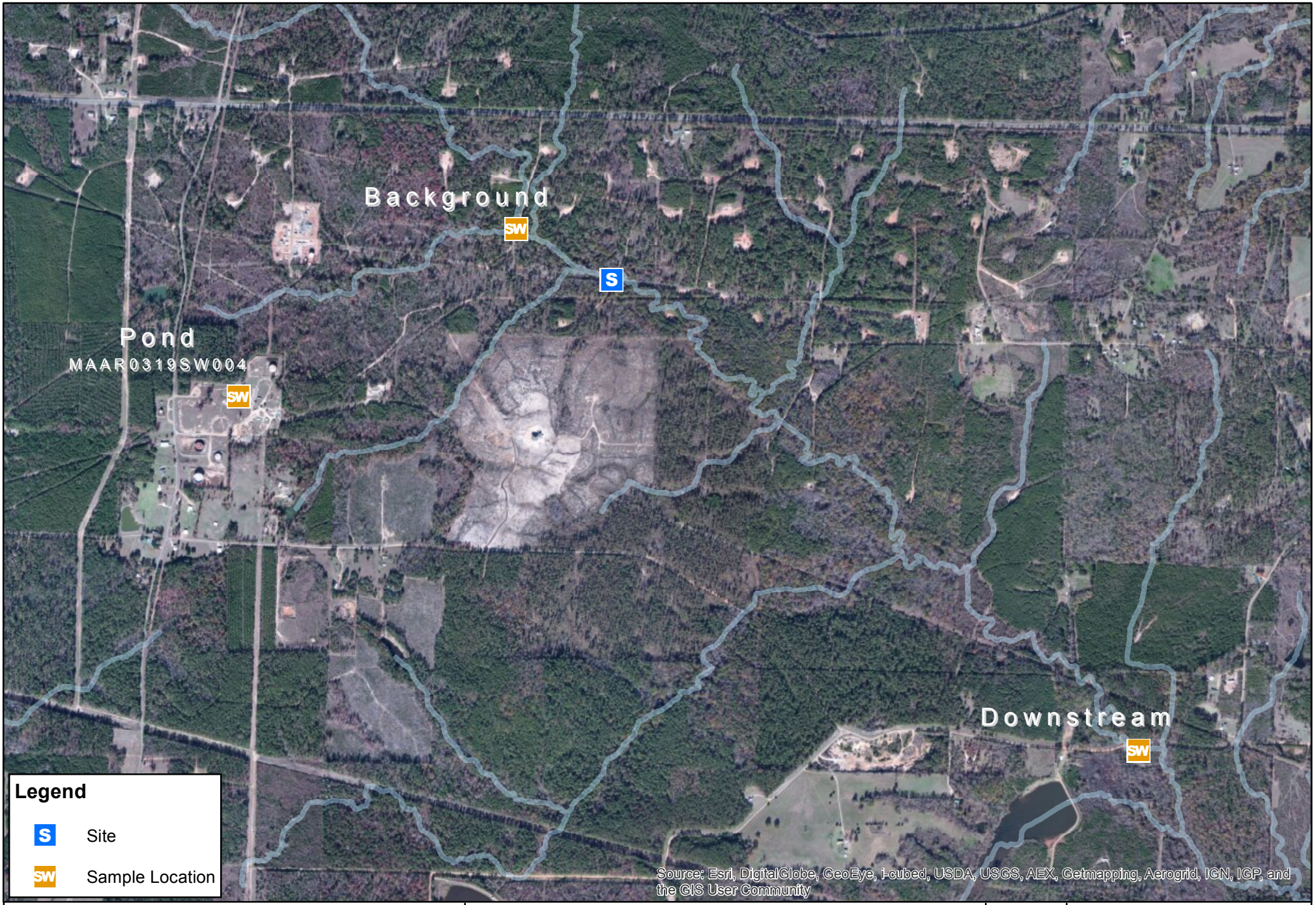
SITE PLAN
MAGNOLIA STATION
PUMP LAYOUT

DRAWN BY	CHK'D BY
JTC	
DATE	DATE
3/12/13	
SCALE	
1/2"=1'-0"	

JOB NO.	PROCESS	MAINT DEPT	OPERATIONS

SHEET NO.	DRAWING NUMBER	REV.
SHEET 1 OF 1	D-01-101	0

ATTACHMENT C - ENVIRONMENTAL SAMPLING LOCATION MAP



Water Sampling Locations

0 0.125 0.25 0.5 0.75 1
Miles

N

CTEH®

Project No.
40432

Delek US Holdings
Magnolia, AR
Columbia County
Print Date: 6/4/2013

ATTACHMENT D - PACE LABORATORY RESULTS

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

March 28, 2013

James McCormack
CTEH
5120 North Shore Drive
North Little Rock, AR 72118

RE: Project 20151823
Project ID: Magnolia, AR

Dear James McCormack:

Enclosed are the analytical results for sample(s) received by the laboratory on March 20, 2013. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Karen Brown
karen.brown@pacelabs.com

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

Laboratory Certifications

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20151823

Client: CTEH

Project ID: Magnolia, AR

Washington Department of Ecology C2078
Oregon Environmental Laboratory Accreditation - LA200001
U.S. Dept. of Agriculture Foreign Soil Import P330-10-00119
Pennsylvania Dept. of Env Protection (NELAC) 68-04202
Texas Commission on Env. Quality (NELAC) T104704405-09-TX
Kansas Department of Health and Environment (NELAC) E-10266
Florida Department of Health (NELAC) E87595
Oklahoma Department of Environmental Quality - 2010-139
Illinois Environmental Protection Agency - 0025721
California Env. Lab Accreditation Program Branch - 11277CA
Louisiana Dept. of Environmental Quality (NELAC/LELAP) 02006

3/28/2013 16:33:13

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Cross Reference

Project: 20151823

Client: CTEH

Project ID: Magnolia, AR

Client Sample ID	Lab ID	Matrix	Collection Date/Time	Received Date/Time
MAAR0317SW001A	201074284	Water	17-Mar-13 00:00	20-Mar-13 10:40
MAAR0318SW002A	201074285	Water	18-Mar-13 00:00	20-Mar-13 10:40
MAAR0319SW003A	201074286	Water	19-Mar-13 00:00	20-Mar-13 10:40
TB001	201074287	Water	17-Mar-13 00:00	20-Mar-13 10:40

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20151823

Sample Receipt Condition:

All samples were received in accordance with EPA protocol.

Holding Times:

All holding times were met.

Blanks:

All blank results were below reporting limits.

Laboratory Control Samples:

All LCS recoveries were within QC limits.

Matrix Spikes and Duplicates:

MS or MSD recoveries outside of QC limits are qualified in the Report of Quality Control section.

Surrogates:

All surrogate recoveries were within QC limits.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

QC Cross Reference

Project: 20151823

Analytical Method	Batch	Sample used for QC
EPA 8015 Mod Ext	205025	Batch sample from another client
EPA 8015/8021	204881	Batch sample from another client
EPA 8015/8021	204881	Batch sample from another client
EPA 6010	204907	Project sample MAAR0317SW001A
EPA 7470	204908	Project sample MAAR0317SW001A
EPA 8270	205028	Batch sample from another client
EPA 8270	205187	Batch sample from another client
EPA 8260	204874	Batch sample from another client

For the sample used as the original for the DUP or MS/MSD for the batch:

Project sample means a sample from this project was used.
Client sample means a sample from the same client but in a different project was used.
Batch sample means a sample from a different client was used.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0317SW001A
Project: 20151823
Project ID: Magnolia, AR
Site: None
Lab ID: 201074284
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205024
Method: EPA 8270
GCMS SVOAs SIM Water
Collected: 17-Mar-13
Received: 20-Mar-13
Prepared: 21-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
83-32-9	Acenaphthene	1	0.112	J	0.125	0.0650		25-Mar-13 12:25 JAM
208-96-8	Acenaphthylene	1	ND		0.125	0.0575		25-Mar-13 12:25 JAM
120-12-7	Anthracene	1	ND		0.125	0.0712		25-Mar-13 12:25 JAM
56-55-3	Benzo(a)anthracene	1	ND		0.125	0.0388		25-Mar-13 12:25 JAM
205-99-2	Benzo(b)fluoranthene	1	ND		0.125	0.0650		25-Mar-13 12:25 JAM
207-08-9	Benzo(k)fluoranthene	1	ND		0.125	0.0512		25-Mar-13 12:25 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		0.125	0.0250		25-Mar-13 12:25 JAM
50-32-8	Benzo(a)pyrene	1	ND		0.125	0.0512		25-Mar-13 12:25 JAM
218-01-9	Chrysene	1	ND		0.125	0.0312		25-Mar-13 12:25 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		0.125	0.0225		25-Mar-13 12:25 JAM
206-44-0	Fluoranthene	1	ND		0.125	0.0488		25-Mar-13 12:25 JAM
86-73-7	Fluorene	1	0.450		0.125	0.0788		25-Mar-13 12:25 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		0.125	0.0225		25-Mar-13 12:25 JAM
91-57-6	2-Methylnaphthalene	1	2.81		0.125	0.0975		25-Mar-13 12:25 JAM
91-20-3	Naphthalene	1	3.46		0.125	0.0838		25-Mar-13 12:25 JAM
85-01-8	Phenanthrene	1	0.588		0.125	0.0612		25-Mar-13 12:25 JAM
129-00-0	Pyrene	1	ND		0.125	0.0450		25-Mar-13 12:25 JAM

17 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0317SW001A
Project: 20151823
Project ID: Magnolia, AR
Site: None
Lab ID: 201074284
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205028
Method: EPA 8270
GCMS SVOAs Water
Collected: 17-Mar-13
Received: 20-Mar-13
Prepared: 22-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
83-32-9	Acenaphthene	1	ND		13.2	0.784		25-Mar-13 19:29 JAM
208-96-8	Acenaphthylene	1	ND		13.2	0.783		25-Mar-13 19:29 JAM
120-12-7	Anthracene	1	ND		13.2	0.955		25-Mar-13 19:29 JAM
56-55-3	Benzo(a)anthracene	1	ND		13.2	0.737		25-Mar-13 19:29 JAM
205-99-2	Benzo(b)fluoranthene	1	ND		13.2	0.849		25-Mar-13 19:29 JAM
207-08-9	Benzo(k)fluoranthene	1	ND		13.2	0.993		25-Mar-13 19:29 JAM
65-85-0	Benzoic acid	1	ND		32.9	2.06		25-Mar-13 19:29 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		13.2	0.880		25-Mar-13 19:29 JAM
50-32-8	Benzo(a)pyrene	1	ND		13.2	0.849		25-Mar-13 19:29 JAM
100-51-6	Benzyl alcohol	1	ND		13.2	1.26		25-Mar-13 19:29 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND		13.2	0.712		25-Mar-13 19:29 JAM
85-68-7	Butylbenzylphthalate	1	ND		13.2	1.09		25-Mar-13 19:29 JAM
86-74-8	Carbazole	1	ND		13.2	1.23		25-Mar-13 19:29 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND		13.2	1.07		25-Mar-13 19:29 JAM
106-47-8	3&4-Chloroaniline	1	ND		13.2	1.61		25-Mar-13 19:29 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND		13.2	1.04		25-Mar-13 19:29 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND		13.2	1.06		25-Mar-13 19:29 JAM
91-58-7	2-Chloronaphthalene	1	ND		13.2	0.938		25-Mar-13 19:29 JAM
95-57-8	2-Chlorophenol	1	ND		13.2	0.942		25-Mar-13 19:29 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND		13.2	0.839		25-Mar-13 19:29 JAM
218-01-9	Chrysene	1	ND		13.2	0.709		25-Mar-13 19:29 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		13.2	0.772		25-Mar-13 19:29 JAM
132-64-9	Dibenzofuran	1	ND		13.2	0.758		25-Mar-13 19:29 JAM
95-50-1	1,2-Dichlorobenzene	1	ND		13.2	1.14		25-Mar-13 19:29 JAM
541-73-1	1,3-Dichlorobenzene	1	ND		13.2	1.09		25-Mar-13 19:29 JAM
106-46-7	1,4-Dichlorobenzene	1	ND		13.2	0.858		25-Mar-13 19:29 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND		13.2	1.03		25-Mar-13 19:29 JAM
120-83-2	2,4-Dichlorophenol	1	ND		13.2	1.03		25-Mar-13 19:29 JAM
84-66-2	Diethylphthalate	1	ND		13.2	0.799		25-Mar-13 19:29 JAM
105-67-9	2,4-Dimethylphenol	1	ND		13.2	1.03		25-Mar-13 19:29 JAM
131-11-3	Dimethylphthalate	1	ND		13.2	0.782		25-Mar-13 19:29 JAM
84-74-2	Di-n-butylphthalate	1	ND		13.2	0.857		25-Mar-13 19:29 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		13.2	1.34		25-Mar-13 19:29 JAM
51-28-5	2,4-Dinitrophenol	1	ND		13.2	0.618		25-Mar-13 19:29 JAM

Protocol 3/28/2013 16:34:26

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit
Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0317SW001A
Project: 20151823
Project ID: Magnolia, AR
Site: None
Lab ID: 201074284
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205028
Method: EPA 8270
GCMS SVOAs Water
Collected: 17-Mar-13
Received: 20-Mar-13
Prepared: 22-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
121-14-2	2,4-Dinitrotoluene	1	ND		13.2	0.975		25-Mar-13 19:29 JAM
606-20-2	2,6-Dinitrotoluene	1	ND		13.2	1.03		25-Mar-13 19:29 JAM
117-84-0	Di-n-octylphthalate	1	ND		13.2	1.03		25-Mar-13 19:29 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		13.2	1.22		25-Mar-13 19:29 JAM
206-44-0	Fluoranthene	1	ND		13.2	0.887		25-Mar-13 19:29 JAM
86-73-7	Fluorene	1	ND		13.2	0.828		25-Mar-13 19:29 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		13.2	0.999		25-Mar-13 19:29 JAM
118-74-1	Hexachlorobenzene	1	ND		13.2	0.896		25-Mar-13 19:29 JAM
77-47-4	Hexachlorocyclopentadiene	1	ND		13.2	0.457		25-Mar-13 19:29 JAM
67-72-1	Hexachloroethane	1	ND		13.2	1.30		25-Mar-13 19:29 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		13.2	0.755		25-Mar-13 19:29 JAM
78-59-1	Isophorone	1	ND		13.2	0.826		25-Mar-13 19:29 JAM
91-57-6	2-Methylnaphthalene	1	3.46	J	13.2	1.08		25-Mar-13 19:29 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		13.2	0.986		25-Mar-13 19:29 JAM
	3&4-Methylphenol	1	ND		13.2	1.25		25-Mar-13 19:29 JAM
91-20-3	Naphthalene	1	4.12	J	13.2	0.995		25-Mar-13 19:29 JAM
88-74-4	2-Nitroaniline	1	ND		13.2	1.13		25-Mar-13 19:29 JAM
99-09-2	3-Nitroaniline	1	ND		13.2	1.15		25-Mar-13 19:29 JAM
100-01-6	4-Nitroaniline	1	ND		13.2	1.28		25-Mar-13 19:29 JAM
98-95-3	Nitrobenzene	1	ND		13.2	1.39		25-Mar-13 19:29 JAM
88-75-5	2-Nitrophenol	1	ND		13.2	1.02		25-Mar-13 19:29 JAM
100-02-7	4-Nitrophenol	1	ND		13.2	1.00		25-Mar-13 19:29 JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND		13.2	1.21		25-Mar-13 19:29 JAM
86-30-6	N-Nitrosodiphenylamine	1	ND		13.2	0.941		25-Mar-13 19:29 JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		13.2	0.963		25-Mar-13 19:29 JAM
87-86-5	Pentachlorophenol	1	ND		13.2	1.13		25-Mar-13 19:29 JAM
85-01-8	Phenanthrene	1	ND		13.2	0.887		25-Mar-13 19:29 JAM
108-95-2	Phenol	1	ND		13.2	1.02		25-Mar-13 19:29 JAM
129-00-0	Pyrene	1	ND		13.2	0.872		25-Mar-13 19:29 JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND		13.2	1.05		25-Mar-13 19:29 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		13.2	0.988		25-Mar-13 19:29 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		13.2	0.970		25-Mar-13 19:29 JAM

66 compound(s) reported

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0317SW001A
Project: 20151823
Project ID: Magnolia, AR
Site: None
Lab ID: 201074284
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 204874
Method: EPA 8260
GCMS VOAs Water
Collected: 17-Mar-13
Received: 20-Mar-13
Prepared: 20-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
67-64-1	Acetone	1	ND		10.0	8.88		20-Mar-13 19:02	RMP
71-43-2	Benzene	1	2.46	J	5.00	0.518		20-Mar-13 19:02	RMP
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		20-Mar-13 19:02	RMP
75-25-2	Bromoform	1	ND		5.00	0.920		20-Mar-13 19:02	RMP
74-83-9	Bromomethane	1	ND		5.00	0.855		20-Mar-13 19:02	RMP
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		20-Mar-13 19:02	RMP
75-15-0	Carbon disulfide	1	ND		5.00	0.530		20-Mar-13 19:02	RMP
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		20-Mar-13 19:02	RMP
108-90-7	Chlorobenzene	1	ND		5.00	0.662		20-Mar-13 19:02	RMP
75-00-3	Chloroethane	1	ND		5.00	1.12		20-Mar-13 19:02	RMP
67-66-3	Chloroform	1	ND		5.00	0.853		20-Mar-13 19:02	RMP
74-87-3	Chloromethane	1	ND		5.00	0.636		20-Mar-13 19:02	RMP
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		20-Mar-13 19:02	RMP
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		20-Mar-13 19:02	RMP
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		20-Mar-13 19:02	RMP
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		20-Mar-13 19:02	RMP
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565		20-Mar-13 19:02	RMP
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		20-Mar-13 19:02	RMP
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		20-Mar-13 19:02	RMP
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		20-Mar-13 19:02	RMP
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		20-Mar-13 19:02	RMP
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		20-Mar-13 19:02	RMP
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		20-Mar-13 19:02	RMP
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		20-Mar-13 19:02	RMP
100-41-4	Ethylbenzene	1	2.73	J	5.00	0.292		20-Mar-13 19:02	RMP
591-78-6	2-Hexanone	1	ND		10.0	1.28		20-Mar-13 19:02	RMP
98-82-8	Isopropylbenzene (Cumene)	1	0.600	J	5.00	0.405		20-Mar-13 19:02	RMP
79-20-9	Methyl acetate	1	ND		10.0	2.36		20-Mar-13 19:02	RMP
75-09-2	Methylene chloride	1	ND		5.00	1.44		20-Mar-13 19:02	RMP
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		20-Mar-13 19:02	RMP
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		20-Mar-13 19:02	RMP
100-42-5	Styrene	1	ND		5.00	0.571		20-Mar-13 19:02	RMP
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		20-Mar-13 19:02	RMP
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		20-Mar-13 19:02	RMP

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0317SW001A
Project: 20151823
Project ID: Magnolia, AR
Site: None
Lab ID: 201074284
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 204874
Method: EPA 8260
GCMS VOAs Water
Collected: 17-Mar-13
Received: 20-Mar-13
Prepared: 20-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
108-88-3	Toluene	1	ND		5.00	0.536		20-Mar-13 19:02	RMP
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		20-Mar-13 19:02	RMP
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915		20-Mar-13 19:02	RMP
79-01-6	Trichloroethene	1	ND		5.00	0.654		20-Mar-13 19:02	RMP
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575		20-Mar-13 19:02	RMP
75-01-4	Vinyl chloride	1	ND		5.00	0.564		20-Mar-13 19:02	RMP
	m&p-Xylene	1	6.67		5.00	0.937		20-Mar-13 19:02	RMP
95-47-6	o-Xylene	1	4.34	J	5.00	0.649		20-Mar-13 19:02	RMP

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0317SW001A
Project: 20151823
Project ID: Magnolia, AR
Site: None
Lab ID: 201074284
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205025
Method: EPA 8015 Mod Ext
8015 TPH Extractables Water
Collected: 17-Mar-13
Received: 20-Mar-13
Prepared: 22-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Diesel Range Organics (C10-28)	1	0.256		0.250	0.0760		26-Mar-13 19:01 SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.500	0.0490		26-Mar-13 19:01 SNP1

2 compound(s) reported

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0317SW001A
Project ID: Magnolia, AR
Lab ID: 201074284
Description: None
Method: EPA 8015/8021
8015/8021 Water

Project: 20151823
Site: None
Matrix: Water
% Moisture: n/a
Prep Level: Water
Batch: 204881
Collected: 17-Mar-13
Received: 20-Mar-13
Prepared: 22-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Gasoline Range Organics(C6-10)	1	0.0924		0.0500	0.0212		22-Mar-13 04:27 DHR1

1 compound(s) reported

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0317SW001A
Project: 20151823
Project ID: Magnolia, AR
Site: None
Lab ID: 201074284
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 204907
Method: EPA 6010
Metals, ICP, Water
Collected: 17-Mar-13
Received: 20-Mar-13
Prepared: 21-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7440-36-0	Antimony	1	ND		60.0	1.35		22-Mar-13 14:06 MHB1
7440-38-2	Arsenic	1	1.91	J	10.0	1.04		22-Mar-13 14:06 MHB1
7440-41-7	Beryllium	1	0.570	J	5.00	0.282		22-Mar-13 14:06 MHB1
7440-43-9	Cadmium	1	ND		5.00	0.361		22-Mar-13 14:06 MHB1
7440-47-3	Chromium	1	ND		10.0	2.00		22-Mar-13 14:06 MHB1
7440-50-8	Copper	1	ND		10.0	2.76		22-Mar-13 14:06 MHB1
7439-92-1	Lead	1	1.33	J	5.00	1.15		22-Mar-13 14:06 MHB1
7440-02-0	Nickel	1	7.57	J	40.0	0.253		22-Mar-13 14:06 MHB1
7782-49-2	Selenium	1	ND		35.0	14.3		22-Mar-13 14:06 MHB1
7440-22-4	Silver	1	ND		10.0	0.579		22-Mar-13 14:06 MHB1
7440-28-0	Thallium	1	1.92	J	10.0	1.05		22-Mar-13 14:06 MHB1
7440-66-6	Zinc	1	18.3	J	20.0	3.52		22-Mar-13 14:06 MHB1

12 compound(s) reported

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Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0317SW001A
Project: 20151823
Project ID: Magnolia, AR
Site: None
Lab ID: 201074284
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 204908
Method: EPA 7470
Mercury Water
Collected: 17-Mar-13
Received: 20-Mar-13
Prepared: 21-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.200	0.0340		21-Mar-13 14:15 MHB1

1 compound(s) reported

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0318SW002A
Project: 20151823
Project ID: Magnolia, AR
Site: None
Lab ID: 201074285
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205024
Method: EPA 8270
GCMS SVOAs SIM Water
Collected: 18-Mar-13
Received: 20-Mar-13
Prepared: 21-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
83-32-9	Acenaphthene	1	0.0928	J	0.103	0.0536		25-Mar-13 12:46 JAM
208-96-8	Acenaphthylene	1	ND		0.103	0.0474		25-Mar-13 12:46 JAM
120-12-7	Anthracene	1	ND		0.103	0.0588		25-Mar-13 12:46 JAM
56-55-3	Benzo(a)anthracene	1	ND		0.103	0.0320		25-Mar-13 12:46 JAM
205-99-2	Benzo(b)fluoranthene	1	ND		0.103	0.0536		25-Mar-13 12:46 JAM
207-08-9	Benzo(k)fluoranthene	1	ND		0.103	0.0423		25-Mar-13 12:46 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		0.103	0.0206		25-Mar-13 12:46 JAM
50-32-8	Benzo(a)pyrene	1	ND		0.103	0.0423		25-Mar-13 12:46 JAM
218-01-9	Chrysene	1	ND		0.103	0.0258		25-Mar-13 12:46 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		0.103	0.0186		25-Mar-13 12:46 JAM
206-44-0	Fluoranthene	1	ND		0.103	0.0402		25-Mar-13 12:46 JAM
86-73-7	Fluorene	1	0.402		0.103	0.0649		25-Mar-13 12:46 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		0.103	0.0186		25-Mar-13 12:46 JAM
91-57-6	2-Methylnaphthalene	1	1.89		0.103	0.0804		25-Mar-13 12:46 JAM
91-20-3	Naphthalene	1	2.00		0.103	0.0691		25-Mar-13 12:46 JAM
85-01-8	Phenanthrene	1	0.485		0.103	0.0505		25-Mar-13 12:46 JAM
129-00-0	Pyrene	1	ND		0.103	0.0371		25-Mar-13 12:46 JAM

17 compound(s) reported

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0318SW002A
Project: 20151823
Project ID: Magnolia, AR
Site: None
Lab ID: 201074285
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205028
Method: EPA 8270
GCMS SVOAs Water
Collected: 18-Mar-13
Received: 20-Mar-13
Prepared: 22-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
83-32-9	Acenaphthene	1	ND		10.0	0.596		25-Mar-13 19:54 JAM
208-96-8	Acenaphthylene	1	ND		10.0	0.595		25-Mar-13 19:54 JAM
120-12-7	Anthracene	1	ND		10.0	0.726		25-Mar-13 19:54 JAM
56-55-3	Benzo(a)anthracene	1	ND		10.0	0.560		25-Mar-13 19:54 JAM
205-99-2	Benzo(b)fluoranthene	1	ND		10.0	0.645		25-Mar-13 19:54 JAM
207-08-9	Benzo(k)fluoranthene	1	ND		10.0	0.755		25-Mar-13 19:54 JAM
65-85-0	Benzoic acid	1	ND		25.0	1.56		25-Mar-13 19:54 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		10.0	0.669		25-Mar-13 19:54 JAM
50-32-8	Benzo(a)pyrene	1	ND		10.0	0.645		25-Mar-13 19:54 JAM
100-51-6	Benzyl alcohol	1	ND		10.0	0.959		25-Mar-13 19:54 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND		10.0	0.541		25-Mar-13 19:54 JAM
85-68-7	Butylbenzylphthalate	1	ND		10.0	0.825		25-Mar-13 19:54 JAM
86-74-8	Carbazole	1	ND		10.0	0.932		25-Mar-13 19:54 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND		10.0	0.812		25-Mar-13 19:54 JAM
106-47-8	3&4-Chloroaniline	1	ND		10.0	1.22		25-Mar-13 19:54 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	0.789		25-Mar-13 19:54 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	0.804		25-Mar-13 19:54 JAM
91-58-7	2-Chloronaphthalene	1	ND		10.0	0.713		25-Mar-13 19:54 JAM
95-57-8	2-Chlorophenol	1	ND		10.0	0.716		25-Mar-13 19:54 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND		10.0	0.638		25-Mar-13 19:54 JAM
218-01-9	Chrysene	1	ND		10.0	0.539		25-Mar-13 19:54 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		10.0	0.587		25-Mar-13 19:54 JAM
132-64-9	Dibenzofuran	1	ND		10.0	0.576		25-Mar-13 19:54 JAM
95-50-1	1,2-Dichlorobenzene	1	ND		10.0	0.867		25-Mar-13 19:54 JAM
541-73-1	1,3-Dichlorobenzene	1	ND		10.0	0.832		25-Mar-13 19:54 JAM
106-46-7	1,4-Dichlorobenzene	1	ND		10.0	0.652		25-Mar-13 19:54 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND		10.0	0.781		25-Mar-13 19:54 JAM
120-83-2	2,4-Dichlorophenol	1	ND		10.0	0.783		25-Mar-13 19:54 JAM
84-66-2	Diethylphthalate	1	ND		10.0	0.607		25-Mar-13 19:54 JAM
105-67-9	2,4-Dimethylphenol	1	ND		10.0	0.781		25-Mar-13 19:54 JAM
131-11-3	Dimethylphthalate	1	ND		10.0	0.594		25-Mar-13 19:54 JAM
84-74-2	Di-n-butylphthalate	1	ND		10.0	0.651		25-Mar-13 19:54 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		10.0	1.02		25-Mar-13 19:54 JAM
51-28-5	2,4-Dinitrophenol	1	ND		10.0	0.470		25-Mar-13 19:54 JAM

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0318SW002A
Project: 20151823
Project ID: Magnolia, AR
Site: None
Lab ID: 201074285
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205028
Method: EPA 8270
GCMS SVOAs Water
Collected: 18-Mar-13
Received: 20-Mar-13
Prepared: 22-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	0.741		25-Mar-13 19:54 JAM
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	0.780		25-Mar-13 19:54 JAM
117-84-0	Di-n-octylphthalate	1	ND		10.0	0.781		25-Mar-13 19:54 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	0.930		25-Mar-13 19:54 JAM
206-44-0	Fluoranthene	1	ND		10.0	0.674		25-Mar-13 19:54 JAM
86-73-7	Fluorene	1	ND		10.0	0.629		25-Mar-13 19:54 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		10.0	0.759		25-Mar-13 19:54 JAM
118-74-1	Hexachlorobenzene	1	ND		10.0	0.681		25-Mar-13 19:54 JAM
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	0.347		25-Mar-13 19:54 JAM
67-72-1	Hexachloroethane	1	ND		10.0	0.987		25-Mar-13 19:54 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		10.0	0.574		25-Mar-13 19:54 JAM
78-59-1	Isophorone	1	ND		10.0	0.628		25-Mar-13 19:54 JAM
91-57-6	2-Methylnaphthalene	1	2.38	J	10.0	0.822		25-Mar-13 19:54 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	0.749		25-Mar-13 19:54 JAM
	3&4-Methylphenol	1	ND		10.0	0.948		25-Mar-13 19:54 JAM
91-20-3	Naphthalene	1	2.45	J	10.0	0.756		25-Mar-13 19:54 JAM
88-74-4	2-Nitroaniline	1	ND		10.0	0.859		25-Mar-13 19:54 JAM
99-09-2	3-Nitroaniline	1	ND		10.0	0.877		25-Mar-13 19:54 JAM
100-01-6	4-Nitroaniline	1	ND		10.0	0.972		25-Mar-13 19:54 JAM
98-95-3	Nitrobenzene	1	ND		10.0	1.06		25-Mar-13 19:54 JAM
88-75-5	2-Nitrophenol	1	ND		10.0	0.772		25-Mar-13 19:54 JAM
100-02-7	4-Nitrophenol	1	ND		10.0	0.761		25-Mar-13 19:54 JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	0.919		25-Mar-13 19:54 JAM
86-30-6	N-Nitrosodiphenylamine	1	ND		10.0	0.715		25-Mar-13 19:54 JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		10.0	0.732		25-Mar-13 19:54 JAM
87-86-5	Pentachlorophenol	1	ND		10.0	0.860		25-Mar-13 19:54 JAM
85-01-8	Phenanthrene	1	ND		10.0	0.674		25-Mar-13 19:54 JAM
108-95-2	Phenol	1	ND		10.0	0.773		25-Mar-13 19:54 JAM
129-00-0	Pyrene	1	ND		10.0	0.663		25-Mar-13 19:54 JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	0.797		25-Mar-13 19:54 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		10.0	0.751		25-Mar-13 19:54 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	0.737		25-Mar-13 19:54 JAM

66 compound(s) reported

Protocol 3/28/2013 16:34:26

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MDL denotes method detection limit
Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0318SW002A
Project: 20151823
Project ID: Magnolia, AR
Site: None
Lab ID: 201074285
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 204874
Method: EPA 8260
GCMS VOAs Water
Collected: 18-Mar-13
Received: 20-Mar-13
Prepared: 20-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
67-64-1	Acetone	1	ND		10.0	8.88		20-Mar-13 19:41	RMP
71-43-2	Benzene	1	1.10	J	5.00	0.518		20-Mar-13 19:41	RMP
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		20-Mar-13 19:41	RMP
75-25-2	Bromoform	1	ND		5.00	0.920		20-Mar-13 19:41	RMP
74-83-9	Bromomethane	1	ND		5.00	0.855		20-Mar-13 19:41	RMP
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		20-Mar-13 19:41	RMP
75-15-0	Carbon disulfide	1	ND		5.00	0.530		20-Mar-13 19:41	RMP
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		20-Mar-13 19:41	RMP
108-90-7	Chlorobenzene	1	ND		5.00	0.662		20-Mar-13 19:41	RMP
75-00-3	Chloroethane	1	ND		5.00	1.12		20-Mar-13 19:41	RMP
67-66-3	Chloroform	1	ND		5.00	0.853		20-Mar-13 19:41	RMP
74-87-3	Chloromethane	1	ND		5.00	0.636		20-Mar-13 19:41	RMP
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		20-Mar-13 19:41	RMP
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		20-Mar-13 19:41	RMP
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		20-Mar-13 19:41	RMP
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		20-Mar-13 19:41	RMP
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565		20-Mar-13 19:41	RMP
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		20-Mar-13 19:41	RMP
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		20-Mar-13 19:41	RMP
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		20-Mar-13 19:41	RMP
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		20-Mar-13 19:41	RMP
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		20-Mar-13 19:41	RMP
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		20-Mar-13 19:41	RMP
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		20-Mar-13 19:41	RMP
100-41-4	Ethylbenzene	1	1.27	J	5.00	0.292		20-Mar-13 19:41	RMP
591-78-6	2-Hexanone	1	ND		10.0	1.28		20-Mar-13 19:41	RMP
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405		20-Mar-13 19:41	RMP
79-20-9	Methyl acetate	1	ND		10.0	2.36		20-Mar-13 19:41	RMP
75-09-2	Methylene chloride	1	ND		5.00	1.44		20-Mar-13 19:41	RMP
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		20-Mar-13 19:41	RMP
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		20-Mar-13 19:41	RMP
100-42-5	Styrene	1	ND		5.00	0.571		20-Mar-13 19:41	RMP
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		20-Mar-13 19:41	RMP
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		20-Mar-13 19:41	RMP

Protocol 3/28/2013 16:34:26

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0318SW002A
Project: 20151823
Project ID: Magnolia, AR
Site: None
Lab ID: 201074285
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 204874
Method: EPA 8260
GCMS VOAs Water
Collected: 18-Mar-13
Received: 20-Mar-13
Prepared: 20-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
108-88-3	Toluene	1	ND		5.00	0.536		20-Mar-13 19:41	RMP
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		20-Mar-13 19:41	RMP
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915		20-Mar-13 19:41	RMP
79-01-6	Trichloroethene	1	ND		5.00	0.654		20-Mar-13 19:41	RMP
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575		20-Mar-13 19:41	RMP
75-01-4	Vinyl chloride	1	ND		5.00	0.564		20-Mar-13 19:41	RMP
	m&p-Xylene	1	2.83	J	5.00	0.937		20-Mar-13 19:41	RMP
95-47-6	o-Xylene	1	1.84	J	5.00	0.649		20-Mar-13 19:41	RMP

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0318SW002A
Project: 20151823
Project ID: Magnolia, AR
Site: None
Lab ID: 201074285
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205025
Method: EPA 8015 Mod Ext
8015 TPH Extractables Water
Collected: 18-Mar-13
Received: 20-Mar-13
Prepared: 22-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Diesel Range Organics (C10-28)	1	ND		0.250	0.0760		26-Mar-13 20:24 SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.500	0.0490		26-Mar-13 20:24 SNP1

2 compound(s) reported

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Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0318SW002A
Project: 20151823
Project ID: Magnolia, AR
Site: None
Lab ID: 201074285
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 204881
Method: EPA 8015/8021
8015/8021 Water
Collected: 18-Mar-13
Received: 20-Mar-13
Prepared: 22-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Gasoline Range Organics(C6-10)	1	0.0570		0.0500	0.0212		22-Mar-13 04:54 DHR1

1 compound(s) reported

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MDL denotes method detection limit

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Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0318SW002A
Project: 20151823
Project ID: Magnolia, AR
Site: None
Lab ID: 201074285
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 204907
Method: EPA 6010
Metals, ICP, Water
Collected: 18-Mar-13
Received: 20-Mar-13
Prepared: 21-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7440-36-0	Antimony	1	ND		60.0	1.35		22-Mar-13 14:20 MHB1
7440-38-2	Arsenic	1	2.73	J	10.0	1.04		22-Mar-13 14:20 MHB1
7440-41-7	Beryllium	1	0.492	J	5.00	0.282		22-Mar-13 14:20 MHB1
7440-43-9	Cadmium	1	ND		5.00	0.361		22-Mar-13 14:20 MHB1
7440-47-3	Chromium	1	ND		10.0	2.00		22-Mar-13 14:20 MHB1
7440-50-8	Copper	1	ND		10.0	2.76		22-Mar-13 14:20 MHB1
7439-92-1	Lead	1	1.79	J	5.00	1.15		22-Mar-13 14:20 MHB1
7440-02-0	Nickel	1	7.01	J	40.0	0.253		22-Mar-13 14:20 MHB1
7782-49-2	Selenium	1	ND		35.0	14.3		22-Mar-13 14:20 MHB1
7440-22-4	Silver	1	ND		10.0	0.579		22-Mar-13 14:20 MHB1
7440-28-0	Thallium	1	ND		10.0	1.05		22-Mar-13 14:20 MHB1
7440-66-6	Zinc	1	15.0	J	20.0	3.52		22-Mar-13 14:20 MHB1

12 compound(s) reported

Protocol 3/28/2013 16:34:26

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0318SW002A
Project: 20151823
Project ID: Magnolia, AR
Site: None
Lab ID: 201074285
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 204908
Method: EPA 7470
Mercury Water
Collected: 18-Mar-13
Received: 20-Mar-13
Prepared: 21-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.200	0.0340		21-Mar-13 14:20 MHB1

1 compound(s) reported

Protocol 3/28/2013 16:34:26

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0319SW003A
Project: 20151823
Project ID: Magnolia, AR
Site: None
Lab ID: 201074286
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205187
Method: EPA 8270
GCMS SVOAs SIM Water
Collected: 19-Mar-13
Received: 20-Mar-13
Prepared: 26-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
83-32-9	Acenaphthene	1	ND		0.100	0.0520		27-Mar-13 11:40 JAM
208-96-8	Acenaphthylene	1	ND		0.100	0.0460		27-Mar-13 11:40 JAM
120-12-7	Anthracene	1	ND		0.100	0.0570		27-Mar-13 11:40 JAM
56-55-3	Benzo(a)anthracene	1	ND		0.100	0.0310		27-Mar-13 11:40 JAM
205-99-2	Benzo(b)fluoranthene	1	ND		0.100	0.0520		27-Mar-13 11:40 JAM
207-08-9	Benzo(k)fluoranthene	1	ND		0.100	0.0410		27-Mar-13 11:40 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		0.100	0.0200		27-Mar-13 11:40 JAM
50-32-8	Benzo(a)pyrene	1	ND		0.100	0.0410		27-Mar-13 11:40 JAM
218-01-9	Chrysene	1	ND		0.100	0.0250		27-Mar-13 11:40 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		0.100	0.0180		27-Mar-13 11:40 JAM
206-44-0	Fluoranthene	1	ND		0.100	0.0390		27-Mar-13 11:40 JAM
86-73-7	Fluorene	1	0.250		0.100	0.0630		27-Mar-13 11:40 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		0.100	0.0180		27-Mar-13 11:40 JAM
91-57-6	2-Methylnaphthalene	1	0.720		0.100	0.0780		27-Mar-13 11:40 JAM
91-20-3	Naphthalene	1	0.720		0.100	0.0670		27-Mar-13 11:40 JAM
85-01-8	Phenanthrene	1	0.290		0.100	0.0490		27-Mar-13 11:40 JAM
129-00-0	Pyrene	1	ND		0.100	0.0360		27-Mar-13 11:40 JAM

17 compound(s) reported

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0319SW003A
Project: 20151823
Project ID: Magnolia, AR
Site: None
Lab ID: 201074286
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205028
Method: EPA 8270
GCMS SVOAs Water
Collected: 19-Mar-13
Received: 20-Mar-13
Prepared: 22-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
83-32-9	Acenaphthene	1	ND		10.0	0.596		25-Mar-13 20:20	JAM
208-96-8	Acenaphthylene	1	ND		10.0	0.595		25-Mar-13 20:20	JAM
120-12-7	Anthracene	1	ND		10.0	0.726		25-Mar-13 20:20	JAM
56-55-3	Benzo(a)anthracene	1	ND		10.0	0.560		25-Mar-13 20:20	JAM
205-99-2	Benzo(b)fluoranthene	1	ND		10.0	0.645		25-Mar-13 20:20	JAM
207-08-9	Benzo(k)fluoranthene	1	ND		10.0	0.755		25-Mar-13 20:20	JAM
65-85-0	Benzoic acid	1	2.19	J	25.0	1.56		25-Mar-13 20:20	JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		10.0	0.669		25-Mar-13 20:20	JAM
50-32-8	Benzo(a)pyrene	1	ND		10.0	0.645		25-Mar-13 20:20	JAM
100-51-6	Benzyl alcohol	1	ND		10.0	0.959		25-Mar-13 20:20	JAM
101-55-3	4-Bromophenylphenyl ether	1	ND		10.0	0.541		25-Mar-13 20:20	JAM
85-68-7	Butylbenzylphthalate	1	ND		10.0	0.825		25-Mar-13 20:20	JAM
86-74-8	Carbazole	1	ND		10.0	0.932		25-Mar-13 20:20	JAM
59-50-7	4-Chloro-3-methylphenol	1	ND		10.0	0.812		25-Mar-13 20:20	JAM
106-47-8	3&4-Chloroaniline	1	ND		10.0	1.22		25-Mar-13 20:20	JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	0.789		25-Mar-13 20:20	JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	0.804		25-Mar-13 20:20	JAM
91-58-7	2-Chloronaphthalene	1	ND		10.0	0.713		25-Mar-13 20:20	JAM
95-57-8	2-Chlorophenol	1	ND		10.0	0.716		25-Mar-13 20:20	JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND		10.0	0.638		25-Mar-13 20:20	JAM
218-01-9	Chrysene	1	ND		10.0	0.539		25-Mar-13 20:20	JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		10.0	0.587		25-Mar-13 20:20	JAM
132-64-9	Dibenzofuran	1	ND		10.0	0.576		25-Mar-13 20:20	JAM
95-50-1	1,2-Dichlorobenzene	1	ND		10.0	0.867		25-Mar-13 20:20	JAM
541-73-1	1,3-Dichlorobenzene	1	ND		10.0	0.832		25-Mar-13 20:20	JAM
106-46-7	1,4-Dichlorobenzene	1	ND		10.0	0.652		25-Mar-13 20:20	JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND		10.0	0.781		25-Mar-13 20:20	JAM
120-83-2	2,4-Dichlorophenol	1	ND		10.0	0.783		25-Mar-13 20:20	JAM
84-66-2	Diethylphthalate	1	ND		10.0	0.607		25-Mar-13 20:20	JAM
105-67-9	2,4-Dimethylphenol	1	ND		10.0	0.781		25-Mar-13 20:20	JAM
131-11-3	Dimethylphthalate	1	ND		10.0	0.594		25-Mar-13 20:20	JAM
84-74-2	Di-n-butylphthalate	1	ND		10.0	0.651		25-Mar-13 20:20	JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		10.0	1.02		25-Mar-13 20:20	JAM
51-28-5	2,4-Dinitrophenol	1	ND		10.0	0.470		25-Mar-13 20:20	JAM

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ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit
Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0319SW003A
Project: 20151823
Project ID: Magnolia, AR
Site: None
Lab ID: 201074286
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205028
Method: EPA 8270
GCMS SVOAs Water
Collected: 19-Mar-13
Received: 20-Mar-13
Prepared: 22-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	0.741		25-Mar-13 20:20	JAM
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	0.780		25-Mar-13 20:20	JAM
117-84-0	Di-n-octylphthalate	1	ND		10.0	0.781		25-Mar-13 20:20	JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	0.930		25-Mar-13 20:20	JAM
206-44-0	Fluoranthene	1	ND		10.0	0.674		25-Mar-13 20:20	JAM
86-73-7	Fluorene	1	ND		10.0	0.629		25-Mar-13 20:20	JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		10.0	0.759		25-Mar-13 20:20	JAM
118-74-1	Hexachlorobenzene	1	ND		10.0	0.681		25-Mar-13 20:20	JAM
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	0.347		25-Mar-13 20:20	JAM
67-72-1	Hexachloroethane	1	ND		10.0	0.987		25-Mar-13 20:20	JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		10.0	0.574		25-Mar-13 20:20	JAM
78-59-1	Isophorone	1	ND		10.0	0.628		25-Mar-13 20:20	JAM
91-57-6	2-Methylnaphthalene	1	1.31	J	10.0	0.822		25-Mar-13 20:20	JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	0.749		25-Mar-13 20:20	JAM
	3&4-Methylphenol	1	ND		10.0	0.948		25-Mar-13 20:20	JAM
91-20-3	Naphthalene	1	1.39	J	10.0	0.756		25-Mar-13 20:20	JAM
88-74-4	2-Nitroaniline	1	ND		10.0	0.859		25-Mar-13 20:20	JAM
99-09-2	3-Nitroaniline	1	ND		10.0	0.877		25-Mar-13 20:20	JAM
100-01-6	4-Nitroaniline	1	ND		10.0	0.972		25-Mar-13 20:20	JAM
98-95-3	Nitrobenzene	1	ND		10.0	1.06		25-Mar-13 20:20	JAM
88-75-5	2-Nitrophenol	1	ND		10.0	0.772		25-Mar-13 20:20	JAM
100-02-7	4-Nitrophenol	1	ND		10.0	0.761		25-Mar-13 20:20	JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	0.919		25-Mar-13 20:20	JAM
86-30-6	N-Nitrosodiphenylamine	1	ND		10.0	0.715		25-Mar-13 20:20	JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		10.0	0.732		25-Mar-13 20:20	JAM
87-86-5	Pentachlorophenol	1	ND		10.0	0.860		25-Mar-13 20:20	JAM
85-01-8	Phenanthrene	1	ND		10.0	0.674		25-Mar-13 20:20	JAM
108-95-2	Phenol	1	ND		10.0	0.773		25-Mar-13 20:20	JAM
129-00-0	Pyrene	1	ND		10.0	0.663		25-Mar-13 20:20	JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	0.797		25-Mar-13 20:20	JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		10.0	0.751		25-Mar-13 20:20	JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	0.737		25-Mar-13 20:20	JAM

66 compound(s) reported

Protocol 3/28/2013 16:34:26

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0319SW003A
Project: 20151823
Project ID: Magnolia, AR
Site: None
Lab ID: 201074286
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 204874
Method: EPA 8260
GCMS VOAs Water
Collected: 19-Mar-13
Received: 20-Mar-13
Prepared: 20-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
67-64-1	Acetone	1	ND		10.0	8.88		20-Mar-13 20:01	RMP
71-43-2	Benzene	1	0.550	J	5.00	0.518		20-Mar-13 20:01	RMP
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		20-Mar-13 20:01	RMP
75-25-2	Bromoform	1	ND		5.00	0.920		20-Mar-13 20:01	RMP
74-83-9	Bromomethane	1	ND		5.00	0.855		20-Mar-13 20:01	RMP
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		20-Mar-13 20:01	RMP
75-15-0	Carbon disulfide	1	ND		5.00	0.530		20-Mar-13 20:01	RMP
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		20-Mar-13 20:01	RMP
108-90-7	Chlorobenzene	1	ND		5.00	0.662		20-Mar-13 20:01	RMP
75-00-3	Chloroethane	1	ND		5.00	1.12		20-Mar-13 20:01	RMP
67-66-3	Chloroform	1	ND		5.00	0.853		20-Mar-13 20:01	RMP
74-87-3	Chloromethane	1	ND		5.00	0.636		20-Mar-13 20:01	RMP
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		20-Mar-13 20:01	RMP
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		20-Mar-13 20:01	RMP
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		20-Mar-13 20:01	RMP
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		20-Mar-13 20:01	RMP
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565		20-Mar-13 20:01	RMP
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		20-Mar-13 20:01	RMP
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		20-Mar-13 20:01	RMP
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		20-Mar-13 20:01	RMP
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		20-Mar-13 20:01	RMP
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		20-Mar-13 20:01	RMP
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		20-Mar-13 20:01	RMP
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		20-Mar-13 20:01	RMP
100-41-4	Ethylbenzene	1	0.850	J	5.00	0.292		20-Mar-13 20:01	RMP
591-78-6	2-Hexanone	1	ND		10.0	1.28		20-Mar-13 20:01	RMP
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405		20-Mar-13 20:01	RMP
79-20-9	Methyl acetate	1	ND		10.0	2.36		20-Mar-13 20:01	RMP
75-09-2	Methylene chloride	1	ND		5.00	1.44		20-Mar-13 20:01	RMP
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		20-Mar-13 20:01	RMP
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		20-Mar-13 20:01	RMP
100-42-5	Styrene	1	ND		5.00	0.571		20-Mar-13 20:01	RMP
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		20-Mar-13 20:01	RMP
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		20-Mar-13 20:01	RMP

Protocol 3/28/2013 16:34:26

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0319SW003A
Project: 20151823
Project ID: Magnolia, AR
Site: None
Lab ID: 201074286
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 204874
Method: EPA 8260
GCMS VOAs Water
Collected: 19-Mar-13
Received: 20-Mar-13
Prepared: 20-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
108-88-3	Toluene	1	ND		5.00	0.536		20-Mar-13 20:01	RMP
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		20-Mar-13 20:01	RMP
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915		20-Mar-13 20:01	RMP
79-01-6	Trichloroethene	1	ND		5.00	0.654		20-Mar-13 20:01	RMP
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575		20-Mar-13 20:01	RMP
75-01-4	Vinyl chloride	1	ND		5.00	0.564		20-Mar-13 20:01	RMP
	m&p-Xylene	1	1.68	J	5.00	0.937		20-Mar-13 20:01	RMP
95-47-6	o-Xylene	1	1.47	J	5.00	0.649		20-Mar-13 20:01	RMP

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0319SW003A
Project: 20151823
Project ID: Magnolia, AR
Site: None
Lab ID: 201074286
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205025
Method: EPA 8015 Mod Ext
8015 TPH Extractables Water
Collected: 19-Mar-13
Received: 20-Mar-13
Prepared: 22-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
none	Diesel Range Organics (C10-28)	1	ND		0.250	0.0760		27-Mar-13 00:04	SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.500	0.0490		27-Mar-13 00:04	SNP1

2 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
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Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0319SW003A
Project: 20151823
Project ID: Magnolia, AR
Site: None
Lab ID: 201074286
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 204881
Method: EPA 8015/8021
8015/8021 Water
Collected: 19-Mar-13
Received: 20-Mar-13
Prepared: 22-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Gasoline Range Organics(C6-10)	1	0.0449	J	0.0500	0.0212		22-Mar-13 05:22 DHR1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0319SW003A
Project ID: Magnolia, AR
Lab ID: 201074286
Description: None
Method: EPA 6010
Metals, ICP, Water

Project: 20151823
Site: None
Matrix: Water **% Moisture:** n/a
Prep Level: Water **Batch:** 204907

Collected: 19-Mar-13 **Received:** 20-Mar-13
Prepared: 21-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7440-36-0	Antimony	1	ND		60.0	1.35		22-Mar-13 14:23 MHB1
7440-38-2	Arsenic	1	1.10	J	10.0	1.04		22-Mar-13 14:23 MHB1
7440-41-7	Beryllium	1	0.509	J	5.00	0.282		22-Mar-13 14:23 MHB1
7440-43-9	Cadmium	1	ND		5.00	0.361		22-Mar-13 14:23 MHB1
7440-47-3	Chromium	1	ND		10.0	2.00		22-Mar-13 14:23 MHB1
7440-50-8	Copper	1	ND		10.0	2.76		22-Mar-13 14:23 MHB1
7439-92-1	Lead	1	2.02	J	5.00	1.15		22-Mar-13 14:23 MHB1
7440-02-0	Nickel	1	7.17	J	40.0	0.253		22-Mar-13 14:23 MHB1
7782-49-2	Selenium	1	ND		35.0	14.3		22-Mar-13 14:23 MHB1
7440-22-4	Silver	1	ND		10.0	0.579		22-Mar-13 14:23 MHB1
7440-28-0	Thallium	1	1.58	J	10.0	1.05		22-Mar-13 14:23 MHB1
7440-66-6	Zinc	1	16.1	J	20.0	3.52		22-Mar-13 14:23 MHB1

12 compound(s) reported

Protocol 3/28/2013 16:34:26

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MDL denotes method detection limit

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0319SW003A
Project: 20151823
Project ID: Magnolia, AR
Site: None
Lab ID: 201074286
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 204908
Method: EPA 7470
Mercury Water
Collected: 19-Mar-13
Received: 20-Mar-13
Prepared: 21-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.200	0.0340		21-Mar-13 14:22 MHB1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: TB001
Project: 20151823
Project ID: Magnolia, AR
Site: None
Lab ID: 201074287
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 204874
Method: EPA 8260
GCMS VOAs Water
Collected: 17-Mar-13
Received: 20-Mar-13
Prepared: 20-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
67-64-1	Acetone	1	ND		10.0	8.88		20-Mar-13 19:21	RMP
71-43-2	Benzene	1	ND		5.00	0.518		20-Mar-13 19:21	RMP
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		20-Mar-13 19:21	RMP
75-25-2	Bromoform	1	ND		5.00	0.920		20-Mar-13 19:21	RMP
74-83-9	Bromomethane	1	ND		5.00	0.855		20-Mar-13 19:21	RMP
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		20-Mar-13 19:21	RMP
75-15-0	Carbon disulfide	1	ND		5.00	0.530		20-Mar-13 19:21	RMP
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		20-Mar-13 19:21	RMP
108-90-7	Chlorobenzene	1	ND		5.00	0.662		20-Mar-13 19:21	RMP
75-00-3	Chloroethane	1	ND		5.00	1.12		20-Mar-13 19:21	RMP
67-66-3	Chloroform	1	ND		5.00	0.853		20-Mar-13 19:21	RMP
74-87-3	Chloromethane	1	ND		5.00	0.636		20-Mar-13 19:21	RMP
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		20-Mar-13 19:21	RMP
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		20-Mar-13 19:21	RMP
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		20-Mar-13 19:21	RMP
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		20-Mar-13 19:21	RMP
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565		20-Mar-13 19:21	RMP
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		20-Mar-13 19:21	RMP
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		20-Mar-13 19:21	RMP
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		20-Mar-13 19:21	RMP
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		20-Mar-13 19:21	RMP
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		20-Mar-13 19:21	RMP
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		20-Mar-13 19:21	RMP
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		20-Mar-13 19:21	RMP
100-41-4	Ethylbenzene	1	ND		5.00	0.292		20-Mar-13 19:21	RMP
591-78-6	2-Hexanone	1	ND		10.0	1.28		20-Mar-13 19:21	RMP
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405		20-Mar-13 19:21	RMP
79-20-9	Methyl acetate	1	ND		10.0	2.36		20-Mar-13 19:21	RMP
75-09-2	Methylene chloride	1	ND		5.00	1.44		20-Mar-13 19:21	RMP
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		20-Mar-13 19:21	RMP
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		20-Mar-13 19:21	RMP
100-42-5	Styrene	1	ND		5.00	0.571		20-Mar-13 19:21	RMP
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		20-Mar-13 19:21	RMP
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		20-Mar-13 19:21	RMP

Protocol 3/28/2013 16:34:26

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Client: CTEH

Client ID: TB001
Project ID: Magnolia, AR
Lab ID: 201074287
Description: None
Method: EPA 8260
GCMS VOAs Water

Project: 20151823
Site: None
Matrix: Water **% Moisture:** n/a
Prep Level: Water **Batch:** 204874
Collected: 17-Mar-13 **Received:** 20-Mar-13
Prepared: 20-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
108-88-3	Toluene	1	ND		5.00	0.536		20-Mar-13 19:21	RMP
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		20-Mar-13 19:21	RMP
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915		20-Mar-13 19:21	RMP
79-01-6	Trichloroethene	1	ND		5.00	0.654		20-Mar-13 19:21	RMP
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575		20-Mar-13 19:21	RMP
75-01-4	Vinyl chloride	1	ND		5.00	0.564		20-Mar-13 19:21	RMP
	m&p-Xylene	1	ND		5.00	0.937		20-Mar-13 19:21	RMP
95-47-6	o-Xylene	1	ND		5.00	0.649		20-Mar-13 19:21	RMP

42 compound(s) reported

Pace Analytical™

Surrogate Recovery

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Batch: 205024 **Project:** 20151823

Method: Water GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201075184	205024 BLANK 1		76	76						
201075185	205024 LCS 1		59	50						
201074284	MAAR0317SW001A		66	76						
201074285	MAAR0318SW002A		70	76						
	QC limits:		12-110	25-113						

Sur 1: 2-Fluorobiphenyl (S)
Sur 2: Terphenyl-d14 (S)

*** denotes surrogate recovery outside of QC limits.**
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

Pace Analytical™

Surrogate Recovery

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Batch: 205028 **Project:** 20151823

Method: Water GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201075222	205028 BLANK 1		84	80	68	83	73	100		
201075223	205028 LCS 1		88	82	73	74	79	97		
201074284	MAAR0317SW001A		94	73	72	86	76	90		
201074285	MAAR0318SW002A		94	84	75	90	80	88		
201074286	MAAR0319SW003A		92	76	75	88	80	88		
201075224	SRP-MW13-GAGW-0001 MS 1		92	85	78	76	81	85		
201075225	SRP-MW13-GAGW-0001 MSD 1		84	76	65	68	70	81		
	QC limits:		25-145	34-117	10-118	33-120	15-134	24-133		

Sur 1: 2,4,6-Tribromophenol (S)
Sur 2: 2-Fluorobiphenyl (S)
Sur 3: 2-Fluorophenol (S)
Sur 4: Nitrobenzene-d5 (S)
Sur 5: Phenol-d5 (S)
Sur 6: Terphenyl-d14 (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

Pace Analytical Services, Inc.
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(504) 469-0333

Surrogate Recovery

Batch: 205187 **Project:** 20151823

Method: Water GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201075872	1303-MW-47 MS 1		64	73						
201075873	1303-MW-47 MSD 1		78	82						
201075870	205187 BLANK 1		78	88						
201075871	205187 LCS 1		75	80						
201074286	MAAR0319SW003A		54	57						
	QC limits:		12-110	25-113						

Sur 1: 2-Fluorobiphenyl (S)
Sur 2: Terphenyl-d14 (S)

Surrogates 3/28/2013 16:34:28

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

Pace Analytical Services, Inc.
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(504) 469-0333

Surrogate Recovery

Batch: 204874 **Project:** 20151823

Method: Water GC/MS Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201074288	204874 BLANK 1		94	98	93					
201074289	204874 LCS 1		93	92	94					
201074284	MAAR0317SW001A		94	88	93					
201074285	MAAR0318SW002A		93	86	92					
201074286	MAAR0319SW003A		92	90	94					
201074290	T1 TANK MS 1		85	81	89					
201074291	T1 TANK MSD 1		92	85	95					
201074287	TB001		94	92	93					
	QC limits:		68-124	72-126	79-119					

Sur 1: 4-Bromofluorobenzene (S)
Sur 2: Dibromofluoromethane (S)
Sur 3: Toluene-d8 (S)

*** denotes surrogate recovery outside of QC limits.**
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Pace Analytical Services, Inc.
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Batch: 205025 **Project:** 20151823

Method: Water GC Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201075188	205025 BLANK 1		69	66						
201075189	205025 LCS 1		67	65						
201074284	MAAR0317SW001A		27	52						
201074285	MAAR0318SW002A		39	62						
201074286	MAAR0319SW003A		28	49						
201075190	SRP-MW13-GAGW-0001 MS 1		41	61						
201075191	SRP-MW13-GAGW-0001 MSD 1		27	70						
	QC limits:		16-137	10-121						

Sur 1: n-Pentacosane (S)
Sur 2: o-Terphenyl (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

Pace Analytical Services, Inc.
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(504) 469-0333

Surrogate Recovery

Batch: 204881 **Project:** 20151823

Method: Water GC Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201074342	204881 BLANK 1		104							
201075171	204881 BLANK 2		104							
201074343	204881 LCS 1		106							
201075172	204881 LCS 2		106							
201075173	HTK-0350 MS 1		104							
201075174	HTK-0350 MSD 1		107							
201075175	HTK-0351 MS 2		103							
201075176	HTK-0351 MSD 2		107							
201074284	MAAR0317SW001A		103							
201074285	MAAR0318SW002A		106							
201074286	MAAR0319SW003A		106							
	QC limits:		60-129							

Sur 1: 4-Bromofluorobenzene (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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1000 Riverbend Blvd. Suite F
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(504) 469-0333

Batch: 205024 **Project:** 20151823 **LCS:** 201075185 25-Mar-13 12:03

Method: Water GC/MS Semivolatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acenaphthene	2.00	1.26	63								39-110			Q5
Acenaphthylene	2.00	0.950	48								30-110			Q5
Anthracene	2.00	1.28	64								34-110			Q5
Benzo(a)anthracene	2.00	0.930	47								32-110			Q5
Benzo(b)fluoranthene	2.00	1.05	53								30-110			Q5
Benzo(k)fluoranthene	2.00	0.840	42								28-110			Q5
Benzo(g,h,i)perylene	2.00	0.880	44								27-110			Q5
Benzo(a)pyrene	2.00	0.740	37								29-110			Q5
Chrysene	2.00	0.820	41								34-110			Q5
Dibenz(a,h)anthracene	2.00	0.830	42								21-110			Q5
Fluoranthene	2.00	1.22	61								39-114			Q5
Fluorene	2.00	1.23	62								37-110			Q5
Indeno(1,2,3-cd)pyrene	2.00	0.880	44								27-110			Q5
2-Methylnaphthalene	2.00	1.24	62								35-110			Q5
Naphthalene	2.00	1.25	63								40-110			Q5
Phenanthrene	2.00	1.31	66								36-110			Q5
Pyrene	2.00	1.33	67								32-110			Q5

17 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
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(504) 469-0333

Batch: 205028 **Project:** 20151823 **LCS:** 201075223 25-Mar-13 13:31

Method: Water GC/MS Semivolatile Organics **MS:** 201075224 25-Mar-13 21:36

Units: ug/L **MSD:** 201075225 25-Mar-13 22:02

Original for MS: Batch Sample 201073758

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acenaphthene	50.0	43.8	88	50.0		45.1	40.3	90	81	11	49-114	35-128	20	
Acenaphthylene	50.0	44.4	89	50.0		47.1	42.9	94	86	9	49-110	35-123	20	
Anthracene	50.0	44.4	89	50.0		45.4	41.9	91	84	8	50-115	39-123	20	
Benzo(a)anthracene	50.0	44.9	90	50.0		41.5	39.8	83	80	4	52-112	29-129	20	
Benzo(b)fluoranthene	50.0	48.3	97	50.0		38.1	36.5	76	73	4	46-116	25-137	20	
Benzo(k)fluoranthene	50.0	49.4	99	50.0		37.6	34.9	75	70	8	47-118	23-141	20	
Benzoic acid	50.0	45.5	91	50.0		45.3	25.5	91	51	56 *	10-126	10-143	20	
Benzo(g,h,i)perylene	50.0	45.8	92	50.0		40.3	38.6	81	77	4	42-121	10-144	20	
Benzo(a)pyrene	50.0	49.5	99	50.0		40.2	38.6	80	77	4	48-114	24-129	20	
Benzyl alcohol	50.0	41.9	84	50.0		46.4	40.0	93	80	15	43-119	40-124	20	
4-Bromophenylphenyl ether	50.0	41.5	83	50.0		41.5	37.7	83	75	10	47-123	42-121	20	
Butylbenzylphthalate	50.0	39.1	78	50.0		37.8	35.5	76	71	6	47-122	31-129	20	
Carbazole	50.0	43.8	88	50.0		51.5	47.6	103	95	8	48-127	40-138	20	
4-Chloro-3-methylphenol	50.0	38.8	78	50.0		42.0	37.7	84	75	11	40-113	32-125	20	
3&4-Chloroaniline	50.0	39.0	78	50.0		46.2	43.0	92	86	7	10-127	10-127	36	
bis(2-Chloroethoxy)methane	50.0	36.1	72	50.0		36.6	32.9	73	66	11	41-113	34-117	20	
bis(2-Chloroethyl) ether	50.0	39.5	79	50.0		39.9	34.9	80	70	13	47-112	41-115	20	
2-Chloronaphthalene	50.0	40.2	80	50.0		41.8	37.8	84	76	10	50-110	34-125	20	
2-Chlorophenol	50.0	42.2	84	50.0		44.5	38.2	89	76	15	47-110	35-118	20	
4-Chlorophenylphenyl ether	50.0	42.0	84	50.0		42.8	38.7	86	77	10	49-117	35-131	20	
Chrysene	50.0	44.5	89	50.0		41.5	39.8	83	80	4	50-114	28-131	20	
Dibenz(a,h)anthracene	50.0	46.8	94	50.0		40.0	38.9	80	78	3	45-121	14-140	20	
Dibenzofuran	50.0	41.4	83	50.0		43.8	39.1	88	78	11	51-111	27-137	20	
1,2-Dichlorobenzene	50.0	36.4	73	50.0		36.9	32.3	74	65	13	41-110	40-110	20	
1,3-Dichlorobenzene	50.0	36.0	72	50.0		36.5	31.0	73	62	16	38-110	36-110	20	
1,4-Dichlorobenzene	50.0	35.4	71	50.0		36.8	31.5	74	63	15	39-110	37-110	20	
3,3'-Dichlorobenzidine	50.0	38.9	78	50.0		17.7	13.8	36	28	25	11-141	10-132	39	
2,4-Dichlorophenol	50.0	38.1	76	50.0		40.7	37.3	81	75	9	43-110	36-115	20	
Diethylphthalate	50.0	40.8	82	50.0		42.4	37.9	85	76	11	47-123	33-145	20	
2,4-Dimethylphenol	50.0	23.1	46	50.0		41.4	37.2	83	75	11	23-114	10-147	20	
Dimethylphthalate	50.0	39.0	78	50.0		40.6	37.0	81	74	9	51-116	38-135	20	
Di-n-butylphthalate	50.0	39.0	78	50.0		38.1	36.1	76	72	5	50-120	44-123	20	
4,6-Dinitro-2-methylphenol	50.0	45.0	90	50.0		48.6	43.8	97	88	10	42-119	16-145	20	
2,4-Dinitrophenol	50.0	38.4	77	50.0		43.1	36.5	86	73	17	13-134	10-178	20	
2,4-Dinitrotoluene	50.0	42.0	84	50.0		42.5	38.5	85	77	10	47-118	45-126	20	
2,6-Dinitrotoluene	50.0	42.2	84	50.0		42.8	39.1	86	78	9	53-114	48-124	20	
Di-n-octylphthalate	50.0	44.0	88	50.0		31.7	29.4	63	59	8	38-132	16-151	20	
bis(2-Ethylhexyl)phthalate	50.0	40.9	82	50.0		35.1	34.8	70	70	1	45-128	25-138	20	
Fluoranthene	50.0	44.5	89	50.0		44.2	41.7	88	83	6	47-119	36-130	20	
Fluorene	50.0	44.2	88	50.0		45.0	40.9	90	82	10	46-119	37-131	20	
Hexachloro-1,3-butadiene	50.0	33.9	68	50.0		32.1	28.7	64	57	11	29-110	19-112	20	

QC Protocol 3/28/2013 16:34:29

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Pace Analytical Services, Inc.
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(504) 469-0333

Batch: 205028 **Project:** 20151823 **LCS:** 201075223 25-Mar-13 13:31

Method: Water GC/MS Semivolatile Organics **MS:** 201075224 25-Mar-13 21:36

Units: ug/L **MSD:** 201075225 25-Mar-13 22:02

Original for MS: Batch Sample 201073758

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Hexachlorobenzene	50.0	42.6	85	50.0		39.5	37.1	79	74	6	52-113	38-120	20	
Hexachlorocyclopentadiene	50.0	21.6	43	50.0		24.3	22.6	49	45	7	10-110	10-110	20	
Hexachloroethane	50.0	35.4	71	50.0		35.0	29.4	70	59	18	34-110	31-110	20	
Indeno(1,2,3-cd)pyrene	50.0	48.2	96	50.0		41.5	40.1	83	80	3	45-119	12-138	20	
Isophorone	50.0	41.4	83	50.0		41.3	38.0	83	76	8	43-114	40-118	20	
2-Methylnaphthalene	50.0	35.8	72	50.0		37.3	33.4	75	67	11	40-110	35-114	20	
2-Methylphenol (o-Cresol)	50.0	41.4	83	50.0		45.6	39.8	91	80	14	45-110	32-124	20	
3&4-Methylphenol	50.0	40.5	81	50.0		44.6	38.3	89	77	15	44-110	32-126	20	
Naphthalene	50.0	41.6	83	50.0		42.2	38.0	84	76	11	40-110	30-116	20	
2-Nitroaniline	50.0	42.2	84	50.0		44.7	40.0	89	80	11	47-121	28-134	20	
3-Nitroaniline	50.0	46.1	92	50.0		51.3	47.2	103	94	8	33-127	10-134	21	
4-Nitroaniline	50.0	52.1	104	50.0		62.7	58.5	125	117	7	36-129	10-147	20	
Nitrobenzene	50.0	37.6	75	50.0		38.0	34.3	76	69	10	41-118	37-124	20	
2-Nitrophenol	50.0	38.2	76	50.0		39.5	35.5	79	71	11	44-110	32-119	20	
4-Nitrophenol	50.0	43.5	87	50.0		51.1	46.9	102	94	9	28-131	10-168	20	
N-Nitroso-di-n-propylamine	50.0	40.4	81	50.0		41.8	36.8	84	74	13	45-121	43-124	20	
N-Nitrosodiphenylamine	50.0	48.3	97	50.0		43.6	40.2	87	81	8	38-130	10-144	20	
2,2'-Oxybis(1-chloropropane)	50.0	40.2	80	50.0		41.4	35.8	83	72	15	38-122	33-125	20	
Pentachlorophenol	50.0	45.0	90	50.0		48.0	42.3	96	85	13	34-122	23-144	20	
Phenanthrene	50.0	44.5	89	50.0		45.4	41.9	91	84	8	51-114	47-118	20	
Phenol	50.0	40.4	81	50.0	1.06	44.4	37.5	87	73	17	43-110	30-124	20	
Pyrene	50.0	44.1	88	50.0		43.2	39.1	86	78	10	48-117	30-125	20	
1,2,4-Trichlorobenzene	50.0	33.0	66	50.0		34.7	30.7	69	61	12	37-110	34-110	20	
2,4,5-Trichlorophenol	50.0	41.9	84	50.0		46.9	41.8	94	84	12	48-110	34-126	20	
2,4,6-Trichlorophenol	50.0	43.5	87	50.0		47.1	43.1	94	86	9	48-110	26-132	20	

66 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Pace Analytical Services, Inc.
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(504) 469-0333

Batch: 205187 **Project:** 20151823 **LCS:** 201075871 27-Mar-13 11:19

Method: Water GC/MS Semivolatile Organics **MS:** 201075872 27-Mar-13 14:11

Units: ug/L **MSD:** 201075873 27-Mar-13 14:33

Original for MS: Batch Sample 201074907

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acenaphthene	2.00	1.47	74	2.00	1.43	2.49	3.37	53	97	30 *	39-115	10-131	20	
Acenaphthylene	2.00	1.05	53	2.00	0.0900	1.26	1.72	59	82	31 *	30-115	10-131	20	
Anthracene	2.00	1.09	55	2.00	0.0800	1.76	2.16	84	104	20	34-115	10-139	20	
Benzo(a)anthracene	2.00	1.42	71	2.00		1.58	1.90	79	95	18	33-115	12-115	20	
Benzo(b)fluoranthene	2.00	1.76	88	2.00		1.40	1.73	70	87	21 *	30-115	10-119	20	
Benzo(k)fluoranthene	2.00	1.58	79	2.00		1.31	1.67	66	84	24 *	31-115	10-122	20	
Benzo(g,h,i)perylene	2.00	1.61	81	2.00		1.33	1.67	67	84	23 *	27-115	10-123	20	
Benzo(a)pyrene	2.00	1.09	55	2.00		1.38	1.78	69	89	25 *	28-115	10-115	20	
Chrysene	2.00	1.28	64	2.00		1.33	1.67	67	84	23 *	36-115	10-116	20	
Dibenz(a,h)anthracene	2.00	1.53	77	2.00		1.41	1.78	71	89	23 *	23-115	10-128	20	
Fluoranthene	2.00	1.52	76	2.00		1.58	1.97	78	97	22 *	39-115	10-136	20	
Fluorene	2.00	1.51	76	2.00		1.45	1.85	70	90	24 *	38-115	10-129	20	
Indeno(1,2,3-cd)pyrene	2.00	1.58	79	2.00		1.41	1.76	71	88	22 *	28-115	10-124	20	
2-Methylnaphthalene	2.00	1.49	75	2.00	0.120	1.34	1.81	61	85	30 *	31-115	11-125	20	
Naphthalene	2.00	1.54	77	2.00	0.0900	1.28	1.82	60	87	35 *	40-115	14-124	20	
Phenanthrene	2.00	1.52	76	2.00	0.130	1.61	1.93	74	90	18	38-115	10-130	20	
Pyrene	2.00	1.59	80	2.00	0.0500	1.62	1.93	79	94	17	33-115	10-120	20	

17 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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(504) 469-0333

Batch: 204874 **Project:** 20151823 **LCS:** 201074289 20-Mar-13 16:24

Method: Water GC/MS Volatile Organics **MS:** 201074290 20-Mar-13 18:22

Units: ug/L **MSD:** 201074291 20-Mar-13 18:41

Original for MS: Batch Sample 201074208

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acetone	50.0	54.1	108	50.0		41.0	47.0	74	86	14	10-195	10-204	20	
Benzene	50.0	46.2	92	50.0		48.0	45.6	96	91	5	66-132	58-140	20	
Bromodichloromethane	50.0	50.0	100	50.0		50.7	47.2	101	95	7	67-132	63-137	20	
Bromoform	50.0	58.7	117	50.0		55.7	51.8	111	104	7	53-152	49-156	20	
Bromomethane	50.0	66.7	133	50.0		68.5	66.8	137	134	3	47-150	43-152	20	
2-Butanone (MEK)	50.0	48.3	97	50.0		40.4	40.7	81	81	1	16-167	11-180	20	
Carbon disulfide	50.0	60.9	122	50.0		62.7	58.1	125	116	7	18-173	10-184	20	
Carbon tetrachloride	50.0	48.6	97	50.0		53.9	50.0	108	100	7	55-143	50-148	20	
Chlorobenzene	50.0	52.0	104	50.0		54.2	51.7	108	103	5	71-131	69-136	20	
Chloroethane	50.0	72.0	144	50.0		76.0	73.7	152	147	3	31-192	20-193	20	
Chloroform	50.0	49.4	99	50.0		50.2	47.7	100	95	5	69-134	65-140	20	
Chloromethane	50.0	51.8	104	50.0		50.5	53.2	101	106	5	29-157	27-160	20	
1,2-Dibromo-3-chloropropane	50.0	45.5	91	50.0		43.1	43.3	86	87	0	37-151	34-159	20	
Dibromochloromethane	50.0	53.3	107	50.0		52.6	50.5	105	101	4	61-138	59-143	20	
1,2-Dibromoethane (EDB)	50.0	50.9	102	50.0		47.3	45.7	95	91	4	60-145	59-149	20	
Dichlorodifluoromethane	50.0	72.8	146	50.0		72.5	74.3	145	149	2	10-179	10-173	20	
1,1-Dichloroethane	50.0	48.3	97	50.0		49.0	46.2	98	92	6	62-137	59-143	20	
1,2-Dichloroethane	50.0	51.1	102	50.0		51.9	48.5	104	97	7	59-145	58-151	20	
1,1-Dichloroethene	50.0	54.2	108	50.0		53.4	50.6	107	101	5	46-156	32-169	20	
cis-1,2-Dichloroethene	50.0	47.3	95	50.0		47.1	43.9	94	88	7	64-131	61-138	20	
trans-1,2-Dichloroethene	50.0	48.2	96	50.0		48.8	46.5	98	93	5	55-138	51-145	20	
1,2-Dichloropropane	50.0	46.7	94	50.0		48.7	46.3	97	93	5	65-130	63-134	20	
cis-1,3-Dichloropropene	50.0	45.7	91	50.0		43.3	41.9	87	84	3	63-137	59-139	20	
trans-1,3-Dichloropropene	50.0	54.6	109	50.0		52.3	50.7	105	102	3	61-143	57-149	20	
Ethylbenzene	50.0	49.2	98	50.0		52.9	49.5	106	99	7	71-130	65-136	20	
2-Hexanone	50.0	47.0	94	50.0		41.4	38.1	83	76	8	25-156	21-165	20	
Isopropylbenzene (Cumene)	50.0	41.4	83	50.0		44.2	42.1	88	84	5	58-142	55-146	20	
Methylene chloride	50.0	55.4	111	50.0		53.5	50.9	107	102	5	39-172	33-167	20	
4-Methyl-2-pentanone (MIBK	50.0	48.8	98	50.0		43.5	41.3	87	83	5	43-159	39-167	20	
Methyl-tert-butyl ether	50.0	52.7	105	50.0		48.3	46.2	97	93	4	49-157	45-168	20	
Styrene	50.0	51.4	103	50.0		53.1	49.1	106	98	8	72-134	62-141	20	
1,1,2,2-Tetrachloroethane	50.0	44.8	90	50.0		43.1	40.8	86	82	5	40-157	35-164	20	
Tetrachloroethene	50.0	50.0	100	50.0		53.7	49.3	107	99	8	55-156	44-162	20	
Toluene	50.0	49.9	100	50.0		52.5	49.2	105	98	7	68-131	60-137	20	
1,1,1-Trichloroethane	50.0	51.9	104	50.0		53.8	49.3	108	99	9	63-133	58-139	20	
1,1,2-Trichloroethane	50.0	53.6	107	50.0		49.8	48.7	100	98	2	64-135	61-140	20	
Trichloroethene	50.0	47.2	94	50.0		49.1	47.6	98	95	3	68-134	58-145	20	
Trichlorofluoromethane	50.0	86.2	172	50.0		88.9	86.5	178	173	3	39-185	15-192	20	
Vinyl chloride	50.0	54.7	109	50.0		54.0	56.1	108	112	4	40-152	32-157	20	
m&p-Xylene	100.	100.	100	100.		108.	101.	108	101	7	68-134	62-139	20	
o-Xylene	50.0	48.6	97	50.0		51.3	47.7	103	95	7	67-131	61-137	20	

QC Protocol 3/28/2013 16:34:30

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 204874 **Project:** 20151823 **LCS:** 201074289 20-Mar-13 16:24

Method: Water GC/MS Volatile Organics **MS:** 201074290 20-Mar-13 18:22

Units: ug/L **MSD:** 201074291 20-Mar-13 18:41

Original for MS: Batch Sample 201074208

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu

41 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205025 **Project:** 20151823 **LCS:** 201075189 26-Mar-13 13:26

Method: Water GC Semivolatile Organics **MS:** 201075190 26-Mar-13 18:06

Units: mg/L **MSD:** 201075191 26-Mar-13 18:33

Original for MS: Batch Sample 201073758

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Diesel Range Organics (C10-2	0.400	0.189	47	0.400	0.110	0.243	0.320	33	53	28 *	10-115	10-122	20	

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 204881 **Project:** 20151823 **LCS:** 201074343 21-Mar-13 21:31

Method: Water GC Volatile Organics **MS:** 201075173 22-Mar-13 11:33

Units: mg/L **MSD:** 201075174 22-Mar-13 12:01

Original for MS: Batch Sample 201074283

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Gasoline Range Organics(C6-	0.500	0.480	96	0.500	0.0226	0.470	0.480	89	92	2	63-139	17-150	20	
1 compound(s) reported														

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 204907 **Project:** 20151823 **LCS:** 201074492 22-Mar-13 14:02

Method: Water ICP Metals **MS:** 201074493 22-Mar-13 14:09

Units: ug/L **MSD:** 201074494 22-Mar-13 14:13

Original for MS: Client Sample 201074284

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Antimony	1000	983.	98	1000		998.	945.	100	94	5	82-124	51-139	20	
Arsenic	1000	984.	98	1000	1.91	1030	960.	102	96	7	85-116	68-127	20	
Beryllium	1000	976.	98	1000	0.570	1030	951.	103	95	8	85-118	68-127	20	
Cadmium	1000	982.	98	1000		994.	925.	99	93	7	85-115	64-123	20	
Chromium	1000	982.	98	1000		1010	945.	101	95	7	85-115	63-126	20	
Copper	1000	980.	98	1000		1030	948.	103	95	8	85-116	70-128	20	
Lead	1000	998.	100	1000	1.33	994.	924.	99	92	7	85-117	57-129	20	
Nickel	1000	1001	100	1000	7.57	1010	947.	101	94	7	85-118	58-130	20	
Selenium	1000	993.	99	1000		1020	952.	102	95	7	85-117	66-127	20	
Silver	500.	495.	99	500.		506.	482.	101	96	5	78-122	34-151	20	
Thallium	1000	982.	98	1000	1.92	957.	896.	96	89	7	85-119	47-136	20	
Zinc	1000	977.	98	1000	18.3	1010	938.	99	92	7	85-118	54-134	20	

12 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

QC Protocol 3/28/2013 16:34:30

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Quality Control

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Batch: 204908 **Project:** 20151823 **LCS:** 201074496 21-Mar-13 14:09

Method: Water Mercury **MS:** 201074497 21-Mar-13 14:16

Units: ug/L **MSD:** 201074498 21-Mar-13 14:18

Original for MS: Client Sample 201074284

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Mercury	1.00	0.970	97	1.00		1.01	1.00	101	100	1	80-120	75-125	20	

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Blank Results

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Blank ID: 205024 BLANK 1 **Project:** 20151823

Lab ID: 201075184

Prep Level: Water **Batch:** 205024

Method: Water GC/MS Semivolatile Organics

Prepared: 21-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
83-32-9	Acenaphthene	1	ND		0.100	0.0520	25-Mar-13 11:42 JAM
208-96-8	Acenaphthylene	1	ND		0.100	0.0460	25-Mar-13 11:42 JAM
120-12-7	Anthracene	1	ND		0.100	0.0570	25-Mar-13 11:42 JAM
56-55-3	Benzo(a)anthracene	1	ND		0.100	0.0310	25-Mar-13 11:42 JAM
205-99-2	Benzo(b)fluoranthene	1	ND		0.100	0.0520	25-Mar-13 11:42 JAM
207-08-9	Benzo(k)fluoranthene	1	ND		0.100	0.0410	25-Mar-13 11:42 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		0.100	0.0200	25-Mar-13 11:42 JAM
50-32-8	Benzo(a)pyrene	1	ND		0.100	0.0410	25-Mar-13 11:42 JAM
218-01-9	Chrysene	1	ND		0.100	0.0250	25-Mar-13 11:42 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		0.100	0.0180	25-Mar-13 11:42 JAM
206-44-0	Fluoranthene	1	ND		0.100	0.0390	25-Mar-13 11:42 JAM
86-73-7	Fluorene	1	ND		0.100	0.0630	25-Mar-13 11:42 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		0.100	0.0180	25-Mar-13 11:42 JAM
91-57-6	2-Methylnaphthalene	1	ND		0.100	0.0780	25-Mar-13 11:42 JAM
91-20-3	Naphthalene	1	ND		0.100	0.0670	25-Mar-13 11:42 JAM
85-01-8	Phenanthrene	1	ND		0.100	0.0490	25-Mar-13 11:42 JAM
129-00-0	Pyrene	1	ND		0.100	0.0360	25-Mar-13 11:42 JAM

17 compound(s) reported

Protocol Blank 3/28/2013 16:34:31

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Blank Results

Blank ID: 205028 BLANK 1 **Project:** 20151823

Lab ID: 201075222

Prep Level: Water **Batch:** 205028

Method: Water GC/MS Semivolatile Organics

Prepared: 22-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
83-32-9	Acenaphthene	1	ND		10.0	0.596	25-Mar-13 13:05 JAM
208-96-8	Acenaphthylene	1	ND		10.0	0.595	25-Mar-13 13:05 JAM
120-12-7	Anthracene	1	ND		10.0	0.726	25-Mar-13 13:05 JAM
56-55-3	Benzo(a)anthracene	1	ND		10.0	0.560	25-Mar-13 13:05 JAM
205-99-2	Benzo(b)fluoranthene	1	ND		10.0	0.645	25-Mar-13 13:05 JAM
207-08-9	Benzo(k)fluoranthene	1	ND		10.0	0.755	25-Mar-13 13:05 JAM
65-85-0	Benzoic acid	1	ND		25.0	1.56	25-Mar-13 13:05 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		10.0	0.669	25-Mar-13 13:05 JAM
50-32-8	Benzo(a)pyrene	1	ND		10.0	0.645	25-Mar-13 13:05 JAM
100-51-6	Benzyl alcohol	1	ND		10.0	0.959	25-Mar-13 13:05 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND		10.0	0.541	25-Mar-13 13:05 JAM
85-68-7	Butylbenzylphthalate	1	ND		10.0	0.825	25-Mar-13 13:05 JAM
86-74-8	Carbazole	1	ND		10.0	0.932	25-Mar-13 13:05 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND		10.0	0.812	25-Mar-13 13:05 JAM
106-47-8	3&4-Chloroaniline	1	ND		10.0	1.22	25-Mar-13 13:05 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	0.789	25-Mar-13 13:05 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	0.804	25-Mar-13 13:05 JAM
91-58-7	2-Chloronaphthalene	1	ND		10.0	0.713	25-Mar-13 13:05 JAM
95-57-8	2-Chlorophenol	1	ND		10.0	0.716	25-Mar-13 13:05 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND		10.0	0.638	25-Mar-13 13:05 JAM
218-01-9	Chrysene	1	ND		10.0	0.539	25-Mar-13 13:05 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		10.0	0.587	25-Mar-13 13:05 JAM
132-64-9	Dibenzofuran	1	ND		10.0	0.576	25-Mar-13 13:05 JAM
95-50-1	1,2-Dichlorobenzene	1	ND		10.0	0.867	25-Mar-13 13:05 JAM
541-73-1	1,3-Dichlorobenzene	1	ND		10.0	0.832	25-Mar-13 13:05 JAM
106-46-7	1,4-Dichlorobenzene	1	ND		10.0	0.652	25-Mar-13 13:05 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND		10.0	0.781	25-Mar-13 13:05 JAM
120-83-2	2,4-Dichlorophenol	1	ND		10.0	0.783	25-Mar-13 13:05 JAM
84-66-2	Diethylphthalate	1	ND		10.0	0.607	25-Mar-13 13:05 JAM
105-67-9	2,4-Dimethylphenol	1	ND		10.0	0.781	25-Mar-13 13:05 JAM
131-11-3	Dimethylphthalate	1	ND		10.0	0.594	25-Mar-13 13:05 JAM
84-74-2	Di-n-butylphthalate	1	ND		10.0	0.651	25-Mar-13 13:05 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		10.0	1.02	25-Mar-13 13:05 JAM
51-28-5	2,4-Dinitrophenol	1	ND		10.0	0.470	25-Mar-13 13:05 JAM

Protocol Blank 3/28/2013 16:34:31

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Blank Results

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Blank ID: 205028 BLANK 1 **Project:** 20151823

Lab ID: 201075222

Prep Level: Water **Batch:** 205028

Method: Water GC/MS Semivolatile Organics

Prepared: 22-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	0.741	25-Mar-13 13:05 JAM
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	0.780	25-Mar-13 13:05 JAM
117-84-0	Di-n-octylphthalate	1	ND		10.0	0.781	25-Mar-13 13:05 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	0.930	25-Mar-13 13:05 JAM
206-44-0	Fluoranthene	1	ND		10.0	0.674	25-Mar-13 13:05 JAM
86-73-7	Fluorene	1	ND		10.0	0.629	25-Mar-13 13:05 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		10.0	0.759	25-Mar-13 13:05 JAM
118-74-1	Hexachlorobenzene	1	ND		10.0	0.681	25-Mar-13 13:05 JAM
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	0.347	25-Mar-13 13:05 JAM
67-72-1	Hexachloroethane	1	ND		10.0	0.987	25-Mar-13 13:05 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		10.0	0.574	25-Mar-13 13:05 JAM
78-59-1	Isophorone	1	ND		10.0	0.628	25-Mar-13 13:05 JAM
91-57-6	2-Methylnaphthalene	1	ND		10.0	0.822	25-Mar-13 13:05 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	0.749	25-Mar-13 13:05 JAM
	3&4-Methylphenol	1	ND		10.0	0.948	25-Mar-13 13:05 JAM
91-20-3	Naphthalene	1	ND		10.0	0.756	25-Mar-13 13:05 JAM
88-74-4	2-Nitroaniline	1	ND		10.0	0.859	25-Mar-13 13:05 JAM
99-09-2	3-Nitroaniline	1	ND		10.0	0.877	25-Mar-13 13:05 JAM
100-01-6	4-Nitroaniline	1	ND		10.0	0.972	25-Mar-13 13:05 JAM
98-95-3	Nitrobenzene	1	ND		10.0	1.06	25-Mar-13 13:05 JAM
88-75-5	2-Nitrophenol	1	ND		10.0	0.772	25-Mar-13 13:05 JAM
100-02-7	4-Nitrophenol	1	ND		10.0	0.761	25-Mar-13 13:05 JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	0.919	25-Mar-13 13:05 JAM
86-30-6	N-Nitrosodiphenylamine	1	ND		10.0	0.715	25-Mar-13 13:05 JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		10.0	0.732	25-Mar-13 13:05 JAM
87-86-5	Pentachlorophenol	1	ND		10.0	0.860	25-Mar-13 13:05 JAM
85-01-8	Phenanthrene	1	ND		10.0	0.674	25-Mar-13 13:05 JAM
108-95-2	Phenol	1	ND		10.0	0.773	25-Mar-13 13:05 JAM
129-00-0	Pyrene	1	ND		10.0	0.663	25-Mar-13 13:05 JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	0.797	25-Mar-13 13:05 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		10.0	0.751	25-Mar-13 13:05 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	0.737	25-Mar-13 13:05 JAM

66 compound(s) reported

Protocol Blank 3/28/2013 16:34:31

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Blank Results

Blank ID: 205187 BLANK 1 **Project:** 20151823

Lab ID: 201075870

Prep Level: Water **Batch:** 205187

Method: Water GC/MS Semivolatile Organics

Prepared: 26-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
83-32-9	Acenaphthene	1	ND		0.100	0.0520	27-Mar-13 10:57 JAM
208-96-8	Acenaphthylene	1	ND		0.100	0.0460	27-Mar-13 10:57 JAM
120-12-7	Anthracene	1	ND		0.100	0.0570	27-Mar-13 10:57 JAM
56-55-3	Benzo(a)anthracene	1	ND		0.100	0.0310	27-Mar-13 10:57 JAM
205-99-2	Benzo(b)fluoranthene	1	ND		0.100	0.0520	27-Mar-13 10:57 JAM
207-08-9	Benzo(k)fluoranthene	1	ND		0.100	0.0410	27-Mar-13 10:57 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		0.100	0.0200	27-Mar-13 10:57 JAM
50-32-8	Benzo(a)pyrene	1	ND		0.100	0.0410	27-Mar-13 10:57 JAM
86-74-8	Carbazole	1	ND		0.100	0.0290	27-Mar-13 10:57 JAM
218-01-9	Chrysene	1	ND		0.100	0.0250	27-Mar-13 10:57 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		0.100	0.0180	27-Mar-13 10:57 JAM
132-64-9	Dibenzofuran	1	ND		0.100	0.0640	27-Mar-13 10:57 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		0.500	0.114	27-Mar-13 10:57 JAM
206-44-0	Fluoranthene	1	ND		0.100	0.0390	27-Mar-13 10:57 JAM
86-73-7	Fluorene	1	ND		0.100	0.0630	27-Mar-13 10:57 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		0.100	0.0180	27-Mar-13 10:57 JAM
91-57-6	2-Methylnaphthalene	1	ND		0.100	0.0780	27-Mar-13 10:57 JAM
91-20-3	Naphthalene	1	ND		0.100	0.0670	27-Mar-13 10:57 JAM
85-01-8	Phenanthrene	1	ND		0.100	0.0490	27-Mar-13 10:57 JAM
129-00-0	Pyrene	1	ND		0.100	0.0360	27-Mar-13 10:57 JAM

20 compound(s) reported

Protocol Blank 3/28/2013 16:34:31

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 204874 BLANK 1 **Project:** 20151823

Lab ID: 201074288

Prep Level: Water **Batch:** 204874

Method: Water GC/MS Volatile Organics

Prepared: 20-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
67-64-1	Acetone	1	ND		10.0	8.88	20-Mar-13 16:05 RMP
71-43-2	Benzene	1	ND		5.00	0.518	20-Mar-13 16:05 RMP
75-27-4	Bromodichloromethane	1	ND		5.00	0.469	20-Mar-13 16:05 RMP
75-25-2	Bromoform	1	ND		5.00	0.920	20-Mar-13 16:05 RMP
74-83-9	Bromomethane	1	ND		5.00	0.855	20-Mar-13 16:05 RMP
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66	20-Mar-13 16:05 RMP
75-15-0	Carbon disulfide	1	ND		5.00	0.530	20-Mar-13 16:05 RMP
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528	20-Mar-13 16:05 RMP
108-90-7	Chlorobenzene	1	ND		5.00	0.662	20-Mar-13 16:05 RMP
75-00-3	Chloroethane	1	ND		5.00	1.12	20-Mar-13 16:05 RMP
67-66-3	Chloroform	1	ND		5.00	0.853	20-Mar-13 16:05 RMP
74-87-3	Chloromethane	1	ND		5.00	0.636	20-Mar-13 16:05 RMP
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34	20-Mar-13 16:05 RMP
124-48-1	Dibromochloromethane	1	ND		5.00	0.630	20-Mar-13 16:05 RMP
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477	20-Mar-13 16:05 RMP
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553	20-Mar-13 16:05 RMP
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565	20-Mar-13 16:05 RMP
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738	20-Mar-13 16:05 RMP
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557	20-Mar-13 16:05 RMP
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578	20-Mar-13 16:05 RMP
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738	20-Mar-13 16:05 RMP
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579	20-Mar-13 16:05 RMP
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454	20-Mar-13 16:05 RMP
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526	20-Mar-13 16:05 RMP
100-41-4	Ethylbenzene	1	ND		5.00	0.292	20-Mar-13 16:05 RMP
591-78-6	2-Hexanone	1	ND		10.0	1.28	20-Mar-13 16:05 RMP
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405	20-Mar-13 16:05 RMP
79-20-9	Methyl acetate	1	ND		10.0	2.36	20-Mar-13 16:05 RMP
75-09-2	Methylene chloride	1	ND		5.00	1.44	20-Mar-13 16:05 RMP
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10	20-Mar-13 16:05 RMP
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687	20-Mar-13 16:05 RMP
100-42-5	Styrene	1	ND		5.00	0.571	20-Mar-13 16:05 RMP
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12	20-Mar-13 16:05 RMP
127-18-4	Tetrachloroethene	1	ND		5.00	0.679	20-Mar-13 16:05 RMP

Protocol Blank 3/28/2013 16:34:31

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 204874 BLANK 1 **Project:** 20151823

Lab ID: 201074288

Prep Level: Water **Batch:** 204874

Method: Water GC/MS Volatile Organics

Prepared: 20-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
108-88-3	Toluene	1	ND		5.00	0.536	20-Mar-13 16:05 RMP
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554	20-Mar-13 16:05 RMP
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915	20-Mar-13 16:05 RMP
79-01-6	Trichloroethene	1	ND		5.00	0.654	20-Mar-13 16:05 RMP
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575	20-Mar-13 16:05 RMP
75-01-4	Vinyl chloride	1	ND		5.00	0.564	20-Mar-13 16:05 RMP
	m&p-Xylene	1	ND		5.00	0.937	20-Mar-13 16:05 RMP
95-47-6	o-Xylene	1	ND		5.00	0.649	20-Mar-13 16:05 RMP

42 compound(s) reported

Protocol Blank 3/28/2013 16:34:31

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205025 BLANK 1 **Project:** 20151823

Lab ID: 201075188

Prep Level: Water **Batch:** 205025

Method: Water GC Semivolatile Organics

Prepared: 22-Mar-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Diesel Range Organics (C10-28)	1	ND		0.150	0.0760	26-Mar-13 12:59 SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.150	0.0490	26-Mar-13 12:59 SNP1

2 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 204881 BLANK 1 **Project:** 20151823

Lab ID: 201074342

Prep Level: Water **Batch:** 204881

Method: Water GC Volatile Organics

Prepared: 21-Mar-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Gasoline Range Organics(C6-10)	1	0.0222	J	0.0500	0.0212	21-Mar-13 21:03 DHR1

1 compound(s) reported

Protocol Blank 3/28/2013 16:34:31

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 204907 BLANK 1 **Project:** 20151823

Lab ID: 201074491

Prep Level: Water **Batch:** 204907

Method: Water ICP Metals

Prepared: 21-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
7440-36-0	Antimony	1	ND		60.0	1.35	22-Mar-13 13:59 MHB1
7440-38-2	Arsenic	1	ND		10.0	1.04	22-Mar-13 13:59 MHB1
7440-41-7	Beryllium	1	ND		5.00	0.282	22-Mar-13 13:59 MHB1
7440-43-9	Cadmium	1	ND		5.00	0.361	22-Mar-13 13:59 MHB1
7440-47-3	Chromium	1	ND		10.0	2.00	22-Mar-13 13:59 MHB1
7440-50-8	Copper	1	ND		10.0	2.76	22-Mar-13 13:59 MHB1
7439-92-1	Lead	1	ND		5.00	1.15	22-Mar-13 13:59 MHB1
7440-02-0	Nickel	1	ND		40.0	0.253	22-Mar-13 13:59 MHB1
7782-49-2	Selenium	1	ND		35.0	14.3	22-Mar-13 13:59 MHB1
7440-22-4	Silver	1	ND		10.0	0.579	22-Mar-13 13:59 MHB1
7440-28-0	Thallium	1	ND		10.0	1.05	22-Mar-13 13:59 MHB1
7440-66-6	Zinc	1	ND		20.0	3.52	22-Mar-13 13:59 MHB1

12 compound(s) reported

Protocol Blank 3/28/2013 16:34:31

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 204908 BLANK 1 **Project:** 20151823

Lab ID: 201074495

Prep Level: Water **Batch:** 204908

Method: Water Mercury

Prepared: 21-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
7439-97-6	Mercury	1	ND		0.200	0.0340	21-Mar-13 14:07 MHB1

1 compound(s) reported

Protocol Blank 3/28/2013 16:34:31

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20151823

Value	Description
Q5	Insufficient sample was provided to perform matrix spike analyses on any sample in this analytical batch. Method performance for this analyte has been demonstrated by the laboratory control sample recovery.
J	This estimated value for the analyte is below the adjusted reporting limit but above the instrument reporting limit.
U	The analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
B	This analyte was detected in the method blank.
E	The sample concentration is above the linear calibrated range of the analysis.
LCS	Laboratory Control Sample.
MS(D)	Matrix Spike (Duplicate).
DUP	Sample Duplicate.
RPD	Relative Percent Difference.

Pace Analytical Services, In
1000 Riverbend Blvd. Suite F
St. Rose, LA 7008
(504) 469-033

Chains of Custody

Pace Analytical®
www.pacelabs.com

20151823 20-CTEH

20151823

Page: 1 of 1

1540301

Section A Required Client Information:

Company: CTEH	
Address: 5120 Northshore Dr. N. Little Rock, AR 72118	
Email To: CEtreberger@cteh.com	
Phone: 501-376-0394 Fax: 501-801-8501	
Requested Due Date/TAT: Standard	

Section B Required Project Information:

Report To: Chase Etreberger	
Copy To: James McCorkle 40432samples@cteh.com	
Purchase Order No.:	
Project Name: Delek@Magnolia, AR	
Project Number: 40432	

Attention:	
Company Name: SAME	
Address:	
Pace Quote Reference:	
Pace Project Manager:	
Pace Profile #: 5831 / L1	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: AR

Section D Required Client Information

Matrix Codes MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Grab/Composite START DATE	COLLECTED Grab/Composite START TIME	COLLECTED Composite End/Grab DATE	COLLECTED Composite End/Grab TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Y/N	Analysis Test: VOCs 8260	SVOCs 8270	TAL Metals 6010 8015	TPH-GRO 8015	TPH-DRO 8015	TPH-OA2 8015	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MAAR0317SW0001A	WT	G	3-17-13					10	3		1	6						X	X	X	X	X	X		
2	MAAR0318SW0002A	WT	G	3-18-13					10	3		1	6						X	X	X	X	X	X		
3	MAAR0318SW0003A	WT	G	3-19-13					10	3		1	6						X	X	X	X	X	X		
4	TB0001	WT	G						2				2						X							
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										

03.19.2013

03.19.13

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	3-19-2013	1635	FedEx	3-19-2013	1635	
	[signature] FedEx	3-20-13	1040	[signature]	3-20-13	1040	1-8 X X X

ORIGINAL

SAMPLER NAME AND SIGNATURE: [signature]
PRINT Name of SAMPLER: Chase Etreberger
SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 3-19-2013

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

20151823 20-CTEH

Pace Analytical

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Sample Cond

Project #: 20

Courier: ☐ Pace Courier ☐ Hired Courier ☑ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC] **Custody Seals intact:** ☑Yes ☐No

Therometer Used: ☐ Therm Fisher IR 5 ☑ Therm Fisher IR 6 ☐ Therm Fisher IR 7

Type of Ice: (Wet) Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 3-20-13

Temp must be measured from Temperature blank when present

			Comments:
Temperature Blank Present"?	☑Yes ☐No ☐N/A	1	
Chain of Custody Present:	☑Yes ☐No ☐N/A	2	
Chain of Custody Complete:	☑Yes ☐No ☐N/A	3	
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	4	
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	5	
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	6	
Sufficient Volume:	☑Yes ☐No ☐N/A	7	
Correct Containers Used:	☑Yes ☐No ☐N/A	8	
Filtered vol. Rec. for Diss. tests	☐Yes ☑No ☐N/A	9	
Sample Labels match COC:	☑Yes ☐No ☐N/A	10	
All containers received within manafacture's precautionary and/or expiration dates.	☑Yes ☐No ☐N/A	11	
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☑Yes ☐No ☐N/A	12	
All containers preservation checked found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	13	If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐Yes ☑No ☐N/A	14	
Trip Blank Present:	☑Yes ☐No	15	

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Corrected date collected on COC for sample #3, Per email KH 3/20

Changed TAL list of Metals to PP list - per email - KH 3/20

ALLC003rev.08, 15Feb2013 SCUR Form - mod

From: Chase Ertzberger <certzberger@cteh.com>
To: Karen Brown <Karen.Brown@pacelabs.com>
Date: 3/20/2013 11:43 AM
Subject: RE: CTEH - Magnolia, AR project
Attachments: Copy of CTEH-Magnolia.xls

Karen,
Would it be possible to get 3-4 additional kits worth of glassware by Saturday? 4 kits would give us enough glassware to collect 1 sample, once a day. I'd like to try to have a few extra kits on hand for additional sampling which may pop up. None of the glassware has to be separated into kits or anything, just boxes of glassware would be fine. If not, we could probably make do with 24-30 more HCL VOAs containers.

Also, I'd like to see if I could have the analysis for metals changed for the samples coming into your lab today. We filled out on the COC to have "TAL Metals (6010)" ran; instead, we would like to run "Priority Pollutant List (6010)". I've updated this on the COC I'm sending to you for future samples.

Thirdly, there is a sample that was written incorrectly on the COC for the samples coming into your lab today. The third sample I believe is listed as "MAAR0318SW003"; it should actually be "MAAR0319SW003". I've been told the containers are labeled correctly, it was just written incorrectly on the COC.

Thanks for all the help,

Chase Ertzberger
Environmental Scientist I
Center for Toxicology and Environmental Health
(501) 366-0394

From: Karen Brown [mailto:Karen.Brown@pacelabs.com]
Sent: Wednesday, March 20, 2013 10:14 AM
To: Chase Ertzberger
Cc: Henry Pelitire; John Williams; Toby wise
Subject: CTEH - Magnolia, AR project
Importance: High

Hi, Chase !
I will get at least 4 water kits out today for tomorrow delivery.....then, we can re-evaluate the container order need on Friday.

Attached please find a SAMPLE KEY, you may find helpful.....notice, that, if possible, I would prefer to have 5 liters of sample for 82870/8270-SIM/DRO-ORO.....if not possible, please try to send 4 liters.

I have also begun a Chain of Custody.....if you will complete it and return to me, I will print on 3-part paper and include with the bottle order.....

Thanks!!

Karen H. Brown
Customer Service Manager
Pace Analytical Services, Inc.
New Orleans Laboratory
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

April 03, 2013

James McCormack
CTEH
5120 North Shore Drive
North Little Rock, AR 72118

RE: Project 20151993
Project ID: Magnolia, AR

Dear James McCormack:

Enclosed are the analytical results for sample(s) received by the laboratory on March 22, 2013. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Karen Brown
karen.brown@pacelabs.com

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

Laboratory Certifications

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20151993

Client: CTEH

Project ID: Magnolia, AR

Washington Department of Ecology C2078
Oregon Environmental Laboratory Accreditation - LA200001
U.S. Dept. of Agriculture Foreign Soil Import P330-10-00119
Pennsylvania Dept. of Env Protection (NELAC) 68-04202
Texas Commission on Env. Quality (NELAC) T104704405-09-TX
Kansas Department of Health and Environment (NELAC) E-10266
Florida Department of Health (NELAC) E87595
Oklahoma Department of Environmental Quality - 2010-139
Illinois Environmental Protection Agency - 0025721
California Env. Lab Accreditation Program Branch - 11277CA
Louisiana Dept. of Environmental Quality (NELAC/LELAP) 02006

4/3/2013 14:36:43

Sample Cross Reference

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20151993

Client: CTEH

Project ID: Magnolia, AR

Client Sample ID	Lab ID	Matrix	Collection Date/Time	Received Date/Time
MAAR0320SW005A	201075516	Water	20-Mar-13 17:45	22-Mar-13 10:20
TB003	201075517	Water	20-Mar-13 00:00	22-Mar-13 10:20

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20151993

Narrative detail for project management:

An arbitrary collection date of 3/20/2013 was used to log in sample TB003.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20151993

Sample Receipt Condition:

All samples were received in accordance with EPA protocol.

Holding Times:

All holding times were met.

Blanks:

All blank results were below reporting limits.

Laboratory Control Samples:

All LCS recoveries were within QC limits.

Matrix Spikes and Duplicates:

MS or MSD recoveries outside of QC limits are qualified in the Report of Quality Control section.

Surrogates:

All surrogate recoveries were within QC limits.

QC Cross Reference

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20151993

Analytical Method	Batch	Sample used for QC
EPA 8015/8021	205129	Project sample MAAR0320SW005A
EPA 8015/8021	205129	Client sample MAAR0321SW006A from project 20151994
EPA 6010	205105	Batch sample from another client
EPA 7470	205107	Batch sample from another client
EPA 8270	205263	Batch sample from another client
EPA 8260	205121	Batch sample from another client

For the sample used as the original for the DUP or MS/MSD for the batch:

Project sample means a sample from this project was used.
Client sample means a sample from the same client but in a different project was used.
Batch sample means a sample from a different client was used.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0320SW005A
Project: 20151993
Project ID: Magnolia, AR
Site: None
Lab ID: 201075516
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205263
Method: EPA 8270
GCMS SVOAs SIM Water
Collected: 20-Mar-13
Received: 22-Mar-13
Prepared: 27-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
83-32-9	Acenaphthene	1	ND		0.100	0.0520		28-Mar-13 16:44 JAM
208-96-8	Acenaphthylene	1	ND		0.100	0.0460		28-Mar-13 16:44 JAM
120-12-7	Anthracene	1	ND		0.100	0.0570		28-Mar-13 16:44 JAM
56-55-3	Benzo(a)anthracene	1	ND		0.100	0.0310		28-Mar-13 16:44 JAM
205-99-2	Benzo(b)fluoranthene	1	ND		0.100	0.0520		28-Mar-13 16:44 JAM
207-08-9	Benzo(k)fluoranthene	1	ND		0.100	0.0410		28-Mar-13 16:44 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		0.100	0.0200		28-Mar-13 16:44 JAM
50-32-8	Benzo(a)pyrene	1	ND		0.100	0.0410		28-Mar-13 16:44 JAM
218-01-9	Chrysene	1	ND		0.100	0.0250		28-Mar-13 16:44 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		0.100	0.0180		28-Mar-13 16:44 JAM
206-44-0	Fluoranthene	1	ND		0.100	0.0390		28-Mar-13 16:44 JAM
86-73-7	Fluorene	1	0.120		0.100	0.0630		28-Mar-13 16:44 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		0.100	0.0180		28-Mar-13 16:44 JAM
91-57-6	2-Methylnaphthalene	1	ND		0.100	0.0780		28-Mar-13 16:44 JAM
91-20-3	Naphthalene	1	0.120		0.100	0.0670		28-Mar-13 16:44 JAM
85-01-8	Phenanthrene	1	0.100		0.100	0.0490		28-Mar-13 16:44 JAM
129-00-0	Pyrene	1	ND		0.100	0.0360		28-Mar-13 16:44 JAM

17 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
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(504) 469-0333

Client: CTEH

Client ID: MAAR0320SW005A
Project: 20151993
Project ID: Magnolia, AR
Site: None
Lab ID: 201075516
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205284
Method: EPA 8270
GCMS SVOAs Water
Collected: 20-Mar-13
Received: 22-Mar-13
Prepared: 27-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
65-85-0	Benzoic acid	1	ND		25.0	1.56		01-Apr-13 17:31	JAM
100-51-6	Benzyl alcohol	1	ND		10.0	0.959		01-Apr-13 17:31	JAM
101-55-3	4-Bromophenylphenyl ether	1	ND		10.0	0.541		01-Apr-13 17:31	JAM
85-68-7	Butylbenzylphthalate	1	ND		10.0	0.825		01-Apr-13 17:31	JAM
86-74-8	Carbazole	1	ND		10.0	0.932		01-Apr-13 17:31	JAM
59-50-7	4-Chloro-3-methylphenol	1	ND		10.0	0.812		01-Apr-13 17:31	JAM
106-47-8	3&4-Chloroaniline	1	ND		10.0	1.22		01-Apr-13 17:31	JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	0.789		01-Apr-13 17:31	JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	0.804		01-Apr-13 17:31	JAM
91-58-7	2-Chloronaphthalene	1	ND		10.0	0.713		01-Apr-13 17:31	JAM
95-57-8	2-Chlorophenol	1	ND		10.0	0.716		01-Apr-13 17:31	JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND		10.0	0.638		01-Apr-13 17:31	JAM
132-64-9	Dibenzofuran	1	ND		10.0	0.576		01-Apr-13 17:31	JAM
95-50-1	1,2-Dichlorobenzene	1	ND		10.0	0.867		01-Apr-13 17:31	JAM
541-73-1	1,3-Dichlorobenzene	1	ND		10.0	0.832		01-Apr-13 17:31	JAM
106-46-7	1,4-Dichlorobenzene	1	ND		10.0	0.652		01-Apr-13 17:31	JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND		10.0	0.781		01-Apr-13 17:31	JAM
120-83-2	2,4-Dichlorophenol	1	ND		10.0	0.783		01-Apr-13 17:31	JAM
84-66-2	Diethylphthalate	1	ND		10.0	0.607		01-Apr-13 17:31	JAM
105-67-9	2,4-Dimethylphenol	1	ND		10.0	0.781		01-Apr-13 17:31	JAM
131-11-3	Dimethylphthalate	1	ND		10.0	0.594		01-Apr-13 17:31	JAM
84-74-2	Di-n-butylphthalate	1	ND		10.0	0.651		01-Apr-13 17:31	JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		10.0	1.02		01-Apr-13 17:31	JAM
51-28-5	2,4-Dinitrophenol	1	ND		10.0	0.470		01-Apr-13 17:31	JAM
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	0.741		01-Apr-13 17:31	JAM
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	0.780		01-Apr-13 17:31	JAM
117-84-0	Di-n-octylphthalate	1	ND		10.0	0.781		01-Apr-13 17:31	JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	0.930		01-Apr-13 17:31	JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		10.0	0.759		01-Apr-13 17:31	JAM
118-74-1	Hexachlorobenzene	1	ND		10.0	0.681		01-Apr-13 17:31	JAM
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	0.347		01-Apr-13 17:31	JAM
67-72-1	Hexachloroethane	1	ND		10.0	0.987		01-Apr-13 17:31	JAM
78-59-1	Isophorone	1	ND		10.0	0.628		01-Apr-13 17:31	JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	0.749		01-Apr-13 17:31	JAM

Protocol 4/3/2013 14:38:05

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0320SW005A
Project: 20151993
Project ID: Magnolia, AR
Site: None
Lab ID: 201075516
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205284
Method: EPA 8270
GCMS SVOAs Water
Collected: 20-Mar-13
Received: 22-Mar-13
Prepared: 27-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
	3&4-Methylphenol	1	ND		10.0	0.948		01-Apr-13 17:31 JAM
88-74-4	2-Nitroaniline	1	ND		10.0	0.859		01-Apr-13 17:31 JAM
99-09-2	3-Nitroaniline	1	ND		10.0	0.877		01-Apr-13 17:31 JAM
100-01-6	4-Nitroaniline	1	ND		10.0	0.972		01-Apr-13 17:31 JAM
98-95-3	Nitrobenzene	1	ND		10.0	1.06		01-Apr-13 17:31 JAM
88-75-5	2-Nitrophenol	1	ND		10.0	0.772		01-Apr-13 17:31 JAM
100-02-7	4-Nitrophenol	1	ND		10.0	0.761		01-Apr-13 17:31 JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	0.919		01-Apr-13 17:31 JAM
86-30-6	N-Nitrosodiphenylamine	1	ND		10.0	0.715		01-Apr-13 17:31 JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		10.0	0.732		01-Apr-13 17:31 JAM
87-86-5	Pentachlorophenol	1	ND		10.0	0.860		01-Apr-13 17:31 JAM
108-95-2	Phenol	1	ND		10.0	0.773		01-Apr-13 17:31 JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	0.797		01-Apr-13 17:31 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		10.0	0.751		01-Apr-13 17:31 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	0.737		01-Apr-13 17:31 JAM

49 compound(s) reported

Protocol 4/3/2013 14:38:05

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Pace Analytical Services, Inc.
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St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0320SW005A
Project: 20151993
Project ID: Magnolia, AR
Site: None
Lab ID: 201075516
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205121
Method: EPA 8260
GCMS VOAs Water
Collected: 20-Mar-13
Received: 22-Mar-13
Prepared: 25-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	8.88		25-Mar-13 15:39 MHM
71-43-2	Benzene	1	ND		5.00	0.518		25-Mar-13 15:39 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		25-Mar-13 15:39 MHM
75-25-2	Bromoform	1	ND		5.00	0.920		25-Mar-13 15:39 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855		25-Mar-13 15:39 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		25-Mar-13 15:39 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530		25-Mar-13 15:39 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		25-Mar-13 15:39 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662		25-Mar-13 15:39 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12		25-Mar-13 15:39 MHM
67-66-3	Chloroform	1	ND		5.00	0.853		25-Mar-13 15:39 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636		25-Mar-13 15:39 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		25-Mar-13 15:39 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		25-Mar-13 15:39 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		25-Mar-13 15:39 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		25-Mar-13 15:39 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565		25-Mar-13 15:39 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		25-Mar-13 15:39 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		25-Mar-13 15:39 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		25-Mar-13 15:39 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		25-Mar-13 15:39 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		25-Mar-13 15:39 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		25-Mar-13 15:39 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		25-Mar-13 15:39 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292		25-Mar-13 15:39 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28		25-Mar-13 15:39 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405		25-Mar-13 15:39 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36		25-Mar-13 15:39 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44		25-Mar-13 15:39 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		25-Mar-13 15:39 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		25-Mar-13 15:39 MHM
100-42-5	Styrene	1	ND		5.00	0.571		25-Mar-13 15:39 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		25-Mar-13 15:39 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		25-Mar-13 15:39 MHM

Protocol 4/3/2013 14:38:05

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Pace Analytical™

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0320SW005A
Project: 20151993
Project ID: Magnolia, AR
Site: None
Lab ID: 201075516
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205121
Method: EPA 8260
GCMS VOAs Water
Collected: 20-Mar-13
Received: 22-Mar-13
Prepared: 25-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	0.690	J	5.00	0.536		25-Mar-13 15:39 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		25-Mar-13 15:39 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915		25-Mar-13 15:39 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654		25-Mar-13 15:39 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575		25-Mar-13 15:39 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564		25-Mar-13 15:39 MHM
	m&p-Xylene	1	ND		5.00	0.937		25-Mar-13 15:39 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649		25-Mar-13 15:39 MHM

42 compound(s) reported

Protocol 4/3/2013 14:38:05

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Client: CTEH

Client ID: MAAR0320SW005A
Project: 20151993
Project ID: Magnolia, AR
Site: None
Lab ID: 201075516
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205182
Method: EPA 8015 Mod Ext
8015 TPH Extractables Water
Collected: 20-Mar-13
Received: 22-Mar-13
Prepared: 26-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Diesel Range Organics (C10-28)	1	ND		0.250	0.0760		26-Mar-13 16:50 SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.500	0.0490		26-Mar-13 16:50 SNP1

2 compound(s) reported

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(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0320SW005A
Project: 20151993
Project ID: Magnolia, AR
Site: None
Lab ID: 201075516
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205129
Method: EPA 8015/8021
8015/8021 Water
Collected: 20-Mar-13
Received: 22-Mar-13
Prepared: 25-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Gasoline Range Organics(C6-10)	1	0.0302	J	0.0500	0.0212		25-Mar-13 15:55 DHR1

1 compound(s) reported

Protocol 4/3/2013 14:38:05

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Pace Analytical Services, Inc.
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(504) 469-0333

Client: CTEH

Client ID: MAAR0320SW005A
Project ID: Magnolia, AR
Lab ID: 201075516
Description: None
Method: EPA 6010
Metals, ICP, Water

Project: 20151993
Site: None
Matrix: Water **% Moisture:** n/a
Prep Level: Water **Batch:** 205105

Collected: 20-Mar-13 **Received:** 22-Mar-13
Prepared: 25-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
7440-36-0	Antimony	1	ND		60.0	1.35		26-Mar-13 15:27	EJH
7440-38-2	Arsenic	1	1.62	J	10.0	1.04		26-Mar-13 15:27	EJH
7440-41-7	Beryllium	1	0.408	J	5.00	0.282		26-Mar-13 15:27	EJH
7440-43-9	Cadmium	1	ND		5.00	0.361		26-Mar-13 15:27	EJH
7440-47-3	Chromium	1	ND		10.0	2.00		26-Mar-13 15:27	EJH
7440-50-8	Copper	1	ND		10.0	2.76		26-Mar-13 15:27	EJH
7439-92-1	Lead	1	2.79	J	5.00	1.15		26-Mar-13 15:27	EJH
7440-02-0	Nickel	1	6.01	J	40.0	0.253		26-Mar-13 15:27	EJH
7782-49-2	Selenium	1	ND		35.0	14.3		26-Mar-13 15:27	EJH
7440-22-4	Silver	1	ND		10.0	0.579		26-Mar-13 15:27	EJH
7440-28-0	Thallium	1	ND		10.0	1.05		26-Mar-13 15:27	EJH
7440-66-6	Zinc	1	13.7	J	20.0	3.52		26-Mar-13 15:27	EJH

12 compound(s) reported

Protocol 4/3/2013 14:38:05

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Pace Analytical Services, Inc.
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St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0320SW005A
Project: 20151993
Project ID: Magnolia, AR
Site: None
Lab ID: 201075516
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205107
Method: EPA 7470
Mercury Water
Collected: 20-Mar-13
Received: 22-Mar-13
Prepared: 25-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.200	0.0340		26-Mar-13 09:06 MHB1

1 compound(s) reported

Protocol 4/3/2013 14:38:05

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: TB003
Project: 20151993
Project ID: Magnolia, AR
Site: None
Lab ID: 201075517
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205121
Method: EPA 8260
GCMS VOAs Water
Collected: 20-Mar-13
Received: 22-Mar-13
Prepared: 25-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	8.88		25-Mar-13 15:59 MHM
71-43-2	Benzene	1	ND		5.00	0.518		25-Mar-13 15:59 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		25-Mar-13 15:59 MHM
75-25-2	Bromoform	1	ND		5.00	0.920		25-Mar-13 15:59 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855		25-Mar-13 15:59 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		25-Mar-13 15:59 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530		25-Mar-13 15:59 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		25-Mar-13 15:59 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662		25-Mar-13 15:59 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12		25-Mar-13 15:59 MHM
67-66-3	Chloroform	1	ND		5.00	0.853		25-Mar-13 15:59 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636		25-Mar-13 15:59 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		25-Mar-13 15:59 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		25-Mar-13 15:59 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		25-Mar-13 15:59 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		25-Mar-13 15:59 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565		25-Mar-13 15:59 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		25-Mar-13 15:59 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		25-Mar-13 15:59 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		25-Mar-13 15:59 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		25-Mar-13 15:59 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		25-Mar-13 15:59 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		25-Mar-13 15:59 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		25-Mar-13 15:59 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292		25-Mar-13 15:59 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28		25-Mar-13 15:59 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405		25-Mar-13 15:59 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36		25-Mar-13 15:59 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44		25-Mar-13 15:59 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		25-Mar-13 15:59 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		25-Mar-13 15:59 MHM
100-42-5	Styrene	1	ND		5.00	0.571		25-Mar-13 15:59 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		25-Mar-13 15:59 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		25-Mar-13 15:59 MHM

Protocol 4/3/2013 14:38:05

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit
Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Sample Results

Client: CTEH

Client ID: TB003
Project ID: Magnolia, AR
Lab ID: 201075517
Description: None
Method: EPA 8260
GCMS VOAs Water

Project: 20151993
Site: None
Matrix: Water
% Moisture: n/a
Prep Level: Water
Batch: 205121
Collected: 20-Mar-13
Received: 22-Mar-13
Prepared: 25-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	0.580	J	5.00	0.536		25-Mar-13 15:59 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		25-Mar-13 15:59 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915		25-Mar-13 15:59 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654		25-Mar-13 15:59 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575		25-Mar-13 15:59 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564		25-Mar-13 15:59 MHM
	m&p-Xylene	1	ND		5.00	0.937		25-Mar-13 15:59 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649		25-Mar-13 15:59 MHM

42 compound(s) reported

Protocol 4/3/2013 14:38:05

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Surrogate Recovery

Batch: 205263 **Project:** 20151993

Method: Water GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201076334	205263 BLANK 1		67	63						
201076335	205263 LCS 1		70	64						
201076336	540-130321-SB6 MS 1		70	69						
201076337	540-130321-SB6 MSD 1		60	64						
201075516	MAAR0320SW005A		74	86						
	QC limits:		12-110	25-113						

Sur 1: 2-Fluorobiphenyl (S)
Sur 2: Terphenyl-d14 (S)

Surrogates 4/3/2013 14:38:07

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205284 **Project:** 20151993

Method: Water GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201076403	205284 BLANK 1		69	74	62	76	60	82		
201076404	205284 LCS 1		69	71	64	63	65	80		
201075516	MAAR0320SW005A		57	58	48	60	49	59		
QC limits:			25-145	34-117	10-118	33-120	15-134	24-133		

Sur 1: 2,4,6-Tribromophenol (S)
Sur 2: 2-Fluorobiphenyl (S)
Sur 3: 2-Fluorophenol (S)
Sur 4: Nitrobenzene-d5 (S)
Sur 5: Phenol-d5 (S)
Sur 6: Terphenyl-d14 (S)

Surrogates 4/3/2013 14:38:07

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205121 **Project:** 20151993

Method: Water GC/MS Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201075645	205121 BLANK 1		82	93	85					
201076001	205121 BLANK 2		78	89	81					
201075646	205121 LCS 1		86	89	88					
201076002	205121 LCS 2		83	92	87					
201075647	540-130321-SB6 MS 1		83	90	89					
201075648	540-130321-SB6 MSD 1		81	84	87					
201075516	MAAR0320SW005A		82	87	83					
201075517	TB003		82	87	81					
	QC limits:		68-124	72-126	79-119					

Sur 1: 4-Bromofluorobenzene (S)
Sur 2: Dibromofluoromethane (S)
Sur 3: Toluene-d8 (S)

Surrogates 4/3/2013 14:38:07

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205182 **Project:** 20151993

Method: Water GC Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201075860	205182 BLANK 1		80	86						
201075861	205182 LCS 1		73	70						
201075516	MAAR0320SW005A		25	50						
	QC limits:		16-137	10-121						

Sur 1: n-Pentacosane (S)
Sur 2: o-Terphenyl (S)

Surrogates 4/3/2013 14:38:07

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205129 **Project:** 20151993

Method: Water GC Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201075677	205129 BLANK 1		104							
201075934	205129 BLANK 2		103							
201075966	205129 BLANK 3		103							
201075678	205129 LCS 1		106							
201075935	205129 LCS 2		110							
201075967	205129 LCS 3		104							
201075516	MAAR0320SW005A		103							
201075968	MAAR0320SW005A MS 1		102							
201075969	MAAR0320SW005A MSD 1		107							
201075970	MAAR0321SW006A MS 2		107							
201075971	MAAR0321SW006A MSD 2		104							
	QC limits:		60-129							

Sur 1: 4-Bromofluorobenzene (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Batch: 205263 **Project:** 20151993 **LCS:** 201076335 28-Mar-13 16:01

Method: Water GC/MS Semivolatile Organics **MS:** 201076336 28-Mar-13 22:29

Units: ug/L **MSD:** 201076337 28-Mar-13 22:51

Original for MS: Batch Sample 201075437

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acenaphthene	2.00	1.55	78	2.00		1.56	1.36	78	68	14	39-115	10-131	20	
Acenaphthylene	2.00	1.13	57	2.00		1.34	1.12	67	56	18	30-115	10-131	20	
Anthracene	2.00	1.59	80	2.00		1.76	1.49	88	75	17	34-115	10-139	20	
Benzo(a)anthracene	2.00	1.31	66	2.00		1.56	1.41	78	71	10	33-115	12-115	20	
Benzo(b)fluoranthene	2.00	1.48	74	2.00		1.40	1.29	70	65	8	30-115	10-119	20	
Benzo(k)fluoranthene	2.00	1.18	59	2.00		1.44	1.34	72	67	7	31-115	10-122	20	
Benzo(g,h,i)perylene	2.00	1.44	72	2.00		1.44	1.34	72	67	7	27-115	10-123	20	
Benzo(a)pyrene	2.00	1.16	58	2.00		1.45	1.33	73	67	9	28-115	10-115	20	
Chrysene	2.00	1.15	58	2.00		1.43	1.32	72	66	8	36-115	10-116	20	
Dibenz(a,h)anthracene	2.00	1.43	72	2.00		1.54	1.44	77	72	7	23-115	10-128	20	
Fluoranthene	2.00	1.58	79	2.00		1.67	1.44	84	72	15	39-115	10-136	20	
Fluorene	2.00	1.55	78	2.00		1.63	1.38	82	69	17	38-115	10-129	20	
Indeno(1,2,3-cd)pyrene	2.00	1.43	72	2.00		1.52	1.41	76	71	8	28-115	10-124	20	
2-Methylnaphthalene	2.00	1.52	76	2.00		1.58	1.31	79	66	19	31-115	11-125	20	
Naphthalene	2.00	1.60	80	2.00		1.55	1.36	76	66	13	40-115	14-124	20	
Phenanthrene	2.00	1.61	81	2.00		1.68	1.41	84	71	17	38-115	10-130	20	
Pyrene	2.00	1.60	80	2.00		1.65	1.41	83	71	16	33-115	10-120	20	

17 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205284 **Project:** 20151993 **LCS:** 201076404 01-Apr-13 11:31

Method: Water GC/MS Semivolatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Benzoic acid	50.0	23.2	47								10-130			Q5
Benzyl alcohol	50.0	31.2	62								44-120			Q5
4-Bromophenylphenyl ether	50.0	33.5	67								49-120			Q5
Butylbenzylphthalate	50.0	32.5	65								46-120			Q5
Carbazole	50.0	36.5	73								51-127			Q5
4-Chloro-3-methylphenol	50.0	32.4	65								43-115			Q5
3&4-Chloroaniline	50.0	25.5	51								10-130			Q5
bis(2-Chloroethoxy)methane	50.0	30.8	62								43-115			Q5
bis(2-Chloroethyl) ether	50.0	34.0	68								47-115			Q5
2-Chloronaphthalene	50.0	34.4	69								52-115			Q5
2-Chlorophenol	50.0	35.9	72								48-115			Q5
4-Chlorophenylphenyl ether	50.0	35.3	71								52-116			Q5
Dibenzofuran	50.0	35.5	71								53-115			Q5
1,2-Dichlorobenzene	50.0	34.9	70								42-115			Q5
1,3-Dichlorobenzene	50.0	33.3	67								40-115			Q5
1,4-Dichlorobenzene	50.0	34.0	68								41-115			Q5
3,3'-Dichlorobenzidine	50.0	37.0	74								16-142			Q5
2,4-Dichlorophenol	50.0	32.9	66								45-115			Q5
Diethylphthalate	50.0	33.4	67								49-120			Q5
2,4-Dimethylphenol	50.0	32.5	65								23-116			Q5
Dimethylphthalate	50.0	32.5	65								52-115			Q5
Di-n-butylphthalate	50.0	31.3	63								50-117			Q5
4,6-Dinitro-2-methylphenol	50.0	33.2	66								44-122			Q5
2,4-Dinitrophenol	50.0	24.7	49								16-134			Q5
2,4-Dinitrotoluene	50.0	34.6	69								50-118			Q5
2,6-Dinitrotoluene	50.0	34.9	70								55-115			Q5
Di-n-octylphthalate	50.0	32.8	66								40-129			Q5
bis(2-Ethylhexyl)phthalate	50.0	34.5	69								46-124			Q5
Hexachloro-1,3-butadiene	50.0	29.2	58								32-115			Q5
Hexachlorobenzene	50.0	34.6	69								53-115			Q5
Hexachlorocyclopentadiene	50.0	26.8	54								10-115			Q5
Hexachloroethane	50.0	31.2	63								36-115			Q5
Isophorone	50.0	31.6	63								45-115			Q5
2-Methylphenol (o-Cresol)	50.0	35.9	72								46-115			Q5
3&4-Methylphenol	50.0	33.4	67								46-115			Q5
2-Nitroaniline	50.0	34.4	69								48-121			Q5
3-Nitroaniline	50.0	34.5	69								38-125			Q5
4-Nitroaniline	50.0	35.2	70								37-132			Q5
Nitrobenzene	50.0	32.0	64								44-118			Q5
2-Nitrophenol	50.0	34.3	69								45-115			Q5
4-Nitrophenol	50.0	24.5	49								29-134			Q5

QC Protocol 4/3/2013 14:38:08

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205284 **Project:** 20151993 **LCS:** 201076404 01-Apr-13 11:31

Method: Water GC/MS Semivolatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
N-Nitroso-di-n-propylamine	50.0	31.8	64								45-119			Q5
N-Nitrosodiphenylamine	50.0	40.9	82								42-134			Q5
2,2'-Oxybis(1-chloropropane)	50.0	36.0	72								40-120			Q5
Pentachlorophenol	50.0	30.1	60								34-124			Q5
Phenol	50.0	34.2	68								44-115			Q5
1,2,4-Trichlorobenzene	50.0	31.6	63								40-115			Q5
2,4,5-Trichlorophenol	50.0	33.4	67								49-115			Q5
2,4,6-Trichlorophenol	50.0	36.2	73								48-115			Q5

49 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205121 **Project:** 20151993 **LCS:** 201075646 25-Mar-13 10:27

Method: Water GC/MS Volatile Organics **MS:** 201075647 25-Mar-13 18:21

Units: ug/L **MSD:** 201075648 25-Mar-13 18:42

Original for MS: Batch Sample 201075437

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acetone	50.0	52.7	105	2500		2640	2730	106	109	3	10-195	10-204	20	D6
Benzene	50.0	48.4	97	2500		2310	2390	92	96	4	66-132	58-140	20	D6
Bromodichloromethane	50.0	49.9	100	2500		2290	2430	92	97	6	67-132	63-137	20	D6
Bromoform	50.0	56.1	112	2500		2450	2600	98	104	6	53-152	49-156	20	D6
Bromomethane	50.0	52.8	106	2500		2360	2170	94	87	8	47-150	43-152	20	D6
2-Butanone (MEK)	50.0	59.3	119	2500		2620	2760	105	110	5	16-167	11-180	20	D6
Carbon disulfide	50.0	56.9	114	2500		2770	2710	111	108	2	18-173	10-184	20	D6
Carbon tetrachloride	50.0	47.8	96	2500		2260	2330	90	93	3	55-143	50-148	20	D6
Chlorobenzene	50.0	52.4	105	2500		2250	2440	90	98	8	71-131	69-136	20	D6
Chloroethane	50.0	53.2	106	2500		2170	1940	87	78	11	31-192	20-193	20	D6
Chloroform	50.0	51.0	102	2500		2340	2410	93	97	3	69-134	65-140	20	D6
Chloromethane	50.0	54.1	108	2500		2030	1950	81	78	4	29-157	27-160	20	D6
1,2-Dibromo-3-chloropropane	50.0	50.5	101	2500		2320	2510	93	100	8	37-151	34-159	20	D6
Dibromochloromethane	50.0	55.3	111	2500		2410	2620	96	105	9	61-138	59-143	20	D6
1,2-Dibromoethane (EDB)	50.0	53.7	107	2500		2430	2590	97	104	7	60-145	59-149	20	D6
Dichlorodifluoromethane	50.0	47.2	95	2500		1200	1130	48	45	6	10-179	10-173	20	D6
1,1-Dichloroethane	50.0	48.8	98	2500	5470	7270	7270	72	72	0	62-137	59-143	20	D6
1,2-Dichloroethane	50.0	49.7	99	2500		2320	2420	93	97	4	59-145	58-151	20	D6
1,1-Dichloroethene	50.0	55.8	112	2500	156.	2840	2770	107	105	3	46-156	32-169	20	D6
cis-1,2-Dichloroethene	50.0	52.9	106	2500	47.0	2520	2590	99	102	3	64-131	61-138	20	D6
trans-1,2-Dichloroethene	50.0	53.3	107	2500		2560	2580	103	103	1	55-138	51-145	20	D6
1,2-Dichloropropane	50.0	50.7	101	2500		2370	2560	95	102	8	65-130	63-134	20	D6
cis-1,3-Dichloropropene	50.0	47.1	94	2500		2220	2380	89	95	7	63-137	59-139	20	D6
trans-1,3-Dichloropropene	50.0	53.2	106	2500		2400	2490	96	100	4	61-143	57-149	20	D6
Ethylbenzene	50.0	48.7	97	2500		2150	2260	86	90	5	71-130	65-136	20	D6
2-Hexanone	50.0	55.1	110	2500		2320	2480	93	99	7	25-156	21-165	20	D6
Isopropylbenzene (Cumene)	50.0	47.2	95	2500		2070	2170	83	87	5	58-142	55-146	20	D6
Methylene chloride	50.0	58.1	116	2500		2860	2930	114	117	2	39-172	33-167	20	D6
4-Methyl-2-pentanone (MIBK	50.0	58.5	117	2500		2590	2680	104	107	3	43-159	39-167	20	D6
Methyl-tert-butyl ether	50.0	54.7	109	2500		2550	2600	102	104	2	49-157	45-168	20	D6
Styrene	50.0	50.3	101	2500		2190	2350	88	94	7	72-134	62-141	20	D6
1,1,2,2-Tetrachloroethane	50.0	51.8	104	2500		2250	2410	90	97	7	40-157	35-164	20	D6
Tetrachloroethene	50.0	51.2	102	2500		2190	2320	88	93	6	55-156	44-162	20	D6
Toluene	50.0	47.8	96	2500		2190	2340	88	94	7	68-131	60-137	20	D6
1,1,1-Trichloroethane	50.0	49.9	100	2500		2280	2360	91	95	4	63-133	58-139	20	D6
1,1,2-Trichloroethane	50.0	54.2	108	2500	49.0	2490	2670	98	105	7	64-135	61-140	20	D6
Trichloroethene	50.0	47.5	95	2500		2150	2270	86	91	5	68-134	58-145	20	D6
Trichlorofluoromethane	50.0	61.0	122	2500		2920	2760	117	110	6	39-185	15-192	20	D6
Vinyl chloride	50.0	43.2	86	2500		1860	1750	75	70	6	40-152	32-157	20	D6
m&p-Xylene	100.	98.7	99	5000		4340	4600	87	92	6	68-134	62-139	20	D6
o-Xylene	50.0	49.3	99	2500		2150	2300	86	92	7	67-131	61-137	20	D6

QC Protocol 4/3/2013 14:38:08

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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(504) 469-0333

Batch: 205121 **Project:** 20151993 **LCS:** 201075646 25-Mar-13 10:27

Method: Water GC/MS Volatile Organics **MS:** 201075647 25-Mar-13 18:21

Units: ug/L **MSD:** 201075648 25-Mar-13 18:42

Original for MS: Batch Sample 201075437

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu

41 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205182 **Project:** 20151993 **LCS:** 201075861 26-Mar-13 14:25

Method: Water GC Semivolatile Organics **MS:**

Units: mg/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Diesel Range Organics (C10-2	0.400	0.198	50								10-115			Q5

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205129 **Project:** 20151993 **LCS:** 201075678 25-Mar-13 10:14

Method: Water GC Volatile Organics **MS:**

Units: mg/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Gasoline Range Organics(C6-	0.500	0.505	101								63-139			
1 compound(s) reported														

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205129 **Project:** 20151993 **LCS:** 201075967 26-Mar-13 9:55

Method: Water GC Volatile Organics **MS:** 201075968 26-Mar-13 11:01

Units: mg/L **MSD:** 201075969 26-Mar-13 11:28

Original for MS: Client Sample 201075516

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Gasoline Range Organics(C6-	0.500	0.508	102	0.500	0.0302	0.501	0.502	94	94	0	61-136	15-147	20	
1 compound(s) reported														

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205129 **Project:** 20151993 **LCS:**

Method: Water GC Volatile Organics **MS:** 201075970 26-Mar-13 11:55

Units: mg/L **MSD:** 201075971 26-Mar-13 12:23

Original for MS: Batch Sample 201075518

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Gasoline Range Organics(C6-				0.500	0.0481			0 *	0 *	0		15-147	20	Q1
1 compound(s) reported														

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205105 **Project:** 20151993 **LCS:** 201075587 26-Mar-13 14:06

Method: Water ICP Metals **MS:** 201075588 26-Mar-13 14:13

Units: ug/L **MSD:** 201075589 26-Mar-13 14:16

Original for MS: Batch Sample 201075370

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Antimony	1000	955.	96	1000		911.	975.	91	98	7	82-120	80-120	20	
Arsenic	1000	899.	90	1000	10.6	887.	953.	88	94	7	84-117	80-120	20	
Beryllium	1000	916.	92	1000		895.	957.	90	96	7	85-117	80-120	20	
Cadmium	1000	924.	92	1000		826.	884.	83	88	7	85-115	80-120	20	
Chromium	1000	902.	90	1000	3.02	879.	941.	88	94	7	83-117	80-120	20	
Copper	1000	1000	100	1000		992.	1070	99	107	7	85-116	80-120	20	
Lead	1000	936.	94	1000	1.35	820.	877.	82	88	7	84-118	80-120	20	
Nickel	1000	933.	93	1000	17.4	824.	880.	81	86	7	85-118	80-120	20	
Selenium	1000	903.	90	1000		885.	955.	89	96	8	85-116	80-120	20	
Silver	500.	455.	91	500.		443.	472.	89	95	6	80-120	80-120	20	
Thallium	1000	957.	96	1000		788.	838.	79 *	84	6	85-118	80-120	20	Q1
Zinc	1000	901.	90	1000	18.9	812.	870.	79 *	85	7	81-120	80-120	20	Q1

12 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205107 **Project:** 20151993 **LCS:** 201075595 26-Mar-13 8:56

Method: Water Mercury **MS:** 201075596 26-Mar-13 8:59

Units: ug/L **MSD:** 201075597 26-Mar-13 9:01

Original for MS: Batch Sample 201075370

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Mercury	1.00	0.990	99	1.00		1.01	1.01	101	101	0	80-120	75-125	20	

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Blank Results

Blank ID: 205263 BLANK 1 **Project:** 20151993

Lab ID: 201076334

Prep Level: Water **Batch:** 205263

Method: Water GC/MS Semivolatile Organics

Prepared: 27-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
83-32-9	Acenaphthene	1	ND		0.100	0.0520	28-Mar-13 15:39 JAM
208-96-8	Acenaphthylene	1	ND		0.100	0.0460	28-Mar-13 15:39 JAM
120-12-7	Anthracene	1	ND		0.100	0.0570	28-Mar-13 15:39 JAM
56-55-3	Benzo(a)anthracene	1	ND		0.100	0.0310	28-Mar-13 15:39 JAM
205-99-2	Benzo(b)fluoranthene	1	ND		0.100	0.0520	28-Mar-13 15:39 JAM
207-08-9	Benzo(k)fluoranthene	1	ND		0.100	0.0410	28-Mar-13 15:39 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		0.100	0.0200	28-Mar-13 15:39 JAM
50-32-8	Benzo(a)pyrene	1	ND		0.100	0.0410	28-Mar-13 15:39 JAM
86-74-8	Carbazole	1	ND		0.100	0.0290	28-Mar-13 15:39 JAM
218-01-9	Chrysene	1	ND		0.100	0.0250	28-Mar-13 15:39 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		0.100	0.0180	28-Mar-13 15:39 JAM
132-64-9	Dibenzofuran	1	ND		0.100	0.0640	28-Mar-13 15:39 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		0.500	0.114	28-Mar-13 15:39 JAM
206-44-0	Fluoranthene	1	ND		0.100	0.0390	28-Mar-13 15:39 JAM
86-73-7	Fluorene	1	ND		0.100	0.0630	28-Mar-13 15:39 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		0.100	0.0180	28-Mar-13 15:39 JAM
91-57-6	2-Methylnaphthalene	1	ND		0.100	0.0780	28-Mar-13 15:39 JAM
91-20-3	Naphthalene	1	ND		0.100	0.0670	28-Mar-13 15:39 JAM
85-01-8	Phenanthrene	1	ND		0.100	0.0490	28-Mar-13 15:39 JAM
129-00-0	Pyrene	1	ND		0.100	0.0360	28-Mar-13 15:39 JAM

20 compound(s) reported

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205284 BLANK 1 **Project:** 20151993

Lab ID: 201076403

Prep Level: Water **Batch:** 205284

Method: Water GC/MS Semivolatile Organics

Prepared: 27-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
65-85-0	Benzoic acid	1	ND		25.0	1.56	01-Apr-13 11:06 JAM
100-51-6	Benzyl alcohol	1	ND		10.0	0.959	01-Apr-13 11:06 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND		10.0	0.541	01-Apr-13 11:06 JAM
85-68-7	Butylbenzylphthalate	1	ND		10.0	0.825	01-Apr-13 11:06 JAM
86-74-8	Carbazole	1	ND		10.0	0.932	01-Apr-13 11:06 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND		10.0	0.812	01-Apr-13 11:06 JAM
106-47-8	3&4-Chloroaniline	1	ND		10.0	1.22	01-Apr-13 11:06 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	0.789	01-Apr-13 11:06 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	0.804	01-Apr-13 11:06 JAM
91-58-7	2-Chloronaphthalene	1	ND		10.0	0.713	01-Apr-13 11:06 JAM
95-57-8	2-Chlorophenol	1	ND		10.0	0.716	01-Apr-13 11:06 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND		10.0	0.638	01-Apr-13 11:06 JAM
132-64-9	Dibenzofuran	1	ND		10.0	0.576	01-Apr-13 11:06 JAM
95-50-1	1,2-Dichlorobenzene	1	ND		10.0	0.867	01-Apr-13 11:06 JAM
541-73-1	1,3-Dichlorobenzene	1	ND		10.0	0.832	01-Apr-13 11:06 JAM
106-46-7	1,4-Dichlorobenzene	1	ND		10.0	0.652	01-Apr-13 11:06 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND		10.0	0.781	01-Apr-13 11:06 JAM
120-83-2	2,4-Dichlorophenol	1	ND		10.0	0.783	01-Apr-13 11:06 JAM
84-66-2	Diethylphthalate	1	ND		10.0	0.607	01-Apr-13 11:06 JAM
105-67-9	2,4-Dimethylphenol	1	ND		10.0	0.781	01-Apr-13 11:06 JAM
131-11-3	Dimethylphthalate	1	ND		10.0	0.594	01-Apr-13 11:06 JAM
84-74-2	Di-n-butylphthalate	1	ND		10.0	0.651	01-Apr-13 11:06 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		10.0	1.02	01-Apr-13 11:06 JAM
51-28-5	2,4-Dinitrophenol	1	ND		10.0	0.470	01-Apr-13 11:06 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	0.741	01-Apr-13 11:06 JAM
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	0.780	01-Apr-13 11:06 JAM
117-84-0	Di-n-octylphthalate	1	ND		10.0	0.781	01-Apr-13 11:06 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	0.930	01-Apr-13 11:06 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		10.0	0.759	01-Apr-13 11:06 JAM
118-74-1	Hexachlorobenzene	1	ND		10.0	0.681	01-Apr-13 11:06 JAM
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	0.347	01-Apr-13 11:06 JAM
67-72-1	Hexachloroethane	1	ND		10.0	0.987	01-Apr-13 11:06 JAM
78-59-1	Isophorone	1	ND		10.0	0.628	01-Apr-13 11:06 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	0.749	01-Apr-13 11:06 JAM

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205284 BLANK 1 **Project:** 20151993

Lab ID: 201076403

Prep Level: Water **Batch:** 205284

Method: Water GC/MS Semivolatile Organics

Prepared: 27-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
	3&4-Methylphenol	1	ND		10.0	0.948	01-Apr-13 11:06 JAM
88-74-4	2-Nitroaniline	1	ND		10.0	0.859	01-Apr-13 11:06 JAM
99-09-2	3-Nitroaniline	1	ND		10.0	0.877	01-Apr-13 11:06 JAM
100-01-6	4-Nitroaniline	1	ND		10.0	0.972	01-Apr-13 11:06 JAM
98-95-3	Nitrobenzene	1	ND		10.0	1.06	01-Apr-13 11:06 JAM
88-75-5	2-Nitrophenol	1	ND		10.0	0.772	01-Apr-13 11:06 JAM
100-02-7	4-Nitrophenol	1	ND		10.0	0.761	01-Apr-13 11:06 JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	0.919	01-Apr-13 11:06 JAM
86-30-6	N-Nitrosodiphenylamine	1	ND		10.0	0.715	01-Apr-13 11:06 JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		10.0	0.732	01-Apr-13 11:06 JAM
87-86-5	Pentachlorophenol	1	ND		10.0	0.860	01-Apr-13 11:06 JAM
108-95-2	Phenol	1	ND		10.0	0.773	01-Apr-13 11:06 JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	0.797	01-Apr-13 11:06 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		10.0	0.751	01-Apr-13 11:06 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	0.737	01-Apr-13 11:06 JAM

49 compound(s) reported

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205121 BLANK 1 **Project:** 20151993

Lab ID: 201075645

Prep Level: Water **Batch:** 205121

Method: Water GC/MS Volatile Organics

Prepared: 25-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
67-64-1	Acetone	1	ND		10.0	8.88	25-Mar-13 10:07 MHM
71-43-2	Benzene	1	ND		5.00	0.518	25-Mar-13 10:07 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469	25-Mar-13 10:07 MHM
75-25-2	Bromoform	1	ND		5.00	0.920	25-Mar-13 10:07 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855	25-Mar-13 10:07 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66	25-Mar-13 10:07 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530	25-Mar-13 10:07 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528	25-Mar-13 10:07 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662	25-Mar-13 10:07 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12	25-Mar-13 10:07 MHM
67-66-3	Chloroform	1	ND		5.00	0.853	25-Mar-13 10:07 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636	25-Mar-13 10:07 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34	25-Mar-13 10:07 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630	25-Mar-13 10:07 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477	25-Mar-13 10:07 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553	25-Mar-13 10:07 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565	25-Mar-13 10:07 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738	25-Mar-13 10:07 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557	25-Mar-13 10:07 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578	25-Mar-13 10:07 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738	25-Mar-13 10:07 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579	25-Mar-13 10:07 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454	25-Mar-13 10:07 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526	25-Mar-13 10:07 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292	25-Mar-13 10:07 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28	25-Mar-13 10:07 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405	25-Mar-13 10:07 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36	25-Mar-13 10:07 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44	25-Mar-13 10:07 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10	25-Mar-13 10:07 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687	25-Mar-13 10:07 MHM
100-42-5	Styrene	1	ND		5.00	0.571	25-Mar-13 10:07 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12	25-Mar-13 10:07 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679	25-Mar-13 10:07 MHM

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Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205121 BLANK 1 **Project:** 20151993

Lab ID: 201075645

Prep Level: Water **Batch:** 205121

Method: Water GC/MS Volatile Organics

Prepared: 25-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
108-88-3	Toluene	1	ND		5.00	0.536	25-Mar-13 10:07 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554	25-Mar-13 10:07 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915	25-Mar-13 10:07 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654	25-Mar-13 10:07 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575	25-Mar-13 10:07 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564	25-Mar-13 10:07 MHM
	m&p-Xylene	1	ND		5.00	0.937	25-Mar-13 10:07 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649	25-Mar-13 10:07 MHM

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205182 BLANK 1 **Project:** 20151993

Lab ID: 201075860

Prep Level: Water **Batch:** 205182

Method: Water GC Semivolatile Organics

Prepared: 26-Mar-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Diesel Range Organics (C10-28)	1	ND		0.150	0.0760	26-Mar-13 13:57 SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.150	0.0490	26-Mar-13 13:57 SNP1

2 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205129 BLANK 1 **Project:** 20151993

Lab ID: 201075677

Prep Level: Water **Batch:** 205129

Method: Water GC Volatile Organics

Prepared: 25-Mar-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Gasoline Range Organics(C6-10)	1	0.0237	J	0.0500	0.0212	25-Mar-13 09:46 DHR1

1 compound(s) reported

Protocol Blank 4/3/2013 14:38:10

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205129 BLANK 3 **Project:** 20151993

Lab ID: 201075966

Prep Level: Water **Batch:** 205129

Method: Water GC Volatile Organics

Prepared: 26-Mar-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Gasoline Range Organics(C6-10)	1	0.0261	J	0.0500	0.0212	26-Mar-13 09:27 DHR1

1 compound(s) reported

Protocol Blank 4/3/2013 14:38:10

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205105 BLANK 1 **Project:** 20151993

Lab ID: 201075586

Prep Level: Water **Batch:** 205105

Method: Water ICP Metals

Prepared: 25-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis	
7440-36-0	Antimony	1	ND		60.0	1.35	26-Mar-13 14:02	EJH
7440-38-2	Arsenic	1	ND		10.0	1.04	26-Mar-13 14:02	EJH
7440-41-7	Beryllium	1	ND		5.00	0.282	26-Mar-13 14:02	EJH
7440-43-9	Cadmium	1	ND		5.00	0.361	26-Mar-13 14:02	EJH
7440-47-3	Chromium	1	ND		10.0	2.00	26-Mar-13 14:02	EJH
7440-50-8	Copper	1	ND		10.0	2.76	26-Mar-13 14:02	EJH
7439-92-1	Lead	1	ND		5.00	1.15	26-Mar-13 14:02	EJH
7440-02-0	Nickel	1	ND		40.0	0.253	26-Mar-13 14:02	EJH
7782-49-2	Selenium	1	ND		35.0	14.3	26-Mar-13 14:02	EJH
7440-22-4	Silver	1	ND		10.0	0.579	26-Mar-13 14:02	EJH
7440-28-0	Thallium	1	ND		10.0	1.05	26-Mar-13 14:02	EJH
7440-66-6	Zinc	1	ND		20.0	3.52	26-Mar-13 14:02	EJH

12 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205107 BLANK 1 **Project:** 20151993

Lab ID: 201075594

Prep Level: Water **Batch:** 205107

Method: Water Mercury

Prepared: 25-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
7439-97-6	Mercury	1	ND		0.200	0.0340	26-Mar-13 08:54 MHB1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20151993

Value	Description
D6	The sample was analyzed at a dilution based upon the screening information.
Q1	The matrix spike recoveries are poor. Acceptable method performance for this analyte has been demonstrated by the laboratory control sample recovery.
Q5	Insufficient sample was provided to perform matrix spike analyses on any sample in this analytical batch. Method performance for this analyte has been demonstrated by the laboratory control sample recovery.
J	This estimated value for the analyte is below the adjusted reporting limit but above the instrument reporting limit.
U	The analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
B	This analyte was detected in the method blank.
E	The sample concentration is above the linear calibrated range of the analysis.
LCS	Laboratory Control Sample.
MS(D)	Matrix Spike (Duplicate).
DUP	Sample Duplicate.
RPD	Relative Percent Difference.

Pace Analytical Services, In
1000 Riverbend Blvd. Suite F
St. Rose, LA 7008
(504) 469-033

Chains of Custody

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytic

The Chain-of-Custody is a LEGAL DOCUMENT. All releva

20151993 20-CTEH

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: CTEH	Report To: Chase Ertzberger	Attention: CTEH
Address: 5120 Northshore Dr	Copy To: James McCormack(jmccormack@cteh.com	
N. Little Rock, AR 72118	40432samples@cteh.com	Address: 5120 Northshore Dr
Email To: Certzbèrger@cteh.com	Purchase Order No.:	Pace Quote Reference:
Phone: 501-366-0394 Fax:	Project Name: Delek @ Magnolia, AR	Pace Project Manager: Karen Brown
Requested Due Date/TAT Normal 10 WD	Project Number: 40432	Pace Profile #: 5831 / Line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: AR

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	8260	8270	8270-SIM (Low level)	Priority Pollutant List (6010)	TPH-GRO (8015)	TPH-DRO / ORO (8015)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MAAR03205W005A	SW	G			3-20-13	1745		12	5		1	6						3	2	2	1	3	1		201075516
2	TB003	SW	G			—	—		2										2							5517
3																										
4																										
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	A Ertzberger / CTEH	3-21-13	1700	Fedex	3-21-13	1700				
	Fedex	3-22-13	1020	[signature]	3-22-13	1020	1.8	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY):

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.06, 2-Feb-2007

Pace Analytical

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Sample Conditi

20151993 20-CTEH

Courier: ☐ Pace Courier ☐ Hired Courier ☒ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC] **Custody Seals intact:** ☒Yes ☐No

Therometer Used: ☐ Therm Fisher IR 5 ☒ Therm Fisher IR 6 ☐ Therm Fisher IR 7

Type of ice: (Wet) Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 03-25-13 MB

Temp must be measured from Temperature blank when present

					Comments:
Temperature Blank Present"?	☒Yes	☐No	☐N/A	1	
Chain of Custody Present:	☒Yes	☐No	☐N/A	2	
Chain of Custody Complete:	☒Yes	☐No	☐N/A	3	
Chain of Custody Relinquished:	☒Yes	☐No	☐N/A	4	
Sampler Name & Signature on COC:	☒Yes	☐No	☐N/A	5	
Samples Arrived within Hold Time:	☒Yes	☐No	☐N/A	6	
Sufficient Volume:	☒Yes	☐No	☐N/A	7	
Correct Containers Used:	☒Yes	☐No	☐N/A	8	
Filtered vol. Rec. for Diss. tests	☐Yes	☐No	☒N/A	9	
Sample Labels match COC:	☒Yes	☐No	☐N/A	10	
All containers received within manafacture's precautionary and/or expiration dates.	☒Yes	☐No	☐N/A	11	
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☒Yes	☐No	☐N/A	12	
All containers preservation checked found to be in compliance with EPA recommendation.	☒Yes	☐No	☐N/A	13	If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐Yes	☒No	☐N/A	14	
Trip Blank Present:	☒Yes	☐No		15	

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: COC indicates we were to receive 5 1Liter Glass Jars for Semi VOA's, but we only received 4 1Liter containers with this project. There is no additional back up sample as requested by the project manager.

TB coll date 3/20/13

ALLC003rev.08, 15Feb2013 SCUR Form - mod

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

April 03, 2013

James McCormack
CTEH
5120 North Shore Drive
North Little Rock, AR 72118

RE: Project 20151994
Project ID: Magnolia, AR

Dear James McCormack:

Enclosed are the analytical results for sample(s) received by the laboratory on March 23, 2013. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Karen Brown
karen.brown@pacelabs.com

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

Laboratory Certifications

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20151994

Client: CTEH

Project ID: Magnolia, AR

Washington Department of Ecology C2078
Oregon Environmental Laboratory Accreditation - LA200001
U.S. Dept. of Agriculture Foreign Soil Import P330-10-00119
Pennsylvania Dept. of Env Protection (NELAC) 68-04202
Texas Commission on Env. Quality (NELAC) T104704405-09-TX
Kansas Department of Health and Environment (NELAC) E-10266
Florida Department of Health (NELAC) E87595
Oklahoma Department of Environmental Quality - 2010-139
Illinois Environmental Protection Agency - 0025721
California Env. Lab Accreditation Program Branch - 11277CA
Louisiana Dept. of Environmental Quality (NELAC/LELAP) 02006

4/3/2013 16:53:07

Sample Cross Reference

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20151994

Client: CTEH

Project ID: Magnolia, AR

Client Sample ID	Lab ID	Matrix	Collection Date/Time	Received Date/Time
MAAR0321SW006A	201075518	Water	21-Mar-13 18:40	23-Mar-13 08:00
MAAR0322SW007A	201075519	Water	22-Mar-13 14:45	23-Mar-13 08:00
MAAR0322SW008BKG	201075520	Water	22-Mar-13 16:00	23-Mar-13 08:00
TB004	201075521	Water	21-Mar-13 00:00	23-Mar-13 08:00

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20151994

Sample Receipt Condition:

All samples were received in accordance with EPA protocol.

Holding Times:

All holding times were met.

Blanks:

All blank results were below reporting limits.

Laboratory Control Samples:

All LCS recoveries were within QC limits.

Matrix Spikes and Duplicates:

MS or MSD recoveries outside of QC limits are qualified in the Report of Quality Control section.

Surrogates:

All surrogate recoveries were within QC limits.

QC Cross Reference

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20151994

Analytical Method	Batch	Sample used for QC
EPA 8015/8021	205129	Client sample MAAR0320SW005A from project 20151993
EPA 8015/8021	205129	Project sample MAAR0321SW006A
EPA 6010	205105	Batch sample from another client
EPA 7470	205107	Batch sample from another client
EPA 8260	205121	Batch sample from another client

For the sample used as the original for the DUP or MS/MSD for the batch:

Project sample means a sample from this project was used.
Client sample means a sample from the same client but in a different project was used.
Batch sample means a sample from a different client was used.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0321SW006A
Project: 20151994
Project ID: Magnolia, AR
Site: None
Lab ID: 201075518
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205354
Method: EPA 8270
GCMS SVOAs SIM Water
Collected: 21-Mar-13
Received: 23-Mar-13
Prepared: 28-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
83-32-9	Acenaphthene	1	ND		0.100	0.0520		29-Mar-13 17:41	JAM
208-96-8	Acenaphthylene	1	ND		0.100	0.0460		29-Mar-13 17:41	JAM
120-12-7	Anthracene	1	ND		0.100	0.0570		29-Mar-13 17:41	JAM
56-55-3	Benzo(a)anthracene	1	ND		0.100	0.0310		29-Mar-13 17:41	JAM
205-99-2	Benzo(b)fluoranthene	1	ND		0.100	0.0520		29-Mar-13 17:41	JAM
207-08-9	Benzo(k)fluoranthene	1	ND		0.100	0.0410		29-Mar-13 17:41	JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		0.100	0.0200		29-Mar-13 17:41	JAM
50-32-8	Benzo(a)pyrene	1	ND		0.100	0.0410		29-Mar-13 17:41	JAM
218-01-9	Chrysene	1	ND		0.100	0.0250		29-Mar-13 17:41	JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		0.100	0.0180		29-Mar-13 17:41	JAM
206-44-0	Fluoranthene	1	ND		0.100	0.0390		29-Mar-13 17:41	JAM
86-73-7	Fluorene	1	0.140		0.100	0.0630		29-Mar-13 17:41	JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		0.100	0.0180		29-Mar-13 17:41	JAM
91-57-6	2-Methylnaphthalene	1	0.140		0.100	0.0780		29-Mar-13 17:41	JAM
91-20-3	Naphthalene	1	0.180		0.100	0.0670		29-Mar-13 17:41	JAM
85-01-8	Phenanthrene	1	0.0700	J	0.100	0.0490		29-Mar-13 17:41	JAM
129-00-0	Pyrene	1	ND		0.100	0.0360		29-Mar-13 17:41	JAM

17 compound(s) reported

Protocol 4/3/2013 16:53:58

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0321SW006A
Project: 20151994
Project ID: Magnolia, AR
Site: None
Lab ID: 201075518
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205284
Method: EPA 8270
GCMS SVOAs Water
Collected: 21-Mar-13
Received: 23-Mar-13
Prepared: 27-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
65-85-0	Benzoic acid	1	ND		25.0	1.56		01-Apr-13 17:56 JAM
100-51-6	Benzyl alcohol	1	ND		10.0	0.959		01-Apr-13 17:56 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND		10.0	0.541		01-Apr-13 17:56 JAM
85-68-7	Butylbenzylphthalate	1	ND		10.0	0.825		01-Apr-13 17:56 JAM
86-74-8	Carbazole	1	ND		10.0	0.932		01-Apr-13 17:56 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND		10.0	0.812		01-Apr-13 17:56 JAM
106-47-8	3&4-Chloroaniline	1	ND		10.0	1.22		01-Apr-13 17:56 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	0.789		01-Apr-13 17:56 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	0.804		01-Apr-13 17:56 JAM
91-58-7	2-Chloronaphthalene	1	ND		10.0	0.713		01-Apr-13 17:56 JAM
95-57-8	2-Chlorophenol	1	ND		10.0	0.716		01-Apr-13 17:56 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND		10.0	0.638		01-Apr-13 17:56 JAM
132-64-9	Dibenzofuran	1	ND		10.0	0.576		01-Apr-13 17:56 JAM
95-50-1	1,2-Dichlorobenzene	1	ND		10.0	0.867		01-Apr-13 17:56 JAM
541-73-1	1,3-Dichlorobenzene	1	ND		10.0	0.832		01-Apr-13 17:56 JAM
106-46-7	1,4-Dichlorobenzene	1	ND		10.0	0.652		01-Apr-13 17:56 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND		10.0	0.781		01-Apr-13 17:56 JAM
120-83-2	2,4-Dichlorophenol	1	ND		10.0	0.783		01-Apr-13 17:56 JAM
84-66-2	Diethylphthalate	1	ND		10.0	0.607		01-Apr-13 17:56 JAM
105-67-9	2,4-Dimethylphenol	1	ND		10.0	0.781		01-Apr-13 17:56 JAM
131-11-3	Dimethylphthalate	1	ND		10.0	0.594		01-Apr-13 17:56 JAM
84-74-2	Di-n-butylphthalate	1	ND		10.0	0.651		01-Apr-13 17:56 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		10.0	1.02		01-Apr-13 17:56 JAM
51-28-5	2,4-Dinitrophenol	1	ND		10.0	0.470		01-Apr-13 17:56 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	0.741		01-Apr-13 17:56 JAM
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	0.780		01-Apr-13 17:56 JAM
117-84-0	Di-n-octylphthalate	1	ND		10.0	0.781		01-Apr-13 17:56 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	0.930		01-Apr-13 17:56 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		10.0	0.759		01-Apr-13 17:56 JAM
118-74-1	Hexachlorobenzene	1	ND		10.0	0.681		01-Apr-13 17:56 JAM
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	0.347		01-Apr-13 17:56 JAM
67-72-1	Hexachloroethane	1	ND		10.0	0.987		01-Apr-13 17:56 JAM
78-59-1	Isophorone	1	ND		10.0	0.628		01-Apr-13 17:56 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	0.749		01-Apr-13 17:56 JAM

Protocol 4/3/2013 16:53:58

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit
Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0321SW006A
Project: 20151994
Project ID: Magnolia, AR
Site: None
Lab ID: 201075518
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205284
Method: EPA 8270
GCMS SVOAs Water
Collected: 21-Mar-13
Received: 23-Mar-13
Prepared: 27-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
	3&4-Methylphenol	1	ND		10.0	0.948		01-Apr-13 17:56 JAM
88-74-4	2-Nitroaniline	1	ND		10.0	0.859		01-Apr-13 17:56 JAM
99-09-2	3-Nitroaniline	1	ND		10.0	0.877		01-Apr-13 17:56 JAM
100-01-6	4-Nitroaniline	1	ND		10.0	0.972		01-Apr-13 17:56 JAM
98-95-3	Nitrobenzene	1	ND		10.0	1.06		01-Apr-13 17:56 JAM
88-75-5	2-Nitrophenol	1	ND		10.0	0.772		01-Apr-13 17:56 JAM
100-02-7	4-Nitrophenol	1	ND		10.0	0.761		01-Apr-13 17:56 JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	0.919		01-Apr-13 17:56 JAM
86-30-6	N-Nitrosodiphenylamine	1	ND		10.0	0.715		01-Apr-13 17:56 JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		10.0	0.732		01-Apr-13 17:56 JAM
87-86-5	Pentachlorophenol	1	ND		10.0	0.860		01-Apr-13 17:56 JAM
108-95-2	Phenol	1	ND		10.0	0.773		01-Apr-13 17:56 JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	0.797		01-Apr-13 17:56 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		10.0	0.751		01-Apr-13 17:56 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	0.737		01-Apr-13 17:56 JAM

49 compound(s) reported

Protocol 4/3/2013 16:53:58

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0321SW006A
Project: 20151994
Project ID: Magnolia, AR
Site: None
Lab ID: 201075518
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205121
Method: EPA 8260
GCMS VOAs Water
Collected: 21-Mar-13
Received: 23-Mar-13
Prepared: 25-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	8.88		25-Mar-13 16:20 MHM
71-43-2	Benzene	1	1.07	J	5.00	0.518		25-Mar-13 16:20 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		25-Mar-13 16:20 MHM
75-25-2	Bromoform	1	ND		5.00	0.920		25-Mar-13 16:20 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855		25-Mar-13 16:20 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		25-Mar-13 16:20 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530		25-Mar-13 16:20 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		25-Mar-13 16:20 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662		25-Mar-13 16:20 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12		25-Mar-13 16:20 MHM
67-66-3	Chloroform	1	ND		5.00	0.853		25-Mar-13 16:20 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636		25-Mar-13 16:20 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		25-Mar-13 16:20 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		25-Mar-13 16:20 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		25-Mar-13 16:20 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		25-Mar-13 16:20 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565		25-Mar-13 16:20 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		25-Mar-13 16:20 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		25-Mar-13 16:20 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		25-Mar-13 16:20 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		25-Mar-13 16:20 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		25-Mar-13 16:20 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		25-Mar-13 16:20 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		25-Mar-13 16:20 MHM
100-41-4	Ethylbenzene	1	0.730	J	5.00	0.292		25-Mar-13 16:20 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28		25-Mar-13 16:20 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405		25-Mar-13 16:20 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36		25-Mar-13 16:20 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44		25-Mar-13 16:20 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		25-Mar-13 16:20 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		25-Mar-13 16:20 MHM
100-42-5	Styrene	1	ND		5.00	0.571		25-Mar-13 16:20 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		25-Mar-13 16:20 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		25-Mar-13 16:20 MHM

Protocol 4/3/2013 16:53:58

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0321SW006A
Project ID: Magnolia, AR
Lab ID: 201075518
Description: None
Method: EPA 8260
GCMS VOAs Water

Project: 20151994
Site: None
Matrix: Water
% Moisture: n/a
Prep Level: Water
Batch: 205121
Collected: 21-Mar-13
Received: 23-Mar-13
Prepared: 25-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	1.52	J	5.00	0.536		25-Mar-13 16:20 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		25-Mar-13 16:20 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915		25-Mar-13 16:20 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654		25-Mar-13 16:20 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575		25-Mar-13 16:20 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564		25-Mar-13 16:20 MHM
	m&p-Xylene	1	1.81	J	5.00	0.937		25-Mar-13 16:20 MHM
95-47-6	o-Xylene	1	1.31	J	5.00	0.649		25-Mar-13 16:20 MHM

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0321SW006A
Project: 20151994
Project ID: Magnolia, AR
Site: None
Lab ID: 201075518
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205350
Method: EPA 8015 Mod Ext
8015 TPH Extractables Water
Collected: 21-Mar-13
Received: 23-Mar-13
Prepared: 28-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Diesel Range Organics (C10-28)	1	ND		0.250	0.0760		02-Apr-13 02:18 SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.500	0.0490		02-Apr-13 02:18 SNP1

2 compound(s) reported

Protocol 4/3/2013 16:53:58

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0321SW006A
Project ID: Magnolia, AR
Lab ID: 201075518
Description: None
Method: EPA 8015/8021
8015/8021 Water

Project: 20151994
Site: None
Matrix: Water
% Moisture: n/a
Prep Level: Water
Batch: 205129
Collected: 21-Mar-13
Received: 23-Mar-13
Prepared: 25-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Gasoline Range Organics(C6-10)	1	0.0481	J	0.0500	0.0212		25-Mar-13 16:22 DHR1

1 compound(s) reported

Protocol 4/3/2013 16:53:58

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0321SW006A
Project ID: Magnolia, AR
Lab ID: 201075518
Description: None
Method: EPA 6010
Metals, ICP, Water

Project: 20151994
Site: None
Matrix: Water **% Moisture:** n/a
Prep Level: Water **Batch:** 205105
Collected: 21-Mar-13 **Received:** 23-Mar-13
Prepared: 25-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
7440-36-0	Antimony	1	ND		60.0	1.35		26-Mar-13 15:30	EJH
7440-38-2	Arsenic	1	ND		10.0	1.04		26-Mar-13 15:30	EJH
7440-41-7	Beryllium	1	0.384	J	5.00	0.282		26-Mar-13 15:30	EJH
7440-43-9	Cadmium	1	ND		5.00	0.361		26-Mar-13 15:30	EJH
7440-47-3	Chromium	1	ND		10.0	2.00		26-Mar-13 15:30	EJH
7440-50-8	Copper	1	ND		10.0	2.76		26-Mar-13 15:30	EJH
7439-92-1	Lead	1	2.71	J	5.00	1.15		26-Mar-13 15:30	EJH
7440-02-0	Nickel	1	6.35	J	40.0	0.253		26-Mar-13 15:30	EJH
7782-49-2	Selenium	1	ND		35.0	14.3		26-Mar-13 15:30	EJH
7440-22-4	Silver	1	ND		10.0	0.579		26-Mar-13 15:30	EJH
7440-28-0	Thallium	1	ND		10.0	1.05		26-Mar-13 15:30	EJH
7440-66-6	Zinc	1	16.7	J	20.0	3.52		26-Mar-13 15:30	EJH

12 compound(s) reported

Protocol 4/3/2013 16:53:58

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MDL denotes method detection limit

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0321SW006A
Project: 20151994
Project ID: Magnolia, AR
Site: None
Lab ID: 201075518
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205107
Method: EPA 7470
Mercury Water
Collected: 21-Mar-13
Received: 23-Mar-13
Prepared: 25-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.200	0.0340		26-Mar-13 09:08 MHB1

1 compound(s) reported

Protocol 4/3/2013 16:53:58

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0322SW007A
Project: 20151994
Project ID: Magnolia, AR
Site: None
Lab ID: 201075519
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205354
Method: EPA 8270
GCMS SVOAs SIM Water
Collected: 22-Mar-13
Received: 23-Mar-13
Prepared: 28-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
83-32-9	Acenaphthene	1	ND		0.100	0.0520		29-Mar-13 18:03 JAM
208-96-8	Acenaphthylene	1	ND		0.100	0.0460		29-Mar-13 18:03 JAM
120-12-7	Anthracene	1	ND		0.100	0.0570		29-Mar-13 18:03 JAM
56-55-3	Benzo(a)anthracene	1	ND		0.100	0.0310		29-Mar-13 18:03 JAM
205-99-2	Benzo(b)fluoranthene	1	ND		0.100	0.0520		29-Mar-13 18:03 JAM
207-08-9	Benzo(k)fluoranthene	1	ND		0.100	0.0410		29-Mar-13 18:03 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		0.100	0.0200		29-Mar-13 18:03 JAM
50-32-8	Benzo(a)pyrene	1	ND		0.100	0.0410		29-Mar-13 18:03 JAM
218-01-9	Chrysene	1	ND		0.100	0.0250		29-Mar-13 18:03 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		0.100	0.0180		29-Mar-13 18:03 JAM
206-44-0	Fluoranthene	1	ND		0.100	0.0390		29-Mar-13 18:03 JAM
86-73-7	Fluorene	1	ND		0.100	0.0630		29-Mar-13 18:03 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		0.100	0.0180		29-Mar-13 18:03 JAM
91-57-6	2-Methylnaphthalene	1	ND		0.100	0.0780		29-Mar-13 18:03 JAM
91-20-3	Naphthalene	1	ND		0.100	0.0670		29-Mar-13 18:03 JAM
85-01-8	Phenanthrene	1	ND		0.100	0.0490		29-Mar-13 18:03 JAM
129-00-0	Pyrene	1	ND		0.100	0.0360		29-Mar-13 18:03 JAM

17 compound(s) reported

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0322SW007A
Project: 20151994
Project ID: Magnolia, AR
Site: None
Lab ID: 201075519
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205284
Method: EPA 8270
GCMS SVOAs Water
Collected: 22-Mar-13
Received: 23-Mar-13
Prepared: 27-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
65-85-0	Benzoic acid	1	ND		25.0	1.56		01-Apr-13 18:22 JAM
100-51-6	Benzyl alcohol	1	ND		10.0	0.959		01-Apr-13 18:22 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND		10.0	0.541		01-Apr-13 18:22 JAM
85-68-7	Butylbenzylphthalate	1	ND		10.0	0.825		01-Apr-13 18:22 JAM
86-74-8	Carbazole	1	ND		10.0	0.932		01-Apr-13 18:22 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND		10.0	0.812		01-Apr-13 18:22 JAM
106-47-8	3&4-Chloroaniline	1	ND		10.0	1.22		01-Apr-13 18:22 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	0.789		01-Apr-13 18:22 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	0.804		01-Apr-13 18:22 JAM
91-58-7	2-Chloronaphthalene	1	ND		10.0	0.713		01-Apr-13 18:22 JAM
95-57-8	2-Chlorophenol	1	ND		10.0	0.716		01-Apr-13 18:22 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND		10.0	0.638		01-Apr-13 18:22 JAM
132-64-9	Dibenzofuran	1	ND		10.0	0.576		01-Apr-13 18:22 JAM
95-50-1	1,2-Dichlorobenzene	1	ND		10.0	0.867		01-Apr-13 18:22 JAM
541-73-1	1,3-Dichlorobenzene	1	ND		10.0	0.832		01-Apr-13 18:22 JAM
106-46-7	1,4-Dichlorobenzene	1	ND		10.0	0.652		01-Apr-13 18:22 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND		10.0	0.781		01-Apr-13 18:22 JAM
120-83-2	2,4-Dichlorophenol	1	ND		10.0	0.783		01-Apr-13 18:22 JAM
84-66-2	Diethylphthalate	1	ND		10.0	0.607		01-Apr-13 18:22 JAM
105-67-9	2,4-Dimethylphenol	1	ND		10.0	0.781		01-Apr-13 18:22 JAM
131-11-3	Dimethylphthalate	1	ND		10.0	0.594		01-Apr-13 18:22 JAM
84-74-2	Di-n-butylphthalate	1	ND		10.0	0.651		01-Apr-13 18:22 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		10.0	1.02		01-Apr-13 18:22 JAM
51-28-5	2,4-Dinitrophenol	1	ND		10.0	0.470		01-Apr-13 18:22 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	0.741		01-Apr-13 18:22 JAM
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	0.780		01-Apr-13 18:22 JAM
117-84-0	Di-n-octylphthalate	1	ND		10.0	0.781		01-Apr-13 18:22 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	0.930		01-Apr-13 18:22 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		10.0	0.759		01-Apr-13 18:22 JAM
118-74-1	Hexachlorobenzene	1	ND		10.0	0.681		01-Apr-13 18:22 JAM
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	0.347		01-Apr-13 18:22 JAM
67-72-1	Hexachloroethane	1	ND		10.0	0.987		01-Apr-13 18:22 JAM
78-59-1	Isophorone	1	ND		10.0	0.628		01-Apr-13 18:22 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	0.749		01-Apr-13 18:22 JAM

Protocol 4/3/2013 16:53:58

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0322SW007A
Project: 20151994
Project ID: Magnolia, AR
Site: None
Lab ID: 201075519
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205284
Method: EPA 8270
GCMS SVOAs Water
Collected: 22-Mar-13
Received: 23-Mar-13
Prepared: 27-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
	3&4-Methylphenol	1	ND		10.0	0.948		01-Apr-13 18:22 JAM
88-74-4	2-Nitroaniline	1	ND		10.0	0.859		01-Apr-13 18:22 JAM
99-09-2	3-Nitroaniline	1	ND		10.0	0.877		01-Apr-13 18:22 JAM
100-01-6	4-Nitroaniline	1	ND		10.0	0.972		01-Apr-13 18:22 JAM
98-95-3	Nitrobenzene	1	ND		10.0	1.06		01-Apr-13 18:22 JAM
88-75-5	2-Nitrophenol	1	ND		10.0	0.772		01-Apr-13 18:22 JAM
100-02-7	4-Nitrophenol	1	ND		10.0	0.761		01-Apr-13 18:22 JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	0.919		01-Apr-13 18:22 JAM
86-30-6	N-Nitrosodiphenylamine	1	ND		10.0	0.715		01-Apr-13 18:22 JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		10.0	0.732		01-Apr-13 18:22 JAM
87-86-5	Pentachlorophenol	1	ND		10.0	0.860		01-Apr-13 18:22 JAM
108-95-2	Phenol	1	ND		10.0	0.773		01-Apr-13 18:22 JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	0.797		01-Apr-13 18:22 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		10.0	0.751		01-Apr-13 18:22 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	0.737		01-Apr-13 18:22 JAM

49 compound(s) reported

Protocol 4/3/2013 16:53:58

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0322SW007A
Project: 20151994
Project ID: Magnolia, AR
Site: None
Lab ID: 201075519
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205121
Method: EPA 8260
GCMS VOAs Water
Collected: 22-Mar-13
Received: 23-Mar-13
Prepared: 25-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	8.88		25-Mar-13 16:41 MHM
71-43-2	Benzene	1	ND		5.00	0.518		25-Mar-13 16:41 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		25-Mar-13 16:41 MHM
75-25-2	Bromoform	1	ND		5.00	0.920		25-Mar-13 16:41 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855		25-Mar-13 16:41 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		25-Mar-13 16:41 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530		25-Mar-13 16:41 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		25-Mar-13 16:41 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662		25-Mar-13 16:41 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12		25-Mar-13 16:41 MHM
67-66-3	Chloroform	1	ND		5.00	0.853		25-Mar-13 16:41 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636		25-Mar-13 16:41 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		25-Mar-13 16:41 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		25-Mar-13 16:41 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		25-Mar-13 16:41 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		25-Mar-13 16:41 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565		25-Mar-13 16:41 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		25-Mar-13 16:41 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		25-Mar-13 16:41 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		25-Mar-13 16:41 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		25-Mar-13 16:41 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		25-Mar-13 16:41 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		25-Mar-13 16:41 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		25-Mar-13 16:41 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292		25-Mar-13 16:41 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28		25-Mar-13 16:41 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405		25-Mar-13 16:41 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36		25-Mar-13 16:41 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44		25-Mar-13 16:41 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		25-Mar-13 16:41 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		25-Mar-13 16:41 MHM
100-42-5	Styrene	1	ND		5.00	0.571		25-Mar-13 16:41 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		25-Mar-13 16:41 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		25-Mar-13 16:41 MHM

Protocol 4/3/2013 16:53:58

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MDL denotes method detection limit

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0322SW007A
Project ID: Magnolia, AR
Lab ID: 201075519
Description: None
Method: EPA 8260
GCMS VOAs Water

Project: 20151994
Site: None
Matrix: Water **% Moisture:** n/a
Prep Level: Water **Batch:** 205121

Collected: 22-Mar-13 **Received:** 23-Mar-13
Prepared: 25-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	ND		5.00	0.536		25-Mar-13 16:41 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		25-Mar-13 16:41 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915		25-Mar-13 16:41 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654		25-Mar-13 16:41 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575		25-Mar-13 16:41 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564		25-Mar-13 16:41 MHM
	m&p-Xylene	1	ND		5.00	0.937		25-Mar-13 16:41 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649		25-Mar-13 16:41 MHM

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0322SW007A
Project: 20151994
Project ID: Magnolia, AR
Site: None
Lab ID: 201075519
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205350
Method: EPA 8015 Mod Ext
8015 TPH Extractables Water
Collected: 22-Mar-13
Received: 23-Mar-13
Prepared: 28-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Diesel Range Organics (C10-28)	1	ND		0.250	0.0760		02-Apr-13 02:45 SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.500	0.0490		02-Apr-13 02:45 SNP1

2 compound(s) reported

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0322SW007A
Project ID: Magnolia, AR
Lab ID: 201075519
Description: None
Method: EPA 8015/8021
8015/8021 Water

Project: 20151994
Site: None
Matrix: Water
% Moisture: n/a
Prep Level: Water
Batch: 205129
Collected: 22-Mar-13
Received: 23-Mar-13
Prepared: 25-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Gasoline Range Organics(C6-10)	1	0.0258	J	0.0500	0.0212		25-Mar-13 16:50 DHR1

1 compound(s) reported

Protocol 4/3/2013 16:53:59

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0322SW007A
Project ID: Magnolia, AR
Lab ID: 201075519
Description: None
Method: EPA 6010
Metals, ICP, Water

Project: 20151994
Site: None
Matrix: Water **% Moisture:** n/a
Prep Level: Water **Batch:** 205105

Collected: 22-Mar-13 **Received:** 23-Mar-13
Prepared: 25-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
7440-36-0	Antimony	1	ND		60.0	1.35		26-Mar-13 15:34	EJH
7440-38-2	Arsenic	1	ND		10.0	1.04		26-Mar-13 15:34	EJH
7440-41-7	Beryllium	1	0.327	J	5.00	0.282		26-Mar-13 15:34	EJH
7440-43-9	Cadmium	1	ND		5.00	0.361		26-Mar-13 15:34	EJH
7440-47-3	Chromium	1	ND		10.0	2.00		26-Mar-13 15:34	EJH
7440-50-8	Copper	1	ND		10.0	2.76		26-Mar-13 15:34	EJH
7439-92-1	Lead	1	2.16	J	5.00	1.15		26-Mar-13 15:34	EJH
7440-02-0	Nickel	1	3.82	J	40.0	0.253		26-Mar-13 15:34	EJH
7782-49-2	Selenium	1	ND		35.0	14.3		26-Mar-13 15:34	EJH
7440-22-4	Silver	1	ND		10.0	0.579		26-Mar-13 15:34	EJH
7440-28-0	Thallium	1	ND		10.0	1.05		26-Mar-13 15:34	EJH
7440-66-6	Zinc	1	7.92	J	20.0	3.52		26-Mar-13 15:34	EJH

12 compound(s) reported

Protocol 4/3/2013 16:53:59

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0322SW007A
Project: 20151994
Project ID: Magnolia, AR
Site: None
Lab ID: 201075519
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205107
Method: EPA 7470
Mercury Water
Collected: 22-Mar-13
Received: 23-Mar-13
Prepared: 25-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.200	0.0340		26-Mar-13 09:10 MHB1

1 compound(s) reported

Protocol 4/3/2013 16:53:59

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0322SW008BKG
Project: 20151994
Project ID: Magnolia, AR
Site: None
Lab ID: 201075520
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205354
Method: EPA 8270
GCMS SVOAs SIM Water
Collected: 22-Mar-13
Received: 23-Mar-13
Prepared: 28-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
83-32-9	Acenaphthene	1	ND		0.100	0.0520		29-Mar-13 18:24 JAM
208-96-8	Acenaphthylene	1	ND		0.100	0.0460		29-Mar-13 18:24 JAM
120-12-7	Anthracene	1	ND		0.100	0.0570		29-Mar-13 18:24 JAM
56-55-3	Benzo(a)anthracene	1	ND		0.100	0.0310		29-Mar-13 18:24 JAM
205-99-2	Benzo(b)fluoranthene	1	ND		0.100	0.0520		29-Mar-13 18:24 JAM
207-08-9	Benzo(k)fluoranthene	1	ND		0.100	0.0410		29-Mar-13 18:24 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		0.100	0.0200		29-Mar-13 18:24 JAM
50-32-8	Benzo(a)pyrene	1	ND		0.100	0.0410		29-Mar-13 18:24 JAM
218-01-9	Chrysene	1	ND		0.100	0.0250		29-Mar-13 18:24 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		0.100	0.0180		29-Mar-13 18:24 JAM
206-44-0	Fluoranthene	1	ND		0.100	0.0390		29-Mar-13 18:24 JAM
86-73-7	Fluorene	1	ND		0.100	0.0630		29-Mar-13 18:24 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		0.100	0.0180		29-Mar-13 18:24 JAM
91-57-6	2-Methylnaphthalene	1	ND		0.100	0.0780		29-Mar-13 18:24 JAM
91-20-3	Naphthalene	1	ND		0.100	0.0670		29-Mar-13 18:24 JAM
85-01-8	Phenanthrene	1	ND		0.100	0.0490		29-Mar-13 18:24 JAM
129-00-0	Pyrene	1	ND		0.100	0.0360		29-Mar-13 18:24 JAM

17 compound(s) reported

Protocol 4/3/2013 16:53:59

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0322SW008BKG
Project: 20151994
Project ID: Magnolia, AR
Site: None
Lab ID: 201075520
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205284
Method: EPA 8270
GCMS SVOAs Water
Collected: 22-Mar-13
Received: 23-Mar-13
Prepared: 27-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
65-85-0	Benzoic acid	1	ND		25.0	1.56		01-Apr-13 18:48 JAM
100-51-6	Benzyl alcohol	1	ND		10.0	0.959		01-Apr-13 18:48 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND		10.0	0.541		01-Apr-13 18:48 JAM
85-68-7	Butylbenzylphthalate	1	ND		10.0	0.825		01-Apr-13 18:48 JAM
86-74-8	Carbazole	1	ND		10.0	0.932		01-Apr-13 18:48 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND		10.0	0.812		01-Apr-13 18:48 JAM
106-47-8	3&4-Chloroaniline	1	ND		10.0	1.22		01-Apr-13 18:48 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	0.789		01-Apr-13 18:48 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	0.804		01-Apr-13 18:48 JAM
91-58-7	2-Chloronaphthalene	1	ND		10.0	0.713		01-Apr-13 18:48 JAM
95-57-8	2-Chlorophenol	1	ND		10.0	0.716		01-Apr-13 18:48 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND		10.0	0.638		01-Apr-13 18:48 JAM
132-64-9	Dibenzofuran	1	ND		10.0	0.576		01-Apr-13 18:48 JAM
95-50-1	1,2-Dichlorobenzene	1	ND		10.0	0.867		01-Apr-13 18:48 JAM
541-73-1	1,3-Dichlorobenzene	1	ND		10.0	0.832		01-Apr-13 18:48 JAM
106-46-7	1,4-Dichlorobenzene	1	ND		10.0	0.652		01-Apr-13 18:48 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND		10.0	0.781		01-Apr-13 18:48 JAM
120-83-2	2,4-Dichlorophenol	1	ND		10.0	0.783		01-Apr-13 18:48 JAM
84-66-2	Diethylphthalate	1	ND		10.0	0.607		01-Apr-13 18:48 JAM
105-67-9	2,4-Dimethylphenol	1	ND		10.0	0.781		01-Apr-13 18:48 JAM
131-11-3	Dimethylphthalate	1	ND		10.0	0.594		01-Apr-13 18:48 JAM
84-74-2	Di-n-butylphthalate	1	ND		10.0	0.651		01-Apr-13 18:48 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		10.0	1.02		01-Apr-13 18:48 JAM
51-28-5	2,4-Dinitrophenol	1	ND		10.0	0.470		01-Apr-13 18:48 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	0.741		01-Apr-13 18:48 JAM
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	0.780		01-Apr-13 18:48 JAM
117-84-0	Di-n-octylphthalate	1	ND		10.0	0.781		01-Apr-13 18:48 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	0.930		01-Apr-13 18:48 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		10.0	0.759		01-Apr-13 18:48 JAM
118-74-1	Hexachlorobenzene	1	ND		10.0	0.681		01-Apr-13 18:48 JAM
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	0.347		01-Apr-13 18:48 JAM
67-72-1	Hexachloroethane	1	ND		10.0	0.987		01-Apr-13 18:48 JAM
78-59-1	Isophorone	1	ND		10.0	0.628		01-Apr-13 18:48 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	0.749		01-Apr-13 18:48 JAM

Protocol 4/3/2013 16:53:59

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0322SW008BKG
Project: 20151994
Project ID: Magnolia, AR
Site: None
Lab ID: 201075520
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205284
Method: EPA 8270
GCMS SVOAs Water
Collected: 22-Mar-13
Received: 23-Mar-13
Prepared: 27-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
	3&4-Methylphenol	1	ND		10.0	0.948		01-Apr-13 18:48 JAM
88-74-4	2-Nitroaniline	1	ND		10.0	0.859		01-Apr-13 18:48 JAM
99-09-2	3-Nitroaniline	1	ND		10.0	0.877		01-Apr-13 18:48 JAM
100-01-6	4-Nitroaniline	1	ND		10.0	0.972		01-Apr-13 18:48 JAM
98-95-3	Nitrobenzene	1	ND		10.0	1.06		01-Apr-13 18:48 JAM
88-75-5	2-Nitrophenol	1	ND		10.0	0.772		01-Apr-13 18:48 JAM
100-02-7	4-Nitrophenol	1	ND		10.0	0.761		01-Apr-13 18:48 JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	0.919		01-Apr-13 18:48 JAM
86-30-6	N-Nitrosodiphenylamine	1	ND		10.0	0.715		01-Apr-13 18:48 JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		10.0	0.732		01-Apr-13 18:48 JAM
87-86-5	Pentachlorophenol	1	ND		10.0	0.860		01-Apr-13 18:48 JAM
108-95-2	Phenol	1	ND		10.0	0.773		01-Apr-13 18:48 JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	0.797		01-Apr-13 18:48 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		10.0	0.751		01-Apr-13 18:48 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	0.737		01-Apr-13 18:48 JAM

49 compound(s) reported

Protocol 4/3/2013 16:53:59

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0322SW008BKG
Project: 20151994
Project ID: Magnolia, AR
Site: None
Lab ID: 201075520
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205121
Method: EPA 8260
GCMS VOAs Water
Collected: 22-Mar-13
Received: 23-Mar-13
Prepared: 25-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	8.88		25-Mar-13 17:01 MHM
71-43-2	Benzene	1	ND		5.00	0.518		25-Mar-13 17:01 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		25-Mar-13 17:01 MHM
75-25-2	Bromoform	1	ND		5.00	0.920		25-Mar-13 17:01 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855		25-Mar-13 17:01 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		25-Mar-13 17:01 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530		25-Mar-13 17:01 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		25-Mar-13 17:01 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662		25-Mar-13 17:01 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12		25-Mar-13 17:01 MHM
67-66-3	Chloroform	1	ND		5.00	0.853		25-Mar-13 17:01 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636		25-Mar-13 17:01 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		25-Mar-13 17:01 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		25-Mar-13 17:01 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		25-Mar-13 17:01 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		25-Mar-13 17:01 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565		25-Mar-13 17:01 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		25-Mar-13 17:01 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		25-Mar-13 17:01 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		25-Mar-13 17:01 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		25-Mar-13 17:01 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		25-Mar-13 17:01 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		25-Mar-13 17:01 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		25-Mar-13 17:01 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292		25-Mar-13 17:01 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28		25-Mar-13 17:01 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405		25-Mar-13 17:01 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36		25-Mar-13 17:01 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44		25-Mar-13 17:01 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		25-Mar-13 17:01 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		25-Mar-13 17:01 MHM
100-42-5	Styrene	1	ND		5.00	0.571		25-Mar-13 17:01 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		25-Mar-13 17:01 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		25-Mar-13 17:01 MHM

Protocol 4/3/2013 16:53:59

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Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0322SW008BKG
Project: 20151994
Project ID: Magnolia, AR
Site: None
Lab ID: 201075520
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205121
Method: EPA 8260
GCMS VOAs Water
Collected: 22-Mar-13
Received: 23-Mar-13
Prepared: 25-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	ND		5.00	0.536		25-Mar-13 17:01 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		25-Mar-13 17:01 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915		25-Mar-13 17:01 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654		25-Mar-13 17:01 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575		25-Mar-13 17:01 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564		25-Mar-13 17:01 MHM
	m&p-Xylene	1	ND		5.00	0.937		25-Mar-13 17:01 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649		25-Mar-13 17:01 MHM

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0322SW008BKG
Project: 20151994
Project ID: Magnolia, AR
Site: None
Lab ID: 201075520
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205396
Method: EPA 8015 Mod Ext
8015 TPH Extractables Water
Collected: 22-Mar-13
Received: 23-Mar-13
Prepared: 28-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Diesel Range Organics (C10-28)	1	ND		0.250	0.0760		01-Apr-13 19:24 SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.500	0.0490		01-Apr-13 19:24 SNP1

2 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
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Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0322SW008BKG
Project: 20151994
Project ID: Magnolia, AR
Site: None
Lab ID: 201075520
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205129
Method: EPA 8015/8021
8015/8021 Water
Collected: 22-Mar-13
Received: 23-Mar-13
Prepared: 25-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Gasoline Range Organics(C6-10)	1	0.0222	J	0.0500	0.0212		25-Mar-13 17:19 DHR1

1 compound(s) reported

Protocol 4/3/2013 16:53:59

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Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0322SW008BKG
Project: 20151994
Project ID: Magnolia, AR
Site: None
Lab ID: 201075520
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205105
Method: EPA 6010
Metals, ICP, Water
Collected: 22-Mar-13
Received: 23-Mar-13
Prepared: 25-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
7440-36-0	Antimony	1	ND		60.0	1.35		26-Mar-13 15:38	EJH
7440-38-2	Arsenic	1	ND		10.0	1.04		26-Mar-13 15:38	EJH
7440-41-7	Beryllium	1	0.467	J	5.00	0.282		26-Mar-13 15:38	EJH
7440-43-9	Cadmium	1	ND		5.00	0.361		26-Mar-13 15:38	EJH
7440-47-3	Chromium	1	ND		10.0	2.00		26-Mar-13 15:38	EJH
7440-50-8	Copper	1	ND		10.0	2.76		26-Mar-13 15:38	EJH
7439-92-1	Lead	1	1.99	J	5.00	1.15		26-Mar-13 15:38	EJH
7440-02-0	Nickel	1	6.50	J	40.0	0.253		26-Mar-13 15:38	EJH
7782-49-2	Selenium	1	ND		35.0	14.3		26-Mar-13 15:38	EJH
7440-22-4	Silver	1	ND		10.0	0.579		26-Mar-13 15:38	EJH
7440-28-0	Thallium	1	ND		10.0	1.05		26-Mar-13 15:38	EJH
7440-66-6	Zinc	1	24.8		20.0	3.52		26-Mar-13 15:38	EJH

12 compound(s) reported

Protocol 4/3/2013 16:53:59

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0322SW008BKG
Project ID: Magnolia, AR
Lab ID: 201075520
Description: None
Method: EPA 7470
Mercury Water

Project: 20151994
Site: None
Matrix: Water
% Moisture: n/a
Prep Level: Water
Batch: 205107
Collected: 22-Mar-13
Received: 23-Mar-13
Prepared: 25-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.200	0.0340		26-Mar-13 09:12 MHB1

1 compound(s) reported

Protocol 4/3/2013 16:53:59

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: TB004
Project: 20151994
Project ID: Magnolia, AR
Site: None
Lab ID: 201075521
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205121
Method: EPA 8260
GCMS VOAs Water
Collected: 21-Mar-13
Received: 23-Mar-13
Prepared: 25-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	8.88		25-Mar-13 17:21 MHM
71-43-2	Benzene	1	ND		5.00	0.518		25-Mar-13 17:21 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		25-Mar-13 17:21 MHM
75-25-2	Bromoform	1	ND		5.00	0.920		25-Mar-13 17:21 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855		25-Mar-13 17:21 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		25-Mar-13 17:21 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530		25-Mar-13 17:21 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		25-Mar-13 17:21 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662		25-Mar-13 17:21 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12		25-Mar-13 17:21 MHM
67-66-3	Chloroform	1	ND		5.00	0.853		25-Mar-13 17:21 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636		25-Mar-13 17:21 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		25-Mar-13 17:21 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		25-Mar-13 17:21 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		25-Mar-13 17:21 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		25-Mar-13 17:21 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565		25-Mar-13 17:21 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		25-Mar-13 17:21 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		25-Mar-13 17:21 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		25-Mar-13 17:21 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		25-Mar-13 17:21 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		25-Mar-13 17:21 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		25-Mar-13 17:21 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		25-Mar-13 17:21 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292		25-Mar-13 17:21 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28		25-Mar-13 17:21 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405		25-Mar-13 17:21 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36		25-Mar-13 17:21 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44		25-Mar-13 17:21 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		25-Mar-13 17:21 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		25-Mar-13 17:21 MHM
100-42-5	Styrene	1	ND		5.00	0.571		25-Mar-13 17:21 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		25-Mar-13 17:21 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		25-Mar-13 17:21 MHM

Protocol 4/3/2013 16:53:59

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Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: TB004
Project ID: Magnolia, AR
Lab ID: 201075521
Description: None
Method: EPA 8260
GCMS VOAs Water

Project: 20151994
Site: None
Matrix: Water **% Moisture:** n/a
Prep Level: Water **Batch:** 205121
Collected: 21-Mar-13 **Received:** 23-Mar-13
Prepared: 25-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	ND		5.00	0.536		25-Mar-13 17:21 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		25-Mar-13 17:21 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915		25-Mar-13 17:21 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654		25-Mar-13 17:21 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575		25-Mar-13 17:21 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564		25-Mar-13 17:21 MHM
	m&p-Xylene	1	ND		5.00	0.937		25-Mar-13 17:21 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649		25-Mar-13 17:21 MHM

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Surrogate Recovery

Batch: 205284 **Project:** 20151994

Method: Water GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201076403	205284 BLANK 1		69	74	62	76	60	82		
201076404	205284 LCS 1		69	71	64	63	65	80		
201075518	MAAR0321SW006A		58	59	48	62	41	60		
201075519	MAAR0322SW007A		72	70	53	69	48	73		
201075520	MAAR0322SW008BKG		86	79	56	76	64	94		
	QC limits:		25-145	34-117	10-118	33-120	15-134	24-133		

Sur 1: 2,4,6-Tribromophenol (S)
Sur 2: 2-Fluorobiphenyl (S)
Sur 3: 2-Fluorophenol (S)
Sur 4: Nitrobenzene-d5 (S)
Sur 5: Phenol-d5 (S)
Sur 6: Terphenyl-d14 (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Surrogate Recovery

Batch: 205354 **Project:** 20151994

Method: Water GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201076694	205354 BLANK 1		80	84						
201076695	205354 LCS 1		88	85						
201075518	MAAR0321SW006A		48	48						
201075519	MAAR0322SW007A		68	69						
201075520	MAAR0322SW008BKG		56	53						
	QC limits:		12-110	25-113						

Sur 1: 2-Fluorobiphenyl (S)
Sur 2: Terphenyl-d14 (S)

Surrogates 4/3/2013 16:54:00

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Surrogate Recovery

Batch: 205121 **Project:** 20151994

Method: Water GC/MS Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201075645	205121 BLANK 1		82	93	85					
201076001	205121 BLANK 2		78	89	81					
201075646	205121 LCS 1		86	89	88					
201076002	205121 LCS 2		83	92	87					
201075647	540-130321-SB6 MS 1		83	90	89					
201075648	540-130321-SB6 MSD 1		81	84	87					
201075518	MAAR0321SW006A		80	85	82					
201075519	MAAR0322SW007A		81	90	83					
201075520	MAAR0322SW008BKG		80	88	82					
201075521	TB004		80	86	85					
	QC limits:		68-124	72-126	79-119					

Sur 1: 4-Bromofluorobenzene (S)
Sur 2: Dibromofluoromethane (S)
Sur 3: Toluene-d8 (S)

Surrogates 4/3/2013 16:54:00

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

Pace Analytical™

Surrogate Recovery

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Batch: 205350 **Project:** 20151994

Method: Water GC Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201076686	205350 BLANK 1		73	73						
201076687	205350 LCS 1		68	71						
201075518	MAAR0321SW006A		33	52						
201075519	MAAR0322SW007A		20	53						
	QC limits:		16-137	10-121						

Sur 1: n-Pentacosane (S)
Sur 2: o-Terphenyl (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

Pace Analytical™

Surrogate Recovery

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Batch: 205396 **Project:** 20151994

Method: Water GC Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201076900	205396 BLANK 1		88	82						
201076901	205396 LCS 1		68	71						
201075520	MAAR0322SW008BKG		53	67						
	QC limits:		16-137	10-121						

Sur 1: n-Pentacosane (S)
Sur 2: o-Terphenyl (S)

Surrogates 4/3/2013 16:54:00

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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(504) 469-0333

Surrogate Recovery

Batch: 205129 **Project:** 20151994

Method: Water GC Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201075677	205129 BLANK 1		104							
201075934	205129 BLANK 2		103							
201075966	205129 BLANK 3		103							
201075678	205129 LCS 1		106							
201075935	205129 LCS 2		110							
201075967	205129 LCS 3		104							
201075968	MAAR0320SW005A MS 1		102							
201075969	MAAR0320SW005A MSD 1		107							
201075518	MAAR0321SW006A		106							
201075970	MAAR0321SW006A MS 2		107							
201075971	MAAR0321SW006A MSD 2		104							
201075519	MAAR0322SW007A		103							
201075520	MAAR0322SW008BKG		103							
	QC limits:		60-129							

Sur 1: 4-Bromofluorobenzene (S)

Surrogates 4/3/2013 16:54:01

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Batch: 205284 **Project:** 20151994 **LCS:** 201076404 01-Apr-13 11:31

Method: Water GC/MS Semivolatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Benzoic acid	50.0	23.2	47								10-130			Q5
Benzyl alcohol	50.0	31.2	62								44-120			Q5
4-Bromophenylphenyl ether	50.0	33.5	67								49-120			Q5
Butylbenzylphthalate	50.0	32.5	65								46-120			Q5
Carbazole	50.0	36.5	73								51-127			Q5
4-Chloro-3-methylphenol	50.0	32.4	65								43-115			Q5
3&4-Chloroaniline	50.0	25.5	51								10-130			Q5
bis(2-Chloroethoxy)methane	50.0	30.8	62								43-115			Q5
bis(2-Chloroethyl) ether	50.0	34.0	68								47-115			Q5
2-Chloronaphthalene	50.0	34.4	69								52-115			Q5
2-Chlorophenol	50.0	35.9	72								48-115			Q5
4-Chlorophenylphenyl ether	50.0	35.3	71								52-116			Q5
Dibenzofuran	50.0	35.5	71								53-115			Q5
1,2-Dichlorobenzene	50.0	34.9	70								42-115			Q5
1,3-Dichlorobenzene	50.0	33.3	67								40-115			Q5
1,4-Dichlorobenzene	50.0	34.0	68								41-115			Q5
3,3'-Dichlorobenzidine	50.0	37.0	74								16-142			Q5
2,4-Dichlorophenol	50.0	32.9	66								45-115			Q5
Diethylphthalate	50.0	33.4	67								49-120			Q5
2,4-Dimethylphenol	50.0	32.5	65								23-116			Q5
Dimethylphthalate	50.0	32.5	65								52-115			Q5
Di-n-butylphthalate	50.0	31.3	63								50-117			Q5
4,6-Dinitro-2-methylphenol	50.0	33.2	66								44-122			Q5
2,4-Dinitrophenol	50.0	24.7	49								16-134			Q5
2,4-Dinitrotoluene	50.0	34.6	69								50-118			Q5
2,6-Dinitrotoluene	50.0	34.9	70								55-115			Q5
Di-n-octylphthalate	50.0	32.8	66								40-129			Q5
bis(2-Ethylhexyl)phthalate	50.0	34.5	69								46-124			Q5
Hexachloro-1,3-butadiene	50.0	29.2	58								32-115			Q5
Hexachlorobenzene	50.0	34.6	69								53-115			Q5
Hexachlorocyclopentadiene	50.0	26.8	54								10-115			Q5
Hexachloroethane	50.0	31.2	63								36-115			Q5
Isophorone	50.0	31.6	63								45-115			Q5
2-Methylphenol (o-Cresol)	50.0	35.9	72								46-115			Q5
3&4-Methylphenol	50.0	33.4	67								46-115			Q5
2-Nitroaniline	50.0	34.4	69								48-121			Q5
3-Nitroaniline	50.0	34.5	69								38-125			Q5
4-Nitroaniline	50.0	35.2	70								37-132			Q5
Nitrobenzene	50.0	32.0	64								44-118			Q5
2-Nitrophenol	50.0	34.3	69								45-115			Q5
4-Nitrophenol	50.0	24.5	49								29-134			Q5

QC Protocol 4/3/2013 16:54:02

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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(504) 469-0333

Batch: 205284 **Project:** 20151994 **LCS:** 201076404 01-Apr-13 11:31

Method: Water GC/MS Semivolatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
N-Nitroso-di-n-propylamine	50.0	31.8	64								45-119			Q5
N-Nitrosodiphenylamine	50.0	40.9	82								42-134			Q5
2,2'-Oxybis(1-chloropropane)	50.0	36.0	72								40-120			Q5
Pentachlorophenol	50.0	30.1	60								34-124			Q5
Phenol	50.0	34.2	68								44-115			Q5
1,2,4-Trichlorobenzene	50.0	31.6	63								40-115			Q5
2,4,5-Trichlorophenol	50.0	33.4	67								49-115			Q5
2,4,6-Trichlorophenol	50.0	36.2	73								48-115			Q5

49 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205354 **Project:** 20151994 **LCS:** 201076695 29-Mar-13 16:36

Method: Water GC/MS Semivolatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acenaphthene	2.00	1.87	94								39-115			Q5
Acenaphthylene	2.00	1.28	64								30-115			Q5
Anthracene	2.00	2.01	101								34-115			Q5
Benzo(a)anthracene	2.00	1.75	88								33-115			Q5
Benzo(b)fluoranthene	2.00	1.68	84								30-115			Q5
Benzo(k)fluoranthene	2.00	1.40	70								31-115			Q5
Benzo(g,h,i)perylene	2.00	1.24	62								27-115			Q5
Benzo(a)pyrene	2.00	1.30	65								28-115			Q5
Chrysene	2.00	1.49	75								36-115			Q5
Dibenz(a,h)anthracene	2.00	1.30	65								23-115			Q5
Fluoranthene	2.00	1.98	99								39-115			Q5
Fluorene	2.00	1.90	95								38-115			Q5
Indeno(1,2,3-cd)pyrene	2.00	1.42	71								28-115			Q5
2-Methylnaphthalene	2.00	1.84	92								31-115			Q5
Naphthalene	2.00	1.91	96								40-115			Q5
Phenanthrene	2.00	1.98	99								38-115			Q5
Pyrene	2.00	1.92	96								33-115			Q5

17 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205121 **Project:** 20151994 **LCS:** 201075646 25-Mar-13 10:27

Method: Water GC/MS Volatile Organics **MS:** 201075647 25-Mar-13 18:21

Units: ug/L **MSD:** 201075648 25-Mar-13 18:42

Original for MS: Batch Sample 201075437

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acetone	50.0	52.7	105	2500		2640	2730	106	109	3	10-195	10-204	20	D6
Benzene	50.0	48.4	97	2500		2310	2390	92	96	4	66-132	58-140	20	D6
Bromodichloromethane	50.0	49.9	100	2500		2290	2430	92	97	6	67-132	63-137	20	D6
Bromoform	50.0	56.1	112	2500		2450	2600	98	104	6	53-152	49-156	20	D6
Bromomethane	50.0	52.8	106	2500		2360	2170	94	87	8	47-150	43-152	20	D6
2-Butanone (MEK)	50.0	59.3	119	2500		2620	2760	105	110	5	16-167	11-180	20	D6
Carbon disulfide	50.0	56.9	114	2500		2770	2710	111	108	2	18-173	10-184	20	D6
Carbon tetrachloride	50.0	47.8	96	2500		2260	2330	90	93	3	55-143	50-148	20	D6
Chlorobenzene	50.0	52.4	105	2500		2250	2440	90	98	8	71-131	69-136	20	D6
Chloroethane	50.0	53.2	106	2500		2170	1940	87	78	11	31-192	20-193	20	D6
Chloroform	50.0	51.0	102	2500		2340	2410	93	97	3	69-134	65-140	20	D6
Chloromethane	50.0	54.1	108	2500		2030	1950	81	78	4	29-157	27-160	20	D6
1,2-Dibromo-3-chloropropane	50.0	50.5	101	2500		2320	2510	93	100	8	37-151	34-159	20	D6
Dibromochloromethane	50.0	55.3	111	2500		2410	2620	96	105	9	61-138	59-143	20	D6
1,2-Dibromoethane (EDB)	50.0	53.7	107	2500		2430	2590	97	104	7	60-145	59-149	20	D6
Dichlorodifluoromethane	50.0	47.2	95	2500		1200	1130	48	45	6	10-179	10-173	20	D6
1,1-Dichloroethane	50.0	48.8	98	2500	5470	7270	7270	72	72	0	62-137	59-143	20	D6
1,2-Dichloroethane	50.0	49.7	99	2500		2320	2420	93	97	4	59-145	58-151	20	D6
1,1-Dichloroethene	50.0	55.8	112	2500	156.	2840	2770	107	105	3	46-156	32-169	20	D6
cis-1,2-Dichloroethene	50.0	52.9	106	2500	47.0	2520	2590	99	102	3	64-131	61-138	20	D6
trans-1,2-Dichloroethene	50.0	53.3	107	2500		2560	2580	103	103	1	55-138	51-145	20	D6
1,2-Dichloropropane	50.0	50.7	101	2500		2370	2560	95	102	8	65-130	63-134	20	D6
cis-1,3-Dichloropropene	50.0	47.1	94	2500		2220	2380	89	95	7	63-137	59-139	20	D6
trans-1,3-Dichloropropene	50.0	53.2	106	2500		2400	2490	96	100	4	61-143	57-149	20	D6
Ethylbenzene	50.0	48.7	97	2500		2150	2260	86	90	5	71-130	65-136	20	D6
2-Hexanone	50.0	55.1	110	2500		2320	2480	93	99	7	25-156	21-165	20	D6
Isopropylbenzene (Cumene)	50.0	47.2	95	2500		2070	2170	83	87	5	58-142	55-146	20	D6
Methylene chloride	50.0	58.1	116	2500		2860	2930	114	117	2	39-172	33-167	20	D6
4-Methyl-2-pentanone (MIBK	50.0	58.5	117	2500		2590	2680	104	107	3	43-159	39-167	20	D6
Methyl-tert-butyl ether	50.0	54.7	109	2500		2550	2600	102	104	2	49-157	45-168	20	D6
Styrene	50.0	50.3	101	2500		2190	2350	88	94	7	72-134	62-141	20	D6
1,1,2,2-Tetrachloroethane	50.0	51.8	104	2500		2250	2410	90	97	7	40-157	35-164	20	D6
Tetrachloroethene	50.0	51.2	102	2500		2190	2320	88	93	6	55-156	44-162	20	D6
Toluene	50.0	47.8	96	2500		2190	2340	88	94	7	68-131	60-137	20	D6
1,1,1-Trichloroethane	50.0	49.9	100	2500		2280	2360	91	95	4	63-133	58-139	20	D6
1,1,2-Trichloroethane	50.0	54.2	108	2500	49.0	2490	2670	98	105	7	64-135	61-140	20	D6
Trichloroethene	50.0	47.5	95	2500		2150	2270	86	91	5	68-134	58-145	20	D6
Trichlorofluoromethane	50.0	61.0	122	2500		2920	2760	117	110	6	39-185	15-192	20	D6
Vinyl chloride	50.0	43.2	86	2500		1860	1750	75	70	6	40-152	32-157	20	D6
m&p-Xylene	100.	98.7	99	5000		4340	4600	87	92	6	68-134	62-139	20	D6
o-Xylene	50.0	49.3	99	2500		2150	2300	86	92	7	67-131	61-137	20	D6

QC Protocol 4/3/2013 16:54:02

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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(504) 469-0333

Batch: 205121 **Project:** 20151994 **LCS:** 201075646 25-Mar-13 10:27

Method: Water GC/MS Volatile Organics **MS:** 201075647 25-Mar-13 18:21

Units: ug/L **MSD:** 201075648 25-Mar-13 18:42

Original for MS: Batch Sample 201075437

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu

41 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205350 **Project:** 20151994 **LCS:** 201076687 01-Apr-13 16:39

Method: Water GC Semivolatile Organics **MS:**

Units: mg/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Diesel Range Organics (C10-2	0.400	0.251	63								10-115			Q5

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205396 **Project:** 20151994 **LCS:** 201076901 01-Apr-13 18:02

Method: Water GC Semivolatile Organics **MS:**

Units: mg/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Diesel Range Organics (C10-2	0.400	0.208	52								10-115			Q5

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205129 **Project:** 20151994 **LCS:** 201075678 25-Mar-13 10:14

Method: Water GC Volatile Organics **MS:**

Units: mg/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Gasoline Range Organics(C6-	0.500	0.505	101								63-139			
1 compound(s) reported														

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205129 **Project:** 20151994 **LCS:** 201075967 26-Mar-13 9:55

Method: Water GC Volatile Organics **MS:** 201075968 26-Mar-13 11:01

Units: mg/L **MSD:** 201075969 26-Mar-13 11:28

Original for MS: Batch Sample 201075516

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Gasoline Range Organics(C6-	0.500	0.508	102	0.500	0.0302	0.501	0.502	94	94	0	61-136	15-147	20	
1 compound(s) reported														

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205129 **Project:** 20151994 **LCS:**

Method: Water GC Volatile Organics **MS:** 201075970 26-Mar-13 11:55

Units: mg/L **MSD:** 201075971 26-Mar-13 12:23

Original for MS: Client Sample 201075518

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Gasoline Range Organics(C6-				0.500	0.0481			0 *	0 *	0		15-147	20	Q1

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205105 **Project:** 20151994 **LCS:** 201075587 26-Mar-13 14:06

Method: Water ICP Metals **MS:** 201075588 26-Mar-13 14:13

Units: ug/L **MSD:** 201075589 26-Mar-13 14:16

Original for MS: Batch Sample 201075370

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Antimony	1000	955.	96	1000		911.	975.	91	98	7	82-120	80-120	20	
Arsenic	1000	899.	90	1000	10.6	887.	953.	88	94	7	84-117	80-120	20	
Beryllium	1000	916.	92	1000		895.	957.	90	96	7	85-117	80-120	20	
Cadmium	1000	924.	92	1000		826.	884.	83	88	7	85-115	80-120	20	
Chromium	1000	902.	90	1000	3.02	879.	941.	88	94	7	83-117	80-120	20	
Copper	1000	1000	100	1000		992.	1070	99	107	7	85-116	80-120	20	
Lead	1000	936.	94	1000	1.35	820.	877.	82	88	7	84-118	80-120	20	
Nickel	1000	933.	93	1000	17.4	824.	880.	81	86	7	85-118	80-120	20	
Selenium	1000	903.	90	1000		885.	955.	89	96	8	85-116	80-120	20	
Silver	500.	455.	91	500.		443.	472.	89	95	6	80-120	80-120	20	
Thallium	1000	957.	96	1000		788.	838.	79 *	84	6	85-118	80-120	20	Q1
Zinc	1000	901.	90	1000	18.9	812.	870.	79 *	85	7	81-120	80-120	20	Q1

12 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205107 **Project:** 20151994 **LCS:** 201075595 26-Mar-13 8:56

Method: Water Mercury **MS:** 201075596 26-Mar-13 8:59

Units: ug/L **MSD:** 201075597 26-Mar-13 9:01

Original for MS: Batch Sample 201075370

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Mercury	1.00	0.990	99	1.00		1.01	1.01	101	101	0	80-120	75-125	20	

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205284 BLANK 1 **Project:** 20151994

Lab ID: 201076403

Prep Level: Water **Batch:** 205284

Method: Water GC/MS Semivolatile Organics

Prepared: 27-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
65-85-0	Benzoic acid	1	ND		25.0	1.56	01-Apr-13 11:06 JAM
100-51-6	Benzyl alcohol	1	ND		10.0	0.959	01-Apr-13 11:06 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND		10.0	0.541	01-Apr-13 11:06 JAM
85-68-7	Butylbenzylphthalate	1	ND		10.0	0.825	01-Apr-13 11:06 JAM
86-74-8	Carbazole	1	ND		10.0	0.932	01-Apr-13 11:06 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND		10.0	0.812	01-Apr-13 11:06 JAM
106-47-8	3&4-Chloroaniline	1	ND		10.0	1.22	01-Apr-13 11:06 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	0.789	01-Apr-13 11:06 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	0.804	01-Apr-13 11:06 JAM
91-58-7	2-Chloronaphthalene	1	ND		10.0	0.713	01-Apr-13 11:06 JAM
95-57-8	2-Chlorophenol	1	ND		10.0	0.716	01-Apr-13 11:06 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND		10.0	0.638	01-Apr-13 11:06 JAM
132-64-9	Dibenzofuran	1	ND		10.0	0.576	01-Apr-13 11:06 JAM
95-50-1	1,2-Dichlorobenzene	1	ND		10.0	0.867	01-Apr-13 11:06 JAM
541-73-1	1,3-Dichlorobenzene	1	ND		10.0	0.832	01-Apr-13 11:06 JAM
106-46-7	1,4-Dichlorobenzene	1	ND		10.0	0.652	01-Apr-13 11:06 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND		10.0	0.781	01-Apr-13 11:06 JAM
120-83-2	2,4-Dichlorophenol	1	ND		10.0	0.783	01-Apr-13 11:06 JAM
84-66-2	Diethylphthalate	1	ND		10.0	0.607	01-Apr-13 11:06 JAM
105-67-9	2,4-Dimethylphenol	1	ND		10.0	0.781	01-Apr-13 11:06 JAM
131-11-3	Dimethylphthalate	1	ND		10.0	0.594	01-Apr-13 11:06 JAM
84-74-2	Di-n-butylphthalate	1	ND		10.0	0.651	01-Apr-13 11:06 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		10.0	1.02	01-Apr-13 11:06 JAM
51-28-5	2,4-Dinitrophenol	1	ND		10.0	0.470	01-Apr-13 11:06 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	0.741	01-Apr-13 11:06 JAM
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	0.780	01-Apr-13 11:06 JAM
117-84-0	Di-n-octylphthalate	1	ND		10.0	0.781	01-Apr-13 11:06 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	0.930	01-Apr-13 11:06 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		10.0	0.759	01-Apr-13 11:06 JAM
118-74-1	Hexachlorobenzene	1	ND		10.0	0.681	01-Apr-13 11:06 JAM
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	0.347	01-Apr-13 11:06 JAM
67-72-1	Hexachloroethane	1	ND		10.0	0.987	01-Apr-13 11:06 JAM
78-59-1	Isophorone	1	ND		10.0	0.628	01-Apr-13 11:06 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	0.749	01-Apr-13 11:06 JAM

Protocol Blank 4/3/2013 16:54:04

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205284 BLANK 1 **Project:** 20151994

Lab ID: 201076403

Prep Level: Water **Batch:** 205284

Method: Water GC/MS Semivolatile Organics

Prepared: 27-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
	3&4-Methylphenol	1	ND		10.0	0.948	01-Apr-13 11:06 JAM
88-74-4	2-Nitroaniline	1	ND		10.0	0.859	01-Apr-13 11:06 JAM
99-09-2	3-Nitroaniline	1	ND		10.0	0.877	01-Apr-13 11:06 JAM
100-01-6	4-Nitroaniline	1	ND		10.0	0.972	01-Apr-13 11:06 JAM
98-95-3	Nitrobenzene	1	ND		10.0	1.06	01-Apr-13 11:06 JAM
88-75-5	2-Nitrophenol	1	ND		10.0	0.772	01-Apr-13 11:06 JAM
100-02-7	4-Nitrophenol	1	ND		10.0	0.761	01-Apr-13 11:06 JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	0.919	01-Apr-13 11:06 JAM
86-30-6	N-Nitrosodiphenylamine	1	ND		10.0	0.715	01-Apr-13 11:06 JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		10.0	0.732	01-Apr-13 11:06 JAM
87-86-5	Pentachlorophenol	1	ND		10.0	0.860	01-Apr-13 11:06 JAM
108-95-2	Phenol	1	ND		10.0	0.773	01-Apr-13 11:06 JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	0.797	01-Apr-13 11:06 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		10.0	0.751	01-Apr-13 11:06 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	0.737	01-Apr-13 11:06 JAM

49 compound(s) reported

Protocol Blank 4/3/2013 16:54:04

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank Results

Blank ID: 205354 BLANK 1 **Project:** 20151994

Lab ID: 201076694

Prep Level: Water **Batch:** 205354

Method: Water GC/MS Semivolatile Organics

Prepared: 28-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
83-32-9	Acenaphthene	1	ND		0.100	0.0520	29-Mar-13 16:15 JAM
208-96-8	Acenaphthylene	1	ND		0.100	0.0460	29-Mar-13 16:15 JAM
120-12-7	Anthracene	1	ND		0.100	0.0570	29-Mar-13 16:15 JAM
56-55-3	Benzo(a)anthracene	1	ND		0.100	0.0310	29-Mar-13 16:15 JAM
205-99-2	Benzo(b)fluoranthene	1	ND		0.100	0.0520	29-Mar-13 16:15 JAM
207-08-9	Benzo(k)fluoranthene	1	ND		0.100	0.0410	29-Mar-13 16:15 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		0.100	0.0200	29-Mar-13 16:15 JAM
50-32-8	Benzo(a)pyrene	1	ND		0.100	0.0410	29-Mar-13 16:15 JAM
86-74-8	Carbazole	1	ND		0.100	0.0290	29-Mar-13 16:15 JAM
218-01-9	Chrysene	1	ND		0.100	0.0250	29-Mar-13 16:15 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		0.100	0.0180	29-Mar-13 16:15 JAM
132-64-9	Dibenzofuran	1	ND		0.100	0.0640	29-Mar-13 16:15 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		0.500	0.114	29-Mar-13 16:15 JAM
206-44-0	Fluoranthene	1	ND		0.100	0.0390	29-Mar-13 16:15 JAM
86-73-7	Fluorene	1	ND		0.100	0.0630	29-Mar-13 16:15 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		0.100	0.0180	29-Mar-13 16:15 JAM
91-57-6	2-Methylnaphthalene	1	ND		0.100	0.0780	29-Mar-13 16:15 JAM
91-20-3	Naphthalene	1	ND		0.100	0.0670	29-Mar-13 16:15 JAM
85-01-8	Phenanthrene	1	ND		0.100	0.0490	29-Mar-13 16:15 JAM
129-00-0	Pyrene	1	ND		0.100	0.0360	29-Mar-13 16:15 JAM

20 compound(s) reported

Protocol Blank 4/3/2013 16:54:04

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Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205121 BLANK 1 **Project:** 20151994

Lab ID: 201075645

Prep Level: Water **Batch:** 205121

Method: Water GC/MS Volatile Organics

Prepared: 25-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
67-64-1	Acetone	1	ND		10.0	8.88	25-Mar-13 10:07 MHM
71-43-2	Benzene	1	ND		5.00	0.518	25-Mar-13 10:07 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469	25-Mar-13 10:07 MHM
75-25-2	Bromoform	1	ND		5.00	0.920	25-Mar-13 10:07 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855	25-Mar-13 10:07 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66	25-Mar-13 10:07 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530	25-Mar-13 10:07 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528	25-Mar-13 10:07 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662	25-Mar-13 10:07 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12	25-Mar-13 10:07 MHM
67-66-3	Chloroform	1	ND		5.00	0.853	25-Mar-13 10:07 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636	25-Mar-13 10:07 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34	25-Mar-13 10:07 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630	25-Mar-13 10:07 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477	25-Mar-13 10:07 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553	25-Mar-13 10:07 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565	25-Mar-13 10:07 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738	25-Mar-13 10:07 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557	25-Mar-13 10:07 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578	25-Mar-13 10:07 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738	25-Mar-13 10:07 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579	25-Mar-13 10:07 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454	25-Mar-13 10:07 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526	25-Mar-13 10:07 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292	25-Mar-13 10:07 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28	25-Mar-13 10:07 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405	25-Mar-13 10:07 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36	25-Mar-13 10:07 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44	25-Mar-13 10:07 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10	25-Mar-13 10:07 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687	25-Mar-13 10:07 MHM
100-42-5	Styrene	1	ND		5.00	0.571	25-Mar-13 10:07 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12	25-Mar-13 10:07 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679	25-Mar-13 10:07 MHM

Protocol Blank 4/3/2013 16:54:04

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205121 BLANK 1 **Project:** 20151994

Lab ID: 201075645

Prep Level: Water **Batch:** 205121

Method: Water GC/MS Volatile Organics

Prepared: 25-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
108-88-3	Toluene	1	ND		5.00	0.536	25-Mar-13 10:07 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554	25-Mar-13 10:07 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915	25-Mar-13 10:07 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654	25-Mar-13 10:07 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575	25-Mar-13 10:07 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564	25-Mar-13 10:07 MHM
	m&p-Xylene	1	ND		5.00	0.937	25-Mar-13 10:07 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649	25-Mar-13 10:07 MHM

42 compound(s) reported

Protocol Blank 4/3/2013 16:54:04

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MDL denotes method detection limit

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205350 BLANK 1 **Project:** 20151994

Lab ID: 201076686

Prep Level: Water **Batch:** 205350

Method: Water GC Semivolatile Organics

Prepared: 28-Mar-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Diesel Range Organics (C10-28)	1	ND		0.150	0.0760	01-Apr-13 16:11 SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.150	0.0490	01-Apr-13 16:11 SNP1

2 compound(s) reported

Protocol Blank 4/3/2013 16:54:04

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205396 BLANK 1 **Project:** 20151994

Lab ID: 201076900

Prep Level: Water **Batch:** 205396

Method: Water GC Semivolatile Organics

Prepared: 28-Mar-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Diesel Range Organics (C10-28)	1	ND		0.150	0.0760	03-Apr-13 15:07 SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.150	0.0490	03-Apr-13 15:07 SNP1

2 compound(s) reported

Protocol Blank 4/3/2013 16:54:04

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205129 BLANK 1 **Project:** 20151994

Lab ID: 201075677

Prep Level: Water **Batch:** 205129

Method: Water GC Volatile Organics

Prepared: 25-Mar-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Gasoline Range Organics(C6-10)	1	0.0237	J	0.0500	0.0212	25-Mar-13 09:46 DHR1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205129 BLANK 3 **Project:** 20151994

Lab ID: 201075966

Prep Level: Water **Batch:** 205129

Method: Water GC Volatile Organics

Prepared: 26-Mar-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Gasoline Range Organics(C6-10)	1	0.0261	J	0.0500	0.0212	26-Mar-13 09:27 DHR1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205105 BLANK 1 **Project:** 20151994

Lab ID: 201075586

Prep Level: Water **Batch:** 205105

Method: Water ICP Metals

Prepared: 25-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis	
7440-36-0	Antimony	1	ND		60.0	1.35	26-Mar-13 14:02	EJH
7440-38-2	Arsenic	1	ND		10.0	1.04	26-Mar-13 14:02	EJH
7440-41-7	Beryllium	1	ND		5.00	0.282	26-Mar-13 14:02	EJH
7440-43-9	Cadmium	1	ND		5.00	0.361	26-Mar-13 14:02	EJH
7440-47-3	Chromium	1	ND		10.0	2.00	26-Mar-13 14:02	EJH
7440-50-8	Copper	1	ND		10.0	2.76	26-Mar-13 14:02	EJH
7439-92-1	Lead	1	ND		5.00	1.15	26-Mar-13 14:02	EJH
7440-02-0	Nickel	1	ND		40.0	0.253	26-Mar-13 14:02	EJH
7782-49-2	Selenium	1	ND		35.0	14.3	26-Mar-13 14:02	EJH
7440-22-4	Silver	1	ND		10.0	0.579	26-Mar-13 14:02	EJH
7440-28-0	Thallium	1	ND		10.0	1.05	26-Mar-13 14:02	EJH
7440-66-6	Zinc	1	ND		20.0	3.52	26-Mar-13 14:02	EJH

12 compound(s) reported

Protocol Blank 4/3/2013 16:54:05

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205107 BLANK 1 **Project:** 20151994

Lab ID: 201075594

Prep Level: Water **Batch:** 205107

Method: Water Mercury

Prepared: 25-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
7439-97-6	Mercury	1	ND		0.200	0.0340	26-Mar-13 08:54 MHB1

1 compound(s) reported

Protocol Blank 4/3/2013 16:54:05

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Definitions/Qualifiers

Project: 20151994

Value	Description
D6	The sample was analyzed at a dilution based upon the screening information.
Q1	The matrix spike recoveries are poor. Acceptable method performance for this analyte has been demonstrated by the laboratory control sample recovery.
Q5	Insufficient sample was provided to perform matrix spike analyses on any sample in this analytical batch. Method performance for this analyte has been demonstrated by the laboratory control sample recovery.
J	This estimated value for the analyte is below the adjusted reporting limit but above the instrument reporting limit.
U	The analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
B	This analyte was detected in the method blank.
E	The sample concentration is above the linear calibrated range of the analysis.
LCS	Laboratory Control Sample.
MS(D)	Matrix Spike (Duplicate).
DUP	Sample Duplicate.
RPD	Relative Percent Difference.

Pace Analytical Services, In
1000 Riverbend Blvd. Suite F
St. Rose, LA 7008
(504) 469-033

Chains of Custody

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www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant field

20151994 20-CTEH

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: CTEH	Report To: Chase Ertzberger	Attention: CTEH
Address: 5120 Northshore Dr	Copy To: James McCormack(jmccormack@cteh.com	
N. Little Rock, AR 72118	40432samples@cteh.com	Address: 5120 Northshore Dr
Email To: Certzberger@cteh.com	Purchase Order No.:	Pace Quote Reference:
Phone: 501-366-0394 Fax:	Project Name: Delek @ Magnolia, AR	Pace Project Manager: Karen Brown
Requested Due Date/TAT Normal 10 WD	Project Number: 40432	Pace Profile #: 5831 / Line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: AR

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	8260	8270	8270-SIM (Low level)	Priority Pollutant List (6010)	TPH-GRO (8015)	TPH-DRO / ORO (8015)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MAAR0321SW006A	SW	G			3-21-13	1840		11	4		1	6						3	1	2	1	3	1		201075518
2	MAAR0322SW007A	SW	G			3-22-13	1445		11	4		1	6						3	1	2	1	3	1		519
3	MAAR0322SW008BKG	SW	G			3-22-13	1600		11	4		1	6						3	1	2	1	3	1		520
4	TB004	SW	G			3-21-13	—		2				2						2							521
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature] / CTEH	3-22-13	1730	UPS	3-22-13	1730	~~1.6~~ 2.0	~~y~~	~~y~~	~~y~~
	UPS	3/23/13	0800	[signature]	3/23/13	0800	1.6	y	y	y
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Chase Ertzberger

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 3-22-2013

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.06, 2-Feb-2007

Pace Analytical

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Sample Conditio

20151994 20-CTEH

Courier: ☐ Pace Courier ☐ Hired Courier ☐ Fed X ☒ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC] **Custody Seals Intact:** ☑Yes ☐No

Therometer Used:	☐ Therm Fisher IR 5 ☑ Therm Fisher IR 6 ☐ Therm Fisher IR 7

Type of Ice: (Wet) Blue None

Samples on ice: [see COC]

Date and Initials of person examining contents: 03-23-13

Cooler Temperature: [see COC] Temp should be above freezing to 6°C

Temp must be measured from Temperature blank when present

				Comments:
Temperature Blank Present"?	☑Yes	☐No	☐N/A	1
Chain of Custody Present:	☑Yes	☐No	☐N/A	2
Chain of Custody Complete:	☑Yes	☐No	☐N/A	3
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	4
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	5
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	6
Sufficient Volume:	☑Yes	☐No	☐N/A	7
Correct Containers Used:	☑Yes	☐No	☐N/A	8
Filtered vol. Rec. for Diss. tests	☐Yes	☐No	☑N/A	9
Sample Labels match COC:	☑Yes	☐No	☐N/A	10
All containers received within manafacture's precautionary and/or expiration dates.	☑Yes	☐No	☐N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☑Yes	☐No	☐N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	☑Yes	☐No	☐N/A	13 If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐Yes	☑No	☐N/A	14
Trip Blank Present:	☑Yes	☐No		15

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

ALLC003rev.08, 15Feb2013 SCUR Form - mod

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

April 05, 2013

James McCormack
CTEH
5120 North Shore Drive
North Little Rock, AR 72118

RE: Project 20152031
Project ID: Magnolia, AR

Dear James McCormack:

Enclosed are the analytical results for sample(s) received by the laboratory on March 26, 2013. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Karen Brown
karen.brown@pacelabs.com

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

Laboratory Certifications

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152031

Client: CTEH

Project ID: Magnolia, AR

Washington Department of Ecology C2078
Oregon Environmental Laboratory Accreditation - LA200001
U.S. Dept. of Agriculture Foreign Soil Import P330-10-00119
Pennsylvania Dept. of Env Protection (NELAC) 68-04202
Texas Commission on Env. Quality (NELAC) T104704405-09-TX
Kansas Department of Health and Environment (NELAC) E-10266
Florida Department of Health (NELAC) E87595
Oklahoma Department of Environmental Quality - 2010-139
Illinois Environmental Protection Agency - 0025721
California Env. Lab Accreditation Program Branch - 11277CA
Louisiana Dept. of Environmental Quality (NELAC/LELAP) 02006

4/5/2013 18:05:54

Sample Cross Reference

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152031

Client: CTEH

Project ID: Magnolia, AR

Client Sample ID	Lab ID	Matrix	Collection Date/Time	Received Date/Time
MAAR0323SW009A	201075936	Water	23-Mar-13 16:45	26-Mar-13 06:45
MAAR0324SW010A	201075937	Water	24-Mar-13 15:50	26-Mar-13 06:45
MAAR0325SW011A	201075943	Water	25-Mar-13 14:50	26-Mar-13 06:45
TB005	201075944	Water	25-Mar-13 00:00	26-Mar-13 06:45

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152031

Narrative detail for GC semi-volatiles analyses:

Sample 201075936 yielded low surrogate recovery and was therefore re-extracted; the re-extraction was performed outside the holding time limit. Re-analysis results were similar, with similar surrogate trends, indicating a matrix effect.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152031

Sample Receipt Condition:

All samples were received in accordance with EPA protocol.

Holding Times (Qualified):

These holding times were exceeded due to sample receipt or re-extraction after the holding time had expired.

Sample 201075936 analysis 3535TPH TPH Water SPE

Blanks:

All blank results were below reporting limits.

Laboratory Control Samples:

All LCS recoveries were within QC limits.

Matrix Spikes and Duplicates:

MS or MSD recoveries outside of QC limits are qualified in the Report of Quality Control section.

Surrogates:

Surrogate recoveries outside of QC limits are qualified in the surrogate results section.

QC Cross Reference

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152031

Analytical Method	Batch	Sample used for QC
EPA 8015/8021	205129	Client sample MAAR0320SW005A from project 20151993
EPA 8015/8021	205129	Client sample MAAR0321SW006A from project 20151994
EPA 6010	205212	Batch sample from another client
EPA 7470	205234	Project sample MAAR0323SW009A
EPA 8260	205216	Project sample MAAR0323SW009A

For the sample used as the original for the DUP or MS/MSD for the batch:

Project sample means a sample from this project was used.
Client sample means a sample from the same client but in a different project was used.
Batch sample means a sample from a different client was used.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0323SW009A
Project: 20152031
Project ID: Magnolia, AR
Site: None
Lab ID: 201075936
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205447
Method: EPA 8270
GCMS SVOAs SIM Water
Collected: 23-Mar-13
Received: 26-Mar-13
Prepared: 29-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
83-32-9	Acenaphthene	1	0.0600	J	0.100	0.0520		01-Apr-13 12:30 JAM
208-96-8	Acenaphthylene	1	ND		0.100	0.0460		01-Apr-13 12:30 JAM
120-12-7	Anthracene	1	ND		0.100	0.0570		01-Apr-13 12:30 JAM
56-55-3	Benzo(a)anthracene	1	ND		0.100	0.0310		01-Apr-13 12:30 JAM
205-99-2	Benzo(b)fluoranthene	1	ND		0.100	0.0520		01-Apr-13 12:30 JAM
207-08-9	Benzo(k)fluoranthene	1	ND		0.100	0.0410		01-Apr-13 12:30 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		0.100	0.0200		01-Apr-13 12:30 JAM
50-32-8	Benzo(a)pyrene	1	ND		0.100	0.0410		01-Apr-13 12:30 JAM
218-01-9	Chrysene	1	ND		0.100	0.0250		01-Apr-13 12:30 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		0.100	0.0180		01-Apr-13 12:30 JAM
206-44-0	Fluoranthene	1	ND		0.100	0.0390		01-Apr-13 12:30 JAM
86-73-7	Fluorene	1	0.260		0.100	0.0630		01-Apr-13 12:30 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		0.100	0.0180		01-Apr-13 12:30 JAM
91-57-6	2-Methylnaphthalene	1	0.0900	J	0.100	0.0780		01-Apr-13 12:30 JAM
91-20-3	Naphthalene	1	0.0800	J	0.100	0.0670		01-Apr-13 12:30 JAM
85-01-8	Phenanthrene	1	0.140		0.100	0.0490		01-Apr-13 12:30 JAM
129-00-0	Pyrene	1	ND		0.100	0.0360		01-Apr-13 12:30 JAM

17 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0323SW009A
Project: 20152031
Project ID: Magnolia, AR
Site: None
Lab ID: 201075936
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205284
Method: EPA 8270
GCMS SVOAs Water
Collected: 23-Mar-13
Received: 26-Mar-13
Prepared: 27-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
65-85-0	Benzoic acid	1	ND		25.0	1.56		01-Apr-13 19:13 JAM
100-51-6	Benzyl alcohol	1	ND		10.0	0.959		01-Apr-13 19:13 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND		10.0	0.541		01-Apr-13 19:13 JAM
85-68-7	Butylbenzylphthalate	1	ND		10.0	0.825		01-Apr-13 19:13 JAM
86-74-8	Carbazole	1	ND		10.0	0.932		01-Apr-13 19:13 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND		10.0	0.812		01-Apr-13 19:13 JAM
106-47-8	3&4-Chloroaniline	1	ND		10.0	1.22		01-Apr-13 19:13 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	0.789		01-Apr-13 19:13 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	0.804		01-Apr-13 19:13 JAM
91-58-7	2-Chloronaphthalene	1	ND		10.0	0.713		01-Apr-13 19:13 JAM
95-57-8	2-Chlorophenol	1	ND		10.0	0.716		01-Apr-13 19:13 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND		10.0	0.638		01-Apr-13 19:13 JAM
132-64-9	Dibenzofuran	1	ND		10.0	0.576		01-Apr-13 19:13 JAM
95-50-1	1,2-Dichlorobenzene	1	ND		10.0	0.867		01-Apr-13 19:13 JAM
541-73-1	1,3-Dichlorobenzene	1	ND		10.0	0.832		01-Apr-13 19:13 JAM
106-46-7	1,4-Dichlorobenzene	1	ND		10.0	0.652		01-Apr-13 19:13 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND		10.0	0.781		01-Apr-13 19:13 JAM
120-83-2	2,4-Dichlorophenol	1	ND		10.0	0.783		01-Apr-13 19:13 JAM
84-66-2	Diethylphthalate	1	ND		10.0	0.607		01-Apr-13 19:13 JAM
105-67-9	2,4-Dimethylphenol	1	ND		10.0	0.781		01-Apr-13 19:13 JAM
131-11-3	Dimethylphthalate	1	ND		10.0	0.594		01-Apr-13 19:13 JAM
84-74-2	Di-n-butylphthalate	1	ND		10.0	0.651		01-Apr-13 19:13 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		10.0	1.02		01-Apr-13 19:13 JAM
51-28-5	2,4-Dinitrophenol	1	ND		10.0	0.470		01-Apr-13 19:13 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	0.741		01-Apr-13 19:13 JAM
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	0.780		01-Apr-13 19:13 JAM
117-84-0	Di-n-octylphthalate	1	ND		10.0	0.781		01-Apr-13 19:13 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	0.930		01-Apr-13 19:13 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		10.0	0.759		01-Apr-13 19:13 JAM
118-74-1	Hexachlorobenzene	1	ND		10.0	0.681		01-Apr-13 19:13 JAM
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	0.347		01-Apr-13 19:13 JAM
67-72-1	Hexachloroethane	1	ND		10.0	0.987		01-Apr-13 19:13 JAM
78-59-1	Isophorone	1	ND		10.0	0.628		01-Apr-13 19:13 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	0.749		01-Apr-13 19:13 JAM

Protocol 4/5/2013 18:07:17

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0323SW009A
Project: 20152031
Project ID: Magnolia, AR
Site: None
Lab ID: 201075936
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205284
Method: EPA 8270
GCMS SVOAs Water
Collected: 23-Mar-13
Received: 26-Mar-13
Prepared: 27-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
	3&4-Methylphenol	1	ND		10.0	0.948		01-Apr-13 19:13 JAM
88-74-4	2-Nitroaniline	1	ND		10.0	0.859		01-Apr-13 19:13 JAM
99-09-2	3-Nitroaniline	1	ND		10.0	0.877		01-Apr-13 19:13 JAM
100-01-6	4-Nitroaniline	1	ND		10.0	0.972		01-Apr-13 19:13 JAM
98-95-3	Nitrobenzene	1	ND		10.0	1.06		01-Apr-13 19:13 JAM
88-75-5	2-Nitrophenol	1	ND		10.0	0.772		01-Apr-13 19:13 JAM
100-02-7	4-Nitrophenol	1	ND		10.0	0.761		01-Apr-13 19:13 JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	0.919		01-Apr-13 19:13 JAM
86-30-6	N-Nitrosodiphenylamine	1	ND		10.0	0.715		01-Apr-13 19:13 JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		10.0	0.732		01-Apr-13 19:13 JAM
87-86-5	Pentachlorophenol	1	ND		10.0	0.860		01-Apr-13 19:13 JAM
108-95-2	Phenol	1	ND		10.0	0.773		01-Apr-13 19:13 JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	0.797		01-Apr-13 19:13 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		10.0	0.751		01-Apr-13 19:13 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	0.737		01-Apr-13 19:13 JAM

49 compound(s) reported

Protocol 4/5/2013 18:07:18

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0323SW009A
Project: 20152031
Project ID: Magnolia, AR
Site: None
Lab ID: 201075936
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205216
Method: EPA 8260
GCMS VOAs Water
Collected: 23-Mar-13
Received: 26-Mar-13
Prepared: 26-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	8.88		26-Mar-13 16:02 MHM
71-43-2	Benzene	1	2.00	J	5.00	0.518		26-Mar-13 16:02 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		26-Mar-13 16:02 MHM
75-25-2	Bromoform	1	ND		5.00	0.920		26-Mar-13 16:02 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855		26-Mar-13 16:02 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		26-Mar-13 16:02 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530		26-Mar-13 16:02 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		26-Mar-13 16:02 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662		26-Mar-13 16:02 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12		26-Mar-13 16:02 MHM
67-66-3	Chloroform	1	ND		5.00	0.853		26-Mar-13 16:02 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636		26-Mar-13 16:02 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		26-Mar-13 16:02 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		26-Mar-13 16:02 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		26-Mar-13 16:02 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		26-Mar-13 16:02 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565		26-Mar-13 16:02 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		26-Mar-13 16:02 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		26-Mar-13 16:02 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		26-Mar-13 16:02 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		26-Mar-13 16:02 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		26-Mar-13 16:02 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		26-Mar-13 16:02 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		26-Mar-13 16:02 MHM
100-41-4	Ethylbenzene	1	1.61	J	5.00	0.292		26-Mar-13 16:02 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28		26-Mar-13 16:02 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405		26-Mar-13 16:02 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36		26-Mar-13 16:02 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44		26-Mar-13 16:02 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		26-Mar-13 16:02 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		26-Mar-13 16:02 MHM
100-42-5	Styrene	1	ND		5.00	0.571		26-Mar-13 16:02 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		26-Mar-13 16:02 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		26-Mar-13 16:02 MHM

Protocol 4/5/2013 18:07:18

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MDL denotes method detection limit
Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0323SW009A
Project: 20152031
Project ID: Magnolia, AR
Site: None
Lab ID: 201075936
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205216
Method: EPA 8260
GCMS VOAs Water
Collected: 23-Mar-13
Received: 26-Mar-13
Prepared: 26-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	2.49	J	5.00	0.536		26-Mar-13 16:02 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		26-Mar-13 16:02 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915		26-Mar-13 16:02 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654		26-Mar-13 16:02 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575		26-Mar-13 16:02 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564		26-Mar-13 16:02 MHM
	m&p-Xylene	1	2.49	J	5.00	0.937		26-Mar-13 16:02 MHM
95-47-6	o-Xylene	1	1.98	J	5.00	0.649		26-Mar-13 16:02 MHM

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0323SW009A
Project ID: Magnolia, AR
Lab ID: 201075936
Description: None
Method: EPA 8015 Mod Ext
8015 TPH Extractables Water

Project: 20152031
Site: None
Matrix: Water
% Moisture: n/a
Prep Level: Water
Batch: 205396
Collected: 23-Mar-13
Received: 26-Mar-13
Prepared: 28-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Diesel Range Organics (C10-28)	1	ND	N	0.250	0.0760		01-Apr-13 19:52 SNP1
none	Oil Range Organics (>C28-40)	1	ND	N	0.500	0.0490		01-Apr-13 19:52 SNP1

2 compound(s) reported

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ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0323SW009A
Project ID: Magnolia, AR
Lab ID: 201075936
Description: None
Method: EPA 8015/8021
8015/8021 Water

Project: 20152031
Site: None
Matrix: Water
% Moisture: n/a
Prep Level: Water
Batch: 205129
Collected: 23-Mar-13
Received: 26-Mar-13
Prepared: 27-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Gasoline Range Organics(C6-10)	1	0.0739		0.0500	0.0212		27-Mar-13 07:23 DHR1

1 compound(s) reported

Protocol 4/5/2013 18:07:18

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0323SW009A
Project ID: Magnolia, AR
Lab ID: 201075936
Description: None
Method: EPA 6010
Metals, ICP, Water

Project: 20152031
Site: None
Matrix: Water **% Moisture:** n/a
Prep Level: Water **Batch:** 205212

Collected: 23-Mar-13 **Received:** 26-Mar-13
Prepared: 26-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
7440-36-0	Antimony	1	ND		60.0	1.35		26-Mar-13 17:33	EJH
7440-38-2	Arsenic	1	ND		10.0	1.04		26-Mar-13 17:33	EJH
7440-41-7	Beryllium	1	0.495	J	5.00	0.282		26-Mar-13 17:33	EJH
7440-43-9	Cadmium	1	ND		5.00	0.361		26-Mar-13 17:33	EJH
7440-47-3	Chromium	1	ND		10.0	2.00		26-Mar-13 17:33	EJH
7440-50-8	Copper	1	ND		10.0	2.76		26-Mar-13 17:33	EJH
7439-92-1	Lead	1	4.35	J	5.00	1.15		26-Mar-13 17:33	EJH
7440-02-0	Nickel	1	6.88	J	40.0	0.253		26-Mar-13 17:33	EJH
7782-49-2	Selenium	1	ND		35.0	14.3		26-Mar-13 17:33	EJH
7440-22-4	Silver	1	ND		10.0	0.579		26-Mar-13 17:33	EJH
7440-28-0	Thallium	1	ND		10.0	1.05		26-Mar-13 17:33	EJH
7440-66-6	Zinc	1	19.3	J	20.0	3.52		26-Mar-13 17:33	EJH

12 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0323SW009A
Project ID: Magnolia, AR
Lab ID: 201075936
Description: None
Method: EPA 7470
Mercury Water

Project: 20152031
Site: None
Matrix: Water
Prep Level: Water
% Moisture: n/a
Batch: 205234
Collected: 23-Mar-13
Received: 26-Mar-13
Prepared: 26-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.200	0.0340		26-Mar-13 15:13 MHB1

1 compound(s) reported

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MDL denotes method detection limit

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0323SW009A
Project: 20152031
Project ID: Magnolia, AR
Site: None
Lab ID: 201075936RE1
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205650
Method: EPA 8015 Mod Ext
8015 TPH Extractables Water
Collected: 23-Mar-13
Received: 26-Mar-13
Prepared: 02-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
none	Diesel Range Organics (C10-28)	1	ND	N	0.250	0.0760		04-Apr-13 05:27	SNP1
none	Oil Range Organics (>C28-40)	1	ND	N	0.500	0.0490		04-Apr-13 05:27	SNP1

2 compound(s) reported

Protocol 4/5/2013 18:07:18

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0324SW010A
Project: 20152031
Project ID: Magnolia, AR
Site: None
Lab ID: 201075937
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205447
Method: EPA 8270
GCMS SVOAs SIM Water
Collected: 24-Mar-13
Received: 26-Mar-13
Prepared: 29-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
83-32-9	Acenaphthene	1	ND		0.100	0.0520		01-Apr-13 12:52 JAM
208-96-8	Acenaphthylene	1	ND		0.100	0.0460		01-Apr-13 12:52 JAM
120-12-7	Anthracene	1	ND		0.100	0.0570		01-Apr-13 12:52 JAM
56-55-3	Benzo(a)anthracene	1	ND		0.100	0.0310		01-Apr-13 12:52 JAM
205-99-2	Benzo(b)fluoranthene	1	ND		0.100	0.0520		01-Apr-13 12:52 JAM
207-08-9	Benzo(k)fluoranthene	1	ND		0.100	0.0410		01-Apr-13 12:52 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		0.100	0.0200		01-Apr-13 12:52 JAM
50-32-8	Benzo(a)pyrene	1	ND		0.100	0.0410		01-Apr-13 12:52 JAM
218-01-9	Chrysene	1	ND		0.100	0.0250		01-Apr-13 12:52 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		0.100	0.0180		01-Apr-13 12:52 JAM
206-44-0	Fluoranthene	1	ND		0.100	0.0390		01-Apr-13 12:52 JAM
86-73-7	Fluorene	1	ND		0.100	0.0630		01-Apr-13 12:52 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		0.100	0.0180		01-Apr-13 12:52 JAM
91-57-6	2-Methylnaphthalene	1	ND		0.100	0.0780		01-Apr-13 12:52 JAM
91-20-3	Naphthalene	1	ND		0.100	0.0670		01-Apr-13 12:52 JAM
85-01-8	Phenanthrene	1	ND		0.100	0.0490		01-Apr-13 12:52 JAM
129-00-0	Pyrene	1	ND		0.100	0.0360		01-Apr-13 12:52 JAM

17 compound(s) reported

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0324SW010A
Project: 20152031
Project ID: Magnolia, AR
Site: None
Lab ID: 201075937
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205284
Method: EPA 8270
GCMS SVOAs Water
Collected: 24-Mar-13
Received: 26-Mar-13
Prepared: 27-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
65-85-0	Benzoic acid	1	ND		25.0	1.56		01-Apr-13 19:39 JAM
100-51-6	Benzyl alcohol	1	ND		10.0	0.959		01-Apr-13 19:39 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND		10.0	0.541		01-Apr-13 19:39 JAM
85-68-7	Butylbenzylphthalate	1	ND		10.0	0.825		01-Apr-13 19:39 JAM
86-74-8	Carbazole	1	ND		10.0	0.932		01-Apr-13 19:39 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND		10.0	0.812		01-Apr-13 19:39 JAM
106-47-8	3&4-Chloroaniline	1	ND		10.0	1.22		01-Apr-13 19:39 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	0.789		01-Apr-13 19:39 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	0.804		01-Apr-13 19:39 JAM
91-58-7	2-Chloronaphthalene	1	ND		10.0	0.713		01-Apr-13 19:39 JAM
95-57-8	2-Chlorophenol	1	ND		10.0	0.716		01-Apr-13 19:39 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND		10.0	0.638		01-Apr-13 19:39 JAM
132-64-9	Dibenzofuran	1	ND		10.0	0.576		01-Apr-13 19:39 JAM
95-50-1	1,2-Dichlorobenzene	1	ND		10.0	0.867		01-Apr-13 19:39 JAM
541-73-1	1,3-Dichlorobenzene	1	ND		10.0	0.832		01-Apr-13 19:39 JAM
106-46-7	1,4-Dichlorobenzene	1	ND		10.0	0.652		01-Apr-13 19:39 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND		10.0	0.781		01-Apr-13 19:39 JAM
120-83-2	2,4-Dichlorophenol	1	ND		10.0	0.783		01-Apr-13 19:39 JAM
84-66-2	Diethylphthalate	1	ND		10.0	0.607		01-Apr-13 19:39 JAM
105-67-9	2,4-Dimethylphenol	1	ND		10.0	0.781		01-Apr-13 19:39 JAM
131-11-3	Dimethylphthalate	1	ND		10.0	0.594		01-Apr-13 19:39 JAM
84-74-2	Di-n-butylphthalate	1	ND		10.0	0.651		01-Apr-13 19:39 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		10.0	1.02		01-Apr-13 19:39 JAM
51-28-5	2,4-Dinitrophenol	1	ND		10.0	0.470		01-Apr-13 19:39 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	0.741		01-Apr-13 19:39 JAM
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	0.780		01-Apr-13 19:39 JAM
117-84-0	Di-n-octylphthalate	1	ND		10.0	0.781		01-Apr-13 19:39 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	2.69	J	10.0	0.930		01-Apr-13 19:39 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		10.0	0.759		01-Apr-13 19:39 JAM
118-74-1	Hexachlorobenzene	1	ND		10.0	0.681		01-Apr-13 19:39 JAM
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	0.347		01-Apr-13 19:39 JAM
67-72-1	Hexachloroethane	1	ND		10.0	0.987		01-Apr-13 19:39 JAM
78-59-1	Isophorone	1	ND		10.0	0.628		01-Apr-13 19:39 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	0.749		01-Apr-13 19:39 JAM

Protocol 4/5/2013 18:07:18

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0324SW010A
Project: 20152031
Project ID: Magnolia, AR
Site: None
Lab ID: 201075937
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205284
Method: EPA 8270
GCMS SVOAs Water
Collected: 24-Mar-13
Received: 26-Mar-13
Prepared: 27-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
	3&4-Methylphenol	1	ND		10.0	0.948		01-Apr-13 19:39 JAM
88-74-4	2-Nitroaniline	1	ND		10.0	0.859		01-Apr-13 19:39 JAM
99-09-2	3-Nitroaniline	1	ND		10.0	0.877		01-Apr-13 19:39 JAM
100-01-6	4-Nitroaniline	1	ND		10.0	0.972		01-Apr-13 19:39 JAM
98-95-3	Nitrobenzene	1	ND		10.0	1.06		01-Apr-13 19:39 JAM
88-75-5	2-Nitrophenol	1	ND		10.0	0.772		01-Apr-13 19:39 JAM
100-02-7	4-Nitrophenol	1	ND		10.0	0.761		01-Apr-13 19:39 JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	0.919		01-Apr-13 19:39 JAM
86-30-6	N-Nitrosodiphenylamine	1	ND		10.0	0.715		01-Apr-13 19:39 JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		10.0	0.732		01-Apr-13 19:39 JAM
87-86-5	Pentachlorophenol	1	ND		10.0	0.860		01-Apr-13 19:39 JAM
108-95-2	Phenol	1	ND		10.0	0.773		01-Apr-13 19:39 JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	0.797		01-Apr-13 19:39 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		10.0	0.751		01-Apr-13 19:39 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	0.737		01-Apr-13 19:39 JAM

49 compound(s) reported

Protocol 4/5/2013 18:07:18

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0324SW010A
Project: 20152031
Project ID: Magnolia, AR
Site: None
Lab ID: 201075937
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205216
Method: EPA 8260
GCMS VOAs Water
Collected: 24-Mar-13
Received: 26-Mar-13
Prepared: 26-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	8.88		26-Mar-13 17:02 MHM
71-43-2	Benzene	1	4.38	J	5.00	0.518		26-Mar-13 17:02 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		26-Mar-13 17:02 MHM
75-25-2	Bromoform	1	ND		5.00	0.920		26-Mar-13 17:02 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855		26-Mar-13 17:02 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		26-Mar-13 17:02 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530		26-Mar-13 17:02 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		26-Mar-13 17:02 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662		26-Mar-13 17:02 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12		26-Mar-13 17:02 MHM
67-66-3	Chloroform	1	ND		5.00	0.853		26-Mar-13 17:02 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636		26-Mar-13 17:02 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		26-Mar-13 17:02 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		26-Mar-13 17:02 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		26-Mar-13 17:02 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		26-Mar-13 17:02 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565		26-Mar-13 17:02 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		26-Mar-13 17:02 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		26-Mar-13 17:02 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		26-Mar-13 17:02 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		26-Mar-13 17:02 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		26-Mar-13 17:02 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		26-Mar-13 17:02 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		26-Mar-13 17:02 MHM
100-41-4	Ethylbenzene	1	3.83	J	5.00	0.292		26-Mar-13 17:02 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28		26-Mar-13 17:02 MHM
98-82-8	Isopropylbenzene (Cumene)	1	0.540	J	5.00	0.405		26-Mar-13 17:02 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36		26-Mar-13 17:02 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44		26-Mar-13 17:02 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		26-Mar-13 17:02 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		26-Mar-13 17:02 MHM
100-42-5	Styrene	1	ND		5.00	0.571		26-Mar-13 17:02 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		26-Mar-13 17:02 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		26-Mar-13 17:02 MHM

Protocol 4/5/2013 18:07:18

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0324SW010A
Project ID: Magnolia, AR
Lab ID: 201075937
Description: None
Method: EPA 8260
GCMS VOAs Water

Project: 20152031
Site: None
Matrix: Water
% Moisture: n/a
Prep Level: Water
Batch: 205216
Collected: 24-Mar-13
Received: 26-Mar-13
Prepared: 26-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	5.51		5.00	0.536		26-Mar-13 17:02 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		26-Mar-13 17:02 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915		26-Mar-13 17:02 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654		26-Mar-13 17:02 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575		26-Mar-13 17:02 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564		26-Mar-13 17:02 MHM
	m&p-Xylene	1	5.20		5.00	0.937		26-Mar-13 17:02 MHM
95-47-6	o-Xylene	1	2.96	J	5.00	0.649		26-Mar-13 17:02 MHM

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0324SW010A
Project: 20152031
Project ID: Magnolia, AR
Site: None
Lab ID: 201075937
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205396
Method: EPA 8015 Mod Ext
8015 TPH Extractables Water
Collected: 24-Mar-13
Received: 26-Mar-13
Prepared: 28-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
none	Diesel Range Organics (C10-28)	1	0.369		0.250	0.0760		01-Apr-13 20:20	SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.500	0.0490		01-Apr-13 20:20	SNP1

2 compound(s) reported

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Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0324SW010A
Project: 20152031
Project ID: Magnolia, AR
Site: None
Lab ID: 201075937
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205129
Method: EPA 8015/8021
8015/8021 Water
Collected: 24-Mar-13
Received: 26-Mar-13
Prepared: 27-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Gasoline Range Organics(C6-10)	1	0.114		0.0500	0.0212		27-Mar-13 07:51 DHR1

1 compound(s) reported

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St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0324SW010A
Project ID: Magnolia, AR
Lab ID: 201075937
Description: None
Method: EPA 6010
Metals, ICP, Water

Project: 20152031
Site: None
Matrix: Water **% Moisture:** n/a
Prep Level: Water **Batch:** 205212

Collected: 24-Mar-13 **Received:** 26-Mar-13
Prepared: 26-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
7440-36-0	Antimony	1	ND		60.0	1.35		26-Mar-13 17:44	EJH
7440-38-2	Arsenic	1	1.42	J	10.0	1.04		26-Mar-13 17:44	EJH
7440-41-7	Beryllium	1	0.504	J	5.00	0.282		26-Mar-13 17:44	EJH
7440-43-9	Cadmium	1	ND		5.00	0.361		26-Mar-13 17:44	EJH
7440-47-3	Chromium	1	ND		10.0	2.00		26-Mar-13 17:44	EJH
7440-50-8	Copper	1	ND		10.0	2.76		26-Mar-13 17:44	EJH
7439-92-1	Lead	1	3.63	J	5.00	1.15		26-Mar-13 17:44	EJH
7440-02-0	Nickel	1	5.88	J	40.0	0.253		26-Mar-13 17:44	EJH
7782-49-2	Selenium	1	ND		35.0	14.3		26-Mar-13 17:44	EJH
7440-22-4	Silver	1	ND		10.0	0.579		26-Mar-13 17:44	EJH
7440-28-0	Thallium	1	ND		10.0	1.05		26-Mar-13 17:44	EJH
7440-66-6	Zinc	1	22.6		20.0	3.52		26-Mar-13 17:44	EJH

12 compound(s) reported

Protocol 4/5/2013 18:07:18

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0324SW010A
Project ID: Magnolia, AR
Lab ID: 201075937
Description: None
Method: EPA 7470
Mercury Water

Project: 20152031
Site: None
Matrix: Water
Prep Level: Water
% Moisture: n/a
Batch: 205234
Collected: 24-Mar-13
Received: 26-Mar-13
Prepared: 26-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.200	0.0340		26-Mar-13 15:18 MHB1

1 compound(s) reported

Protocol 4/5/2013 18:07:18

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Pace Analytical Services, Inc.
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St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0325SW011A
Project: 20152031
Project ID: Magnolia, AR
Site: None
Lab ID: 201075943
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205447
Method: EPA 8270
GCMS SVOAs SIM Water
Collected: 25-Mar-13
Received: 26-Mar-13
Prepared: 29-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
83-32-9	Acenaphthene	1	ND		0.100	0.0520		01-Apr-13 13:13 JAM
208-96-8	Acenaphthylene	1	ND		0.100	0.0460		01-Apr-13 13:13 JAM
120-12-7	Anthracene	1	ND		0.100	0.0570		01-Apr-13 13:13 JAM
56-55-3	Benzo(a)anthracene	1	ND		0.100	0.0310		01-Apr-13 13:13 JAM
205-99-2	Benzo(b)fluoranthene	1	ND		0.100	0.0520		01-Apr-13 13:13 JAM
207-08-9	Benzo(k)fluoranthene	1	ND		0.100	0.0410		01-Apr-13 13:13 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		0.100	0.0200		01-Apr-13 13:13 JAM
50-32-8	Benzo(a)pyrene	1	ND		0.100	0.0410		01-Apr-13 13:13 JAM
218-01-9	Chrysene	1	ND		0.100	0.0250		01-Apr-13 13:13 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		0.100	0.0180		01-Apr-13 13:13 JAM
206-44-0	Fluoranthene	1	ND		0.100	0.0390		01-Apr-13 13:13 JAM
86-73-7	Fluorene	1	0.130		0.100	0.0630		01-Apr-13 13:13 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		0.100	0.0180		01-Apr-13 13:13 JAM
91-57-6	2-Methylnaphthalene	1	0.420		0.100	0.0780		01-Apr-13 13:13 JAM
91-20-3	Naphthalene	1	0.330		0.100	0.0670		01-Apr-13 13:13 JAM
85-01-8	Phenanthrene	1	0.170		0.100	0.0490		01-Apr-13 13:13 JAM
129-00-0	Pyrene	1	ND		0.100	0.0360		01-Apr-13 13:13 JAM

17 compound(s) reported

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0325SW011A
Project: 20152031
Project ID: Magnolia, AR
Site: None
Lab ID: 201075943
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205284
Method: EPA 8270
GCMS SVOAs Water
Collected: 25-Mar-13
Received: 26-Mar-13
Prepared: 27-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
65-85-0	Benzoic acid	1	ND		25.0	1.56		01-Apr-13 20:05 JAM
100-51-6	Benzyl alcohol	1	ND		10.0	0.959		01-Apr-13 20:05 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND		10.0	0.541		01-Apr-13 20:05 JAM
85-68-7	Butylbenzylphthalate	1	ND		10.0	0.825		01-Apr-13 20:05 JAM
86-74-8	Carbazole	1	ND		10.0	0.932		01-Apr-13 20:05 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND		10.0	0.812		01-Apr-13 20:05 JAM
106-47-8	3&4-Chloroaniline	1	ND		10.0	1.22		01-Apr-13 20:05 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	0.789		01-Apr-13 20:05 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	0.804		01-Apr-13 20:05 JAM
91-58-7	2-Chloronaphthalene	1	ND		10.0	0.713		01-Apr-13 20:05 JAM
95-57-8	2-Chlorophenol	1	ND		10.0	0.716		01-Apr-13 20:05 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND		10.0	0.638		01-Apr-13 20:05 JAM
132-64-9	Dibenzofuran	1	ND		10.0	0.576		01-Apr-13 20:05 JAM
95-50-1	1,2-Dichlorobenzene	1	ND		10.0	0.867		01-Apr-13 20:05 JAM
541-73-1	1,3-Dichlorobenzene	1	ND		10.0	0.832		01-Apr-13 20:05 JAM
106-46-7	1,4-Dichlorobenzene	1	ND		10.0	0.652		01-Apr-13 20:05 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND		10.0	0.781		01-Apr-13 20:05 JAM
120-83-2	2,4-Dichlorophenol	1	ND		10.0	0.783		01-Apr-13 20:05 JAM
84-66-2	Diethylphthalate	1	ND		10.0	0.607		01-Apr-13 20:05 JAM
105-67-9	2,4-Dimethylphenol	1	ND		10.0	0.781		01-Apr-13 20:05 JAM
131-11-3	Dimethylphthalate	1	ND		10.0	0.594		01-Apr-13 20:05 JAM
84-74-2	Di-n-butylphthalate	1	ND		10.0	0.651		01-Apr-13 20:05 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		10.0	1.02		01-Apr-13 20:05 JAM
51-28-5	2,4-Dinitrophenol	1	ND		10.0	0.470		01-Apr-13 20:05 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	0.741		01-Apr-13 20:05 JAM
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	0.780		01-Apr-13 20:05 JAM
117-84-0	Di-n-octylphthalate	1	ND		10.0	0.781		01-Apr-13 20:05 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	1.83	J	10.0	0.930		01-Apr-13 20:05 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		10.0	0.759		01-Apr-13 20:05 JAM
118-74-1	Hexachlorobenzene	1	ND		10.0	0.681		01-Apr-13 20:05 JAM
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	0.347		01-Apr-13 20:05 JAM
67-72-1	Hexachloroethane	1	ND		10.0	0.987		01-Apr-13 20:05 JAM
78-59-1	Isophorone	1	ND		10.0	0.628		01-Apr-13 20:05 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	0.749		01-Apr-13 20:05 JAM

Protocol 4/5/2013 18:07:18

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0325SW011A
Project: 20152031
Project ID: Magnolia, AR
Site: None
Lab ID: 201075943
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205284
Method: EPA 8270
GCMS SVOAs Water
Collected: 25-Mar-13
Received: 26-Mar-13
Prepared: 27-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
	3&4-Methylphenol	1	ND		10.0	0.948		01-Apr-13 20:05 JAM
88-74-4	2-Nitroaniline	1	ND		10.0	0.859		01-Apr-13 20:05 JAM
99-09-2	3-Nitroaniline	1	ND		10.0	0.877		01-Apr-13 20:05 JAM
100-01-6	4-Nitroaniline	1	ND		10.0	0.972		01-Apr-13 20:05 JAM
98-95-3	Nitrobenzene	1	ND		10.0	1.06		01-Apr-13 20:05 JAM
88-75-5	2-Nitrophenol	1	ND		10.0	0.772		01-Apr-13 20:05 JAM
100-02-7	4-Nitrophenol	1	ND		10.0	0.761		01-Apr-13 20:05 JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	0.919		01-Apr-13 20:05 JAM
86-30-6	N-Nitrosodiphenylamine	1	ND		10.0	0.715		01-Apr-13 20:05 JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		10.0	0.732		01-Apr-13 20:05 JAM
87-86-5	Pentachlorophenol	1	ND		10.0	0.860		01-Apr-13 20:05 JAM
108-95-2	Phenol	1	ND		10.0	0.773		01-Apr-13 20:05 JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	0.797		01-Apr-13 20:05 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		10.0	0.751		01-Apr-13 20:05 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	0.737		01-Apr-13 20:05 JAM

49 compound(s) reported

Protocol 4/5/2013 18:07:18

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0325SW011A
Project: 20152031
Project ID: Magnolia, AR
Site: None
Lab ID: 201075943
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205216
Method: EPA 8260
GCMS VOAs Water
Collected: 25-Mar-13
Received: 26-Mar-13
Prepared: 26-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	8.88		26-Mar-13 17:23 MHM
71-43-2	Benzene	1	1.59	J	5.00	0.518		26-Mar-13 17:23 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		26-Mar-13 17:23 MHM
75-25-2	Bromoform	1	ND		5.00	0.920		26-Mar-13 17:23 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855		26-Mar-13 17:23 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		26-Mar-13 17:23 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530		26-Mar-13 17:23 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		26-Mar-13 17:23 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662		26-Mar-13 17:23 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12		26-Mar-13 17:23 MHM
67-66-3	Chloroform	1	ND		5.00	0.853		26-Mar-13 17:23 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636		26-Mar-13 17:23 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		26-Mar-13 17:23 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		26-Mar-13 17:23 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		26-Mar-13 17:23 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		26-Mar-13 17:23 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565		26-Mar-13 17:23 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		26-Mar-13 17:23 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		26-Mar-13 17:23 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		26-Mar-13 17:23 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		26-Mar-13 17:23 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		26-Mar-13 17:23 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		26-Mar-13 17:23 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		26-Mar-13 17:23 MHM
100-41-4	Ethylbenzene	1	0.990	J	5.00	0.292		26-Mar-13 17:23 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28		26-Mar-13 17:23 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405		26-Mar-13 17:23 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36		26-Mar-13 17:23 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44		26-Mar-13 17:23 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		26-Mar-13 17:23 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		26-Mar-13 17:23 MHM
100-42-5	Styrene	1	ND		5.00	0.571		26-Mar-13 17:23 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		26-Mar-13 17:23 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		26-Mar-13 17:23 MHM

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0325SW011A
Project: 20152031
Project ID: Magnolia, AR
Site: None
Lab ID: 201075943
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205216
Method: EPA 8260
GCMS VOAs Water
Collected: 25-Mar-13
Received: 26-Mar-13
Prepared: 26-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	1.63	J	5.00	0.536		26-Mar-13 17:23 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		26-Mar-13 17:23 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915		26-Mar-13 17:23 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654		26-Mar-13 17:23 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575		26-Mar-13 17:23 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564		26-Mar-13 17:23 MHM
	m&p-Xylene	1	1.62	J	5.00	0.937		26-Mar-13 17:23 MHM
95-47-6	o-Xylene	1	0.930	J	5.00	0.649		26-Mar-13 17:23 MHM

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0325SW011A
Project: 20152031
Project ID: Magnolia, AR
Site: None
Lab ID: 201075943
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205396
Method: EPA 8015 Mod Ext
8015 TPH Extractables Water
Collected: 25-Mar-13
Received: 26-Mar-13
Prepared: 28-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Diesel Range Organics (C10-28)	1	ND		0.250	0.0760		01-Apr-13 20:47 SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.500	0.0490		01-Apr-13 20:47 SNP1

2 compound(s) reported

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ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Client: CTEH

Client ID: MAAR0325SW011A
Project ID: Magnolia, AR
Lab ID: 201075943
Description: None
Method: EPA 8015/8021
8015/8021 Water

Project: 20152031
Site: None
Matrix: Water
% Moisture: n/a
Prep Level: Water
Batch: 205129
Collected: 25-Mar-13
Received: 26-Mar-13
Prepared: 27-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Gasoline Range Organics(C6-10)	1	0.0500		0.0500	0.0212		27-Mar-13 08:20 DHR1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Client: CTEH

Client ID: MAAR0325SW011A
Project ID: Magnolia, AR
Lab ID: 201075943
Description: None
Method: EPA 6010
Metals, ICP, Water

Project: 20152031
Site: None
Matrix: Water **% Moisture:** n/a
Prep Level: Water **Batch:** 205212

Collected: 25-Mar-13 **Received:** 26-Mar-13
Prepared: 26-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
7440-36-0	Antimony	1	ND		60.0	1.35		26-Mar-13 17:48	EJH
7440-38-2	Arsenic	1	ND		10.0	1.04		26-Mar-13 17:48	EJH
7440-41-7	Beryllium	1	0.488	J	5.00	0.282		26-Mar-13 17:48	EJH
7440-43-9	Cadmium	1	ND		5.00	0.361		26-Mar-13 17:48	EJH
7440-47-3	Chromium	1	ND		10.0	2.00		26-Mar-13 17:48	EJH
7440-50-8	Copper	1	3.40	J	10.0	2.76		26-Mar-13 17:48	EJH
7439-92-1	Lead	1	2.71	J	5.00	1.15		26-Mar-13 17:48	EJH
7440-02-0	Nickel	1	6.55	J	40.0	0.253		26-Mar-13 17:48	EJH
7782-49-2	Selenium	1	ND		35.0	14.3		26-Mar-13 17:48	EJH
7440-22-4	Silver	1	ND		10.0	0.579		26-Mar-13 17:48	EJH
7440-28-0	Thallium	1	ND		10.0	1.05		26-Mar-13 17:48	EJH
7440-66-6	Zinc	1	22.2		20.0	3.52		26-Mar-13 17:48	EJH

12 compound(s) reported

Protocol 4/5/2013 18:07:18

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
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(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0325SW011A
Project: 20152031
Project ID: Magnolia, AR
Site: None
Lab ID: 201075943
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205234
Method: EPA 7470
Mercury Water
Collected: 25-Mar-13
Received: 26-Mar-13
Prepared: 26-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.200	0.0340		26-Mar-13 15:20 MHB1

1 compound(s) reported

Protocol 4/5/2013 18:07:18

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Client: CTEH

Client ID: TB005
Project: 20152031
Project ID: Magnolia, AR
Site: None
Lab ID: 201075944
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205216
Method: EPA 8260
GCMS VOAs Water
Collected: 25-Mar-13
Received: 26-Mar-13
Prepared: 26-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	8.88		26-Mar-13 17:43 MHM
71-43-2	Benzene	1	ND		5.00	0.518		26-Mar-13 17:43 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		26-Mar-13 17:43 MHM
75-25-2	Bromoform	1	ND		5.00	0.920		26-Mar-13 17:43 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855		26-Mar-13 17:43 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		26-Mar-13 17:43 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530		26-Mar-13 17:43 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		26-Mar-13 17:43 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662		26-Mar-13 17:43 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12		26-Mar-13 17:43 MHM
67-66-3	Chloroform	1	ND		5.00	0.853		26-Mar-13 17:43 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636		26-Mar-13 17:43 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		26-Mar-13 17:43 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		26-Mar-13 17:43 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		26-Mar-13 17:43 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		26-Mar-13 17:43 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565		26-Mar-13 17:43 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		26-Mar-13 17:43 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		26-Mar-13 17:43 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		26-Mar-13 17:43 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		26-Mar-13 17:43 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		26-Mar-13 17:43 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		26-Mar-13 17:43 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		26-Mar-13 17:43 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292		26-Mar-13 17:43 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28		26-Mar-13 17:43 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405		26-Mar-13 17:43 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36		26-Mar-13 17:43 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44		26-Mar-13 17:43 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		26-Mar-13 17:43 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		26-Mar-13 17:43 MHM
100-42-5	Styrene	1	ND		5.00	0.571		26-Mar-13 17:43 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		26-Mar-13 17:43 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		26-Mar-13 17:43 MHM

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Client: CTEH

Client ID: TB005
Project ID: Magnolia, AR
Lab ID: 201075944
Description: None
Method: EPA 8260
GCMS VOAs Water

Project: 20152031
Site: None
Matrix: Water **% Moisture:** n/a
Prep Level: Water **Batch:** 205216
Collected: 25-Mar-13 **Received:** 26-Mar-13
Prepared: 26-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	ND		5.00	0.536		26-Mar-13 17:43 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		26-Mar-13 17:43 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915		26-Mar-13 17:43 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654		26-Mar-13 17:43 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575		26-Mar-13 17:43 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564		26-Mar-13 17:43 MHM
	m&p-Xylene	1	ND		5.00	0.937		26-Mar-13 17:43 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649		26-Mar-13 17:43 MHM

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Surrogate Recovery

Batch: 205284 **Project:** 20152031

Method: Water GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201076403	205284 BLANK 1		69	74	62	76	60	82		
201076404	205284 LCS 1		69	71	64	63	65	80		
201075936	MAAR0323SW009A		44	45	33	43	36	37		
201075937	MAAR0324SW010A		80	79	64	82	68	64		
201075943	MAAR0325SW011A		38	50	26	50	20	44		
QC limits:			25-145	34-117	10-118	33-120	15-134	24-133		

Sur 1: 2,4,6-Tribromophenol (S)
Sur 2: 2-Fluorobiphenyl (S)
Sur 3: 2-Fluorophenol (S)
Sur 4: Nitrobenzene-d5 (S)
Sur 5: Phenol-d5 (S)
Sur 6: Terphenyl-d14 (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205447 **Project:** 20152031

Method: Water GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201077198	205447 BLANK 1		70	70						
201077199	205447 LCS 1		68	62						
201075936	MAAR0323SW009A		73	84						
201075937	MAAR0324SW010A		94	86						
201075943	MAAR0325SW011A		73	84						
	QC limits:		12-110	25-113						

Sur 1: 2-Fluorobiphenyl (S)
Sur 2: Terphenyl-d14 (S)

Surrogates 4/5/2013 18:07:20

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205216 **Project:** 20152031

Method: Water GC/MS Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201075972	205216 BLANK 1		78	89	81					
201075973	205216 LCS 1		83	92	87					
201075936	MAAR0323SW009A		79	87	83					
201075974	MAAR0323SW009A MS 1		84	91	88					
201075975	MAAR0323SW009A MSD 1		84	87	88					
201075937	MAAR0324SW010A		81	89	83					
201075943	MAAR0325SW011A		82	88	85					
201075944	TB005		79	86	82					
	QC limits:		68-124	72-126	79-119					

Sur 1: 4-Bromofluorobenzene (S)
Sur 2: Dibromofluoromethane (S)
Sur 3: Toluene-d8 (S)

*** denotes surrogate recovery outside of QC limits.**
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205396 **Project:** 20152031

Method: Water GC Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201076900	205396 BLANK 1		88	82						
201076901	205396 LCS 1		68	71						
201075936	MAAR0323SW009A	N	9 *	38						
201075937	MAAR0324SW010A		31	54						
201075943	MAAR0325SW011A		26	56						
	QC limits:		16-137	10-121						

Sur 1: n-Pentacosane (S)
Sur 2: o-Terphenyl (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205650 **Project:** 20152031

Method: Water GC Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201078042	205650 BLANK 1		79	73						
201078043	205650 LCS 1		69	64						
201075936	MAAR0323SW009A	N	35	64						
	QC limits:		16-137	10-121						

Sur 1: n-Pentacosane (S)
Sur 2: o-Terphenyl (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205129 **Project:** 20152031

Method: Water GC Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201075677	205129 BLANK 1		104							
201075934	205129 BLANK 2		103							
201075966	205129 BLANK 3		103							
201075678	205129 LCS 1		106							
201075935	205129 LCS 2		110							
201075967	205129 LCS 3		104							
201075968	MAAR0320SW005A MS 1		102							
201075969	MAAR0320SW005A MSD 1		107							
201075970	MAAR0321SW006A MS 2		107							
201075971	MAAR0321SW006A MSD 2		104							
201075936	MAAR0323SW009A		110							
201075937	MAAR0324SW010A		111							
201075943	MAAR0325SW011A		109							
	QC limits:		60-129							

Sur 1: 4-Bromofluorobenzene (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Batch: 205284 **Project:** 20152031 **LCS:** 201076404 01-Apr-13 11:31

Method: Water GC/MS Semivolatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Benzoic acid	50.0	23.2	47								10-130			Q5
Benzyl alcohol	50.0	31.2	62								44-120			Q5
4-Bromophenylphenyl ether	50.0	33.5	67								49-120			Q5
Butylbenzylphthalate	50.0	32.5	65								46-120			Q5
Carbazole	50.0	36.5	73								51-127			Q5
4-Chloro-3-methylphenol	50.0	32.4	65								43-115			Q5
3&4-Chloroaniline	50.0	25.5	51								10-130			Q5
bis(2-Chloroethoxy)methane	50.0	30.8	62								43-115			Q5
bis(2-Chloroethyl) ether	50.0	34.0	68								47-115			Q5
2-Chloronaphthalene	50.0	34.4	69								52-115			Q5
2-Chlorophenol	50.0	35.9	72								48-115			Q5
4-Chlorophenylphenyl ether	50.0	35.3	71								52-116			Q5
Dibenzofuran	50.0	35.5	71								53-115			Q5
1,2-Dichlorobenzene	50.0	34.9	70								42-115			Q5
1,3-Dichlorobenzene	50.0	33.3	67								40-115			Q5
1,4-Dichlorobenzene	50.0	34.0	68								41-115			Q5
3,3'-Dichlorobenzidine	50.0	37.0	74								16-142			Q5
2,4-Dichlorophenol	50.0	32.9	66								45-115			Q5
Diethylphthalate	50.0	33.4	67								49-120			Q5
2,4-Dimethylphenol	50.0	32.5	65								23-116			Q5
Dimethylphthalate	50.0	32.5	65								52-115			Q5
Di-n-butylphthalate	50.0	31.3	63								50-117			Q5
4,6-Dinitro-2-methylphenol	50.0	33.2	66								44-122			Q5
2,4-Dinitrophenol	50.0	24.7	49								16-134			Q5
2,4-Dinitrotoluene	50.0	34.6	69								50-118			Q5
2,6-Dinitrotoluene	50.0	34.9	70								55-115			Q5
Di-n-octylphthalate	50.0	32.8	66								40-129			Q5
bis(2-Ethylhexyl)phthalate	50.0	34.5	69								46-124			Q5
Hexachloro-1,3-butadiene	50.0	29.2	58								32-115			Q5
Hexachlorobenzene	50.0	34.6	69								53-115			Q5
Hexachlorocyclopentadiene	50.0	26.8	54								10-115			Q5
Hexachloroethane	50.0	31.2	63								36-115			Q5
Isophorone	50.0	31.6	63								45-115			Q5
2-Methylphenol (o-Cresol)	50.0	35.9	72								46-115			Q5
3&4-Methylphenol	50.0	33.4	67								46-115			Q5
2-Nitroaniline	50.0	34.4	69								48-121			Q5
3-Nitroaniline	50.0	34.5	69								38-125			Q5
4-Nitroaniline	50.0	35.2	70								37-132			Q5
Nitrobenzene	50.0	32.0	64								44-118			Q5
2-Nitrophenol	50.0	34.3	69								45-115			Q5
4-Nitrophenol	50.0	24.5	49								29-134			Q5

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*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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(504) 469-0333

Batch: 205284 **Project:** 20152031 **LCS:** 201076404 01-Apr-13 11:31

Method: Water GC/MS Semivolatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
N-Nitroso-di-n-propylamine	50.0	31.8	64								45-119			Q5
N-Nitrosodiphenylamine	50.0	40.9	82								42-134			Q5
2,2'-Oxybis(1-chloropropane)	50.0	36.0	72								40-120			Q5
Pentachlorophenol	50.0	30.1	60								34-124			Q5
Phenol	50.0	34.2	68								44-115			Q5
1,2,4-Trichlorobenzene	50.0	31.6	63								40-115			Q5
2,4,5-Trichlorophenol	50.0	33.4	67								49-115			Q5
2,4,6-Trichlorophenol	50.0	36.2	73								48-115			Q5

49 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Pace Analytical Services, Inc.
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Batch: 205447 **Project:** 20152031 **LCS:** 201077199 01-Apr-13 11:04

Method: Water GC/MS Semivolatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acenaphthene	2.00	1.22	61								39-115			Q5
Acenaphthylene	2.00	0.950	48								30-115			Q5
Anthracene	2.00	1.05	53								34-115			Q5
Benzo(a)anthracene	2.00	1.25	63								33-115			Q5
Benzo(b)fluoranthene	2.00	1.23	62								30-115			Q5
Benzo(k)fluoranthene	2.00	1.35	68								31-115			Q5
Benzo(g,h,i)perylene	2.00	1.29	65								27-115			Q5
Benzo(a)pyrene	2.00	1.14	57								28-115			Q5
Chrysene	2.00	1.21	61								36-115			Q5
Dibenz(a,h)anthracene	2.00	1.39	70								23-115			Q5
Fluoranthene	2.00	1.23	62								39-115			Q5
Fluorene	2.00	1.23	62								38-115			Q5
Indeno(1,2,3-cd)pyrene	2.00	1.38	69								28-115			Q5
2-Methylnaphthalene	2.00	1.20	60								31-115			Q5
Naphthalene	2.00	1.27	64								40-115			Q5
Phenanthrene	2.00	1.22	61								38-115			Q5
Pyrene	2.00	1.19	60								33-115			Q5

17 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205216 **Project:** 20152031 **LCS:** 201075973 26-Mar-13 10:47

Method: Water GC/MS Volatile Organics **MS:** 201075974 26-Mar-13 16:22

Units: ug/L **MSD:** 201075975 26-Mar-13 16:42

Original for MS: Client Sample 201075936

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acetone	50.0	61.1	122	50.0		57.3	54.0	115	108	6	10-198	10-202	20	
Benzene	50.0	48.4	97	50.0	2.00	49.7	49.2	95	94	1	68-129	60-138	20	
Bromodichloromethane	50.0	49.8	100	50.0		48.2	47.7	96	96	1	68-132	66-137	20	
Bromoform	50.0	56.0	112	50.0		49.3	47.8	99	96	3	56-153	53-156	20	
Bromomethane	50.0	42.8	86	50.0		44.0	40.2	88	80	9	47-149	43-151	20	
2-Butanone (MEK)	50.0	64.7	129	50.0		51.8	48.9	104	98	6	18-173	14-184	20	
Carbon disulfide	50.0	56.8	114	50.0		56.7	53.9	113	108	5	25-166	17-176	20	
Carbon tetrachloride	50.0	53.0	106	50.0		47.0	48.1	94	96	2	56-146	51-151	20	
Chlorobenzene	50.0	50.7	101	50.0		50.3	49.3	101	99	2	74-131	71-135	20	
Chloroethane	50.0	37.6	75	50.0		49.7	46.3	99	93	7	28-190	21-191	20	
Chloroform	50.0	51.1	102	50.0		50.5	48.2	101	96	5	71-132	67-138	20	
Chloromethane	50.0	35.0	70	50.0		32.7	31.0	66	62	6	27-154	24-158	20	
1,2-Dibromo-3-chloropropane	50.0	53.2	106	50.0		41.7	42.0	83	84	1	40-155	38-162	20	
Dibromochloromethane	50.0	54.4	109	50.0		50.9	50.5	102	101	1	64-138	62-142	20	
1,2-Dibromoethane (EDB)	50.0	54.6	109	50.0		49.4	48.4	99	97	2	62-146	61-149	20	
Dichlorodifluoromethane	50.0	18.0	36	50.0		16.8	15.7	34	31	7	18-173	16-176	20	
1,1-Dichloroethane	50.0	51.0	102	50.0		49.9	48.9	100	98	2	63-135	61-141	20	
1,2-Dichloroethane	50.0	51.4	103	50.0		46.5	46.4	93	93	0	58-150	57-155	20	
1,1-Dichloroethene	50.0	53.1	106	50.0		55.7	51.5	111	103	8	50-151	40-163	20	
cis-1,2-Dichloroethene	50.0	53.3	107	50.0		53.6	51.7	107	103	4	65-132	61-138	20	
trans-1,2-Dichloroethene	50.0	53.6	107	50.0		55.2	51.9	110	104	6	56-137	52-144	20	
1,2-Dichloropropane	50.0	51.5	103	50.0		50.6	49.4	101	99	2	66-131	64-137	20	
cis-1,3-Dichloropropene	50.0	47.7	96	50.0		46.9	46.6	94	93	1	66-135	62-137	20	
trans-1,3-Dichloropropene	50.0	53.9	108	50.0		49.3	49.0	99	98	1	62-146	59-151	20	
Ethylbenzene	50.0	46.3	93	50.0	1.61	48.4	47.8	94	92	1	73-129	66-136	20	
2-Hexanone	50.0	55.0	110	50.0		44.1	45.1	88	90	2	29-158	27-165	20	
Isopropylbenzene (Cumene)	50.0	45.3	91	50.0		46.2	46.1	92	92	0	61-139	58-144	20	
Methylene chloride	50.0	60.2	120	50.0		59.1	54.9	118	110	7	41-171	35-165	20	
4-Methyl-2-pentanone (MIBK	50.0	59.3	119	50.0		48.6	48.4	97	97	0	46-159	43-165	20	
Methyl-tert-butyl ether	50.0	56.2	112	50.0		51.5	49.3	103	99	4	51-155	48-164	20	
Styrene	50.0	49.0	98	50.0		47.6	47.0	95	94	1	74-132	63-141	20	
1,1,2,2-Tetrachloroethane	50.0	50.5	101	50.0		46.3	46.6	93	93	1	46-153	41-160	20	
Tetrachloroethene	50.0	48.0	96	50.0		48.5	47.9	97	96	1	57-151	48-160	20	
Toluene	50.0	47.5	95	50.0	2.49	49.1	48.6	93	92	1	70-130	62-137	20	
1,1,1-Trichloroethane	50.0	53.5	107	50.0		48.5	49.3	97	99	2	65-132	61-138	20	
1,1,2-Trichloroethane	50.0	54.0	108	50.0		50.1	50.8	100	102	1	64-140	63-145	20	
Trichloroethene	50.0	46.4	93	50.0		46.3	46.2	93	92	0	71-131	62-142	20	
Trichlorofluoromethane	50.0	54.5	109	50.0		53.5	50.8	107	102	5	37-188	19-196	20	
Vinyl chloride	50.0	31.1	62	50.0		30.5	28.9	61	58	6	42-148	35-153	20	
m&p-Xylene	100.	96.3	96	100.	2.49	99.2	95.3	97	93	4	71-132	64-138	20	
o-Xylene	50.0	47.1	94	50.0	1.98	49.5	48.2	95	93	3	69-129	63-136	20	

QC Protocol 4/5/2013 18:07:22

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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(504) 469-0333

Batch: 205216 **Project:** 20152031 **LCS:** 201075973 26-Mar-13 10:47

Method: Water GC/MS Volatile Organics **MS:** 201075974 26-Mar-13 16:22

Units: ug/L **MSD:** 201075975 26-Mar-13 16:42

Original for MS: Client Sample 201075936

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu

41 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205396 **Project:** 20152031 **LCS:** 201076901 01-Apr-13 18:02

Method: Water GC Semivolatile Organics **MS:**

Units: mg/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Diesel Range Organics (C10-2	0.400	0.208	52								10-115			Q5

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Quality Control

Batch: 205650 **Project:** 20152031 **LCS:** 201078043 03-Apr-13 23:53

Method: Water GC Semivolatile Organics **MS:**

Units: mg/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Diesel Range Organics (C10-2	0.400	0.183	46								10-115			Q5

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205129 **Project:** 20152031 **LCS:** 201075967 26-Mar-13 9:55

Method: Water GC Volatile Organics **MS:** 201075968 26-Mar-13 11:01

Units: mg/L **MSD:** 201075969 26-Mar-13 11:28

Original for MS: Batch Sample 201075516

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Gasoline Range Organics(C6-	0.500	0.508	102	0.500	0.0302	0.501	0.502	94	94	0	61-136	15-147	20	
1 compound(s) reported														

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205129 **Project:** 20152031 **LCS:**

Method: Water GC Volatile Organics **MS:** 201075970 26-Mar-13 11:55

Units: mg/L **MSD:** 201075971 26-Mar-13 12:23

Original for MS: Batch Sample 201075518

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Gasoline Range Organics(C6-				0.500	0.0481			0 *	0 *	0		15-147	20	Q1

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205212 **Project:** 20152031 **LCS:** 201075946 26-Mar-13 17:05

Method: Water ICP Metals **MS:** 201075947 26-Mar-13 17:12

Units: ug/L **MSD:** 201075948 26-Mar-13 17:16

Original for MS: Batch Sample 201075924

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Antimony	1000	1030	103	1000	2.05	929.	923.	93	92	1	82-120	80-120	20	
Arsenic	1000	1030	103	1000	4.49	940.	942.	94	94	0	84-117	80-120	20	
Beryllium	1000	1030	103	1000		936.	945.	94	95	1	85-117	80-120	20	
Cadmium	1000	1030	103	1000		892.	896.	89	90	1	85-115	80-120	20	
Chromium	1000	1020	102	1000		929.	939.	93	94	1	83-117	80-120	20	
Copper	1000	1030	103	1000	3.41	944.	938.	94	94	1	85-116	80-120	20	
Lead	1000	1040	104	1000		875.	880.	87	88	1	84-118	80-120	20	
Nickel	1000	1040	104	1000	2.14	883.	889.	88	89	1	85-118	80-120	20	
Selenium	1000	1020	102	1000		918.	941.	92	94	2	85-116	80-120	20	
Silver	500.	515.	103	500.		470.	466.	94	93	1	80-120	80-120	20	
Thallium	1000	1040	104	1000		837.	840.	84	84	0	85-118	80-120	20	
Zinc	1000	1040	104	1000		906.	913.	90	91	1	81-120	80-120	20	

12 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205234 **Project:** 20152031 **LCS:** 201076062 26-Mar-13 15:11

Method: Water Mercury **MS:** 201076063 26-Mar-13 15:15

Units: ug/L **MSD:** 201076064 26-Mar-13 15:16

Original for MS: Client Sample 201075936

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Mercury	1.00	1.06	106	1.00		0.999	1.00	100	100	0	80-120	75-125	20	

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205284 BLANK 1 **Project:** 20152031

Lab ID: 201076403

Prep Level: Water **Batch:** 205284

Method: Water GC/MS Semivolatile Organics

Prepared: 27-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
65-85-0	Benzoic acid	1	ND		25.0	1.56	01-Apr-13 11:06 JAM
100-51-6	Benzyl alcohol	1	ND		10.0	0.959	01-Apr-13 11:06 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND		10.0	0.541	01-Apr-13 11:06 JAM
85-68-7	Butylbenzylphthalate	1	ND		10.0	0.825	01-Apr-13 11:06 JAM
86-74-8	Carbazole	1	ND		10.0	0.932	01-Apr-13 11:06 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND		10.0	0.812	01-Apr-13 11:06 JAM
106-47-8	3&4-Chloroaniline	1	ND		10.0	1.22	01-Apr-13 11:06 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	0.789	01-Apr-13 11:06 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	0.804	01-Apr-13 11:06 JAM
91-58-7	2-Chloronaphthalene	1	ND		10.0	0.713	01-Apr-13 11:06 JAM
95-57-8	2-Chlorophenol	1	ND		10.0	0.716	01-Apr-13 11:06 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND		10.0	0.638	01-Apr-13 11:06 JAM
132-64-9	Dibenzofuran	1	ND		10.0	0.576	01-Apr-13 11:06 JAM
95-50-1	1,2-Dichlorobenzene	1	ND		10.0	0.867	01-Apr-13 11:06 JAM
541-73-1	1,3-Dichlorobenzene	1	ND		10.0	0.832	01-Apr-13 11:06 JAM
106-46-7	1,4-Dichlorobenzene	1	ND		10.0	0.652	01-Apr-13 11:06 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND		10.0	0.781	01-Apr-13 11:06 JAM
120-83-2	2,4-Dichlorophenol	1	ND		10.0	0.783	01-Apr-13 11:06 JAM
84-66-2	Diethylphthalate	1	ND		10.0	0.607	01-Apr-13 11:06 JAM
105-67-9	2,4-Dimethylphenol	1	ND		10.0	0.781	01-Apr-13 11:06 JAM
131-11-3	Dimethylphthalate	1	ND		10.0	0.594	01-Apr-13 11:06 JAM
84-74-2	Di-n-butylphthalate	1	ND		10.0	0.651	01-Apr-13 11:06 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		10.0	1.02	01-Apr-13 11:06 JAM
51-28-5	2,4-Dinitrophenol	1	ND		10.0	0.470	01-Apr-13 11:06 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	0.741	01-Apr-13 11:06 JAM
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	0.780	01-Apr-13 11:06 JAM
117-84-0	Di-n-octylphthalate	1	ND		10.0	0.781	01-Apr-13 11:06 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	0.930	01-Apr-13 11:06 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		10.0	0.759	01-Apr-13 11:06 JAM
118-74-1	Hexachlorobenzene	1	ND		10.0	0.681	01-Apr-13 11:06 JAM
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	0.347	01-Apr-13 11:06 JAM
67-72-1	Hexachloroethane	1	ND		10.0	0.987	01-Apr-13 11:06 JAM
78-59-1	Isophorone	1	ND		10.0	0.628	01-Apr-13 11:06 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	0.749	01-Apr-13 11:06 JAM

Protocol Blank 4/5/2013 18:07:23

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205284 BLANK 1 **Project:** 20152031

Lab ID: 201076403

Prep Level: Water **Batch:** 205284

Method: Water GC/MS Semivolatile Organics

Prepared: 27-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
	3&4-Methylphenol	1	ND		10.0	0.948	01-Apr-13 11:06 JAM
88-74-4	2-Nitroaniline	1	ND		10.0	0.859	01-Apr-13 11:06 JAM
99-09-2	3-Nitroaniline	1	ND		10.0	0.877	01-Apr-13 11:06 JAM
100-01-6	4-Nitroaniline	1	ND		10.0	0.972	01-Apr-13 11:06 JAM
98-95-3	Nitrobenzene	1	ND		10.0	1.06	01-Apr-13 11:06 JAM
88-75-5	2-Nitrophenol	1	ND		10.0	0.772	01-Apr-13 11:06 JAM
100-02-7	4-Nitrophenol	1	ND		10.0	0.761	01-Apr-13 11:06 JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	0.919	01-Apr-13 11:06 JAM
86-30-6	N-Nitrosodiphenylamine	1	ND		10.0	0.715	01-Apr-13 11:06 JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		10.0	0.732	01-Apr-13 11:06 JAM
87-86-5	Pentachlorophenol	1	ND		10.0	0.860	01-Apr-13 11:06 JAM
108-95-2	Phenol	1	ND		10.0	0.773	01-Apr-13 11:06 JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	0.797	01-Apr-13 11:06 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		10.0	0.751	01-Apr-13 11:06 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	0.737	01-Apr-13 11:06 JAM

49 compound(s) reported

Protocol Blank 4/5/2013 18:07:23

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Blank Results

Blank ID: 205447 BLANK 1 **Project:** 20152031

Lab ID: 201077198

Prep Level: Water **Batch:** 205447

Method: Water GC/MS Semivolatile Organics

Prepared: 29-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
83-32-9	Acenaphthene	1	ND		0.100	0.0520	01-Apr-13 10:42 JAM
208-96-8	Acenaphthylene	1	ND		0.100	0.0460	01-Apr-13 10:42 JAM
120-12-7	Anthracene	1	ND		0.100	0.0570	01-Apr-13 10:42 JAM
56-55-3	Benzo(a)anthracene	1	ND		0.100	0.0310	01-Apr-13 10:42 JAM
205-99-2	Benzo(b)fluoranthene	1	ND		0.100	0.0520	01-Apr-13 10:42 JAM
207-08-9	Benzo(k)fluoranthene	1	ND		0.100	0.0410	01-Apr-13 10:42 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		0.100	0.0200	01-Apr-13 10:42 JAM
50-32-8	Benzo(a)pyrene	1	ND		0.100	0.0410	01-Apr-13 10:42 JAM
218-01-9	Chrysene	1	ND		0.100	0.0250	01-Apr-13 10:42 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		0.100	0.0180	01-Apr-13 10:42 JAM
206-44-0	Fluoranthene	1	ND		0.100	0.0390	01-Apr-13 10:42 JAM
86-73-7	Fluorene	1	ND		0.100	0.0630	01-Apr-13 10:42 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		0.100	0.0180	01-Apr-13 10:42 JAM
91-57-6	2-Methylnaphthalene	1	ND		0.100	0.0780	01-Apr-13 10:42 JAM
91-20-3	Naphthalene	1	ND		0.100	0.0670	01-Apr-13 10:42 JAM
85-01-8	Phenanthrene	1	ND		0.100	0.0490	01-Apr-13 10:42 JAM
129-00-0	Pyrene	1	ND		0.100	0.0360	01-Apr-13 10:42 JAM

17 compound(s) reported

Protocol Blank 4/5/2013 18:07:23

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Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205216 BLANK 1 **Project:** 20152031

Lab ID: 201075972

Prep Level: Water **Batch:** 205216

Method: Water GC/MS Volatile Organics

Prepared: 26-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
67-64-1	Acetone	1	ND		10.0	8.88	26-Mar-13 10:27 MHM
71-43-2	Benzene	1	ND		5.00	0.518	26-Mar-13 10:27 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469	26-Mar-13 10:27 MHM
75-25-2	Bromoform	1	ND		5.00	0.920	26-Mar-13 10:27 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855	26-Mar-13 10:27 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66	26-Mar-13 10:27 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530	26-Mar-13 10:27 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528	26-Mar-13 10:27 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662	26-Mar-13 10:27 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12	26-Mar-13 10:27 MHM
67-66-3	Chloroform	1	ND		5.00	0.853	26-Mar-13 10:27 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636	26-Mar-13 10:27 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34	26-Mar-13 10:27 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630	26-Mar-13 10:27 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477	26-Mar-13 10:27 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553	26-Mar-13 10:27 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565	26-Mar-13 10:27 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738	26-Mar-13 10:27 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557	26-Mar-13 10:27 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578	26-Mar-13 10:27 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738	26-Mar-13 10:27 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579	26-Mar-13 10:27 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454	26-Mar-13 10:27 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526	26-Mar-13 10:27 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292	26-Mar-13 10:27 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28	26-Mar-13 10:27 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405	26-Mar-13 10:27 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36	26-Mar-13 10:27 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44	26-Mar-13 10:27 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10	26-Mar-13 10:27 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687	26-Mar-13 10:27 MHM
100-42-5	Styrene	1	ND		5.00	0.571	26-Mar-13 10:27 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12	26-Mar-13 10:27 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679	26-Mar-13 10:27 MHM

Protocol Blank 4/5/2013 18:07:23

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205216 BLANK 1 **Project:** 20152031

Lab ID: 201075972

Prep Level: Water **Batch:** 205216

Method: Water GC/MS Volatile Organics

Prepared: 26-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
108-88-3	Toluene	1	0.540	J	5.00	0.536	26-Mar-13 10:27 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554	26-Mar-13 10:27 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915	26-Mar-13 10:27 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654	26-Mar-13 10:27 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575	26-Mar-13 10:27 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564	26-Mar-13 10:27 MHM
	m&p-Xylene	1	ND		5.00	0.937	26-Mar-13 10:27 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649	26-Mar-13 10:27 MHM

42 compound(s) reported

Protocol Blank 4/5/2013 18:07:23

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205396 BLANK 1 **Project:** 20152031

Lab ID: 201076900

Prep Level: Water **Batch:** 205396

Method: Water GC Semivolatile Organics

Prepared: 28-Mar-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Diesel Range Organics (C10-28)	1	ND		0.150	0.0760	03-Apr-13 15:07 SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.150	0.0490	03-Apr-13 15:07 SNP1

2 compound(s) reported

Protocol Blank 4/5/2013 18:07:23

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205650 BLANK 1 **Project:** 20152031

Lab ID: 201078042

Prep Level: Water **Batch:** 205650

Method: Water GC Semivolatile Organics

Prepared: 02-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Diesel Range Organics (C10-28)	1	ND		0.150	0.0760	03-Apr-13 23:25 SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.150	0.0490	03-Apr-13 23:25 SNP1

2 compound(s) reported

Protocol Blank 4/5/2013 18:07:23

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205129 BLANK 3 **Project:** 20152031

Lab ID: 201075966

Prep Level: Water **Batch:** 205129

Method: Water GC Volatile Organics

Prepared: 26-Mar-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Gasoline Range Organics(C6-10)	1	0.0261	J	0.0500	0.0212	26-Mar-13 09:27 DHR1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205212 BLANK 1 **Project:** 20152031

Lab ID: 201075945

Prep Level: Water **Batch:** 205212

Method: Water ICP Metals

Prepared: 26-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis	
7440-36-0	Antimony	1	ND		60.0	1.35	26-Mar-13 17:01	EJH
7440-38-2	Arsenic	1	ND		10.0	1.04	26-Mar-13 17:01	EJH
7440-41-7	Beryllium	1	ND		5.00	0.282	26-Mar-13 17:01	EJH
7440-43-9	Cadmium	1	ND		5.00	0.361	26-Mar-13 17:01	EJH
7440-47-3	Chromium	1	ND		10.0	2.00	26-Mar-13 17:01	EJH
7440-50-8	Copper	1	ND		10.0	2.76	26-Mar-13 17:01	EJH
7439-92-1	Lead	1	ND		5.00	1.15	26-Mar-13 17:01	EJH
7440-02-0	Nickel	1	ND		40.0	0.253	26-Mar-13 17:01	EJH
7782-49-2	Selenium	1	ND		35.0	14.3	26-Mar-13 17:01	EJH
7440-22-4	Silver	1	ND		10.0	0.579	26-Mar-13 17:01	EJH
7440-28-0	Thallium	1	ND		10.0	1.05	26-Mar-13 17:01	EJH
7440-66-6	Zinc	1	ND		20.0	3.52	26-Mar-13 17:01	EJH

12 compound(s) reported

Protocol Blank 4/5/2013 18:07:23

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205234 BLANK 1 **Project:** 20152031

Lab ID: 201076061

Prep Level: Water **Batch:** 205234

Method: Water Mercury

Prepared: 26-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
7439-97-6	Mercury	1	ND		0.200	0.0340	26-Mar-13 15:09 MHB1

1 compound(s) reported

Protocol Blank 4/5/2013 18:07:23

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Definitions/Qualifiers

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152031

Value	Description
N	See narrative for a detailed explanation.
Q1	The matrix spike recoveries are poor. Acceptable method performance for this analyte has been demonstrated by the laboratory control sample recovery.
Q5	Insufficient sample was provided to perform matrix spike analyses on any sample in this analytical batch. Method performance for this analyte has been demonstrated by the laboratory control sample recovery.
J	This estimated value for the analyte is below the adjusted reporting limit but above the instrument reporting limit.
U	The analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
B	This analyte was detected in the method blank.
E	The sample concentration is above the linear calibrated range of the analysis.
LCS	Laboratory Control Sample.
MS(D)	Matrix Spike (Duplicate).
DUP	Sample Duplicate.
RPD	Relative Percent Difference.

Pace Analytical Services, In
1000 Riverbend Blvd. Suite F
St. Rose, LA 7008
(504) 469-033

Chains of Custody

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytica

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fi

20152031 20-CTEH

Section A Required Client Information:

Company:	CTEH
Address:	5120 Northshore Dr
	N. Little Rock, AR 72118
Email To:	Certzberger@cteh.com
Phone: 501-366-0394	Fax:
Requested Due Date/TAT Normal 10 WD	

Section B Required Project Information:

Report To:	Chase Ertzberger
Copy To:	James McCormack(jmccormack@cteh.com
	40432samples@cteh.com
Purchase Order No.:	
Project Name:	Delek @ Magnolia, AR
Project Number:	40432

Section C Invoice Information:

Attention:	CTEH
Address:	5120 Northshore Dr
Pace Quote Reference:	
Pace Project Manager:	Karen Brown
Pace Profile #:	5831 / Line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: AR

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260	8270	8270-SIM (Low level)	Priority Pollutant List (6010)	TPH-GRO (8015)	TPH-DRO / ORO (8015)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MAAR0323SW0009A	WT	G	—	—	03.23	1645		11	4		1	6					3	2	1	1	3	1		201075936
2	MAAR0324SW0010A			—	—	03.24	1550		1	1		1	1					1	1	1	1	1	1		937
3	MAAR0325SW0011A			—	—	03.25	1450		1	1		1	1					1	1	1	1	1	1		943
4	TB0005			—	—	—	—		2				2					2							944
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										

03.25.13

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	R. Shaver / CTEH	03.25.13		UPS	03.25.13		
	UPS 3.26.13		0645		3.26.13	0645	1.1 X Y Y

SAMPLER NAME AND SIGNATURE	Rich Shaver
PRINT Name of SAMPLER:	Rich Shaver
SIGNATURE of SAMPLER:	Rich Shaver
DATE Signed (MM/DD/YY):	03.25.13

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical

Urb. Jardines de Guaynabo
Calle Mrginal Blq A-10
Guaynabo, PR 00969

Sample Co

20152031 20-CTEH

Courier: ☐ Pace Courier ☐ Hired Courier ☐ Fed X ☒ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC] **Custody Seals intact:** ☐Yes ☐No

Therometer Used:	☐ Therm Fisher IR 5 ☒ Therm Fisher IR 6 ☐ Therm Fisher IR 7

Type of Ice: Wet Blue None Samples on ice: [see COC]

Cooler Temperature: [see COC] Temp should be above freezing to 6°C

Date and Initials of person examining contents: 3/26/13

Temp must be measured from Temperature blank when present

				Comments:
Temperature Blank Present"?	☒Yes	☐No	☐N/A	1
Chain of Custody Present:	☒Yes	☐No	☐N/A	2
Chain of Custody Complete:	☒Yes	☐No	☐N/A	3
Chain of Custody Relinquished:	☒Yes	☐No	☐N/A	4
Sampler Name & Signature on COC:	☒Yes	☐No	☐N/A	5
Samples Arrived within Hold Time:	☒Yes	☐No	☐N/A	6
Sufficient Volume:	☒Yes	☐No	☐N/A	7 4 liters -
Correct Containers Used:	☒Yes	☐No	☐N/A	8
Filtered vol. Rec. for Diss. tests	☐Yes	☐No	☒N/A	9
Sample Labels match COC:	☒Yes	☐No	☐N/A	10
All containers received within manafacture's precautionary and/or expiration dates.	☒Yes	☐No	☐N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☒Yes	☐No	☐N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	☒Yes	☐No	☐N/A	13 If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐Yes	☒No	☐N/A	14
Trip Blank Present:	☒Yes	☐No		15

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution:

Note: Coll. date 3/25 used for TB per KO

ALLC003rev.08, 15Feb2013pr SCUR Form - mod

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

April 05, 2013

James McCormack
CTEH
5120 North Shore Drive
North Little Rock, AR 72118

RE: Project 20152100
Project ID: Magnolia, AR

Dear James McCormack:

Enclosed are the analytical results for sample(s) received by the laboratory on March 27, 2013. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Karen Brown
karen.brown@pacelabs.com

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

Laboratory Certifications

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152100

Client: CTEH

Project ID: Magnolia, AR

Washington Department of Ecology C2078
Oregon Environmental Laboratory Accreditation - LA200001
U.S. Dept. of Agriculture Foreign Soil Import P330-10-00119
Pennsylvania Dept. of Env Protection (NELAC) 68-04202
Texas Commission on Env. Quality (NELAC) T104704405-09-TX
Kansas Department of Health and Environment (NELAC) E-10266
Florida Department of Health (NELAC) E87595
Oklahoma Department of Environmental Quality - 2010-139
Illinois Environmental Protection Agency - 0025721
California Env. Lab Accreditation Program Branch - 11277CA
Louisiana Dept. of Environmental Quality (NELAC/LELAP) 02006

4/5/2013 18:12:03

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Cross Reference

Project: 20152100

Client: CTEH

Project ID: Magnolia, AR

Client Sample ID	Lab ID	Matrix	Collection Date/Time	Received Date/Time
MAAR0326SW012A	201076451	Water	26-Mar-13 14:20	27-Mar-13 09:47
TB007	201076453	Water	26-Mar-13 00:00	27-Mar-13 09:47

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152100

Sample Receipt Condition:

All samples were received in accordance with EPA protocol.

Holding Times:

All holding times were met.

Blanks:

All blank results were below reporting limits.

Laboratory Control Samples:

All LCS recoveries were within QC limits.

Matrix Spikes and Duplicates:

All MS/MSD recoveries or duplicate RPDs were within QC limits.

Surrogates:

All surrogate recoveries were within QC limits.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

QC Cross Reference

Project: 20152100

Analytical Method	Batch	Sample used for QC
EPA 8015/8021	205225	Batch sample from another client
EPA 8015/8021	205225	Batch sample from another client
EPA 6010	205349	Project sample MAAR0326SW012A
EPA 7470	205490	Batch sample from another client
EPA 8270	205649	Batch sample from another client
EPA 8260	205264	Batch sample from another client

For the sample used as the original for the DUP or MS/MSD for the batch:

Project sample means a sample from this project was used.
Client sample means a sample from the same client but in a different project was used.
Batch sample means a sample from a different client was used.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0326SW012A
Project: 20152100
Project ID: Magnolia, AR
Site: None
Lab ID: 201076451
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205649
Method: EPA 8270
GCMS SVOAs SIM Water
Collected: 26-Mar-13
Received: 27-Mar-13
Prepared: 02-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
83-32-9	Acenaphthene	1	ND		0.100	0.0520		02-Apr-13 21:07 JAM
208-96-8	Acenaphthylene	1	ND		0.100	0.0460		02-Apr-13 21:07 JAM
120-12-7	Anthracene	1	ND		0.100	0.0570		02-Apr-13 21:07 JAM
56-55-3	Benzo(a)anthracene	1	ND		0.100	0.0310		02-Apr-13 21:07 JAM
205-99-2	Benzo(b)fluoranthene	1	ND		0.100	0.0520		02-Apr-13 21:07 JAM
207-08-9	Benzo(k)fluoranthene	1	ND		0.100	0.0410		02-Apr-13 21:07 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		0.100	0.0200		02-Apr-13 21:07 JAM
50-32-8	Benzo(a)pyrene	1	ND		0.100	0.0410		02-Apr-13 21:07 JAM
218-01-9	Chrysene	1	ND		0.100	0.0250		02-Apr-13 21:07 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		0.100	0.0180		02-Apr-13 21:07 JAM
206-44-0	Fluoranthene	1	ND		0.100	0.0390		02-Apr-13 21:07 JAM
86-73-7	Fluorene	1	0.100		0.100	0.0630		02-Apr-13 21:07 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		0.100	0.0180		02-Apr-13 21:07 JAM
91-57-6	2-Methylnaphthalene	1	0.230		0.100	0.0780		02-Apr-13 21:07 JAM
91-20-3	Naphthalene	1	0.200		0.100	0.0670		02-Apr-13 21:07 JAM
85-01-8	Phenanthrene	1	0.110		0.100	0.0490		02-Apr-13 21:07 JAM
129-00-0	Pyrene	1	ND		0.100	0.0360		02-Apr-13 21:07 JAM

17 compound(s) reported

Protocol 4/5/2013 18:12:44

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0326SW012A
Project: 20152100
Project ID: Magnolia, AR
Site: None
Lab ID: 201076451
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205387
Method: EPA 8270
GCMS SVOAs Water
Collected: 26-Mar-13
Received: 27-Mar-13
Prepared: 28-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
65-85-0	Benzoic acid	1	ND		25.0	1.56		03-Apr-13 16:46 JAM
100-51-6	Benzyl alcohol	1	ND		10.0	0.959		03-Apr-13 16:46 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND		10.0	0.541		03-Apr-13 16:46 JAM
85-68-7	Butylbenzylphthalate	1	ND		10.0	0.825		03-Apr-13 16:46 JAM
86-74-8	Carbazole	1	ND		10.0	0.932		03-Apr-13 16:46 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND		10.0	0.812		03-Apr-13 16:46 JAM
106-47-8	3&4-Chloroaniline	1	ND		10.0	1.22		03-Apr-13 16:46 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	0.789		03-Apr-13 16:46 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	0.804		03-Apr-13 16:46 JAM
91-58-7	2-Chloronaphthalene	1	ND		10.0	0.713		03-Apr-13 16:46 JAM
95-57-8	2-Chlorophenol	1	ND		10.0	0.716		03-Apr-13 16:46 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND		10.0	0.638		03-Apr-13 16:46 JAM
132-64-9	Dibenzofuran	1	ND		10.0	0.576		03-Apr-13 16:46 JAM
95-50-1	1,2-Dichlorobenzene	1	ND		10.0	0.867		03-Apr-13 16:46 JAM
541-73-1	1,3-Dichlorobenzene	1	ND		10.0	0.832		03-Apr-13 16:46 JAM
106-46-7	1,4-Dichlorobenzene	1	ND		10.0	0.652		03-Apr-13 16:46 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND		10.0	0.781		03-Apr-13 16:46 JAM
120-83-2	2,4-Dichlorophenol	1	ND		10.0	0.783		03-Apr-13 16:46 JAM
84-66-2	Diethylphthalate	1	ND		10.0	0.607		03-Apr-13 16:46 JAM
105-67-9	2,4-Dimethylphenol	1	ND		10.0	0.781		03-Apr-13 16:46 JAM
131-11-3	Dimethylphthalate	1	ND		10.0	0.594		03-Apr-13 16:46 JAM
84-74-2	Di-n-butylphthalate	1	1.15	J	10.0	0.651		03-Apr-13 16:46 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		10.0	1.02		03-Apr-13 16:46 JAM
51-28-5	2,4-Dinitrophenol	1	ND		10.0	0.470		03-Apr-13 16:46 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	0.741		03-Apr-13 16:46 JAM
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	0.780		03-Apr-13 16:46 JAM
117-84-0	Di-n-octylphthalate	1	ND		10.0	0.781		03-Apr-13 16:46 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	0.930		03-Apr-13 16:46 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		10.0	0.759		03-Apr-13 16:46 JAM
118-74-1	Hexachlorobenzene	1	ND		10.0	0.681		03-Apr-13 16:46 JAM
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	0.347		03-Apr-13 16:46 JAM
67-72-1	Hexachloroethane	1	ND		10.0	0.987		03-Apr-13 16:46 JAM
78-59-1	Isophorone	1	ND		10.0	0.628		03-Apr-13 16:46 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	0.749		03-Apr-13 16:46 JAM

Protocol 4/5/2013 18:12:44

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0326SW012A
Project: 20152100
Project ID: Magnolia, AR
Site: None
Lab ID: 201076451
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205387
Method: EPA 8270
GCMS SVOAs Water
Collected: 26-Mar-13
Received: 27-Mar-13
Prepared: 28-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
	3&4-Methylphenol	1	ND		10.0	0.948		03-Apr-13 16:46 JAM
88-74-4	2-Nitroaniline	1	ND		10.0	0.859		03-Apr-13 16:46 JAM
99-09-2	3-Nitroaniline	1	ND		10.0	0.877		03-Apr-13 16:46 JAM
100-01-6	4-Nitroaniline	1	ND		10.0	0.972		03-Apr-13 16:46 JAM
98-95-3	Nitrobenzene	1	ND		10.0	1.06		03-Apr-13 16:46 JAM
88-75-5	2-Nitrophenol	1	ND		10.0	0.772		03-Apr-13 16:46 JAM
100-02-7	4-Nitrophenol	1	ND		10.0	0.761		03-Apr-13 16:46 JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	0.919		03-Apr-13 16:46 JAM
86-30-6	N-Nitrosodiphenylamine	1	ND		10.0	0.715		03-Apr-13 16:46 JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		10.0	0.732		03-Apr-13 16:46 JAM
87-86-5	Pentachlorophenol	1	ND		10.0	0.860		03-Apr-13 16:46 JAM
108-95-2	Phenol	1	ND		10.0	0.773		03-Apr-13 16:46 JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	0.797		03-Apr-13 16:46 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		10.0	0.751		03-Apr-13 16:46 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	0.737		03-Apr-13 16:46 JAM

49 compound(s) reported

Protocol 4/5/2013 18:12:44

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0326SW012A
Project: 20152100
Project ID: Magnolia, AR
Site: None
Lab ID: 201076451
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205264
Method: EPA 8260
GCMS VOAs Water
Collected: 26-Mar-13
Received: 27-Mar-13
Prepared: 27-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	8.88		27-Mar-13 17:59 MHM
71-43-2	Benzene	1	0.960	J	5.00	0.518		27-Mar-13 17:59 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		27-Mar-13 17:59 MHM
75-25-2	Bromoform	1	ND		5.00	0.920		27-Mar-13 17:59 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855		27-Mar-13 17:59 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		27-Mar-13 17:59 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530		27-Mar-13 17:59 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		27-Mar-13 17:59 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662		27-Mar-13 17:59 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12		27-Mar-13 17:59 MHM
67-66-3	Chloroform	1	ND		5.00	0.853		27-Mar-13 17:59 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636		27-Mar-13 17:59 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		27-Mar-13 17:59 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		27-Mar-13 17:59 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		27-Mar-13 17:59 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		27-Mar-13 17:59 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565		27-Mar-13 17:59 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		27-Mar-13 17:59 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		27-Mar-13 17:59 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		27-Mar-13 17:59 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		27-Mar-13 17:59 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		27-Mar-13 17:59 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		27-Mar-13 17:59 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		27-Mar-13 17:59 MHM
100-41-4	Ethylbenzene	1	0.670	J	5.00	0.292		27-Mar-13 17:59 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28		27-Mar-13 17:59 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405		27-Mar-13 17:59 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36		27-Mar-13 17:59 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44		27-Mar-13 17:59 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		27-Mar-13 17:59 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		27-Mar-13 17:59 MHM
100-42-5	Styrene	1	ND		5.00	0.571		27-Mar-13 17:59 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		27-Mar-13 17:59 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		27-Mar-13 17:59 MHM

Protocol 4/5/2013 18:12:44

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0326SW012A
Project: 20152100
Project ID: Magnolia, AR
Site: None
Lab ID: 201076451
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205264
Method: EPA 8260
GCMS VOAs Water
Collected: 26-Mar-13
Received: 27-Mar-13
Prepared: 27-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	1.14	J	5.00	0.536		27-Mar-13 17:59 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		27-Mar-13 17:59 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915		27-Mar-13 17:59 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654		27-Mar-13 17:59 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575		27-Mar-13 17:59 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564		27-Mar-13 17:59 MHM
	m&p-Xylene	1	0.980	J	5.00	0.937		27-Mar-13 17:59 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649		27-Mar-13 17:59 MHM

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0326SW012A
Project: 20152100
Project ID: Magnolia, AR
Site: None
Lab ID: 201076451
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205650
Method: EPA 8015 Mod Ext
8015 TPH Extractables Water
Collected: 26-Mar-13
Received: 27-Mar-13
Prepared: 02-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
none	Diesel Range Organics (C10-28)	1	ND		0.250	0.0760		04-Apr-13 05:54	SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.500	0.0490		04-Apr-13 05:54	SNP1

2 compound(s) reported

Protocol 4/5/2013 18:12:44

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MDL denotes method detection limit

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0326SW012A
Project ID: Magnolia, AR
Lab ID: 201076451
Description: None
Method: EPA 8015/8021
8015/8021 Water

Project: 20152100
Site: None
Matrix: Water
% Moisture: n/a
Prep Level: Water
Batch: 205225
Collected: 26-Mar-13
Received: 27-Mar-13
Prepared: 27-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Gasoline Range Organics(C6-10)	1	0.0356	J	0.0500	0.0212		27-Mar-13 12:18 DHR1

1 compound(s) reported

Protocol 4/5/2013 18:12:44

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical™

Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0326SW012A
Project: 20152100
Project ID: Magnolia, AR
Site: None
Lab ID: 201076451
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205349
Method: EPA 6010
Metals, ICP, Water
Collected: 26-Mar-13
Received: 27-Mar-13
Prepared: 28-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7440-36-0	Antimony	1	ND		60.0	1.35		28-Mar-13 15:02 MHB1
7440-38-2	Arsenic	1	1.91	J	10.0	1.04		28-Mar-13 15:02 MHB1
7440-41-7	Beryllium	1	0.699	J	5.00	0.282		28-Mar-13 15:02 MHB1
7440-43-9	Cadmium	1	0.438	J	5.00	0.361		28-Mar-13 15:02 MHB1
7440-47-3	Chromium	1	ND		10.0	2.00		28-Mar-13 15:02 MHB1
7440-50-8	Copper	1	ND		10.0	2.76		28-Mar-13 15:02 MHB1
7439-92-1	Lead	1	3.24	J	5.00	1.15		28-Mar-13 15:02 MHB1
7440-02-0	Nickel	1	8.14	J	40.0	0.253		28-Mar-13 15:02 MHB1
7782-49-2	Selenium	1	ND		35.0	14.3		28-Mar-13 15:02 MHB1
7440-22-4	Silver	1	ND		10.0	0.579		28-Mar-13 15:02 MHB1
7440-28-0	Thallium	1	ND		10.0	1.05		28-Mar-13 15:02 MHB1
7440-66-6	Zinc	1	21.9		20.0	3.52		28-Mar-13 15:02 MHB1

12 compound(s) reported

Protocol 4/5/2013 18:12:44

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MDL denotes method detection limit

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0326SW012A
Project ID: Magnolia, AR
Lab ID: 201076451
Description: None
Method: EPA 7470
Mercury Water

Project: 20152100
Site: None
Matrix: Water
Prep Level: Water
% Moisture: n/a
Batch: 205490
Collected: 26-Mar-13
Received: 27-Mar-13
Prepared: 29-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.200	0.0340		29-Mar-13 14:28 MHB1

1 compound(s) reported

Protocol 4/5/2013 18:12:44

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: TB007
Project: 20152100
Project ID: Magnolia, AR
Site: None
Lab ID: 201076453
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205264
Method: EPA 8260
GCMS VOAs Water
Collected: 26-Mar-13
Received: 27-Mar-13
Prepared: 28-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	8.88		28-Mar-13 11:14 MHM
71-43-2	Benzene	1	ND		5.00	0.518		28-Mar-13 11:14 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		28-Mar-13 11:14 MHM
75-25-2	Bromoform	1	ND		5.00	0.920		28-Mar-13 11:14 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855		28-Mar-13 11:14 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		28-Mar-13 11:14 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530		28-Mar-13 11:14 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		28-Mar-13 11:14 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662		28-Mar-13 11:14 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12		28-Mar-13 11:14 MHM
67-66-3	Chloroform	1	ND		5.00	0.853		28-Mar-13 11:14 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636		28-Mar-13 11:14 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		28-Mar-13 11:14 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		28-Mar-13 11:14 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		28-Mar-13 11:14 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		28-Mar-13 11:14 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565		28-Mar-13 11:14 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		28-Mar-13 11:14 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		28-Mar-13 11:14 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		28-Mar-13 11:14 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		28-Mar-13 11:14 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		28-Mar-13 11:14 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		28-Mar-13 11:14 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		28-Mar-13 11:14 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292		28-Mar-13 11:14 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28		28-Mar-13 11:14 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405		28-Mar-13 11:14 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36		28-Mar-13 11:14 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44		28-Mar-13 11:14 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		28-Mar-13 11:14 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		28-Mar-13 11:14 MHM
100-42-5	Styrene	1	ND		5.00	0.571		28-Mar-13 11:14 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		28-Mar-13 11:14 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		28-Mar-13 11:14 MHM

Protocol 4/5/2013 18:12:44

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
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Client: CTEH

Client ID: TB007
Project ID: Magnolia, AR
Lab ID: 201076453
Description: None
Method: EPA 8260
GCMS VOAs Water

Project: 20152100
Site: None
Matrix: Water **% Moisture:** n/a
Prep Level: Water **Batch:** 205264

Collected: 26-Mar-13 **Received:** 27-Mar-13
Prepared: 28-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	ND		5.00	0.536		28-Mar-13 11:14 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		28-Mar-13 11:14 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915		28-Mar-13 11:14 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654		28-Mar-13 11:14 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575		28-Mar-13 11:14 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564		28-Mar-13 11:14 MHM
	m&p-Xylene	1	ND		5.00	0.937		28-Mar-13 11:14 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649		28-Mar-13 11:14 MHM

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Surrogate Recovery

Batch: 205387 **Project:** 20152100

Method: Water GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201076886	205387 BLANK 1		76	81	68	83	70	96		
201076887	205387 LCS 1		87	87	78	76	82	107		
201076451	MAAR0326SW012A		78	77	64	83	71	86		
	QC limits:		25-145	34-117	10-118	33-120	15-134	24-133		

Sur 1: 2,4,6-Tribromophenol (S)
Sur 2: 2-Fluorobiphenyl (S)
Sur 3: 2-Fluorophenol (S)
Sur 4: Nitrobenzene-d5 (S)
Sur 5: Phenol-d5 (S)
Sur 6: Terphenyl-d14 (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

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Batch: 205649 **Project:** 20152100

Method: Water GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201078038	205649 BLANK 1		66	60						
201078039	205649 LCS 1		74	77						
201076451	MAAR0326SW012A		53	52						
201078040	MW-3 MS 1		90	74						
201078041	MW-3 MSD 1		78	61						
	QC limits:		12-110	25-113						

Sur 1: 2-Fluorobiphenyl (S)
Sur 2: Terphenyl-d14 (S)

Surrogates 4/5/2013 18:12:46

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205264 **Project:** 20152100

Method: Water GC/MS Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201076341	205264 BLANK 1		80	95	82					
201076821	205264 BLANK 2		76	90	80					
201076342	205264 LCS 1		81	90	86					
201076822	205264 LCS 2		77	89	85					
201076343	BORROWC-013-173-089 MS 1		79	89	88					
201076344	BORROWC-013-173-089 MSD 1		81	88	88					
201076451	MAAR0326SW012A		78	88	84					
201076453	TB007		75	86	80					
	QC limits:		68-124	72-126	79-119					

Sur 1: 4-Bromofluorobenzene (S)
Sur 2: Dibromofluoromethane (S)
Sur 3: Toluene-d8 (S)

*** denotes surrogate recovery outside of QC limits.**
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205650 **Project:** 20152100

Method: Water GC Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201078042	205650 BLANK 1		79	73						
201078043	205650 LCS 1		69	64						
201076451	MAAR0326SW012A		23	83						
	QC limits:		16-137	10-121						

Sur 1: n-Pentacosane (S)
Sur 2: o-Terphenyl (S)

Surrogates 4/5/2013 18:12:46

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205225 **Project:** 20152100

Method: Water GC Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201076025	205225 BLANK 1		108							
201076745	205225 BLANK 2		110							
201076026	205225 LCS 1		106							
201076746	205225 LCS 2		109							
201076747	CAW-01 MS 1		105							
201076748	CAW-01 MSD 1		109							
201076749	CAW-02 MS 2		105							
201076750	CAW-02 MSD 2		107							
201076451	MAAR0326SW012A		102							
	QC limits:		60-129							

Sur 1: 4-Bromofluorobenzene (S)

Surrogates 4/5/2013 18:12:46

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

Batch: 205387 **Project:** 20152100 **LCS:** 201076887 03-Apr-13 15:55

Method: Water GC/MS Semivolatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Benzoic acid	50.0	27.4	55								10-130			Q5
Benzyl alcohol	50.0	39.9	80								44-120			Q5
4-Bromophenylphenyl ether	50.0	41.0	82								49-120			Q5
Butylbenzylphthalate	50.0	40.5	81								46-120			Q5
Carbazole	50.0	44.5	89								51-127			Q5
4-Chloro-3-methylphenol	50.0	38.3	77								43-115			Q5
3&4-Chloroaniline	50.0	32.2	65								10-130			Q5
bis(2-Chloroethoxy)methane	50.0	34.9	70								43-115			Q5
bis(2-Chloroethyl) ether	50.0	40.9	82								47-115			Q5
2-Chloronaphthalene	50.0	40.9	82								52-115			Q5
2-Chlorophenol	50.0	44.4	89								48-115			Q5
4-Chlorophenylphenyl ether	50.0	42.0	84								52-116			Q5
Dibenzofuran	50.0	41.9	84								53-115			Q5
1,2-Dichlorobenzene	50.0	40.4	81								42-115			Q5
1,3-Dichlorobenzene	50.0	39.7	79								40-115			Q5
1,4-Dichlorobenzene	50.0	40.0	80								41-115			Q5
3,3'-Dichlorobenzidine	50.0	36.4	73								16-142			Q5
2,4-Dichlorophenol	50.0	38.8	78								45-115			Q5
Diethylphthalate	50.0	40.0	80								49-120			Q5
2,4-Dimethylphenol	50.0	37.9	76								23-116			Q5
Dimethylphthalate	50.0	38.1	76								52-115			Q5
Di-n-butylphthalate	50.0	37.4	75								50-117			Q5
4,6-Dinitro-2-methylphenol	50.0	40.8	82								44-122			Q5
2,4-Dinitrophenol	50.0	30.6	61								16-134			Q5
2,4-Dinitrotoluene	50.0	40.8	82								50-118			Q5
2,6-Dinitrotoluene	50.0	41.7	83								55-115			Q5
Di-n-octylphthalate	50.0	44.0	88								40-129			Q5
bis(2-Ethylhexyl)phthalate	50.0	42.3	85								46-124			Q5
Hexachloro-1,3-butadiene	50.0	37.5	75								32-115			Q5
Hexachlorobenzene	50.0	41.8	84								53-115			Q5
Hexachlorocyclopentadiene	50.0	33.1	66								10-115			Q5
Hexachloroethane	50.0	38.8	78								36-115			Q5
Isophorone	50.0	36.3	73								45-115			Q5
2-Methylphenol (o-Cresol)	50.0	46.1	92								46-115			Q5
3&4-Methylphenol	50.0	41.2	82								46-115			Q5
2-Nitroaniline	50.0	40.7	81								48-121			Q5
3-Nitroaniline	50.0	40.8	82								38-125			Q5
4-Nitroaniline	50.0	40.4	81								37-132			Q5
Nitrobenzene	50.0	36.1	72								44-118			Q5
2-Nitrophenol	50.0	39.7	79								45-115			Q5
4-Nitrophenol	50.0	32.7	65								29-134			Q5

QC Protocol 4/5/2013 18:12:47

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205387 **Project:** 20152100 **LCS:** 201076887 03-Apr-13 15:55

Method: Water GC/MS Semivolatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
N-Nitroso-di-n-propylamine	50.0	40.0	80								45-119			Q5
N-Nitrosodiphenylamine	50.0	49.7	99								42-134			Q5
2,2'-Oxybis(1-chloropropane)	50.0	43.3	87								40-120			Q5
Pentachlorophenol	50.0	38.4	77								34-124			Q5
Phenol	50.0	42.3	85								44-115			Q5
1,2,4-Trichlorobenzene	50.0	36.9	74								40-115			Q5
2,4,5-Trichlorophenol	50.0	42.5	85								49-115			Q5
2,4,6-Trichlorophenol	50.0	43.6	87								48-115			Q5

49 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205649 **Project:** 20152100 **LCS:** 201078039 02-Apr-13 17:09

Method: Water GC/MS Semivolatile Organics **MS:** 201078040 02-Apr-13 18:36

Units: ug/L **MSD:** 201078041 02-Apr-13 18:57

Original for MS: Batch Sample 201076977

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acenaphthene	2.00	1.49	75	2.00		1.79	1.70	90	85	5	39-115	10-131	20	
Acenaphthylene	2.00	1.06	53	2.00		1.50	1.40	75	70	7	30-115	10-131	20	
Anthracene	2.00	1.10	55	2.00		1.99	1.84	100	92	8	34-115	10-139	20	
Benzo(a)anthracene	2.00	1.43	72	2.00		1.48	1.28	74	64	14	33-115	12-115	20	
Benzo(b)fluoranthene	2.00	1.69	85	2.00		1.39	1.18	70	59	16	30-115	10-119	20	
Benzo(k)fluoranthene	2.00	1.60	80	2.00		1.13	1.04	57	52	8	31-115	10-122	20	
Benzo(g,h,i)perylene	2.00	1.66	83	2.00		1.11	0.940	56	47	17	27-115	10-123	20	
Benzo(a)pyrene	2.00	1.08	54	2.00		1.18	1.04	59	52	13	28-115	10-115	20	
Chrysene	2.00	1.22	61	2.00		1.28	1.09	64	55	16	36-115	10-116	20	
Dibenz(a,h)anthracene	2.00	1.58	79	2.00		1.17	0.970	59	49	19	23-115	10-128	20	
Fluoranthene	2.00	1.54	77	2.00		1.78	1.78	89	89	0	39-115	10-136	20	
Fluorene	2.00	1.48	74	2.00		1.77	1.72	89	86	3	38-115	10-129	20	
Indeno(1,2,3-cd)pyrene	2.00	1.64	82	2.00		1.25	1.03	63	52	19	28-115	10-124	20	
2-Methylnaphthalene	2.00	1.46	73	2.00	0.220	1.89	1.85	84	82	2	31-115	11-125	20	
Naphthalene	2.00	1.54	77	2.00	0.360	2.03	2.02	84	83	0	40-115	14-124	20	
Phenanthrene	2.00	1.49	75	2.00		1.88	1.77	94	89	6	38-115	10-130	20	
Pyrene	2.00	1.49	75	2.00		1.77	1.63	89	82	8	33-115	10-120	20	

17 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205264 **Project:** 20152100 **LCS:** 201076342 27-Mar-13 10:00

Method: Water GC/MS Volatile Organics **MS:** 201076343 27-Mar-13 19:00

Units: ug/L **MSD:** 201076344 27-Mar-13 19:20

Original for MS: Batch Sample 201076032

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acetone	50.0	66.9	134	50.0		59.8	53.6	120	107	11	10-198	10-202	20	
Benzene	50.0	48.1	96	50.0		50.1	50.2	100	100	0	68-129	60-138	20	
Bromodichloromethane	50.0	48.4	97	50.0		49.0	49.3	98	99	1	68-132	66-137	20	
Bromoform	50.0	53.2	106	50.0		47.5	48.2	95	96	2	56-153	53-156	20	
Bromomethane	50.0	61.7	123	50.0		60.0	59.8	120	120	0	47-149	43-151	20	
2-Butanone (MEK)	50.0	63.4	127	50.0		56.8	51.2	114	102	10	18-173	14-184	20	
Carbon disulfide	50.0	61.6	123	50.0		64.8	63.7	130	127	2	25-166	17-176	20	
Carbon tetrachloride	50.0	47.7	96	50.0		45.9	47.7	92	95	4	56-146	51-151	20	
Chlorobenzene	50.0	49.4	99	50.0		47.8	49.2	96	98	3	74-131	71-135	20	
Chloroethane	50.0	50.5	101	50.0		60.4	59.5	121	119	2	28-190	21-191	20	
Chloroform	50.0	50.1	100	50.0		50.7	50.4	102	101	1	71-132	67-138	20	
Chloromethane	50.0	67.8	136	50.0		65.8	64.4	132	129	2	27-154	24-158	20	
1,2-Dibromo-3-chloropropane	50.0	51.4	103	50.0		48.6	44.5	97	89	9	40-155	38-162	20	
Dibromochloromethane	50.0	52.9	106	50.0		49.4	50.5	99	101	2	64-138	62-142	20	
1,2-Dibromoethane (EDB)	50.0	52.7	105	50.0		49.9	49.1	100	98	2	62-146	61-149	20	
Dichlorodifluoromethane	50.0	79.6	159	50.0		79.2	78.7	158	157	1	18-173	16-176	20	
1,1-Dichloroethane	50.0	49.7	100	50.0		52.8	52.0	106	104	1	63-135	61-141	20	
1,2-Dichloroethane	50.0	50.3	101	50.0		51.0	49.1	102	98	4	58-150	57-155	20	
1,1-Dichloroethene	50.0	57.8	116	50.0		56.6	55.9	113	112	1	50-151	40-163	20	
cis-1,2-Dichloroethene	50.0	52.7	105	50.0	2.58	55.2	55.0	105	105	0	65-132	61-138	20	
trans-1,2-Dichloroethene	50.0	54.3	109	50.0		54.7	53.0	109	106	3	56-137	52-144	20	
1,2-Dichloropropane	50.0	49.5	99	50.0		51.7	52.9	103	106	2	66-131	64-137	20	
cis-1,3-Dichloropropene	50.0	46.4	93	50.0		46.8	46.4	94	93	1	66-135	62-137	20	
trans-1,3-Dichloropropene	50.0	53.0	106	50.0		51.9	49.8	104	100	4	62-146	59-151	20	
Ethylbenzene	50.0	45.7	91	50.0		44.5	46.4	89	93	4	73-129	66-136	20	
2-Hexanone	50.0	53.8	108	50.0		45.8	43.8	92	88	4	29-158	27-165	20	
Isopropylbenzene (Cumene)	50.0	42.8	86	50.0		44.1	44.5	88	89	1	61-139	58-144	20	
Methylene chloride	50.0	58.2	116	50.0		60.2	59.2	121	118	2	41-171	35-165	20	
4-Methyl-2-pentanone (MIBK	50.0	56.7	113	50.0		51.9	49.2	104	99	5	46-159	43-165	20	
Methyl-tert-butyl ether	50.0	55.0	110	50.0		53.0	50.2	106	100	5	51-155	48-164	20	
Styrene	50.0	47.2	94	50.0		45.0	46.6	90	93	3	74-132	63-141	20	
1,1,2,2-Tetrachloroethane	50.0	50.0	100	50.0		48.0	47.0	96	94	2	46-153	41-160	20	
Tetrachloroethene	50.0	47.5	95	50.0		43.2	45.8	86	92	6	57-151	48-160	20	
Toluene	50.0	46.5	93	50.0		47.7	47.7	95	95	0	70-130	62-137	20	
1,1,1-Trichloroethane	50.0	48.0	96	50.0		49.5	51.7	99	103	4	65-132	61-138	20	
1,1,2-Trichloroethane	50.0	53.2	106	50.0		51.4	50.5	103	101	2	64-140	63-145	20	
Trichloroethene	50.0	46.5	93	50.0	1.71	47.1	48.4	91	93	3	71-131	62-142	20	
Trichlorofluoromethane	50.0	67.6	135	50.0		72.0	69.4	144	139	4	37-188	19-196	20	
Vinyl chloride	50.0	52.2	104	50.0		54.5	53.9	109	108	1	42-148	35-153	20	
m&p-Xylene	100.	94.1	94	100.		91.3	93.6	91	94	2	71-132	64-138	20	
o-Xylene	50.0	45.0	90	50.0		44.5	46.6	89	93	5	69-129	63-136	20	

QC Protocol 4/5/2013 18:12:47

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205264 **Project:** 20152100 **LCS:** 201076342 27-Mar-13 10:00

Method: Water GC/MS Volatile Organics **MS:** 201076343 27-Mar-13 19:00

Units: ug/L **MSD:** 201076344 27-Mar-13 19:20

Original for MS: Batch Sample 201076032

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu

41 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205264 **Project:** 20152100 **LCS:** 201076822 28-Mar-13 10:33

Method: Water GC/MS Volatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acetone	50.0	62.7	125								10-198			
Benzene	50.0	48.5	97								68-129			
Bromodichloromethane	50.0	49.9	100								68-132			
Bromoform	50.0	55.9	112								56-153			
Bromomethane	50.0	61.8	124								47-149			
2-Butanone (MEK)	50.0	65.3	131								18-173			
Carbon disulfide	50.0	61.3	123								25-166			
Carbon tetrachloride	50.0	47.5	95								56-146			
Chlorobenzene	50.0	50.8	102								74-131			
Chloroethane	50.0	50.4	101								28-190			
Chloroform	50.0	51.3	103								71-132			
Chloromethane	50.0	67.2	134								27-154			
1,2-Dibromo-3-chloropropane	50.0	56.6	113								40-155			
Dibromochloromethane	50.0	54.6	109								64-138			
1,2-Dibromoethane (EDB)	50.0	54.2	108								62-146			
Dichlorodifluoromethane	50.0	77.2	154								18-173			
1,1-Dichloroethane	50.0	50.2	100								63-135			
1,2-Dichloroethane	50.0	51.1	102								58-150			
1,1-Dichloroethene	50.0	55.8	112								50-151			
cis-1,2-Dichloroethene	50.0	53.2	106								65-132			
trans-1,2-Dichloroethene	50.0	53.4	107								56-137			
1,2-Dichloropropane	50.0	51.9	104								66-131			
cis-1,3-Dichloropropene	50.0	46.4	93								66-135			
trans-1,3-Dichloropropene	50.0	53.1	106								62-146			
Ethylbenzene	50.0	46.6	93								73-129			
2-Hexanone	50.0	55.1	110								29-158			
Isopropylbenzene (Cumene)	50.0	42.9	86								61-139			
Methylene chloride	50.0	61.3	123								41-171			
4-Methyl-2-pentanone (MIBK	50.0	59.4	119								46-159			
Methyl-tert-butyl ether	50.0	56.4	113								51-155			
Styrene	50.0	47.8	96								74-132			
1,1,2,2-Tetrachloroethane	50.0	49.8	100								46-153			
Tetrachloroethene	50.0	47.5	95								57-151			
Toluene	50.0	46.9	94								70-130			
1,1,1-Trichloroethane	50.0	51.2	102								65-132			
1,1,2-Trichloroethane	50.0	54.6	109								64-140			
Trichloroethene	50.0	46.9	94								71-131			
Trichlorofluoromethane	50.0	67.7	135								37-188			
Vinyl chloride	50.0	51.1	102								42-148			
m&p-Xylene	100.	95.0	95								71-132			
o-Xylene	50.0	46.4	93								69-129			

QC Protocol 4/5/2013 18:12:47

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205264 **Project:** 20152100 **LCS:** 201076822 28-Mar-13 10:33

Method: Water GC/MS Volatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu

41 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205650 **Project:** 20152100 **LCS:** 201078043 03-Apr-13 23:53

Method: Water GC Semivolatile Organics **MS:**

Units: mg/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Diesel Range Organics (C10-2	0.400	0.183	46								10-115			Q5

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205225 **Project:** 20152100 **LCS:** 201076026 27-Mar-13 11:06

Method: Water GC Volatile Organics **MS:** 201076747 28-Mar-13 13:15

Units: mg/L **MSD:** 201076748 28-Mar-13 13:43

Original for MS: Batch Sample 201075279

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Gasoline Range Organics(C6-	0.500	0.507	101	0.500	0.0413	0.453	0.512	82	94	12	61-136	15-147	20	
1 compound(s) reported														

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Quality Control

Batch: 205349 **Project:** 20152100 **LCS:** 201076680 28-Mar-13 14:58

Method: Water ICP Metals **MS:** 201076681 28-Mar-13 15:05

Units: ug/L **MSD:** 201076682 28-Mar-13 15:09

Original for MS: Client Sample 201076451

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Antimony	1000	1030	103	1000		1020	1000	101	100	1	82-120	80-120	20	
Arsenic	1000	1000	100	1000	1.91	996.	983.	99	98	1	84-117	80-120	20	
Beryllium	1000	1000	100	1000	0.699	1000	978.	100	98	2	85-117	80-120	20	
Cadmium	1000	1040	104	1000	0.438	999.	989.	100	99	1	85-115	80-120	20	
Chromium	1000	979.	98	1000		976.	957.	98	96	2	83-117	80-120	20	
Copper	1000	995.	100	1000		985.	969.	98	97	2	85-116	80-120	20	
Lead	1000	1050	105	1000	3.24	997.	985.	99	98	1	84-118	80-120	20	
Nickel	1000	1030	103	1000	8.14	998.	989.	99	98	1	85-118	80-120	20	
Selenium	1000	1030	103	1000		990.	984.	99	98	1	85-116	80-120	20	
Silver	500.	499.	100	500.		494.	488.	99	98	1	80-120	80-120	20	
Thallium	1000	1050	105	1000		970.	966.	97	97	0	85-118	80-120	20	
Zinc	1000	1050	105	1000	21.9	1040	1030	101	101	1	81-120	80-120	20	

12 compound(s) reported

QC Protocol 4/5/2013 18:12:47

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MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Quality Control

Batch: 205490 **Project:** 20152100 **LCS:** 201077354 29-Mar-13 14:21

Method: Water Mercury **MS:** 201077355 29-Mar-13 14:25

Units: ug/L **MSD:** 201077356 29-Mar-13 14:26

Original for MS: Batch Sample 201076782

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Mercury	1.00	1.02	103	1.00		1.01	1.02	100	102	2	80-120	75-125	20	

1 compound(s) reported

QC Protocol 4/5/2013 18:12:47

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Blank Results

Pace Analytical Services, Inc.
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(504) 469-0333

Blank ID: 205387 BLANK 1 **Project:** 20152100

Lab ID: 201076886

Prep Level: Water **Batch:** 205387

Method: Water GC/MS Semivolatile Organics

Prepared: 28-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
65-85-0	Benzoic acid	1	ND		25.0	1.56	03-Apr-13 15:29 JAM
100-51-6	Benzyl alcohol	1	ND		10.0	0.959	03-Apr-13 15:29 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND		10.0	0.541	03-Apr-13 15:29 JAM
85-68-7	Butylbenzylphthalate	1	ND		10.0	0.825	03-Apr-13 15:29 JAM
86-74-8	Carbazole	1	ND		10.0	0.932	03-Apr-13 15:29 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND		10.0	0.812	03-Apr-13 15:29 JAM
106-47-8	3&4-Chloroaniline	1	ND		10.0	1.22	03-Apr-13 15:29 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	0.789	03-Apr-13 15:29 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	0.804	03-Apr-13 15:29 JAM
91-58-7	2-Chloronaphthalene	1	ND		10.0	0.713	03-Apr-13 15:29 JAM
95-57-8	2-Chlorophenol	1	ND		10.0	0.716	03-Apr-13 15:29 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND		10.0	0.638	03-Apr-13 15:29 JAM
132-64-9	Dibenzofuran	1	ND		10.0	0.576	03-Apr-13 15:29 JAM
95-50-1	1,2-Dichlorobenzene	1	ND		10.0	0.867	03-Apr-13 15:29 JAM
541-73-1	1,3-Dichlorobenzene	1	ND		10.0	0.832	03-Apr-13 15:29 JAM
106-46-7	1,4-Dichlorobenzene	1	ND		10.0	0.652	03-Apr-13 15:29 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND		10.0	0.781	03-Apr-13 15:29 JAM
120-83-2	2,4-Dichlorophenol	1	ND		10.0	0.783	03-Apr-13 15:29 JAM
84-66-2	Diethylphthalate	1	ND		10.0	0.607	03-Apr-13 15:29 JAM
105-67-9	2,4-Dimethylphenol	1	ND		10.0	0.781	03-Apr-13 15:29 JAM
131-11-3	Dimethylphthalate	1	ND		10.0	0.594	03-Apr-13 15:29 JAM
84-74-2	Di-n-butylphthalate	1	ND		10.0	0.651	03-Apr-13 15:29 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		10.0	1.02	03-Apr-13 15:29 JAM
51-28-5	2,4-Dinitrophenol	1	ND		10.0	0.470	03-Apr-13 15:29 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	0.741	03-Apr-13 15:29 JAM
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	0.780	03-Apr-13 15:29 JAM
117-84-0	Di-n-octylphthalate	1	ND		10.0	0.781	03-Apr-13 15:29 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	0.930	03-Apr-13 15:29 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		10.0	0.759	03-Apr-13 15:29 JAM
118-74-1	Hexachlorobenzene	1	ND		10.0	0.681	03-Apr-13 15:29 JAM
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	0.347	03-Apr-13 15:29 JAM
67-72-1	Hexachloroethane	1	ND		10.0	0.987	03-Apr-13 15:29 JAM
78-59-1	Isophorone	1	ND		10.0	0.628	03-Apr-13 15:29 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	0.749	03-Apr-13 15:29 JAM

Protocol Blank 4/5/2013 18:12:49

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
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Blank ID: 205387 BLANK 1 **Project:** 20152100

Lab ID: 201076886

Prep Level: Water **Batch:** 205387

Method: Water GC/MS Semivolatile Organics

Prepared: 28-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
	3&4-Methylphenol	1	ND		10.0	0.948	03-Apr-13 15:29 JAM
88-74-4	2-Nitroaniline	1	ND		10.0	0.859	03-Apr-13 15:29 JAM
99-09-2	3-Nitroaniline	1	ND		10.0	0.877	03-Apr-13 15:29 JAM
100-01-6	4-Nitroaniline	1	ND		10.0	0.972	03-Apr-13 15:29 JAM
98-95-3	Nitrobenzene	1	ND		10.0	1.06	03-Apr-13 15:29 JAM
88-75-5	2-Nitrophenol	1	ND		10.0	0.772	03-Apr-13 15:29 JAM
100-02-7	4-Nitrophenol	1	ND		10.0	0.761	03-Apr-13 15:29 JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	0.919	03-Apr-13 15:29 JAM
86-30-6	N-Nitrosodiphenylamine	1	ND		10.0	0.715	03-Apr-13 15:29 JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		10.0	0.732	03-Apr-13 15:29 JAM
87-86-5	Pentachlorophenol	1	ND		10.0	0.860	03-Apr-13 15:29 JAM
108-95-2	Phenol	1	ND		10.0	0.773	03-Apr-13 15:29 JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	0.797	03-Apr-13 15:29 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		10.0	0.751	03-Apr-13 15:29 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	0.737	03-Apr-13 15:29 JAM

49 compound(s) reported

Protocol Blank 4/5/2013 18:12:49

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MDL denotes method detection limit

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Blank Results

Blank ID: 205649 BLANK 1 **Project:** 20152100

Lab ID: 201078038

Prep Level: Water **Batch:** 205649

Method: Water GC/MS Semivolatile Organics

Prepared: 02-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
83-32-9	Acenaphthene	1	ND		0.100	0.0520	02-Apr-13 16:48 JAM
208-96-8	Acenaphthylene	1	ND		0.100	0.0460	02-Apr-13 16:48 JAM
120-12-7	Anthracene	1	ND		0.100	0.0570	02-Apr-13 16:48 JAM
56-55-3	Benzo(a)anthracene	1	ND		0.100	0.0310	02-Apr-13 16:48 JAM
205-99-2	Benzo(b)fluoranthene	1	ND		0.100	0.0520	02-Apr-13 16:48 JAM
207-08-9	Benzo(k)fluoranthene	1	ND		0.100	0.0410	02-Apr-13 16:48 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		0.100	0.0200	02-Apr-13 16:48 JAM
50-32-8	Benzo(a)pyrene	1	ND		0.100	0.0410	02-Apr-13 16:48 JAM
218-01-9	Chrysene	1	ND		0.100	0.0250	02-Apr-13 16:48 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		0.100	0.0180	02-Apr-13 16:48 JAM
206-44-0	Fluoranthene	1	ND		0.100	0.0390	02-Apr-13 16:48 JAM
86-73-7	Fluorene	1	ND		0.100	0.0630	02-Apr-13 16:48 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		0.100	0.0180	02-Apr-13 16:48 JAM
91-57-6	2-Methylnaphthalene	1	ND		0.100	0.0780	02-Apr-13 16:48 JAM
91-20-3	Naphthalene	1	ND		0.100	0.0670	02-Apr-13 16:48 JAM
85-01-8	Phenanthrene	1	ND		0.100	0.0490	02-Apr-13 16:48 JAM
129-00-0	Pyrene	1	ND		0.100	0.0360	02-Apr-13 16:48 JAM

17 compound(s) reported

Protocol Blank 4/5/2013 18:12:49

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
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(504) 469-0333

Blank ID: 205264 BLANK 1 **Project:** 20152100

Lab ID: 201076341

Prep Level: Water **Batch:** 205264

Method: Water GC/MS Volatile Organics

Prepared: 27-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
67-64-1	Acetone	1	ND		10.0	8.88	27-Mar-13 10:53 MHM
71-43-2	Benzene	1	ND		5.00	0.518	27-Mar-13 10:53 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469	27-Mar-13 10:53 MHM
75-25-2	Bromoform	1	ND		5.00	0.920	27-Mar-13 10:53 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855	27-Mar-13 10:53 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66	27-Mar-13 10:53 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530	27-Mar-13 10:53 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528	27-Mar-13 10:53 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662	27-Mar-13 10:53 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12	27-Mar-13 10:53 MHM
67-66-3	Chloroform	1	ND		5.00	0.853	27-Mar-13 10:53 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636	27-Mar-13 10:53 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34	27-Mar-13 10:53 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630	27-Mar-13 10:53 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477	27-Mar-13 10:53 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553	27-Mar-13 10:53 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565	27-Mar-13 10:53 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738	27-Mar-13 10:53 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557	27-Mar-13 10:53 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578	27-Mar-13 10:53 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738	27-Mar-13 10:53 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579	27-Mar-13 10:53 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454	27-Mar-13 10:53 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526	27-Mar-13 10:53 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292	27-Mar-13 10:53 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28	27-Mar-13 10:53 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405	27-Mar-13 10:53 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36	27-Mar-13 10:53 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44	27-Mar-13 10:53 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10	27-Mar-13 10:53 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687	27-Mar-13 10:53 MHM
100-42-5	Styrene	1	ND		5.00	0.571	27-Mar-13 10:53 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12	27-Mar-13 10:53 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679	27-Mar-13 10:53 MHM

Protocol Blank 4/5/2013 18:12:49

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205264 BLANK 1 **Project:** 20152100

Lab ID: 201076341

Prep Level: Water **Batch:** 205264

Method: Water GC/MS Volatile Organics

Prepared: 27-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
108-88-3	Toluene	1	ND		5.00	0.536	27-Mar-13 10:53 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554	27-Mar-13 10:53 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915	27-Mar-13 10:53 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654	27-Mar-13 10:53 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575	27-Mar-13 10:53 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564	27-Mar-13 10:53 MHM
	m&p-Xylene	1	ND		5.00	0.937	27-Mar-13 10:53 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649	27-Mar-13 10:53 MHM

42 compound(s) reported

Protocol Blank 4/5/2013 18:12:49

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205264 BLANK 2 **Project:** 20152100

Lab ID: 201076821

Prep Level: Water **Batch:** 205264

Method: Water GC/MS Volatile Organics

Prepared: 28-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
67-64-1	Acetone	1	ND		10.0	8.88	28-Mar-13 10:13 MHM
71-43-2	Benzene	1	ND		5.00	0.518	28-Mar-13 10:13 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469	28-Mar-13 10:13 MHM
75-25-2	Bromoform	1	ND		5.00	0.920	28-Mar-13 10:13 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855	28-Mar-13 10:13 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66	28-Mar-13 10:13 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530	28-Mar-13 10:13 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528	28-Mar-13 10:13 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662	28-Mar-13 10:13 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12	28-Mar-13 10:13 MHM
67-66-3	Chloroform	1	ND		5.00	0.853	28-Mar-13 10:13 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636	28-Mar-13 10:13 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34	28-Mar-13 10:13 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630	28-Mar-13 10:13 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477	28-Mar-13 10:13 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553	28-Mar-13 10:13 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565	28-Mar-13 10:13 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738	28-Mar-13 10:13 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557	28-Mar-13 10:13 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578	28-Mar-13 10:13 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738	28-Mar-13 10:13 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579	28-Mar-13 10:13 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454	28-Mar-13 10:13 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526	28-Mar-13 10:13 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292	28-Mar-13 10:13 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28	28-Mar-13 10:13 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405	28-Mar-13 10:13 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36	28-Mar-13 10:13 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44	28-Mar-13 10:13 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10	28-Mar-13 10:13 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687	28-Mar-13 10:13 MHM
100-42-5	Styrene	1	ND		5.00	0.571	28-Mar-13 10:13 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12	28-Mar-13 10:13 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679	28-Mar-13 10:13 MHM

Protocol Blank 4/5/2013 18:12:49

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205264 BLANK 2 **Project:** 20152100

Lab ID: 201076821

Prep Level: Water **Batch:** 205264

Method: Water GC/MS Volatile Organics

Prepared: 28-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
108-88-3	Toluene	1	ND		5.00	0.536	28-Mar-13 10:13 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554	28-Mar-13 10:13 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915	28-Mar-13 10:13 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654	28-Mar-13 10:13 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575	28-Mar-13 10:13 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564	28-Mar-13 10:13 MHM
	m&p-Xylene	1	ND		5.00	0.937	28-Mar-13 10:13 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649	28-Mar-13 10:13 MHM

42 compound(s) reported

Protocol Blank 4/5/2013 18:12:49

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Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205650 BLANK 1 **Project:** 20152100

Lab ID: 201078042

Prep Level: Water **Batch:** 205650

Method: Water GC Semivolatile Organics

Prepared: 02-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Diesel Range Organics (C10-28)	1	ND		0.150	0.0760	03-Apr-13 23:25 SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.150	0.0490	03-Apr-13 23:25 SNP1

2 compound(s) reported

Protocol Blank 4/5/2013 18:12:49

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MDL denotes method detection limit

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205225 BLANK 1 **Project:** 20152100

Lab ID: 201076025

Prep Level: Water **Batch:** 205225

Method: Water GC Volatile Organics

Prepared: 27-Mar-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Gasoline Range Organics(C6-10)	1	0.0251	J	0.0500	0.0212	27-Mar-13 10:39 DHR1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205349 BLANK 1 **Project:** 20152100

Lab ID: 201076679

Prep Level: Water **Batch:** 205349

Method: Water ICP Metals

Prepared: 28-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
7440-36-0	Antimony	1	ND		60.0	1.35	28-Mar-13 14:55 MHB1
7440-38-2	Arsenic	1	ND		10.0	1.04	28-Mar-13 14:55 MHB1
7440-41-7	Beryllium	1	ND		5.00	0.282	28-Mar-13 14:55 MHB1
7440-43-9	Cadmium	1	ND		5.00	0.361	28-Mar-13 14:55 MHB1
7440-47-3	Chromium	1	ND		10.0	2.00	28-Mar-13 14:55 MHB1
7440-50-8	Copper	1	ND		10.0	2.76	28-Mar-13 14:55 MHB1
7439-92-1	Lead	1	1.29	J	5.00	1.15	28-Mar-13 14:55 MHB1
7440-02-0	Nickel	1	ND		40.0	0.253	28-Mar-13 14:55 MHB1
7782-49-2	Selenium	1	ND		35.0	14.3	28-Mar-13 14:55 MHB1
7440-22-4	Silver	1	ND		10.0	0.579	28-Mar-13 14:55 MHB1
7440-28-0	Thallium	1	ND		10.0	1.05	28-Mar-13 14:55 MHB1
7440-66-6	Zinc	1	ND		20.0	3.52	28-Mar-13 14:55 MHB1

12 compound(s) reported

Protocol Blank 4/5/2013 18:12:49

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Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205490 BLANK 1 **Project:** 20152100

Lab ID: 201077353

Prep Level: Water **Batch:** 205490

Method: Water Mercury

Prepared: 29-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
7439-97-6	Mercury	1	ND		0.200	0.0340	29-Mar-13 14:19 MHB1

1 compound(s) reported

Protocol Blank 4/5/2013 18:12:49

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152100

Value	Description
Q5	Insufficient sample was provided to perform matrix spike analyses on any sample in this analytical batch. Method performance for this analyte has been demonstrated by the laboratory control sample recovery.
J	This estimated value for the analyte is below the adjusted reporting limit but above the instrument reporting limit.
U	The analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
B	This analyte was detected in the method blank.
E	The sample concentration is above the linear calibrated range of the analysis.
LCS	Laboratory Control Sample.
MS(D)	Matrix Spike (Duplicate).
DUP	Sample Duplicate.
RPD	Relative Percent Difference.

Pace Analytical Services, In
1000 Riverbend Blvd. Suite F
St. Rose, LA 7008
(504) 469-033

Chains of Custody

20152100 20-CTEH

OF-CUSTODY / Analytical Request Document

ustody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

20512100

Page: | of

Section A Required Clie

Section C Invoice Information:

Company: CTEH	Report To: Chase Ertzberger	Attention: CTEH	
Address: 5120 Northshore Dr	Copy To: James McCormack(jmccormack@cteh.com	Address: 5120 Northshore Dr	
N. Little Rock, AR 72118	40432samples@cteh.com		
Email To: Certzberger@cteh.com	Purchase Order No.:	Pace Quote Reference:	
Phone: 501-366-0394 Fax:	Project Name: Delek @ Magnolia, AR	Pace Project Manager: Karen Brown	
Requested Due Date/TAT Normal 10 WD	Project Number: 40432	Pace Profile #: 5831 / Line 1	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: AR

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Y/N	Analysis Test: 8260	8270	8270-SIM (Low level)	Priority Pollutant List (6010)	TPH-GRO (8015)	TPH-DRO / ORO (8015)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MAAR0326SW012A	WT	G	—	—	03.26	1400		11	4		1	6						3	2	1	1	3	1		24107645 1
2	TB0007			—	—	—			2				2						2							03.26.13 453
3																										
4																										
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										

03.26.13

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	CTEH	03.26.13	1700	UPS	03.26.13	1700	
	UPS	3/27/13	0947		3/27/13	0947	1.7 Y Y Y

SAMPLER NAME AND SIGNATURE: Rich Shaw / Rich Shaw

PRINT Name of SAMPLER: Rich Shaw

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 03.26.13

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.08, 2-Feb-2007

20152100 20-CTEH

Pace Analytical

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Sample Conditi

Project #: 20

Courier: ☐ Pace Courier ☐ Hired Courier ☐ Fed X ☑ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC] **Custody Seals intact:** ☑Yes ☐No

Therometer Used: ☐ Therm Fisher IR 5 ☑ Therm Fisher IR 6 ☐ Therm Fisher IR 7

Type of Ice: (Wet) Blue None Samples on ice: [see COC]

Cooler Temperature: [see COC] Temp should be above freezing to 6°C

Date and Initials of person examining contents: 3.27.13

Temp must be measured from Temperature blank when present

			Comments:
Temperature Blank Present"?	☑Yes	☐No ☐N/A	1
Chain of Custody Present:	☑Yes	☐No ☐N/A	2
Chain of Custody Complete:	☑Yes	☐No ☐N/A	3
Chain of Custody Relinquished:	☑Yes	☐No ☐N/A	4
Sampler Name & Signature on COC:	☑Yes	☐No ☐N/A	5
Samples Arrived within Hold Time:	☑Yes	☐No ☐N/A	6
Sufficient Volume:	☑Yes	☐No ☐N/A	7
Correct Containers Used:	☑Yes	☐No ☐N/A	8
Filtered vol. Rec. for Diss. tests	☐Yes	☑No ☐N/A	9
Sample Labels match COC:	☑Yes	☐No ☐N/A	10
All containers received within manafacture's precautionary and/or expiration dates.	☑Yes	☐No ☐N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☑Yes	☐No ☐N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	☑Yes	☐No ☐N/A	13 If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO_3 _____ H_2SO_4 _____
Headspace in VOA Vials (>6mm):	☐Yes	☑No ☐N/A	14
Trip Blank Present:	☑Yes	☐No	15

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

ALLC003rev.08, 15Feb2013 SCUR Form - mod

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

April 05, 2013

James McCormack
CTEH
5120 North Shore Drive
North Little Rock, AR 72118

RE: Project 20152153
Project ID: Magnolia, AR

Dear James McCormack:

Enclosed are the analytical results for sample(s) received by the laboratory on March 28, 2013. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Karen Brown
karen.brown@pacelabs.com

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

Laboratory Certifications

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152153

Client: CTEH

Project ID: Magnolia, AR

Washington Department of Ecology C2078
Oregon Environmental Laboratory Accreditation - LA200001
U.S. Dept. of Agriculture Foreign Soil Import P330-10-00119
Pennsylvania Dept. of Env Protection (NELAC) 68-04202
Texas Commission on Env. Quality (NELAC) T104704405-09-TX
Kansas Department of Health and Environment (NELAC) E-10266
Florida Department of Health (NELAC) E87595
Oklahoma Department of Environmental Quality - 2010-139
Illinois Environmental Protection Agency - 0025721
California Env. Lab Accreditation Program Branch - 11277CA
Louisiana Dept. of Environmental Quality (NELAC/LELAP) 02006

4/5/2013 18:21:32

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Cross Reference

Project: 20152153

Client: CTEH

Project ID: Magnolia, AR

Client Sample ID	Lab ID	Matrix	Collection Date/Time	Received Date/Time
MAAR0327SW013A	201076684	Water	27-Mar-13 12:50	28-Mar-13 06:45
TB008	201076685	Water	27-Mar-13 00:00	28-Mar-13 06:45

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152153

Sample Receipt Condition:

All samples were received in accordance with EPA protocol.

Holding Times:

All holding times were met.

Blanks:

All blank results were below reporting limits.

Laboratory Control Samples:

All LCS recoveries were within QC limits.

Matrix Spikes and Duplicates:

MS or MSD recoveries outside of QC limits are qualified in the Report of Quality Control section.

Surrogates:

All surrogate recoveries were within QC limits.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

QC Cross Reference

Project: 20152153

Analytical Method	Batch	Sample used for QC
EPA 8015/8021	205225	Batch sample from another client
EPA 8015/8021	205225	Batch sample from another client
EPA 6010	205349	Client sample MAAR0326SW012A from project 20152100
EPA 7470	205490	Batch sample from another client
EPA 8270	205649	Batch sample from another client
EPA 8260	205355	Batch sample from another client

For the sample used as the original for the DUP or MS/MSD for the batch:

Project sample means a sample from this project was used.
Client sample means a sample from the same client but in a different project was used.
Batch sample means a sample from a different client was used.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0327SW013A
Project: 20152153
Project ID: Magnolia, AR
Site: None
Lab ID: 201076684
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205649
Method: EPA 8270
GCMS SVOAs SIM Water
Collected: 27-Mar-13
Received: 28-Mar-13
Prepared: 02-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
83-32-9	Acenaphthene	1	ND		0.100	0.0520		02-Apr-13 21:29	JAM
208-96-8	Acenaphthylene	1	ND		0.100	0.0460		02-Apr-13 21:29	JAM
120-12-7	Anthracene	1	ND		0.100	0.0570		02-Apr-13 21:29	JAM
56-55-3	Benzo(a)anthracene	1	ND		0.100	0.0310		02-Apr-13 21:29	JAM
205-99-2	Benzo(b)fluoranthene	1	ND		0.100	0.0520		02-Apr-13 21:29	JAM
207-08-9	Benzo(k)fluoranthene	1	ND		0.100	0.0410		02-Apr-13 21:29	JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		0.100	0.0200		02-Apr-13 21:29	JAM
50-32-8	Benzo(a)pyrene	1	ND		0.100	0.0410		02-Apr-13 21:29	JAM
218-01-9	Chrysene	1	ND		0.100	0.0250		02-Apr-13 21:29	JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		0.100	0.0180		02-Apr-13 21:29	JAM
206-44-0	Fluoranthene	1	ND		0.100	0.0390		02-Apr-13 21:29	JAM
86-73-7	Fluorene	1	0.140		0.100	0.0630		02-Apr-13 21:29	JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		0.100	0.0180		02-Apr-13 21:29	JAM
91-57-6	2-Methylnaphthalene	1	0.290		0.100	0.0780		02-Apr-13 21:29	JAM
91-20-3	Naphthalene	1	0.270		0.100	0.0670		02-Apr-13 21:29	JAM
85-01-8	Phenanthrene	1	0.140		0.100	0.0490		02-Apr-13 21:29	JAM
129-00-0	Pyrene	1	ND		0.100	0.0360		02-Apr-13 21:29	JAM

17 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0327SW013A
Project: 20152153
Project ID: Magnolia, AR
Site: None
Lab ID: 201076684
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205487
Method: EPA 8270
GCMS SVOAs Water
Collected: 27-Mar-13
Received: 28-Mar-13
Prepared: 29-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
65-85-0	Benzoic acid	1	ND		25.0	1.56		03-Apr-13 19:47 JAM
100-51-6	Benzyl alcohol	1	ND		10.0	0.959		03-Apr-13 19:47 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND		10.0	0.541		03-Apr-13 19:47 JAM
85-68-7	Butylbenzylphthalate	1	ND		10.0	0.825		03-Apr-13 19:47 JAM
86-74-8	Carbazole	1	ND		10.0	0.932		03-Apr-13 19:47 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND		10.0	0.812		03-Apr-13 19:47 JAM
106-47-8	3&4-Chloroaniline	1	ND		10.0	1.22		03-Apr-13 19:47 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	0.789		03-Apr-13 19:47 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	0.804		03-Apr-13 19:47 JAM
91-58-7	2-Chloronaphthalene	1	ND		10.0	0.713		03-Apr-13 19:47 JAM
95-57-8	2-Chlorophenol	1	ND		10.0	0.716		03-Apr-13 19:47 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND		10.0	0.638		03-Apr-13 19:47 JAM
132-64-9	Dibenzofuran	1	ND		10.0	0.576		03-Apr-13 19:47 JAM
95-50-1	1,2-Dichlorobenzene	1	ND		10.0	0.867		03-Apr-13 19:47 JAM
541-73-1	1,3-Dichlorobenzene	1	ND		10.0	0.832		03-Apr-13 19:47 JAM
106-46-7	1,4-Dichlorobenzene	1	ND		10.0	0.652		03-Apr-13 19:47 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND		10.0	0.781		03-Apr-13 19:47 JAM
120-83-2	2,4-Dichlorophenol	1	ND		10.0	0.783		03-Apr-13 19:47 JAM
84-66-2	Diethylphthalate	1	ND		10.0	0.607		03-Apr-13 19:47 JAM
105-67-9	2,4-Dimethylphenol	1	ND		10.0	0.781		03-Apr-13 19:47 JAM
131-11-3	Dimethylphthalate	1	ND		10.0	0.594		03-Apr-13 19:47 JAM
84-74-2	Di-n-butylphthalate	1	ND		10.0	0.651		03-Apr-13 19:47 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		10.0	1.02		03-Apr-13 19:47 JAM
51-28-5	2,4-Dinitrophenol	1	ND		10.0	0.470		03-Apr-13 19:47 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	0.741		03-Apr-13 19:47 JAM
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	0.780		03-Apr-13 19:47 JAM
117-84-0	Di-n-octylphthalate	1	ND		10.0	0.781		03-Apr-13 19:47 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	0.930		03-Apr-13 19:47 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		10.0	0.759		03-Apr-13 19:47 JAM
118-74-1	Hexachlorobenzene	1	ND		10.0	0.681		03-Apr-13 19:47 JAM
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	0.347		03-Apr-13 19:47 JAM
67-72-1	Hexachloroethane	1	ND		10.0	0.987		03-Apr-13 19:47 JAM
78-59-1	Isophorone	1	ND		10.0	0.628		03-Apr-13 19:47 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	0.749		03-Apr-13 19:47 JAM

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0327SW013A
Project: 20152153
Project ID: Magnolia, AR
Site: None
Lab ID: 201076684
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205487
Method: EPA 8270
GCMS SVOAs Water
Collected: 27-Mar-13
Received: 28-Mar-13
Prepared: 29-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
	3&4-Methylphenol	1	ND		10.0	0.948		03-Apr-13 19:47 JAM
88-74-4	2-Nitroaniline	1	ND		10.0	0.859		03-Apr-13 19:47 JAM
99-09-2	3-Nitroaniline	1	ND		10.0	0.877		03-Apr-13 19:47 JAM
100-01-6	4-Nitroaniline	1	ND		10.0	0.972		03-Apr-13 19:47 JAM
98-95-3	Nitrobenzene	1	ND		10.0	1.06		03-Apr-13 19:47 JAM
88-75-5	2-Nitrophenol	1	ND		10.0	0.772		03-Apr-13 19:47 JAM
100-02-7	4-Nitrophenol	1	ND		10.0	0.761		03-Apr-13 19:47 JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	0.919		03-Apr-13 19:47 JAM
86-30-6	N-Nitrosodiphenylamine	1	ND		10.0	0.715		03-Apr-13 19:47 JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		10.0	0.732		03-Apr-13 19:47 JAM
87-86-5	Pentachlorophenol	1	ND		10.0	0.860		03-Apr-13 19:47 JAM
108-95-2	Phenol	1	ND		10.0	0.773		03-Apr-13 19:47 JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	0.797		03-Apr-13 19:47 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		10.0	0.751		03-Apr-13 19:47 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	0.737		03-Apr-13 19:47 JAM

49 compound(s) reported

Protocol 4/5/2013 18:22:38

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0327SW013A
Project: 20152153
Project ID: Magnolia, AR
Site: None
Lab ID: 201076684
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205355
Method: EPA 8260
GCMS VOAs Water
Collected: 27-Mar-13
Received: 28-Mar-13
Prepared: 28-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	8.88		28-Mar-13 13:54 MHM
71-43-2	Benzene	1	0.830	J	5.00	0.518		28-Mar-13 13:54 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		28-Mar-13 13:54 MHM
75-25-2	Bromoform	1	ND		5.00	0.920		28-Mar-13 13:54 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855		28-Mar-13 13:54 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		28-Mar-13 13:54 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530		28-Mar-13 13:54 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		28-Mar-13 13:54 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662		28-Mar-13 13:54 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12		28-Mar-13 13:54 MHM
67-66-3	Chloroform	1	ND		5.00	0.853		28-Mar-13 13:54 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636		28-Mar-13 13:54 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		28-Mar-13 13:54 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		28-Mar-13 13:54 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		28-Mar-13 13:54 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		28-Mar-13 13:54 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565		28-Mar-13 13:54 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		28-Mar-13 13:54 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		28-Mar-13 13:54 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		28-Mar-13 13:54 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		28-Mar-13 13:54 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		28-Mar-13 13:54 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		28-Mar-13 13:54 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		28-Mar-13 13:54 MHM
100-41-4	Ethylbenzene	1	0.660	J	5.00	0.292		28-Mar-13 13:54 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28		28-Mar-13 13:54 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405		28-Mar-13 13:54 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36		28-Mar-13 13:54 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44		28-Mar-13 13:54 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		28-Mar-13 13:54 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		28-Mar-13 13:54 MHM
100-42-5	Styrene	1	ND		5.00	0.571		28-Mar-13 13:54 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		28-Mar-13 13:54 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		28-Mar-13 13:54 MHM

Protocol 4/5/2013 18:22:38

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0327SW013A
Project: 20152153
Project ID: Magnolia, AR
Site: None
Lab ID: 201076684
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205355
Method: EPA 8260
GCMS VOAs Water
Collected: 27-Mar-13
Received: 28-Mar-13
Prepared: 28-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	1.01	J	5.00	0.536		28-Mar-13 13:54 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		28-Mar-13 13:54 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915		28-Mar-13 13:54 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654		28-Mar-13 13:54 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575		28-Mar-13 13:54 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564		28-Mar-13 13:54 MHM
	m&p-Xylene	1	0.950	J	5.00	0.937		28-Mar-13 13:54 MHM
95-47-6	o-Xylene	1	0.710	J	5.00	0.649		28-Mar-13 13:54 MHM

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0327SW013A
Project: 20152153
Project ID: Magnolia, AR
Site: None
Lab ID: 201076684
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205650
Method: EPA 8015 Mod Ext
8015 TPH Extractables Water
Collected: 27-Mar-13
Received: 28-Mar-13
Prepared: 02-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Diesel Range Organics (C10-28)	1	ND		0.250	0.0760		04-Apr-13 06:22 SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.500	0.0490		04-Apr-13 06:22 SNP1

2 compound(s) reported

Protocol 4/5/2013 18:22:38

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0327SW013A
Project: 20152153
Project ID: Magnolia, AR
Site: None
Lab ID: 201076684
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205225
Method: EPA 8015/8021
8015/8021 Water
Collected: 27-Mar-13
Received: 28-Mar-13
Prepared: 28-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Gasoline Range Organics(C6-10)	1	0.0401	J	0.0500	0.0212		28-Mar-13 12:48 DHR1

1 compound(s) reported

Protocol 4/5/2013 18:22:38

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0327SW013A
Project ID: Magnolia, AR
Lab ID: 201076684
Description: None
Method: EPA 6010
Metals, ICP, Water

Project: 20152153
Site: None
Matrix: Water **% Moisture:** n/a
Prep Level: Water **Batch:** 205349

Collected: 27-Mar-13 **Received:** 28-Mar-13
Prepared: 28-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7440-36-0	Antimony	1	ND		60.0	1.35		28-Mar-13 15:16 MHB1
7440-38-2	Arsenic	1	1.24	J	10.0	1.04		28-Mar-13 15:16 MHB1
7440-41-7	Beryllium	1	0.513	J	5.00	0.282		28-Mar-13 15:16 MHB1
7440-43-9	Cadmium	1	ND		5.00	0.361		28-Mar-13 15:16 MHB1
7440-47-3	Chromium	1	ND		10.0	2.00		28-Mar-13 15:16 MHB1
7440-50-8	Copper	1	ND		10.0	2.76		28-Mar-13 15:16 MHB1
7439-92-1	Lead	1	3.31	J	5.00	1.15		28-Mar-13 15:16 MHB1
7440-02-0	Nickel	1	7.57	J	40.0	0.253		28-Mar-13 15:16 MHB1
7782-49-2	Selenium	1	ND		35.0	14.3		28-Mar-13 15:16 MHB1
7440-22-4	Silver	1	ND		10.0	0.579		28-Mar-13 15:16 MHB1
7440-28-0	Thallium	1	1.09	J	10.0	1.05		28-Mar-13 15:16 MHB1
7440-66-6	Zinc	1	20.8		20.0	3.52		28-Mar-13 15:16 MHB1

12 compound(s) reported

Protocol 4/5/2013 18:22:38

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical™

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0327SW013A
Project ID: Magnolia, AR
Lab ID: 201076684
Description: None
Method: EPA 7470
Mercury Water

Project: 20152153
Site: None
Matrix: Water
% Moisture: n/a
Prep Level: Water
Batch: 205490
Collected: 27-Mar-13
Received: 28-Mar-13
Prepared: 29-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.200	0.0340		29-Mar-13 14:30 MHB1

1 compound(s) reported

Protocol 4/5/2013 18:22:38

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MDL denotes method detection limit

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: TB008
Project: 20152153
Project ID: Magnolia, AR
Site: None
Lab ID: 201076685
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205355
Method: EPA 8260
GCMS VOAs Water
Collected: 27-Mar-13
Received: 28-Mar-13
Prepared: 28-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	8.88		28-Mar-13 14:15 MHM
71-43-2	Benzene	1	ND		5.00	0.518		28-Mar-13 14:15 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		28-Mar-13 14:15 MHM
75-25-2	Bromoform	1	ND		5.00	0.920		28-Mar-13 14:15 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855		28-Mar-13 14:15 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		28-Mar-13 14:15 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530		28-Mar-13 14:15 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		28-Mar-13 14:15 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662		28-Mar-13 14:15 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12		28-Mar-13 14:15 MHM
67-66-3	Chloroform	1	ND		5.00	0.853		28-Mar-13 14:15 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636		28-Mar-13 14:15 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		28-Mar-13 14:15 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		28-Mar-13 14:15 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		28-Mar-13 14:15 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		28-Mar-13 14:15 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565		28-Mar-13 14:15 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		28-Mar-13 14:15 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		28-Mar-13 14:15 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		28-Mar-13 14:15 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		28-Mar-13 14:15 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		28-Mar-13 14:15 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		28-Mar-13 14:15 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		28-Mar-13 14:15 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292		28-Mar-13 14:15 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28		28-Mar-13 14:15 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405		28-Mar-13 14:15 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36		28-Mar-13 14:15 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44		28-Mar-13 14:15 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		28-Mar-13 14:15 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		28-Mar-13 14:15 MHM
100-42-5	Styrene	1	ND		5.00	0.571		28-Mar-13 14:15 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		28-Mar-13 14:15 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		28-Mar-13 14:15 MHM

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ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Client: CTEH

Client ID: TB008
Project: 20152153
Project ID: Magnolia, AR
Site: None
Lab ID: 201076685
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205355
Method: EPA 8260
GCMS VOAs Water
Collected: 27-Mar-13
Received: 28-Mar-13
Prepared: 28-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	ND		5.00	0.536		28-Mar-13 14:15 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		28-Mar-13 14:15 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915		28-Mar-13 14:15 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654		28-Mar-13 14:15 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575		28-Mar-13 14:15 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564		28-Mar-13 14:15 MHM
	m&p-Xylene	1	ND		5.00	0.937		28-Mar-13 14:15 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649		28-Mar-13 14:15 MHM

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Surrogate Recovery

Batch: 205487 **Project:** 20152153

Method: Water GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201077340	205487 BLANK 1		81	85	76	92	78	104		
201077341	205487 LCS 1		85	86	74	74	80	100		
201076684	MAAR0327SW013A		84	83	76	92	77	87		
QC limits:			25-145	34-117	10-118	33-120	15-134	24-133		

Sur 1: 2,4,6-Tribromophenol (S)
Sur 2: 2-Fluorobiphenyl (S)
Sur 3: 2-Fluorophenol (S)
Sur 4: Nitrobenzene-d5 (S)
Sur 5: Phenol-d5 (S)
Sur 6: Terphenyl-d14 (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205649 **Project:** 20152153

Method: Water GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201078038	205649 BLANK 1		66	60						
201078039	205649 LCS 1		74	77						
201076684	MAAR0327SW013A		68	64						
201078040	MW-3 MS 1		90	74						
201078041	MW-3 MSD 1		78	61						
	QC limits:		12-110	25-113						

Sur 1: 2-Fluorobiphenyl (S)
Sur 2: Terphenyl-d14 (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205355 **Project:** 20152153

Method: Water GC/MS Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201076696	205355 BLANK 1		76	90	80					
201077347	205355 BLANK 2		75	89	79					
201076697	205355 LCS 1		77	89	85					
201077348	205355 LCS 2		85	96	92					
201076759	BTF-06MW24-0313 MS 1		82	87	85					
201076760	BTF-06MW24-0313 MSD 1		79	89	86					
201076684	MAAR0327SW013A		76	84	80					
201076685	TB008		74	85	80					
	QC limits:		68-124	72-126	79-119					

Sur 1: 4-Bromofluorobenzene (S)
Sur 2: Dibromofluoromethane (S)
Sur 3: Toluene-d8 (S)

*** denotes surrogate recovery outside of QC limits.**
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205650 **Project:** 20152153

Method: Water GC Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201078042	205650 BLANK 1		79	73						
201078043	205650 LCS 1		69	64						
201076684	MAAR0327SW013A		20	73						
	QC limits:		16-137	10-121						

Sur 1: n-Pentacosane (S)
Sur 2: o-Terphenyl (S)

*** denotes surrogate recovery outside of QC limits.**
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

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Batch: 205225 **Project:** 20152153

Method: Water GC Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201076025	205225 BLANK 1		108							
201076745	205225 BLANK 2		110							
201076026	205225 LCS 1		106							
201076746	205225 LCS 2		109							
201076747	CAW-01 MS 1		105							
201076748	CAW-01 MSD 1		109							
201076749	CAW-02 MS 2		105							
201076750	CAW-02 MSD 2		107							
201076684	MAAR0327SW013A		102							
	QC limits:		60-129							

Sur 1: 4-Bromofluorobenzene (S)

Surrogates 4/5/2013 18:22:39

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Batch: 205487 **Project:** 20152153 **LCS:** 201077341 03-Apr-13 15:03

Method: Water GC/MS Semivolatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Benzoic acid	50.0	47.8	96								10-130			Q5
Benzyl alcohol	50.0	36.9	74								44-120			Q5
4-Bromophenylphenyl ether	50.0	41.8	84								49-120			Q5
Butylbenzylphthalate	50.0	40.1	80								46-120			Q5
Carbazole	50.0	44.2	89								51-127			Q5
4-Chloro-3-methylphenol	50.0	37.3	75								43-115			Q5
3&4-Chloroaniline	50.0	33.0	66								10-130			Q5
bis(2-Chloroethoxy)methane	50.0	35.4	71								43-115			Q5
bis(2-Chloroethyl) ether	50.0	42.2	84								47-115			Q5
2-Chloronaphthalene	50.0	42.1	84								52-115			Q5
2-Chlorophenol	50.0	42.4	85								48-115			Q5
4-Chlorophenylphenyl ether	50.0	43.6	87								52-116			Q5
Dibenzofuran	50.0	42.7	85								53-115			Q5
1,2-Dichlorobenzene	50.0	38.0	76								42-115			Q5
1,3-Dichlorobenzene	50.0	37.1	74								40-115			Q5
1,4-Dichlorobenzene	50.0	36.9	74								41-115			Q5
3,3'-Dichlorobenzidine	50.0	36.9	74								16-142			Q5
2,4-Dichlorophenol	50.0	38.6	77								45-115			Q5
Diethylphthalate	50.0	41.0	82								49-120			Q5
2,4-Dimethylphenol	50.0	20.9	42								23-116			Q5
Dimethylphthalate	50.0	40.0	80								52-115			Q5
Di-n-butylphthalate	50.0	39.1	78								50-117			Q5
4,6-Dinitro-2-methylphenol	50.0	44.0	88								44-122			Q5
2,4-Dinitrophenol	50.0	37.2	74								16-134			Q5
2,4-Dinitrotoluene	50.0	42.7	85								50-118			Q5
2,6-Dinitrotoluene	50.0	43.0	86								55-115			Q5
Di-n-octylphthalate	50.0	47.4	95								40-129			Q5
bis(2-Ethylhexyl)phthalate	50.0	42.5	85								46-124			Q5
Hexachloro-1,3-butadiene	50.0	35.1	70								32-115			Q5
Hexachlorobenzene	50.0	42.3	85								53-115			Q5
Hexachlorocyclopentadiene	50.0	23.4	47								10-115			Q5
Hexachloroethane	50.0	36.2	72								36-115			Q5
Isophorone	50.0	37.4	75								45-115			Q5
2-Methylphenol (o-Cresol)	50.0	41.7	84								46-115			Q5
3&4-Methylphenol	50.0	38.9	78								46-115			Q5
2-Nitroaniline	50.0	40.8	82								48-121			Q5
3-Nitroaniline	50.0	39.9	80								38-125			Q5
4-Nitroaniline	50.0	37.9	76								37-132			Q5
Nitrobenzene	50.0	36.6	73								44-118			Q5
2-Nitrophenol	50.0	39.3	79								45-115			Q5
4-Nitrophenol	50.0	34.0	68								29-134			Q5

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*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Pace Analytical Services, Inc.
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Batch: 205487 **Project:** 20152153 **LCS:** 201077341 03-Apr-13 15:03

Method: Water GC/MS Semivolatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
N-Nitroso-di-n-propylamine	50.0	39.0	78								45-119			Q5
N-Nitrosodiphenylamine	50.0	48.0	96								42-134			Q5
2,2'-Oxybis(1-chloropropane)	50.0	43.0	86								40-120			Q5
Pentachlorophenol	50.0	44.5	89								34-124			Q5
Phenol	50.0	42.0	84								44-115			Q5
1,2,4-Trichlorobenzene	50.0	34.4	69								40-115			Q5
2,4,5-Trichlorophenol	50.0	42.8	86								49-115			Q5
2,4,6-Trichlorophenol	50.0	44.0	88								48-115			Q5

49 compound(s) reported

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Batch: 205649 **Project:** 20152153 **LCS:** 201078039 02-Apr-13 17:09

Method: Water GC/MS Semivolatile Organics **MS:** 201078040 02-Apr-13 18:36

Units: ug/L **MSD:** 201078041 02-Apr-13 18:57

Original for MS: Batch Sample 201076977

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acenaphthene	2.00	1.49	75	2.00		1.79	1.70	90	85	5	39-115	10-131	20	
Acenaphthylene	2.00	1.06	53	2.00		1.50	1.40	75	70	7	30-115	10-131	20	
Anthracene	2.00	1.10	55	2.00		1.99	1.84	100	92	8	34-115	10-139	20	
Benzo(a)anthracene	2.00	1.43	72	2.00		1.48	1.28	74	64	14	33-115	12-115	20	
Benzo(b)fluoranthene	2.00	1.69	85	2.00		1.39	1.18	70	59	16	30-115	10-119	20	
Benzo(k)fluoranthene	2.00	1.60	80	2.00		1.13	1.04	57	52	8	31-115	10-122	20	
Benzo(g,h,i)perylene	2.00	1.66	83	2.00		1.11	0.940	56	47	17	27-115	10-123	20	
Benzo(a)pyrene	2.00	1.08	54	2.00		1.18	1.04	59	52	13	28-115	10-115	20	
Chrysene	2.00	1.22	61	2.00		1.28	1.09	64	55	16	36-115	10-116	20	
Dibenz(a,h)anthracene	2.00	1.58	79	2.00		1.17	0.970	59	49	19	23-115	10-128	20	
Fluoranthene	2.00	1.54	77	2.00		1.78	1.78	89	89	0	39-115	10-136	20	
Fluorene	2.00	1.48	74	2.00		1.77	1.72	89	86	3	38-115	10-129	20	
Indeno(1,2,3-cd)pyrene	2.00	1.64	82	2.00		1.25	1.03	63	52	19	28-115	10-124	20	
2-Methylnaphthalene	2.00	1.46	73	2.00	0.220	1.89	1.85	84	82	2	31-115	11-125	20	
Naphthalene	2.00	1.54	77	2.00	0.360	2.03	2.02	84	83	0	40-115	14-124	20	
Phenanthrene	2.00	1.49	75	2.00		1.88	1.77	94	89	6	38-115	10-130	20	
Pyrene	2.00	1.49	75	2.00		1.77	1.63	89	82	8	33-115	10-120	20	

17 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205355 **Project:** 20152153 **LCS:** 201076697 28-Mar-13 10:33

Method: Water GC/MS Volatile Organics **MS:** 201076759 28-Mar-13 15:55

Units: ug/L **MSD:** 201076760 28-Mar-13 16:15

Original for MS: Batch Sample 201076716

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acetone	50.0	62.7	125	250.		271.	309.	109	124	13	10-198	10-202	20	D7
Benzene	50.0	48.5	97	250.	391.	599.	608.	83	86	1	68-129	60-138	20	D7
Bromodichloromethane	50.0	49.9	100	250.		246.	246.	99	98	0	68-132	66-137	20	D7
Bromoform	50.0	55.9	112	250.		237.	254.	95	102	7	56-153	53-156	20	D7
Bromomethane	50.0	61.8	124	250.		320.	314.	128	126	2	47-149	43-151	20	D7
2-Butanone (MEK)	50.0	65.3	131	250.		267.	296.	107	119	10	18-173	14-184	20	D7
Carbon disulfide	50.0	61.3	123	250.		301.	301.	120	120	0	25-166	17-176	20	D7
Carbon tetrachloride	50.0	47.5	95	250.		228.	231.	91	93	1	56-146	51-151	20	D7
Chlorobenzene	50.0	50.8	102	250.		244.	242.	98	97	1	74-131	71-135	20	D7
Chloroethane	50.0	50.4	101	250.		355.	276.	142	110	25 *	28-190	21-191	20	D7
Chloroform	50.0	51.3	103	250.		251.	252.	101	101	0	71-132	67-138	20	D7
Chloromethane	50.0	67.2	134	250.	13.4	361.	357.	139	137	1	27-154	24-158	20	D7
1,2-Dibromo-3-chloropropane	50.0	56.6	113	250.		233.	259.	93	104	10	40-155	38-162	20	D7
Dibromochloromethane	50.0	54.6	109	250.		252.	256.	101	102	1	64-138	62-142	20	D7
1,2-Dibromoethane (EDB)	50.0	54.2	108	250.		250.	260.	100	104	4	62-146	61-149	20	D7
Dichlorodifluoromethane	50.0	77.2	154	250.		390.	395.	156	158	1	18-173	16-176	20	D7
1,1-Dichloroethane	50.0	50.2	100	250.		254.	250.	102	100	2	63-135	61-141	20	D7
1,2-Dichloroethane	50.0	51.1	102	250.	101.	353.	352.	101	100	0	58-150	57-155	20	D7
1,1-Dichloroethene	50.0	55.8	112	250.		283.	276.	113	111	2	50-151	40-163	20	D7
cis-1,2-Dichloroethene	50.0	53.2	106	250.		259.	265.	103	106	2	65-132	61-138	20	D7
trans-1,2-Dichloroethene	50.0	53.4	107	250.		270.	272.	108	109	1	56-137	52-144	20	D7
1,2-Dichloropropane	50.0	51.9	104	250.		261.	262.	104	105	1	66-131	64-137	20	D7
cis-1,3-Dichloropropene	50.0	46.4	93	250.		237.	243.	95	97	3	66-135	62-137	20	D7
trans-1,3-Dichloropropene	50.0	53.1	106	250.		252.	255.	101	102	1	62-146	59-151	20	D7
Ethylbenzene	50.0	46.6	93	250.	15.2	231.	229.	86	86	1	73-129	66-136	20	D7
2-Hexanone	50.0	55.1	110	250.		227.	247.	91	99	9	29-158	27-165	20	D7
Isopropylbenzene (Cumene)	50.0	42.9	86	250.		235.	229.	94	92	3	61-139	58-144	20	D7
Methylene chloride	50.0	61.3	123	250.		297.	297.	119	119	0	41-171	35-165	20	D7
4-Methyl-2-pentanone (MIBK	50.0	59.4	119	250.		249.	266.	100	106	6	46-159	43-165	20	D7
Methyl-tert-butyl ether	50.0	56.4	113	250.		252.	265.	101	106	5	51-155	48-164	20	D7
Styrene	50.0	47.8	96	250.		228.	236.	91	94	3	74-132	63-141	20	D7
1,1,2,2-Tetrachloroethane	50.0	49.8	100	250.		248.	250.	99	100	1	46-153	41-160	20	D7
Tetrachloroethene	50.0	47.5	95	250.		234.	237.	94	95	1	57-151	48-160	20	D7
Toluene	50.0	46.9	94	250.	16.4	252.	252.	94	94	0	70-130	62-137	20	D7
1,1,1-Trichloroethane	50.0	51.2	102	250.		242.	244.	97	98	1	65-132	61-138	20	D7
1,1,2-Trichloroethane	50.0	54.6	109	250.	3.00	262.	262.	104	103	0	64-140	63-145	20	D7
Trichloroethene	50.0	46.9	94	250.		234.	235.	94	94	0	71-131	62-142	20	D7
Trichlorofluoromethane	50.0	67.7	135	250.		353.	352.	141	141	0	37-188	19-196	20	D7
Vinyl chloride	50.0	51.1	102	250.		261.	260.	104	104	0	42-148	35-153	20	D7
m&p-Xylene	100.	95.0	95	500.	18.3	483.	492.	93	95	2	71-132	64-138	20	D7
o-Xylene	50.0	46.4	93	250.		228.	232.	91	93	2	69-129	63-136	20	D7

QC Protocol 4/5/2013 18:22:41

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Batch: 205355 **Project:** 20152153 **LCS:** 201076697 28-Mar-13 10:33

Method: Water GC/MS Volatile Organics **MS:** 201076759 28-Mar-13 15:55

Units: ug/L **MSD:** 201076760 28-Mar-13 16:15

Original for MS: Batch Sample 201076716

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu

41 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
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(504) 469-0333

Batch: 205650 **Project:** 20152153 **LCS:** 201078043 03-Apr-13 23:53

Method: Water GC Semivolatile Organics **MS:**

Units: mg/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Diesel Range Organics (C10-2	0.400	0.183	46								10-115			Q5

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
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Batch: 205225 **Project:** 20152153 **LCS:** 201076746 28-Mar-13 8:40

Method: Water GC Volatile Organics **MS:** 201076747 28-Mar-13 13:15

Units: mg/L **MSD:** 201076748 28-Mar-13 13:43

Original for MS: Batch Sample 201075279

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Gasoline Range Organics(C6-	0.500	0.488	98	0.500	0.0413	0.453	0.512	82	94	12	61-136	15-147	20	
1 compound(s) reported														

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205349 **Project:** 20152153 **LCS:** 201076680 28-Mar-13 14:58

Method: Water ICP Metals **MS:** 201076681 28-Mar-13 15:05

Units: ug/L **MSD:** 201076682 28-Mar-13 15:09

Original for MS: Batch Sample 201076451

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Antimony	1000	1030	103	1000		1020	1000	101	100	1	82-120	80-120	20	
Arsenic	1000	1000	100	1000	1.91	996.	983.	99	98	1	84-117	80-120	20	
Beryllium	1000	1000	100	1000	0.699	1000	978.	100	98	2	85-117	80-120	20	
Cadmium	1000	1040	104	1000	0.438	999.	989.	100	99	1	85-115	80-120	20	
Chromium	1000	979.	98	1000		976.	957.	98	96	2	83-117	80-120	20	
Copper	1000	995.	100	1000		985.	969.	98	97	2	85-116	80-120	20	
Lead	1000	1050	105	1000	3.24	997.	985.	99	98	1	84-118	80-120	20	
Nickel	1000	1030	103	1000	8.14	998.	989.	99	98	1	85-118	80-120	20	
Selenium	1000	1030	103	1000		990.	984.	99	98	1	85-116	80-120	20	
Silver	500.	499.	100	500.		494.	488.	99	98	1	80-120	80-120	20	
Thallium	1000	1050	105	1000		970.	966.	97	97	0	85-118	80-120	20	
Zinc	1000	1050	105	1000	21.9	1040	1030	101	101	1	81-120	80-120	20	

12 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205490 **Project:** 20152153 **LCS:** 201077354 29-Mar-13 14:21

Method: Water Mercury **MS:** 201077355 29-Mar-13 14:25

Units: ug/L **MSD:** 201077356 29-Mar-13 14:26

Original for MS: Batch Sample 201076782

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Mercury	1.00	1.02	103	1.00		1.01	1.02	100	102	2	80-120	75-125	20	

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205487 BLANK 1 **Project:** 20152153

Lab ID: 201077340

Prep Level: Water **Batch:** 205487

Method: Water GC/MS Semivolatile Organics

Prepared: 29-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
83-32-9	Acenaphthene	1	ND		10.0	0.596	03-Apr-13 14:37 JAM
208-96-8	Acenaphthylene	1	ND		10.0	0.595	03-Apr-13 14:37 JAM
120-12-7	Anthracene	1	ND		10.0	0.726	03-Apr-13 14:37 JAM
56-55-3	Benzo(a)anthracene	1	ND		10.0	0.560	03-Apr-13 14:37 JAM
205-99-2	Benzo(b)fluoranthene	1	ND		10.0	0.645	03-Apr-13 14:37 JAM
207-08-9	Benzo(k)fluoranthene	1	ND		10.0	0.755	03-Apr-13 14:37 JAM
65-85-0	Benzoic acid	1	ND		25.0	1.56	03-Apr-13 14:37 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		10.0	0.669	03-Apr-13 14:37 JAM
50-32-8	Benzo(a)pyrene	1	ND		10.0	0.645	03-Apr-13 14:37 JAM
100-51-6	Benzyl alcohol	1	ND		10.0	0.959	03-Apr-13 14:37 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND		10.0	0.541	03-Apr-13 14:37 JAM
85-68-7	Butylbenzylphthalate	1	ND		10.0	0.825	03-Apr-13 14:37 JAM
86-74-8	Carbazole	1	ND		10.0	0.932	03-Apr-13 14:37 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND		10.0	0.812	03-Apr-13 14:37 JAM
106-47-8	3&4-Chloroaniline	1	ND		10.0	1.22	03-Apr-13 14:37 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	0.789	03-Apr-13 14:37 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	0.804	03-Apr-13 14:37 JAM
91-58-7	2-Chloronaphthalene	1	ND		10.0	0.713	03-Apr-13 14:37 JAM
95-57-8	2-Chlorophenol	1	ND		10.0	0.716	03-Apr-13 14:37 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND		10.0	0.638	03-Apr-13 14:37 JAM
218-01-9	Chrysene	1	ND		10.0	0.539	03-Apr-13 14:37 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		10.0	0.587	03-Apr-13 14:37 JAM
132-64-9	Dibenzofuran	1	ND		10.0	0.576	03-Apr-13 14:37 JAM
95-50-1	1,2-Dichlorobenzene	1	ND		10.0	0.867	03-Apr-13 14:37 JAM
541-73-1	1,3-Dichlorobenzene	1	ND		10.0	0.832	03-Apr-13 14:37 JAM
106-46-7	1,4-Dichlorobenzene	1	ND		10.0	0.652	03-Apr-13 14:37 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND		10.0	0.781	03-Apr-13 14:37 JAM
120-83-2	2,4-Dichlorophenol	1	ND		10.0	0.783	03-Apr-13 14:37 JAM
84-66-2	Diethylphthalate	1	ND		10.0	0.607	03-Apr-13 14:37 JAM
105-67-9	2,4-Dimethylphenol	1	ND		10.0	0.781	03-Apr-13 14:37 JAM
131-11-3	Dimethylphthalate	1	ND		10.0	0.594	03-Apr-13 14:37 JAM
84-74-2	Di-n-butylphthalate	1	ND		10.0	0.651	03-Apr-13 14:37 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		10.0	1.02	03-Apr-13 14:37 JAM
51-28-5	2,4-Dinitrophenol	1	ND		10.0	0.470	03-Apr-13 14:37 JAM

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Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205487 BLANK 1 **Project:** 20152153

Lab ID: 201077340

Prep Level: Water **Batch:** 205487

Method: Water GC/MS Semivolatile Organics

Prepared: 29-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	0.741	03-Apr-13 14:37 JAM
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	0.780	03-Apr-13 14:37 JAM
117-84-0	Di-n-octylphthalate	1	ND		10.0	0.781	03-Apr-13 14:37 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	0.930	03-Apr-13 14:37 JAM
206-44-0	Fluoranthene	1	ND		10.0	0.674	03-Apr-13 14:37 JAM
86-73-7	Fluorene	1	ND		10.0	0.629	03-Apr-13 14:37 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		10.0	0.759	03-Apr-13 14:37 JAM
118-74-1	Hexachlorobenzene	1	ND		10.0	0.681	03-Apr-13 14:37 JAM
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	0.347	03-Apr-13 14:37 JAM
67-72-1	Hexachloroethane	1	ND		10.0	0.987	03-Apr-13 14:37 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		10.0	0.574	03-Apr-13 14:37 JAM
78-59-1	Isophorone	1	ND		10.0	0.628	03-Apr-13 14:37 JAM
91-57-6	2-Methylnaphthalene	1	ND		10.0	0.822	03-Apr-13 14:37 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	0.749	03-Apr-13 14:37 JAM
	3&4-Methylphenol	1	ND		10.0	0.948	03-Apr-13 14:37 JAM
91-20-3	Naphthalene	1	ND		10.0	0.756	03-Apr-13 14:37 JAM
88-74-4	2-Nitroaniline	1	ND		10.0	0.859	03-Apr-13 14:37 JAM
99-09-2	3-Nitroaniline	1	ND		10.0	0.877	03-Apr-13 14:37 JAM
100-01-6	4-Nitroaniline	1	ND		10.0	0.972	03-Apr-13 14:37 JAM
98-95-3	Nitrobenzene	1	ND		10.0	1.06	03-Apr-13 14:37 JAM
88-75-5	2-Nitrophenol	1	ND		10.0	0.772	03-Apr-13 14:37 JAM
100-02-7	4-Nitrophenol	1	ND		10.0	0.761	03-Apr-13 14:37 JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	0.919	03-Apr-13 14:37 JAM
86-30-6	N-Nitrosodiphenylamine	1	ND		10.0	0.715	03-Apr-13 14:37 JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		10.0	0.732	03-Apr-13 14:37 JAM
87-86-5	Pentachlorophenol	1	ND		10.0	0.860	03-Apr-13 14:37 JAM
85-01-8	Phenanthrene	1	ND		10.0	0.674	03-Apr-13 14:37 JAM
108-95-2	Phenol	1	ND		10.0	0.773	03-Apr-13 14:37 JAM
129-00-0	Pyrene	1	ND		10.0	0.663	03-Apr-13 14:37 JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	0.797	03-Apr-13 14:37 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		10.0	0.751	03-Apr-13 14:37 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	0.737	03-Apr-13 14:37 JAM

66 compound(s) reported

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank Results

Blank ID: 205649 BLANK 1 **Project:** 20152153

Lab ID: 201078038

Prep Level: Water **Batch:** 205649

Method: Water GC/MS Semivolatile Organics

Prepared: 02-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
83-32-9	Acenaphthene	1	ND		0.100	0.0520	02-Apr-13 16:48 JAM
208-96-8	Acenaphthylene	1	ND		0.100	0.0460	02-Apr-13 16:48 JAM
120-12-7	Anthracene	1	ND		0.100	0.0570	02-Apr-13 16:48 JAM
56-55-3	Benzo(a)anthracene	1	ND		0.100	0.0310	02-Apr-13 16:48 JAM
205-99-2	Benzo(b)fluoranthene	1	ND		0.100	0.0520	02-Apr-13 16:48 JAM
207-08-9	Benzo(k)fluoranthene	1	ND		0.100	0.0410	02-Apr-13 16:48 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		0.100	0.0200	02-Apr-13 16:48 JAM
50-32-8	Benzo(a)pyrene	1	ND		0.100	0.0410	02-Apr-13 16:48 JAM
218-01-9	Chrysene	1	ND		0.100	0.0250	02-Apr-13 16:48 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		0.100	0.0180	02-Apr-13 16:48 JAM
206-44-0	Fluoranthene	1	ND		0.100	0.0390	02-Apr-13 16:48 JAM
86-73-7	Fluorene	1	ND		0.100	0.0630	02-Apr-13 16:48 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		0.100	0.0180	02-Apr-13 16:48 JAM
91-57-6	2-Methylnaphthalene	1	ND		0.100	0.0780	02-Apr-13 16:48 JAM
91-20-3	Naphthalene	1	ND		0.100	0.0670	02-Apr-13 16:48 JAM
85-01-8	Phenanthrene	1	ND		0.100	0.0490	02-Apr-13 16:48 JAM
129-00-0	Pyrene	1	ND		0.100	0.0360	02-Apr-13 16:48 JAM

17 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205355 BLANK 1 **Project:** 20152153

Lab ID: 201076696

Prep Level: Water **Batch:** 205355

Method: Water GC/MS Volatile Organics

Prepared: 28-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
67-64-1	Acetone	1	ND		10.0	8.88	28-Mar-13 10:13 MHM
71-43-2	Benzene	1	ND		5.00	0.518	28-Mar-13 10:13 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469	28-Mar-13 10:13 MHM
75-25-2	Bromoform	1	ND		5.00	0.920	28-Mar-13 10:13 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855	28-Mar-13 10:13 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66	28-Mar-13 10:13 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530	28-Mar-13 10:13 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528	28-Mar-13 10:13 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662	28-Mar-13 10:13 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12	28-Mar-13 10:13 MHM
67-66-3	Chloroform	1	ND		5.00	0.853	28-Mar-13 10:13 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636	28-Mar-13 10:13 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34	28-Mar-13 10:13 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630	28-Mar-13 10:13 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477	28-Mar-13 10:13 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553	28-Mar-13 10:13 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565	28-Mar-13 10:13 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738	28-Mar-13 10:13 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557	28-Mar-13 10:13 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578	28-Mar-13 10:13 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738	28-Mar-13 10:13 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579	28-Mar-13 10:13 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454	28-Mar-13 10:13 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526	28-Mar-13 10:13 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292	28-Mar-13 10:13 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28	28-Mar-13 10:13 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405	28-Mar-13 10:13 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36	28-Mar-13 10:13 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44	28-Mar-13 10:13 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10	28-Mar-13 10:13 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687	28-Mar-13 10:13 MHM
100-42-5	Styrene	1	ND		5.00	0.571	28-Mar-13 10:13 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12	28-Mar-13 10:13 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679	28-Mar-13 10:13 MHM

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Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205355 BLANK 1 **Project:** 20152153

Lab ID: 201076696

Prep Level: Water **Batch:** 205355

Method: Water GC/MS Volatile Organics

Prepared: 28-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
108-88-3	Toluene	1	ND		5.00	0.536	28-Mar-13 10:13 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554	28-Mar-13 10:13 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915	28-Mar-13 10:13 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654	28-Mar-13 10:13 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575	28-Mar-13 10:13 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564	28-Mar-13 10:13 MHM
	m&p-Xylene	1	ND		5.00	0.937	28-Mar-13 10:13 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649	28-Mar-13 10:13 MHM

42 compound(s) reported

Protocol Blank 4/5/2013 18:22:42

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205650 BLANK 1 **Project:** 20152153

Lab ID: 201078042

Prep Level: Water **Batch:** 205650

Method: Water GC Semivolatile Organics

Prepared: 02-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Diesel Range Organics (C10-28)	1	ND		0.150	0.0760	03-Apr-13 23:25 SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.150	0.0490	03-Apr-13 23:25 SNP1

2 compound(s) reported

Protocol Blank 4/5/2013 18:22:42

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205225 BLANK 2 **Project:** 20152153

Lab ID: 201076745

Prep Level: Water **Batch:** 205225

Method: Water GC Volatile Organics

Prepared: 28-Mar-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Gasoline Range Organics(C6-10)	1	0.0220	J	0.0500	0.0212	28-Mar-13 08:12 DHR1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205349 BLANK 1 **Project:** 20152153

Lab ID: 201076679

Prep Level: Water **Batch:** 205349

Method: Water ICP Metals

Prepared: 28-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
7440-36-0	Antimony	1	ND		60.0	1.35	28-Mar-13 14:55 MHB1
7440-38-2	Arsenic	1	ND		10.0	1.04	28-Mar-13 14:55 MHB1
7440-41-7	Beryllium	1	ND		5.00	0.282	28-Mar-13 14:55 MHB1
7440-43-9	Cadmium	1	ND		5.00	0.361	28-Mar-13 14:55 MHB1
7440-47-3	Chromium	1	ND		10.0	2.00	28-Mar-13 14:55 MHB1
7440-50-8	Copper	1	ND		10.0	2.76	28-Mar-13 14:55 MHB1
7439-92-1	Lead	1	1.29	J	5.00	1.15	28-Mar-13 14:55 MHB1
7440-02-0	Nickel	1	ND		40.0	0.253	28-Mar-13 14:55 MHB1
7782-49-2	Selenium	1	ND		35.0	14.3	28-Mar-13 14:55 MHB1
7440-22-4	Silver	1	ND		10.0	0.579	28-Mar-13 14:55 MHB1
7440-28-0	Thallium	1	ND		10.0	1.05	28-Mar-13 14:55 MHB1
7440-66-6	Zinc	1	ND		20.0	3.52	28-Mar-13 14:55 MHB1

12 compound(s) reported

Protocol Blank 4/5/2013 18:22:42

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205490 BLANK 1 **Project:** 20152153

Lab ID: 201077353

Prep Level: Water **Batch:** 205490

Method: Water Mercury

Prepared: 29-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
7439-97-6	Mercury	1	ND		0.200	0.0340	29-Mar-13 14:19 MHB1

1 compound(s) reported

Protocol Blank 4/5/2013 18:22:43

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152153

Value	Description
D7	The sample was analyzed at a dilution based upon historical data.
Q5	Insufficient sample was provided to perform matrix spike analyses on any sample in this analytical batch. Method performance for this analyte has been demonstrated by the laboratory control sample recovery.
J	This estimated value for the analyte is below the adjusted reporting limit but above the instrument reporting limit.
U	The analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
B	This analyte was detected in the method blank.
E	The sample concentration is above the linear calibrated range of the analysis.
LCS	Laboratory Control Sample.
MS(D)	Matrix Spike (Duplicate).
DUP	Sample Duplicate.
RPD	Relative Percent Difference.

Pace Analytical Services, In
1000 Riverbend Blvd. Suite F
St. Rose, LA 7008
(504) 469-033

Chains of Custody

20152153 20-CTEH

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Re

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields m

Page: / of /

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: CTEH	Report To: Chase Ertzberger	Attention: CTEH
Address: 5120 Northshore Dr	Copy To: James McCormack(jmccormack@cteh.com	
N. Little Rock, AR 72118	40432samples@cteh.com	Address: 5120 Northshore Dr
Email To: Certzberger@cteh.com	Purchase Order No.:	Pace Quote Reference:
Phone: 501-366-0394 Fax:	Project Name: Delek @ Magnolia, AR	Pace Project Manager: Karen Brown
Requested Due Date/TAT Normal 10 WD	Project Number: 40432	Pace Profile #: 5831 / Line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: AR

Requested Analysis Filtered (Y/N)

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

ITEM #	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260	8270	8270-SIM (Low level)	Priority Pollutant List (6010)	TPH-GRO (8015)	TPH-DRO / ORO (8015)		Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WT	G	—	—	03-27	1250		11	4		1	6					3	2	1	1	3	1			20107668 4
2	TB		—	—	—	—		2				2					2								66685
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									

Not Used 3-27-13 RS

Not Used 3-27-13 RS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Rich Shaver / CTEH	03-27-13	1760	UPS	03-27-13	1760	1.4	y	y	y
	UPS			Karen Brown 3/28/13		0645				

SAMPLER NAME AND SIGNATURE: Rich Shaver

PRINT Name of SAMPLER: Rich Shaver

SIGNATURE of SAMPLER: Rich Shaver

DATE Signed (MM/DD/YY): 03-27-13

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.06, 2-Feb-2007

20152153 20-CTEH

Pace Analytical

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Sample Condi

Courier: ☐ Pace Courier ☐ Hired Courier ☐ Fed X ☒ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC] **Custody Seals intact:** ☐Yes ☐No

Therometer Used: ☐ Therm Fisher IR 5 ☒ Therm Fisher IR 6 ☐ Therm Fisher IR 7

Type of Ice: (Wet) Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: KMB 3/28/13

Temp must be measured from Temperature blank when present

					Comments:
Temperature Blank Present"?	☒Yes	☐No	☐N/A	1	
Chain of Custody Present:	☑Yes	☐No	☐N/A	2	
Chain of Custody Complete:	☑Yes	☐No	☐N/A	3	
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	4	
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	5	
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	6	
Sufficient Volume:	☑Yes	☐No	☐N/A	7	
Correct Containers Used:	☑Yes	☐No	☐N/A	8	
Filtered vol. Rec. for Diss. tests	☐Yes	☑No	☐N/A	9	
Sample Labels match COC:	☑Yes	☐No	☐N/A	10	
All containers received within manafacture's precautionary and/or expiration dates.	☑Yes	☐No	☐N/A	11	
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☑Yes	☐No	☐N/A	12	
All containers preservation checked found to be in compliance with EPA recommendation.	☑Yes	☐No	☐N/A	13	If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐Yes	☑No	☐N/A	14	
Trip Blank Present:	☑Yes	☐No		15	

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution:

Note: The date 3/27 was used as "collection" date for TB0008.

ALLC003rev.08, 15Feb2013 SCUR Form - mod

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

April 05, 2013

James McCormack
CTEH
5120 North Shore Drive
North Little Rock, AR 72118

RE: Project 20152235
Project ID: Magnolia, AR

Dear James McCormack:

Enclosed are the analytical results for sample(s) received by the laboratory on March 29, 2013. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Karen Brown
karen.brown@pacelabs.com

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

Laboratory Certifications

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152235

Client: CTEH

Project ID: Magnolia, AR

Washington Department of Ecology C2078
Oregon Environmental Laboratory Accreditation - LA200001
U.S. Dept. of Agriculture Foreign Soil Import P330-10-00119
Pennsylvania Dept. of Env Protection (NELAC) 68-04202
Texas Commission on Env. Quality (NELAC) T104704405-09-TX
Kansas Department of Health and Environment (NELAC) E-10266
Florida Department of Health (NELAC) E87595
Oklahoma Department of Environmental Quality - 2010-139
Illinois Environmental Protection Agency - 0025721
California Env. Lab Accreditation Program Branch - 11277CA
Louisiana Dept. of Environmental Quality (NELAC/LELAP) 02006

4/5/2013 19:26:16

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Cross Reference

Project: 20152235

Client: CTEH

Project ID: Magnolia, AR

Client Sample ID	Lab ID	Matrix	Collection Date/Time	Received Date/Time
MAAR0328SW014A	201077363	Water	28-Mar-13 14:00	29-Mar-13 08:00
TB010	201077364	Water	28-Mar-13 00:00	29-Mar-13 08:00

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152235

Sample Receipt Condition:

All samples were received in accordance with EPA protocol.

Holding Times:

All holding times were met.

Blanks:

All blank results were below reporting limits.

Laboratory Control Samples:

All LCS recoveries were within QC limits.

Matrix Spikes and Duplicates:

All MS/MSD recoveries or duplicate RPDs were within QC limits.

Surrogates:

All surrogate recoveries were within QC limits.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152235

Analytical Method	Batch	Sample used for QC
EPA 8015/8021	205389	Batch sample from another client
EPA 6010	205493	Batch sample from another client
EPA 7470	205490	Batch sample from another client
EPA 8270	205649	Batch sample from another client
EPA 8260	205553	Project sample MAAR0328SW014A

For the sample used as the original for the DUP or MS/MSD for the batch:

Project sample means a sample from this project was used.
Client sample means a sample from the same client but in a different project was used.
Batch sample means a sample from a different client was used.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328SW014A
Project: 20152235
Project ID: Magnolia, AR
Site: None
Lab ID: 201077363
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205649
Method: EPA 8270
GCMS SVOAs SIM Water
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 02-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
83-32-9	Acenaphthene	1	ND		0.100	0.0520		02-Apr-13 20:02	JAM
208-96-8	Acenaphthylene	1	ND		0.100	0.0460		02-Apr-13 20:02	JAM
120-12-7	Anthracene	1	ND		0.100	0.0570		02-Apr-13 20:02	JAM
56-55-3	Benzo(a)anthracene	1	ND		0.100	0.0310		02-Apr-13 20:02	JAM
205-99-2	Benzo(b)fluoranthene	1	ND		0.100	0.0520		02-Apr-13 20:02	JAM
207-08-9	Benzo(k)fluoranthene	1	ND		0.100	0.0410		02-Apr-13 20:02	JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		0.100	0.0200		02-Apr-13 20:02	JAM
50-32-8	Benzo(a)pyrene	1	ND		0.100	0.0410		02-Apr-13 20:02	JAM
218-01-9	Chrysene	1	ND		0.100	0.0250		02-Apr-13 20:02	JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		0.100	0.0180		02-Apr-13 20:02	JAM
206-44-0	Fluoranthene	1	ND		0.100	0.0390		02-Apr-13 20:02	JAM
86-73-7	Fluorene	1	0.0900	J	0.100	0.0630		02-Apr-13 20:02	JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		0.100	0.0180		02-Apr-13 20:02	JAM
91-57-6	2-Methylnaphthalene	1	0.100		0.100	0.0780		02-Apr-13 20:02	JAM
91-20-3	Naphthalene	1	0.130		0.100	0.0670		02-Apr-13 20:02	JAM
85-01-8	Phenanthrene	1	0.0700	J	0.100	0.0490		02-Apr-13 20:02	JAM
129-00-0	Pyrene	1	ND		0.100	0.0360		02-Apr-13 20:02	JAM

17 compound(s) reported

Protocol 4/5/2013 19:26:56

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328SW014A
Project: 20152235
Project ID: Magnolia, AR
Site: None
Lab ID: 201077363
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205584
Method: EPA 8270
GCMS SVOAs Water
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
65-85-0	Benzoic acid	1	ND		25.0	1.56		04-Apr-13 18:34 JAM
100-51-6	Benzyl alcohol	1	ND		10.0	0.959		04-Apr-13 18:34 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND		10.0	0.541		04-Apr-13 18:34 JAM
85-68-7	Butylbenzylphthalate	1	ND		10.0	0.825		04-Apr-13 18:34 JAM
86-74-8	Carbazole	1	ND		10.0	0.932		04-Apr-13 18:34 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND		10.0	0.812		04-Apr-13 18:34 JAM
106-47-8	3&4-Chloroaniline	1	ND		10.0	1.22		04-Apr-13 18:34 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	0.789		04-Apr-13 18:34 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	0.804		04-Apr-13 18:34 JAM
91-58-7	2-Chloronaphthalene	1	ND		10.0	0.713		04-Apr-13 18:34 JAM
95-57-8	2-Chlorophenol	1	ND		10.0	0.716		04-Apr-13 18:34 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND		10.0	0.638		04-Apr-13 18:34 JAM
132-64-9	Dibenzofuran	1	ND		10.0	0.576		04-Apr-13 18:34 JAM
95-50-1	1,2-Dichlorobenzene	1	ND		10.0	0.867		04-Apr-13 18:34 JAM
541-73-1	1,3-Dichlorobenzene	1	ND		10.0	0.832		04-Apr-13 18:34 JAM
106-46-7	1,4-Dichlorobenzene	1	ND		10.0	0.652		04-Apr-13 18:34 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND		10.0	0.781		04-Apr-13 18:34 JAM
120-83-2	2,4-Dichlorophenol	1	ND		10.0	0.783		04-Apr-13 18:34 JAM
84-66-2	Diethylphthalate	1	ND		10.0	0.607		04-Apr-13 18:34 JAM
105-67-9	2,4-Dimethylphenol	1	ND		10.0	0.781		04-Apr-13 18:34 JAM
131-11-3	Dimethylphthalate	1	ND		10.0	0.594		04-Apr-13 18:34 JAM
84-74-2	Di-n-butylphthalate	1	ND		10.0	0.651		04-Apr-13 18:34 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		10.0	1.02		04-Apr-13 18:34 JAM
51-28-5	2,4-Dinitrophenol	1	ND		10.0	0.470		04-Apr-13 18:34 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	0.741		04-Apr-13 18:34 JAM
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	0.780		04-Apr-13 18:34 JAM
117-84-0	Di-n-octylphthalate	1	ND		10.0	0.781		04-Apr-13 18:34 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	0.930		04-Apr-13 18:34 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		10.0	0.759		04-Apr-13 18:34 JAM
118-74-1	Hexachlorobenzene	1	ND		10.0	0.681		04-Apr-13 18:34 JAM
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	0.347		04-Apr-13 18:34 JAM
67-72-1	Hexachloroethane	1	ND		10.0	0.987		04-Apr-13 18:34 JAM
78-59-1	Isophorone	1	ND		10.0	0.628		04-Apr-13 18:34 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	0.749		04-Apr-13 18:34 JAM

Protocol 4/5/2013 19:26:56

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Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328SW014A
Project: 20152235
Project ID: Magnolia, AR
Site: None
Lab ID: 201077363
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205584
Method: EPA 8270
GCMS SVOAs Water
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
	3&4-Methylphenol	1	ND		10.0	0.948		04-Apr-13 18:34 JAM
88-74-4	2-Nitroaniline	1	ND		10.0	0.859		04-Apr-13 18:34 JAM
99-09-2	3-Nitroaniline	1	ND		10.0	0.877		04-Apr-13 18:34 JAM
100-01-6	4-Nitroaniline	1	ND		10.0	0.972		04-Apr-13 18:34 JAM
98-95-3	Nitrobenzene	1	ND		10.0	1.06		04-Apr-13 18:34 JAM
88-75-5	2-Nitrophenol	1	ND		10.0	0.772		04-Apr-13 18:34 JAM
100-02-7	4-Nitrophenol	1	ND		10.0	0.761		04-Apr-13 18:34 JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	0.919		04-Apr-13 18:34 JAM
86-30-6	N-Nitrosodiphenylamine	1	ND		10.0	0.715		04-Apr-13 18:34 JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		10.0	0.732		04-Apr-13 18:34 JAM
87-86-5	Pentachlorophenol	1	ND		10.0	0.860		04-Apr-13 18:34 JAM
108-95-2	Phenol	1	ND		10.0	0.773		04-Apr-13 18:34 JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	0.797		04-Apr-13 18:34 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		10.0	0.751		04-Apr-13 18:34 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	0.737		04-Apr-13 18:34 JAM

49 compound(s) reported

Protocol 4/5/2013 19:26:56

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328SW014A
Project: 20152235
Project ID: Magnolia, AR
Site: None
Lab ID: 201077363
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205553
Method: EPA 8260
GCMS VOAs Water
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	8.88		01-Apr-13 12:28 MHM
71-43-2	Benzene	1	0.710	J	5.00	0.518		01-Apr-13 12:28 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		01-Apr-13 12:28 MHM
75-25-2	Bromoform	1	ND		5.00	0.920		01-Apr-13 12:28 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855		01-Apr-13 12:28 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		01-Apr-13 12:28 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530		01-Apr-13 12:28 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		01-Apr-13 12:28 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662		01-Apr-13 12:28 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12		01-Apr-13 12:28 MHM
67-66-3	Chloroform	1	ND		5.00	0.853		01-Apr-13 12:28 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636		01-Apr-13 12:28 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		01-Apr-13 12:28 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		01-Apr-13 12:28 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		01-Apr-13 12:28 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		01-Apr-13 12:28 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565		01-Apr-13 12:28 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		01-Apr-13 12:28 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		01-Apr-13 12:28 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		01-Apr-13 12:28 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		01-Apr-13 12:28 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		01-Apr-13 12:28 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		01-Apr-13 12:28 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		01-Apr-13 12:28 MHM
100-41-4	Ethylbenzene	1	0.540	J	5.00	0.292		01-Apr-13 12:28 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28		01-Apr-13 12:28 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405		01-Apr-13 12:28 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36		01-Apr-13 12:28 MHM
75-09-2	Methylene chloride	1	4.52	J	5.00	1.44		01-Apr-13 12:28 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		01-Apr-13 12:28 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		01-Apr-13 12:28 MHM
100-42-5	Styrene	1	ND		5.00	0.571		01-Apr-13 12:28 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		01-Apr-13 12:28 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		01-Apr-13 12:28 MHM

Protocol 4/5/2013 19:26:56

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328SW014A
Project ID: Magnolia, AR
Lab ID: 201077363
Description: None
Method: EPA 8260
GCMS VOAs Water

Project: 20152235
Site: None
Matrix: Water **% Moisture:** n/a
Prep Level: Water **Batch:** 205553
Collected: 28-Mar-13 **Received:** 29-Mar-13
Prepared: 01-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	0.830	J	5.00	0.536		01-Apr-13 12:28 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		01-Apr-13 12:28 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915		01-Apr-13 12:28 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654		01-Apr-13 12:28 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575		01-Apr-13 12:28 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564		01-Apr-13 12:28 MHM
	m&p-Xylene	1	ND		5.00	0.937		01-Apr-13 12:28 MHM
95-47-6	o-Xylene	1	0.690	J	5.00	0.649		01-Apr-13 12:28 MHM

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328SW014A
Project: 20152235
Project ID: Magnolia, AR
Site: None
Lab ID: 201077363
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205650
Method: EPA 8015 Mod Ext
8015 TPH Extractables Water
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 02-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
none	Diesel Range Organics (C10-28)	1	ND		0.250	0.0760		04-Apr-13 04:03	SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.500	0.0490		04-Apr-13 04:03	SNP1

2 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0328SW014A
Project ID: Magnolia, AR
Lab ID: 201077363
Description: None
Method: EPA 8015/8021
8015/8021 Water

Project: 20152235
Site: None
Matrix: Water
% Moisture: n/a
Prep Level: Water
Batch: 205389
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 29-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Gasoline Range Organics(C6-10)	1	0.0312	J	0.0500	0.0212		29-Mar-13 12:07 DHR1

1 compound(s) reported

Protocol 4/5/2013 19:26:56

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Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328SW014A
Project: 20152235
Project ID: Magnolia, AR
Site: None
Lab ID: 201077363
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205493
Method: EPA 6010
Metals, ICP, Water
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 29-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
7440-36-0	Antimony	1	ND		60.0	1.35		02-Apr-13 12:03	EJH
7440-38-2	Arsenic	1	ND		10.0	1.04		02-Apr-13 12:03	EJH
7440-41-7	Beryllium	1	0.559	J	5.00	0.282		02-Apr-13 12:03	EJH
7440-43-9	Cadmium	1	ND		5.00	0.361		02-Apr-13 12:03	EJH
7440-47-3	Chromium	1	ND		10.0	2.00		02-Apr-13 12:03	EJH
7440-50-8	Copper	1	ND		10.0	2.76		02-Apr-13 12:03	EJH
7439-92-1	Lead	1	2.26	J	5.00	1.15		02-Apr-13 12:03	EJH
7440-02-0	Nickel	1	7.23	J	40.0	0.253		02-Apr-13 12:03	EJH
7782-49-2	Selenium	1	ND		35.0	14.3		02-Apr-13 12:03	EJH
7440-22-4	Silver	1	ND		10.0	0.579		02-Apr-13 12:03	EJH
7440-28-0	Thallium	1	ND		10.0	1.05		02-Apr-13 12:03	EJH
7440-66-6	Zinc	1	19.2	J	20.0	3.52		02-Apr-13 12:03	EJH

12 compound(s) reported

Protocol 4/5/2013 19:26:56

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0328SW014A
Project ID: Magnolia, AR
Lab ID: 201077363
Description: None
Method: EPA 7470
Mercury Water

Project: 20152235
Site: None
Matrix: Water
Prep Level: Water
% Moisture: n/a
Batch: 205490
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 29-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.200	0.0340		29-Mar-13 14:42 MHB1

1 compound(s) reported

Protocol 4/5/2013 19:26:56

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Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: TB010
Project: 20152235
Project ID: Magnolia, AR
Site: None
Lab ID: 201077364
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205553
Method: EPA 8260
GCMS VOAs Water
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 03-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	8.88		03-Apr-13 12:00 MHM
71-43-2	Benzene	1	ND		5.00	0.518		03-Apr-13 12:00 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		03-Apr-13 12:00 MHM
75-25-2	Bromoform	1	ND		5.00	0.920		03-Apr-13 12:00 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855		03-Apr-13 12:00 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		03-Apr-13 12:00 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530		03-Apr-13 12:00 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		03-Apr-13 12:00 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662		03-Apr-13 12:00 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12		03-Apr-13 12:00 MHM
67-66-3	Chloroform	1	ND		5.00	0.853		03-Apr-13 12:00 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636		03-Apr-13 12:00 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		03-Apr-13 12:00 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		03-Apr-13 12:00 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		03-Apr-13 12:00 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		03-Apr-13 12:00 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565		03-Apr-13 12:00 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		03-Apr-13 12:00 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		03-Apr-13 12:00 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		03-Apr-13 12:00 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		03-Apr-13 12:00 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		03-Apr-13 12:00 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		03-Apr-13 12:00 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		03-Apr-13 12:00 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292		03-Apr-13 12:00 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28		03-Apr-13 12:00 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405		03-Apr-13 12:00 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36		03-Apr-13 12:00 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44		03-Apr-13 12:00 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		03-Apr-13 12:00 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		03-Apr-13 12:00 MHM
100-42-5	Styrene	1	ND		5.00	0.571		03-Apr-13 12:00 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		03-Apr-13 12:00 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		03-Apr-13 12:00 MHM

Protocol 4/5/2013 19:26:56

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: TB010
Project: 20152235
Project ID: Magnolia, AR
Site: None
Lab ID: 201077364
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205553
Method: EPA 8260
GCMS VOAs Water
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 03-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	ND		5.00	0.536		03-Apr-13 12:00 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		03-Apr-13 12:00 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915		03-Apr-13 12:00 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654		03-Apr-13 12:00 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575		03-Apr-13 12:00 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564		03-Apr-13 12:00 MHM
	m&p-Xylene	1	ND		5.00	0.937		03-Apr-13 12:00 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649		03-Apr-13 12:00 MHM

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Surrogate Recovery

Batch: 205584 **Project:** 20152235

Method: Water GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201077834	205584 BLANK 1		73	77	67	82	64	88		
201077835	205584 LCS 1		87	88	76	77	77	91		
201077363	MAAR0328SW014A		94	93	82	97	79	98		
QC limits:			25-145	34-117	10-118	33-120	15-134	24-133		

Sur 1: 2,4,6-Tribromophenol (S)
Sur 2: 2-Fluorobiphenyl (S)
Sur 3: 2-Fluorophenol (S)
Sur 4: Nitrobenzene-d5 (S)
Sur 5: Phenol-d5 (S)
Sur 6: Terphenyl-d14 (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Surrogate Recovery

Batch: 205649 **Project:** 20152235

Method: Water GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201078038	205649 BLANK 1		66	60						
201078039	205649 LCS 1		74	77						
201077363	MAAR0328SW014A		48	48						
201078040	MW-3 MS 1		90	74						
201078041	MW-3 MSD 1		78	61						
	QC limits:		12-110	25-113						

Sur 1: 2-Fluorobiphenyl (S)
Sur 2: Terphenyl-d14 (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Surrogate Recovery

Batch: 205553 **Project:** 20152235

Method: Water GC/MS Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201077705	205553 BLANK 1		90	96	93					
201078146	205553 BLANK 2		85	98	85					
201078418	205553 BLANK 3		85	99	88					
201077706	205553 LCS 1		98	95	98					
201078147	205553 LCS 2		91	100	92					
201078419	205553 LCS 3		92	98	92					
201077363	MAAR0328SW014A		88	94	92					
201077707	MAAR0328SW014A MS 1		94	94	97					
201077708	MAAR0328SW014A MSD 1		97	99	102					
201077364	TB010		85	92	90					
	QC limits:		68-124	72-126	79-119					

Sur 1: 4-Bromofluorobenzene (S)
Sur 2: Dibromofluoromethane (S)
Sur 3: Toluene-d8 (S)

*** denotes surrogate recovery outside of QC limits.**
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Surrogate Recovery

Batch: 205650 **Project:** 20152235

Method: Water GC Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201078042	205650 BLANK 1		79	73						
201078043	205650 LCS 1		69	64						
201077363	MAAR0328SW014A		25	67						
	QC limits:		16-137	10-121						

Sur 1: n-Pentacosane (S)
Sur 2: o-Terphenyl (S)

Surrogates 4/5/2013 19:26:58

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

Pace Analytical™

Surrogate Recovery

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Batch: 205389 **Project:** 20152235

Method: Water GC Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201076896	205389 BLANK 1		104							
201076897	205389 LCS 1		106							
201077363	MAAR0328SW014A		103							
201076898	MW-1 MS 1		109							
201076899	MW-1 MSD 1		111							
	QC limits:		60-129							

Sur 1: 4-Bromofluorobenzene (S)

Surrogates 4/5/2013 19:26:58

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

Pace Analytical Services, Inc.
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Batch: 205584 **Project:** 20152235 **LCS:** 201077835 04-Apr-13 18:08

Method: Water GC/MS Semivolatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Benzoic acid	50.0	33.4	67								10-130			Q5
Benzyl alcohol	50.0	38.8	78								44-120			Q5
4-Bromophenylphenyl ether	50.0	40.1	80								49-120			Q5
Butylbenzylphthalate	50.0	35.6	71								46-120			Q5
Carbazole	50.0	44.4	89								51-127			Q5
4-Chloro-3-methylphenol	50.0	36.0	72								43-115			Q5
3&4-Chloroaniline	50.0	29.5	59								10-130			Q5
bis(2-Chloroethoxy)methane	50.0	34.4	69								43-115			Q5
bis(2-Chloroethyl) ether	50.0	39.2	78								47-115			Q5
2-Chloronaphthalene	50.0	41.3	83								52-115			Q5
2-Chlorophenol	50.0	42.2	84								48-115			Q5
4-Chlorophenylphenyl ether	50.0	40.4	81								52-116			Q5
Dibenzofuran	50.0	41.2	82								53-115			Q5
1,2-Dichlorobenzene	50.0	40.1	80								42-115			Q5
1,3-Dichlorobenzene	50.0	40.5	81								40-115			Q5
1,4-Dichlorobenzene	50.0	40.2	80								41-115			Q5
3,3'-Dichlorobenzidine	50.0	37.8	76								16-142			Q5
2,4-Dichlorophenol	50.0	38.4	77								45-115			Q5
Diethylphthalate	50.0	36.8	74								49-120			Q5
2,4-Dimethylphenol	50.0	36.9	74								23-116			Q5
Dimethylphthalate	50.0	35.9	72								52-115			Q5
Di-n-butylphthalate	50.0	35.4	71								50-117			Q5
4,6-Dinitro-2-methylphenol	50.0	46.2	92								44-122			Q5
2,4-Dinitrophenol	50.0	33.1	66								16-134			Q5
2,4-Dinitrotoluene	50.0	38.1	76								50-118			Q5
2,6-Dinitrotoluene	50.0	39.0	78								55-115			Q5
Di-n-octylphthalate	50.0	34.4	69								40-129			Q5
bis(2-Ethylhexyl)phthalate	50.0	38.2	76								46-124			Q5
Hexachloro-1,3-butadiene	50.0	39.6	79								32-115			Q5
Hexachlorobenzene	50.0	40.2	80								53-115			Q5
Hexachlorocyclopentadiene	50.0	37.3	75								10-115			Q5
Hexachloroethane	50.0	39.7	79								36-115			Q5
Isophorone	50.0	35.6	71								45-115			Q5
2-Methylphenol (o-Cresol)	50.0	41.9	84								46-115			Q5
3&4-Methylphenol	50.0	38.8	78								46-115			Q5
2-Nitroaniline	50.0	39.5	79								48-121			Q5
3-Nitroaniline	50.0	38.4	77								38-125			Q5
4-Nitroaniline	50.0	40.2	80								37-132			Q5
Nitrobenzene	50.0	36.3	73								44-118			Q5
2-Nitrophenol	50.0	39.5	79								45-115			Q5
4-Nitrophenol	50.0	33.8	68								29-134			Q5

QC Protocol 4/5/2013 19:26:59

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Batch: 205584 **Project:** 20152235 **LCS:** 201077835 04-Apr-13 18:08

Method: Water GC/MS Semivolatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
N-Nitroso-di-n-propylamine	50.0	35.7	71								45-119			Q5
N-Nitrosodiphenylamine	50.0	48.7	97								42-134			Q5
2,2'-Oxybis(1-chloropropane)	50.0	42.0	84								40-120			Q5
Pentachlorophenol	50.0	39.3	79								34-124			Q5
Phenol	50.0	40.1	80								44-115			Q5
1,2,4-Trichlorobenzene	50.0	37.5	75								40-115			Q5
2,4,5-Trichlorophenol	50.0	42.0	84								49-115			Q5
2,4,6-Trichlorophenol	50.0	43.6	87								48-115			Q5

49 compound(s) reported

Pace Analytical Services, Inc.
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Batch: 205649 **Project:** 20152235 **LCS:** 201078039 02-Apr-13 17:09

Method: Water GC/MS Semivolatile Organics **MS:** 201078040 02-Apr-13 18:36

Units: ug/L **MSD:** 201078041 02-Apr-13 18:57

Original for MS: Batch Sample 201076977

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acenaphthene	2.00	1.49	75	2.00		1.79	1.70	90	85	5	39-115	10-131	20	
Acenaphthylene	2.00	1.06	53	2.00		1.50	1.40	75	70	7	30-115	10-131	20	
Anthracene	2.00	1.10	55	2.00		1.99	1.84	100	92	8	34-115	10-139	20	
Benzo(a)anthracene	2.00	1.43	72	2.00		1.48	1.28	74	64	14	33-115	12-115	20	
Benzo(b)fluoranthene	2.00	1.69	85	2.00		1.39	1.18	70	59	16	30-115	10-119	20	
Benzo(k)fluoranthene	2.00	1.60	80	2.00		1.13	1.04	57	52	8	31-115	10-122	20	
Benzo(g,h,i)perylene	2.00	1.66	83	2.00		1.11	0.940	56	47	17	27-115	10-123	20	
Benzo(a)pyrene	2.00	1.08	54	2.00		1.18	1.04	59	52	13	28-115	10-115	20	
Chrysene	2.00	1.22	61	2.00		1.28	1.09	64	55	16	36-115	10-116	20	
Dibenz(a,h)anthracene	2.00	1.58	79	2.00		1.17	0.970	59	49	19	23-115	10-128	20	
Fluoranthene	2.00	1.54	77	2.00		1.78	1.78	89	89	0	39-115	10-136	20	
Fluorene	2.00	1.48	74	2.00		1.77	1.72	89	86	3	38-115	10-129	20	
Indeno(1,2,3-cd)pyrene	2.00	1.64	82	2.00		1.25	1.03	63	52	19	28-115	10-124	20	
2-Methylnaphthalene	2.00	1.46	73	2.00	0.220	1.89	1.85	84	82	2	31-115	11-125	20	
Naphthalene	2.00	1.54	77	2.00	0.360	2.03	2.02	84	83	0	40-115	14-124	20	
Phenanthrene	2.00	1.49	75	2.00		1.88	1.77	94	89	6	38-115	10-130	20	
Pyrene	2.00	1.49	75	2.00		1.77	1.63	89	82	8	33-115	10-120	20	

17 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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(504) 469-0333

Batch: 205553 **Project:** 20152235 **LCS:** 201077706 01-Apr-13 12:07

Method: Water GC/MS Volatile Organics **MS:** 201077707 01-Apr-13 12:48

Units: ug/L **MSD:** 201077708 01-Apr-13 13:08

Original for MS: Client Sample 201077363

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acetone	50.0	61.0	122	50.0		56.2	60.1	113	120	7	10-198	10-202	20	
Benzene	50.0	48.8	98	50.0	0.710	47.9	49.0	94	97	2	68-129	60-138	20	
Bromodichloromethane	50.0	50.1	100	50.0		47.5	48.9	95	98	3	68-132	66-137	20	
Bromoform	50.0	56.2	112	50.0		50.9	51.8	101	103	2	56-153	53-156	20	
Bromomethane	50.0	55.8	112	50.0		55.5	53.2	111	107	4	47-149	43-151	20	
2-Butanone (MEK)	50.0	58.1	116	50.0		49.9	54.5	100	109	9	18-173	14-184	20	
Carbon disulfide	50.0	53.6	107	50.0		52.4	55.9	105	112	6	25-166	17-176	20	
Carbon tetrachloride	50.0	50.9	102	50.0		50.1	51.8	100	104	3	56-146	51-151	20	
Chlorobenzene	50.0	52.0	104	50.0		51.1	52.0	102	104	2	74-131	71-135	20	
Chloroethane	50.0	53.5	107	50.0		40.8	49.9	82	100	20	28-190	21-191	20	
Chloroform	50.0	48.5	97	50.0		47.6	49.8	95	100	4	71-132	67-138	20	
Chloromethane	50.0	56.4	113	50.0		57.2	60.8	115	122	6	27-154	24-158	20	
1,2-Dibromo-3-chloropropane	50.0	52.5	105	50.0		49.6	49.3	99	99	1	40-155	38-162	20	
Dibromochloromethane	50.0	53.3	107	50.0		50.0	51.9	100	104	4	64-138	62-142	20	
1,2-Dibromoethane (EDB)	50.0	53.1	106	50.0		48.1	51.3	96	103	6	62-146	61-149	20	
Dichlorodifluoromethane	50.0	64.7	129	50.0		64.9	67.0	130	134	3	18-173	16-176	20	
1,1-Dichloroethane	50.0	47.2	94	50.0		46.6	49.9	93	100	7	63-135	61-141	20	
1,2-Dichloroethane	50.0	51.2	102	50.0		48.7	51.2	98	103	5	58-150	57-155	20	
1,1-Dichloroethene	50.0	53.1	106	50.0		51.3	55.2	103	110	7	50-151	40-163	20	
cis-1,2-Dichloroethene	50.0	52.3	105	50.0		49.7	53.1	99	106	7	65-132	61-138	20	
trans-1,2-Dichloroethene	50.0	52.8	106	50.0		51.9	53.5	104	107	3	56-137	52-144	20	
1,2-Dichloropropane	50.0	48.9	98	50.0		49.4	51.0	99	102	3	66-131	64-137	20	
cis-1,3-Dichloropropene	50.0	46.1	92	50.0		46.3	47.8	93	96	3	66-135	62-137	20	
trans-1,3-Dichloropropene	50.0	52.9	106	50.0		49.4	51.6	99	103	4	62-146	59-151	20	
Ethylbenzene	50.0	48.0	96	50.0	0.540	48.6	48.4	96	96	0	73-129	66-136	20	
2-Hexanone	50.0	52.6	105	50.0		46.5	49.6	93	99	7	29-158	27-165	20	
Isopropylbenzene (Cumene)	50.0	47.9	96	50.0		47.1	48.1	94	96	2	61-139	58-144	20	
Methylene chloride	50.0	62.2	124	50.0	4.52	59.0	63.6	109	118	7	41-171	35-165	20	
4-Methyl-2-pentanone (MIBK	50.0	56.5	113	50.0		51.8	52.2	104	105	1	46-159	43-165	20	
Methyl-tert-butyl ether	50.0	54.6	109	50.0		50.4	53.6	101	107	6	51-155	48-164	20	
Styrene	50.0	50.0	100	50.0		48.0	49.1	96	98	2	74-132	63-141	20	
1,1,2,2-Tetrachloroethane	50.0	49.7	99	50.0		45.6	47.0	91	94	3	46-153	41-160	20	
Tetrachloroethene	50.0	50.2	100	50.0		49.2	50.2	98	100	2	57-151	48-160	20	
Toluene	50.0	48.5	97	50.0	0.830	47.3	49.8	93	98	5	70-130	62-137	20	
1,1,1-Trichloroethane	50.0	51.3	103	50.0		50.6	51.8	101	104	2	65-132	61-138	20	
1,1,2-Trichloroethane	50.0	54.6	109	50.0		48.9	51.4	98	103	5	64-140	63-145	20	
Trichloroethene	50.0	48.4	97	50.0		46.6	48.5	93	97	4	71-131	62-142	20	
Trichlorofluoromethane	50.0	60.6	121	50.0		57.5	58.2	115	116	1	37-188	19-196	20	
Vinyl chloride	50.0	43.3	87	50.0		43.9	46.9	88	94	6	42-148	35-153	20	
m&p-Xylene	100.	99.1	99	100.		98.4	99.4	98	99	1	71-132	64-138	20	
o-Xylene	50.0	48.1	96	50.0	0.690	48.4	49.0	96	97	1	69-129	63-136	20	

QC Protocol 4/5/2013 19:27:00

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Batch: 205553 **Project:** 20152235 **LCS:** 201077706 01-Apr-13 12:07

Method: Water GC/MS Volatile Organics **MS:** 201077707 01-Apr-13 12:48

Units: ug/L **MSD:** 201077708 01-Apr-13 13:08

Original for MS: Client Sample 201077363

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu

41 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205553 **Project:** 20152235 **LCS:** 201078419 03-Apr-13 11:19

Method: Water GC/MS Volatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acetone	50.0	56.7	113								10-198			
Benzene	50.0	46.5	93								68-129			
Bromodichloromethane	50.0	47.7	95								68-132			
Bromoform	50.0	52.2	104								56-153			
Bromomethane	50.0	66.6	133								47-149			
2-Butanone (MEK)	50.0	58.1	116								18-173			
Carbon disulfide	50.0	56.9	114								25-166			
Carbon tetrachloride	50.0	45.2	90								56-146			
Chlorobenzene	50.0	50.8	102								74-131			
Chloroethane	50.0	71.5	143								28-190			
Chloroform	50.0	50.0	100								71-132			
Chloromethane	50.0	57.4	115								27-154			
1,2-Dibromo-3-chloropropane	50.0	46.1	92								40-155			
Dibromochloromethane	50.0	51.2	102								64-138			
1,2-Dibromoethane (EDB)	50.0	49.7	99								62-146			
Dichlorodifluoromethane	50.0	53.9	108								18-173			
1,1-Dichloroethane	50.0	49.6	99								63-135			
1,2-Dichloroethane	50.0	46.9	94								58-150			
1,1-Dichloroethene	50.0	53.7	107								50-151			
cis-1,2-Dichloroethene	50.0	52.9	106								65-132			
trans-1,2-Dichloroethene	50.0	54.1	108								56-137			
1,2-Dichloropropane	50.0	48.9	98								66-131			
cis-1,3-Dichloropropene	50.0	45.5	91								66-135			
trans-1,3-Dichloropropene	50.0	50.5	101								62-146			
Ethylbenzene	50.0	46.4	93								73-129			
2-Hexanone	50.0	47.6	95								29-158			
Isopropylbenzene (Cumene)	50.0	45.4	91								61-139			
Methylene chloride	50.0	59.5	119								41-171			
4-Methyl-2-pentanone (MIBK	50.0	53.6	107								46-159			
Methyl-tert-butyl ether	50.0	53.9	108								51-155			
Styrene	50.0	47.5	95								74-132			
1,1,2,2-Tetrachloroethane	50.0	47.0	94								46-153			
Tetrachloroethene	50.0	48.6	97								57-151			
Toluene	50.0	46.5	93								70-130			
1,1,1-Trichloroethane	50.0	51.0	102								65-132			
1,1,2-Trichloroethane	50.0	52.0	104								64-140			
Trichloroethene	50.0	47.2	94								71-131			
Trichlorofluoromethane	50.0	66.2	132								37-188			
Vinyl chloride	50.0	50.3	101								42-148			
m&p-Xylene	100.	94.7	95								71-132			
o-Xylene	50.0	46.4	93								69-129			

QC Protocol 4/5/2013 19:27:00

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Batch: 205553 **Project:** 20152235 **LCS:** 201078419 03-Apr-13 11:19

Method: Water GC/MS Volatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu

41 compound(s) reported

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
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Batch: 205650 **Project:** 20152235 **LCS:** 201078043 03-Apr-13 23:53

Method: Water GC Semivolatile Organics **MS:**

Units: mg/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Diesel Range Organics (C10-2	0.400	0.183	46								10-115			Q5

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205389 **Project:** 20152235 **LCS:** 201076897 29-Mar-13 11:02

Method: Water GC Volatile Organics **MS:** 201076898 29-Mar-13 13:39

Units: mg/L **MSD:** 201076899 29-Mar-13 14:06

Original for MS: Batch Sample 201076876

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Gasoline Range Organics(C6-	0.500	0.507	101	0.500	0.800	1.23	1.27	87	94	3	61-136	15-147	20	
1 compound(s) reported														

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205493 **Project:** 20152235 **LCS:** 201077374 02-Apr-13 11:46

Method: Water ICP Metals **MS:** 201077375 02-Apr-13 11:53

Units: ug/L **MSD:** 201077376 02-Apr-13 11:56

Original for MS: Batch Sample 201076716

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Antimony	1000	1030	103	1000		982.	977.	98	98	0	82-120	80-120	20	
Arsenic	1000	1010	101	1000	4.05	986.	987.	98	98	0	84-117	80-120	20	
Beryllium	1000	1010	101	1000	0.622	990.	987.	99	99	0	85-117	80-120	20	
Cadmium	1000	1030	103	1000		955.	954.	96	95	0	85-115	80-120	20	
Chromium	1000	1000	100	1000		966.	961.	96	96	0	83-117	80-120	20	
Copper	1000	969.	97	1000		947.	940.	95	94	1	85-116	80-120	20	
Lead	1000	1050	105	1000	5.12	947.	945.	94	94	0	84-118	80-120	20	
Nickel	1000	1040	104	1000	1.29	944.	943.	94	94	0	85-118	80-120	20	
Selenium	1000	1030	103	1000		965.	965.	97	97	0	85-116	80-120	20	
Silver	500.	524.	105	500.		503.	503.	101	101	0	80-120	80-120	20	
Thallium	1000	1030	103	1000		896.	895.	90	90	0	85-118	80-120	20	
Zinc	1000	1030	103	1000	14.9	970.	968.	96	95	0	81-120	80-120	20	

12 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Quality Control

Batch: 205490 **Project:** 20152235 **LCS:** 201077354 29-Mar-13 14:21

Method: Water Mercury **MS:** 201077355 29-Mar-13 14:25

Units: ug/L **MSD:** 201077356 29-Mar-13 14:26

Original for MS: Batch Sample 201076782

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Mercury	1.00	1.02	103	1.00		1.01	1.02	100	102	2	80-120	75-125	20	

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205584 BLANK 1 **Project:** 20152235

Lab ID: 201077834

Prep Level: Water **Batch:** 205584

Method: Water GC/MS Semivolatile Organics

Prepared: 01-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
65-85-0	Benzoic acid	1	ND		25.0	1.56	04-Apr-13 17:43 JAM
100-51-6	Benzyl alcohol	1	ND		10.0	0.959	04-Apr-13 17:43 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND		10.0	0.541	04-Apr-13 17:43 JAM
85-68-7	Butylbenzylphthalate	1	ND		10.0	0.825	04-Apr-13 17:43 JAM
86-74-8	Carbazole	1	ND		10.0	0.932	04-Apr-13 17:43 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND		10.0	0.812	04-Apr-13 17:43 JAM
106-47-8	3&4-Chloroaniline	1	ND		10.0	1.22	04-Apr-13 17:43 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	0.789	04-Apr-13 17:43 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	0.804	04-Apr-13 17:43 JAM
91-58-7	2-Chloronaphthalene	1	ND		10.0	0.713	04-Apr-13 17:43 JAM
95-57-8	2-Chlorophenol	1	ND		10.0	0.716	04-Apr-13 17:43 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND		10.0	0.638	04-Apr-13 17:43 JAM
132-64-9	Dibenzofuran	1	ND		10.0	0.576	04-Apr-13 17:43 JAM
95-50-1	1,2-Dichlorobenzene	1	ND		10.0	0.867	04-Apr-13 17:43 JAM
541-73-1	1,3-Dichlorobenzene	1	ND		10.0	0.832	04-Apr-13 17:43 JAM
106-46-7	1,4-Dichlorobenzene	1	ND		10.0	0.652	04-Apr-13 17:43 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND		10.0	0.781	04-Apr-13 17:43 JAM
120-83-2	2,4-Dichlorophenol	1	ND		10.0	0.783	04-Apr-13 17:43 JAM
84-66-2	Diethylphthalate	1	ND		10.0	0.607	04-Apr-13 17:43 JAM
105-67-9	2,4-Dimethylphenol	1	ND		10.0	0.781	04-Apr-13 17:43 JAM
131-11-3	Dimethylphthalate	1	ND		10.0	0.594	04-Apr-13 17:43 JAM
84-74-2	Di-n-butylphthalate	1	ND		10.0	0.651	04-Apr-13 17:43 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		10.0	1.02	04-Apr-13 17:43 JAM
51-28-5	2,4-Dinitrophenol	1	ND		10.0	0.470	04-Apr-13 17:43 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	0.741	04-Apr-13 17:43 JAM
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	0.780	04-Apr-13 17:43 JAM
117-84-0	Di-n-octylphthalate	1	ND		10.0	0.781	04-Apr-13 17:43 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	0.930	04-Apr-13 17:43 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		10.0	0.759	04-Apr-13 17:43 JAM
118-74-1	Hexachlorobenzene	1	ND		10.0	0.681	04-Apr-13 17:43 JAM
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	0.347	04-Apr-13 17:43 JAM
67-72-1	Hexachloroethane	1	ND		10.0	0.987	04-Apr-13 17:43 JAM
78-59-1	Isophorone	1	ND		10.0	0.628	04-Apr-13 17:43 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	0.749	04-Apr-13 17:43 JAM

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MDL denotes method detection limit

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205584 BLANK 1 **Project:** 20152235

Lab ID: 201077834

Prep Level: Water **Batch:** 205584

Method: Water GC/MS Semivolatile Organics

Prepared: 01-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
	3&4-Methylphenol	1	ND		10.0	0.948	04-Apr-13 17:43 JAM
88-74-4	2-Nitroaniline	1	ND		10.0	0.859	04-Apr-13 17:43 JAM
99-09-2	3-Nitroaniline	1	ND		10.0	0.877	04-Apr-13 17:43 JAM
100-01-6	4-Nitroaniline	1	ND		10.0	0.972	04-Apr-13 17:43 JAM
98-95-3	Nitrobenzene	1	ND		10.0	1.06	04-Apr-13 17:43 JAM
88-75-5	2-Nitrophenol	1	ND		10.0	0.772	04-Apr-13 17:43 JAM
100-02-7	4-Nitrophenol	1	ND		10.0	0.761	04-Apr-13 17:43 JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	0.919	04-Apr-13 17:43 JAM
86-30-6	N-Nitrosodiphenylamine	1	ND		10.0	0.715	04-Apr-13 17:43 JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		10.0	0.732	04-Apr-13 17:43 JAM
87-86-5	Pentachlorophenol	1	ND		10.0	0.860	04-Apr-13 17:43 JAM
108-95-2	Phenol	1	ND		10.0	0.773	04-Apr-13 17:43 JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	0.797	04-Apr-13 17:43 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		10.0	0.751	04-Apr-13 17:43 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	0.737	04-Apr-13 17:43 JAM

49 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Blank Results

Blank ID: 205649 BLANK 1 **Project:** 20152235

Lab ID: 201078038

Prep Level: Water **Batch:** 205649

Method: Water GC/MS Semivolatile Organics

Prepared: 02-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
83-32-9	Acenaphthene	1	ND		0.100	0.0520	02-Apr-13 16:48 JAM
208-96-8	Acenaphthylene	1	ND		0.100	0.0460	02-Apr-13 16:48 JAM
120-12-7	Anthracene	1	ND		0.100	0.0570	02-Apr-13 16:48 JAM
56-55-3	Benzo(a)anthracene	1	ND		0.100	0.0310	02-Apr-13 16:48 JAM
205-99-2	Benzo(b)fluoranthene	1	ND		0.100	0.0520	02-Apr-13 16:48 JAM
207-08-9	Benzo(k)fluoranthene	1	ND		0.100	0.0410	02-Apr-13 16:48 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		0.100	0.0200	02-Apr-13 16:48 JAM
50-32-8	Benzo(a)pyrene	1	ND		0.100	0.0410	02-Apr-13 16:48 JAM
218-01-9	Chrysene	1	ND		0.100	0.0250	02-Apr-13 16:48 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		0.100	0.0180	02-Apr-13 16:48 JAM
206-44-0	Fluoranthene	1	ND		0.100	0.0390	02-Apr-13 16:48 JAM
86-73-7	Fluorene	1	ND		0.100	0.0630	02-Apr-13 16:48 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		0.100	0.0180	02-Apr-13 16:48 JAM
91-57-6	2-Methylnaphthalene	1	ND		0.100	0.0780	02-Apr-13 16:48 JAM
91-20-3	Naphthalene	1	ND		0.100	0.0670	02-Apr-13 16:48 JAM
85-01-8	Phenanthrene	1	ND		0.100	0.0490	02-Apr-13 16:48 JAM
129-00-0	Pyrene	1	ND		0.100	0.0360	02-Apr-13 16:48 JAM

17 compound(s) reported

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Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205553 BLANK 1 **Project:** 20152235

Lab ID: 201077705

Prep Level: Water **Batch:** 205553

Method: Water GC/MS Volatile Organics

Prepared: 01-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
67-64-1	Acetone	1	ND		10.0	8.88	01-Apr-13 11:47 MHM
71-43-2	Benzene	1	ND		5.00	0.518	01-Apr-13 11:47 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469	01-Apr-13 11:47 MHM
75-25-2	Bromoform	1	ND		5.00	0.920	01-Apr-13 11:47 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855	01-Apr-13 11:47 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66	01-Apr-13 11:47 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530	01-Apr-13 11:47 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528	01-Apr-13 11:47 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662	01-Apr-13 11:47 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12	01-Apr-13 11:47 MHM
67-66-3	Chloroform	1	ND		5.00	0.853	01-Apr-13 11:47 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636	01-Apr-13 11:47 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34	01-Apr-13 11:47 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630	01-Apr-13 11:47 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477	01-Apr-13 11:47 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553	01-Apr-13 11:47 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565	01-Apr-13 11:47 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738	01-Apr-13 11:47 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557	01-Apr-13 11:47 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578	01-Apr-13 11:47 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738	01-Apr-13 11:47 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579	01-Apr-13 11:47 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454	01-Apr-13 11:47 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526	01-Apr-13 11:47 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292	01-Apr-13 11:47 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28	01-Apr-13 11:47 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405	01-Apr-13 11:47 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36	01-Apr-13 11:47 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44	01-Apr-13 11:47 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10	01-Apr-13 11:47 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687	01-Apr-13 11:47 MHM
100-42-5	Styrene	1	ND		5.00	0.571	01-Apr-13 11:47 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12	01-Apr-13 11:47 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679	01-Apr-13 11:47 MHM

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Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205553 BLANK 1 **Project:** 20152235

Lab ID: 201077705

Prep Level: Water **Batch:** 205553

Method: Water GC/MS Volatile Organics

Prepared: 01-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
108-88-3	Toluene	1	ND		5.00	0.536	01-Apr-13 11:47 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554	01-Apr-13 11:47 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915	01-Apr-13 11:47 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654	01-Apr-13 11:47 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575	01-Apr-13 11:47 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564	01-Apr-13 11:47 MHM
	m&p-Xylene	1	ND		5.00	0.937	01-Apr-13 11:47 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649	01-Apr-13 11:47 MHM

42 compound(s) reported

Protocol Blank 4/5/2013 19:27:01

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Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205553 BLANK 3 **Project:** 20152235

Lab ID: 201078418

Prep Level: Water **Batch:** 205553

Method: Water GC/MS Volatile Organics

Prepared: 03-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
67-64-1	Acetone	1	ND		10.0	8.88	03-Apr-13 10:58 MHM
71-43-2	Benzene	1	ND		5.00	0.518	03-Apr-13 10:58 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469	03-Apr-13 10:58 MHM
75-25-2	Bromoform	1	ND		5.00	0.920	03-Apr-13 10:58 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855	03-Apr-13 10:58 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66	03-Apr-13 10:58 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530	03-Apr-13 10:58 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528	03-Apr-13 10:58 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662	03-Apr-13 10:58 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12	03-Apr-13 10:58 MHM
67-66-3	Chloroform	1	ND		5.00	0.853	03-Apr-13 10:58 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636	03-Apr-13 10:58 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34	03-Apr-13 10:58 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630	03-Apr-13 10:58 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477	03-Apr-13 10:58 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553	03-Apr-13 10:58 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565	03-Apr-13 10:58 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738	03-Apr-13 10:58 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557	03-Apr-13 10:58 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578	03-Apr-13 10:58 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738	03-Apr-13 10:58 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579	03-Apr-13 10:58 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454	03-Apr-13 10:58 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526	03-Apr-13 10:58 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292	03-Apr-13 10:58 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28	03-Apr-13 10:58 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405	03-Apr-13 10:58 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36	03-Apr-13 10:58 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44	03-Apr-13 10:58 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10	03-Apr-13 10:58 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687	03-Apr-13 10:58 MHM
100-42-5	Styrene	1	ND		5.00	0.571	03-Apr-13 10:58 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12	03-Apr-13 10:58 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679	03-Apr-13 10:58 MHM

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Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205553 BLANK 3 **Project:** 20152235

Lab ID: 201078418

Prep Level: Water **Batch:** 205553

Method: Water GC/MS Volatile Organics

Prepared: 03-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
108-88-3	Toluene	1	ND		5.00	0.536	03-Apr-13 10:58 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554	03-Apr-13 10:58 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915	03-Apr-13 10:58 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654	03-Apr-13 10:58 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575	03-Apr-13 10:58 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564	03-Apr-13 10:58 MHM
	m&p-Xylene	1	ND		5.00	0.937	03-Apr-13 10:58 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649	03-Apr-13 10:58 MHM

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205650 BLANK 1 **Project:** 20152235

Lab ID: 201078042

Prep Level: Water **Batch:** 205650

Method: Water GC Semivolatile Organics

Prepared: 02-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Diesel Range Organics (C10-28)	1	ND		0.150	0.0760	03-Apr-13 23:25 SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.150	0.0490	03-Apr-13 23:25 SNP1

2 compound(s) reported

Protocol Blank 4/5/2013 19:27:01

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205389 BLANK 1 **Project:** 20152235

Lab ID: 201076896

Prep Level: Water **Batch:** 205389

Method: Water GC Volatile Organics

Prepared: 29-Mar-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Gasoline Range Organics(C6-10)	1	0.0235	J	0.0500	0.0212	29-Mar-13 10:35 DHR1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205493 BLANK 1 **Project:** 20152235

Lab ID: 201077373

Prep Level: Water **Batch:** 205493

Method: Water ICP Metals

Prepared: 29-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis	
7440-36-0	Antimony	1	ND		60.0	1.35	02-Apr-13 11:42	EJH
7440-38-2	Arsenic	1	ND		10.0	1.04	02-Apr-13 11:42	EJH
7440-41-7	Beryllium	1	ND		5.00	0.282	02-Apr-13 11:42	EJH
7440-43-9	Cadmium	1	ND		5.00	0.361	02-Apr-13 11:42	EJH
7440-47-3	Chromium	1	ND		10.0	2.00	02-Apr-13 11:42	EJH
7440-50-8	Copper	1	ND		10.0	2.76	02-Apr-13 11:42	EJH
7439-92-1	Lead	1	ND		5.00	1.15	02-Apr-13 11:42	EJH
7440-02-0	Nickel	1	ND		40.0	0.253	02-Apr-13 11:42	EJH
7782-49-2	Selenium	1	ND		35.0	14.3	02-Apr-13 11:42	EJH
7440-22-4	Silver	1	ND		10.0	0.579	02-Apr-13 11:42	EJH
7440-28-0	Thallium	1	ND		10.0	1.05	02-Apr-13 11:42	EJH
7440-66-6	Zinc	1	ND		20.0	3.52	02-Apr-13 11:42	EJH

12 compound(s) reported

Protocol Blank 4/5/2013 19:27:01

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205490 BLANK 1 **Project:** 20152235

Lab ID: 201077353

Prep Level: Water **Batch:** 205490

Method: Water Mercury

Prepared: 29-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
7439-97-6	Mercury	1	ND		0.200	0.0340	29-Mar-13 14:19 MHB1

1 compound(s) reported

Protocol Blank 4/5/2013 19:27:01

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152235

Value	Description
Q5	Insufficient sample was provided to perform matrix spike analyses on any sample in this analytical batch. Method performance for this analyte has been demonstrated by the laboratory control sample recovery.
J	This estimated value for the analyte is below the adjusted reporting limit but above the instrument reporting limit.
U	The analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
B	This analyte was detected in the method blank.
E	The sample concentration is above the linear calibrated range of the analysis.
LCS	Laboratory Control Sample.
MS(D)	Matrix Spike (Duplicate).
DUP	Sample Duplicate.
RPD	Relative Percent Difference.

Pace Analytical Services, In
1000 Riverbend Blvd. Suite F
St. Rose, LA 7008
(504) 469-033

Chains of Custody

20152235 20-CTEH

CHAIN-OF-CUSTODY / Analytical Requ

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be

Analytical

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: CTEH	Report To: Chase Ertzberger	Attention: CTEH
Address: 5120 Northshore Dr	Copy To: James McCormack(jmccormack@cteh.com	Address: 5120 Northshore Dr
N. Little Rock, AR 72118	40432samples@cteh.com	Pace Quote Reference:
Email To: Certzberger@cteh.com	Purchase Order No.:	Pace Project Manager: Karen Brown
Phone: 501-366-0394 Fax:	Project Name: Delek @ Magnolia, AR	Pace Profile #: 5831 / Line 1
Requested Due Date/TAT Normal 10 WD	Project Number: 40432	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: AR

Requested Analysis Filtered (Y/N)

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Y/N	Analysis Test: 8260	8270	8270-SIM (Low level)	Priority Pollutant List (6010)	TPH-GRO (8015)	TPH-DRO / ORO (8015)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MAAR0328SW0140	WT	G	—	—	3-28	1400		11	4		1	6					3	2	1	1	3	1		20l0773635
2	TB0100	1		—	—	—	—		2				2					2							7364
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									

Not Used 3-28-13 RS

Not Used 3-28-13 RS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Rich Shaver / CTEH	3-28-13	1730	UPS	3-28-13	1739	
	UPS	3-29	0800		3-29-13	0800	1.9 Y Y Y

SAMPLER NAME AND SIGNATURE	Rich Shaver
PRINT Name of SAMPLER:	Rich Shaver
SIGNATURE of SAMPLER:	DATE Signed (MM/DD/YY): 3-28-13

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.06, 2-Feb-2007

20152235 20-CTEH

Pace Analytical

Sample Cond

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Courier: ☐ Pace Courier ☐ Hired Courier ☐ Fed X ☒ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC] F.O. **Custody Seals Intact:** ☐Yes ☐No

Therometer Used:	☐ Therm Fisher IR 5 ☒ Therm Fisher IR 6 ☐ Therm Fisher IR 7

Type of Ice: Wet Blue None Samples on ice: [see COC]

Cooler Temperature: [see COC] Temp should be above freezing to 6°C

Date and Initials of person examining contents: KMR 3/29/13

Temp must be measured from Temperature blank when present

		Comments:
Temperature Blank Present"?	☐Yes ☒No ☐N/A	1
Chain of Custody Present:	☒Yes ☐No ☐N/A	2
Chain of Custody Complete:	☒Yes ☐No ☐N/A	3
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	4
Sampler Name & Signature on COC:	☒Yes ☐No ☐N/A	5
Samples Arrived within Hold Time:	☒Yes ☐No ☐N/A	6
Sufficient Volume:	☒Yes ☐No ☐N/A	7
Correct Containers Used:	☒Yes ☐No ☐N/A	8
Filtered vol. Rec. for Diss. tests	☐Yes ☐No ☒N/A	9
Sample Labels match COC:	☒Yes ☐No ☐N/A	10
All containers received within manafacture's precautionary and/or expiration dates.	☒Yes ☐No ☐N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☒Yes ☐No ☐N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	☒Yes ☐No ☐N/A	13 If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐Yes ☒No ☐N/A	14
Trip Blank Present:	☒Yes ☐No	15

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: Coll. Date of 3/28/13 used to log T:B010 in

ALLC003rev.08, 15Feb2013 SCUR Form - mod

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

April 05, 2013

James McCormack
CTEH
5120 North Shore Drive
North Little Rock, AR 72118

RE: Project 20152272
Project ID: Magnolia, AR

Dear James McCormack:

Enclosed are the analytical results for sample(s) received by the laboratory on March 30, 2013. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Karen Brown
karen.brown@pacelabs.com

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

Laboratory Certifications

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152272

Client: CTEH

Project ID: Magnolia, AR

Washington Department of Ecology C2078
Oregon Environmental Laboratory Accreditation - LA200001
U.S. Dept. of Agriculture Foreign Soil Import P330-10-00119
Pennsylvania Dept. of Env Protection (NELAC) 68-04202
Texas Commission on Env. Quality (NELAC) T104704405-09-TX
Kansas Department of Health and Environment (NELAC) E-10266
Florida Department of Health (NELAC) E87595
Oklahoma Department of Environmental Quality - 2010-139
Illinois Environmental Protection Agency - 0025721
California Env. Lab Accreditation Program Branch - 11277CA
Louisiana Dept. of Environmental Quality (NELAC/LELAP) 02006

4/5/2013 19:08:44

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Cross Reference

Project: 20152272

Client: CTEH

Project ID: Magnolia, AR

Client Sample ID	Lab ID	Matrix	Collection Date/Time	Received Date/Time
MAAR0329SW015A	201077658	Water	29-Mar-13 09:00	30-Mar-13 08:30
TB011	201077659	Water	29-Mar-13 00:00	30-Mar-13 08:30

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152272

Sample Receipt Condition:

All samples were received in accordance with EPA protocol.

Holding Times:

All holding times were met.

Blanks:

All blank results were below reporting limits.

Laboratory Control Samples:

All LCS recoveries were within QC limits.

Matrix Spikes and Duplicates:

All MS/MSD recoveries or duplicate RPDs were within QC limits.

Surrogates:

All surrogate recoveries were within QC limits.

QC Cross Reference

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152272

Analytical Method	Batch	Sample used for QC
EPA 8015/8021	205443	Batch sample from another client
EPA 6010	205543	Batch sample from another client
EPA 7470	205646	Project sample MAAR0329SW015A
EPA 8270	205649	Batch sample from another client
EPA 8260	205553	Client sample MAAR0328SW014A from project 20152235

For the sample used as the original for the DUP or MS/MSD for the batch:

Project sample means a sample from this project was used.
Client sample means a sample from the same client but in a different project was used.
Batch sample means a sample from a different client was used.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0329SW015A
Project: 20152272
Project ID: Magnolia, AR
Site: None
Lab ID: 201077658
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205649
Method: EPA 8270
GCMS SVOAs SIM Water
Collected: 29-Mar-13
Received: 30-Mar-13
Prepared: 02-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
83-32-9	Acenaphthene	1	ND		0.100	0.0520		02-Apr-13 20:24 JAM
208-96-8	Acenaphthylene	1	ND		0.100	0.0460		02-Apr-13 20:24 JAM
120-12-7	Anthracene	1	ND		0.100	0.0570		02-Apr-13 20:24 JAM
56-55-3	Benzo(a)anthracene	1	ND		0.100	0.0310		02-Apr-13 20:24 JAM
205-99-2	Benzo(b)fluoranthene	1	ND		0.100	0.0520		02-Apr-13 20:24 JAM
207-08-9	Benzo(k)fluoranthene	1	ND		0.100	0.0410		02-Apr-13 20:24 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		0.100	0.0200		02-Apr-13 20:24 JAM
50-32-8	Benzo(a)pyrene	1	ND		0.100	0.0410		02-Apr-13 20:24 JAM
218-01-9	Chrysene	1	ND		0.100	0.0250		02-Apr-13 20:24 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		0.100	0.0180		02-Apr-13 20:24 JAM
206-44-0	Fluoranthene	1	ND		0.100	0.0390		02-Apr-13 20:24 JAM
86-73-7	Fluorene	1	ND		0.100	0.0630		02-Apr-13 20:24 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		0.100	0.0180		02-Apr-13 20:24 JAM
91-57-6	2-Methylnaphthalene	1	ND		0.100	0.0780		02-Apr-13 20:24 JAM
91-20-3	Naphthalene	1	ND		0.100	0.0670		02-Apr-13 20:24 JAM
85-01-8	Phenanthrene	1	ND		0.100	0.0490		02-Apr-13 20:24 JAM
129-00-0	Pyrene	1	ND		0.100	0.0360		02-Apr-13 20:24 JAM

17 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0329SW015A
Project: 20152272
Project ID: Magnolia, AR
Site: None
Lab ID: 201077658
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205770
Method: EPA 8270
GCMS SVOAs Water
Collected: 29-Mar-13
Received: 30-Mar-13
Prepared: 03-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
65-85-0	Benzoic acid	1	ND		25.0	1.56		04-Apr-13 13:25 JAM
100-51-6	Benzyl alcohol	1	ND		10.0	0.959		04-Apr-13 13:25 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND		10.0	0.541		04-Apr-13 13:25 JAM
85-68-7	Butylbenzylphthalate	1	ND		10.0	0.825		04-Apr-13 13:25 JAM
86-74-8	Carbazole	1	ND		10.0	0.932		04-Apr-13 13:25 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND		10.0	0.812		04-Apr-13 13:25 JAM
106-47-8	3&4-Chloroaniline	1	ND		10.0	1.22		04-Apr-13 13:25 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	0.789		04-Apr-13 13:25 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	0.804		04-Apr-13 13:25 JAM
91-58-7	2-Chloronaphthalene	1	ND		10.0	0.713		04-Apr-13 13:25 JAM
95-57-8	2-Chlorophenol	1	ND		10.0	0.716		04-Apr-13 13:25 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND		10.0	0.638		04-Apr-13 13:25 JAM
132-64-9	Dibenzofuran	1	ND		10.0	0.576		04-Apr-13 13:25 JAM
95-50-1	1,2-Dichlorobenzene	1	ND		10.0	0.867		04-Apr-13 13:25 JAM
541-73-1	1,3-Dichlorobenzene	1	ND		10.0	0.832		04-Apr-13 13:25 JAM
106-46-7	1,4-Dichlorobenzene	1	ND		10.0	0.652		04-Apr-13 13:25 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND		10.0	0.781		04-Apr-13 13:25 JAM
120-83-2	2,4-Dichlorophenol	1	ND		10.0	0.783		04-Apr-13 13:25 JAM
84-66-2	Diethylphthalate	1	ND		10.0	0.607		04-Apr-13 13:25 JAM
105-67-9	2,4-Dimethylphenol	1	ND		10.0	0.781		04-Apr-13 13:25 JAM
131-11-3	Dimethylphthalate	1	ND		10.0	0.594		04-Apr-13 13:25 JAM
84-74-2	Di-n-butylphthalate	1	ND		10.0	0.651		04-Apr-13 13:25 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		10.0	1.02		04-Apr-13 13:25 JAM
51-28-5	2,4-Dinitrophenol	1	ND		10.0	0.470		04-Apr-13 13:25 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	0.741		04-Apr-13 13:25 JAM
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	0.780		04-Apr-13 13:25 JAM
117-84-0	Di-n-octylphthalate	1	ND		10.0	0.781		04-Apr-13 13:25 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	0.930		04-Apr-13 13:25 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		10.0	0.759		04-Apr-13 13:25 JAM
118-74-1	Hexachlorobenzene	1	ND		10.0	0.681		04-Apr-13 13:25 JAM
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	0.347		04-Apr-13 13:25 JAM
67-72-1	Hexachloroethane	1	ND		10.0	0.987		04-Apr-13 13:25 JAM
78-59-1	Isophorone	1	ND		10.0	0.628		04-Apr-13 13:25 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	0.749		04-Apr-13 13:25 JAM

Protocol 4/5/2013 19:10:05

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0329SW015A
Project: 20152272
Project ID: Magnolia, AR
Site: None
Lab ID: 201077658
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205770
Method: EPA 8270
GCMS SVOAs Water
Collected: 29-Mar-13
Received: 30-Mar-13
Prepared: 03-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
	3&4-Methylphenol	1	ND		10.0	0.948		04-Apr-13 13:25 JAM
88-74-4	2-Nitroaniline	1	ND		10.0	0.859		04-Apr-13 13:25 JAM
99-09-2	3-Nitroaniline	1	ND		10.0	0.877		04-Apr-13 13:25 JAM
100-01-6	4-Nitroaniline	1	ND		10.0	0.972		04-Apr-13 13:25 JAM
98-95-3	Nitrobenzene	1	ND		10.0	1.06		04-Apr-13 13:25 JAM
88-75-5	2-Nitrophenol	1	ND		10.0	0.772		04-Apr-13 13:25 JAM
100-02-7	4-Nitrophenol	1	ND		10.0	0.761		04-Apr-13 13:25 JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	0.919		04-Apr-13 13:25 JAM
86-30-6	N-Nitrosodiphenylamine	1	ND		10.0	0.715		04-Apr-13 13:25 JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		10.0	0.732		04-Apr-13 13:25 JAM
87-86-5	Pentachlorophenol	1	ND		10.0	0.860		04-Apr-13 13:25 JAM
108-95-2	Phenol	1	ND		10.0	0.773		04-Apr-13 13:25 JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	0.797		04-Apr-13 13:25 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		10.0	0.751		04-Apr-13 13:25 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	0.737		04-Apr-13 13:25 JAM

49 compound(s) reported

Protocol 4/5/2013 19:10:05

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0329SW015A
Project: 20152272
Project ID: Magnolia, AR
Site: None
Lab ID: 201077658
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205553
Method: EPA 8260
GCMS VOAs Water
Collected: 29-Mar-13
Received: 30-Mar-13
Prepared: 03-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	8.88		03-Apr-13 12:20 MHM
71-43-2	Benzene	1	ND		5.00	0.518		03-Apr-13 12:20 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		03-Apr-13 12:20 MHM
75-25-2	Bromoform	1	ND		5.00	0.920		03-Apr-13 12:20 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855		03-Apr-13 12:20 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		03-Apr-13 12:20 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530		03-Apr-13 12:20 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		03-Apr-13 12:20 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662		03-Apr-13 12:20 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12		03-Apr-13 12:20 MHM
67-66-3	Chloroform	1	ND		5.00	0.853		03-Apr-13 12:20 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636		03-Apr-13 12:20 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		03-Apr-13 12:20 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		03-Apr-13 12:20 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		03-Apr-13 12:20 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		03-Apr-13 12:20 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565		03-Apr-13 12:20 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		03-Apr-13 12:20 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		03-Apr-13 12:20 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		03-Apr-13 12:20 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		03-Apr-13 12:20 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		03-Apr-13 12:20 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		03-Apr-13 12:20 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		03-Apr-13 12:20 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292		03-Apr-13 12:20 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28		03-Apr-13 12:20 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405		03-Apr-13 12:20 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36		03-Apr-13 12:20 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44		03-Apr-13 12:20 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		03-Apr-13 12:20 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		03-Apr-13 12:20 MHM
100-42-5	Styrene	1	ND		5.00	0.571		03-Apr-13 12:20 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		03-Apr-13 12:20 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		03-Apr-13 12:20 MHM

Protocol 4/5/2013 19:10:05

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0329SW015A
Project ID: Magnolia, AR
Lab ID: 201077658
Description: None
Method: EPA 8260
GCMS VOAs Water

Project: 20152272
Site: None
Matrix: Water
% Moisture: n/a
Prep Level: Water
Batch: 205553
Collected: 29-Mar-13
Received: 30-Mar-13
Prepared: 03-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	ND		5.00	0.536		03-Apr-13 12:20 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		03-Apr-13 12:20 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915		03-Apr-13 12:20 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654		03-Apr-13 12:20 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575		03-Apr-13 12:20 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564		03-Apr-13 12:20 MHM
	m&p-Xylene	1	ND		5.00	0.937		03-Apr-13 12:20 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649		03-Apr-13 12:20 MHM

42 compound(s) reported

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0329SW015A
Project: 20152272
Project ID: Magnolia, AR
Site: None
Lab ID: 201077658
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205650
Method: EPA 8015 Mod Ext
8015 TPH Extractables Water
Collected: 29-Mar-13
Received: 30-Mar-13
Prepared: 02-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
none	Diesel Range Organics (C10-28)	1	ND		0.250	0.0760		04-Apr-13 04:31	SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.500	0.0490		04-Apr-13 04:31	SNP1

2 compound(s) reported

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0329SW015A
Project: 20152272
Project ID: Magnolia, AR
Site: None
Lab ID: 201077658
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205443
Method: EPA 8015/8021
8015/8021 Water
Collected: 29-Mar-13
Received: 30-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
none	Gasoline Range Organics(C6-10)	1	0.0282	J	0.0500	0.0212		01-Apr-13 18:31	DHR1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0329SW015A
Project ID: Magnolia, AR
Lab ID: 201077658
Description: None
Method: EPA 6010
Metals, ICP, Water

Project: 20152272
Site: None
Matrix: Water **% Moisture:** n/a
Prep Level: Water **Batch:** 205543

Collected: 29-Mar-13 **Received:** 30-Mar-13
Prepared: 01-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
7440-36-0	Antimony	1	ND		60.0	1.35		02-Apr-13 11:39	EJH
7440-38-2	Arsenic	1	ND		10.0	1.04		02-Apr-13 11:39	EJH
7440-41-7	Beryllium	1	0.531	J	5.00	0.282		02-Apr-13 11:39	EJH
7440-43-9	Cadmium	1	ND		5.00	0.361		02-Apr-13 11:39	EJH
7440-47-3	Chromium	1	ND		10.0	2.00		02-Apr-13 11:39	EJH
7440-50-8	Copper	1	ND		10.0	2.76		02-Apr-13 11:39	EJH
7439-92-1	Lead	1	2.90	J	5.00	1.15		02-Apr-13 11:39	EJH
7440-02-0	Nickel	1	6.71	J	40.0	0.253		02-Apr-13 11:39	EJH
7782-49-2	Selenium	1	ND		35.0	14.3		02-Apr-13 11:39	EJH
7440-22-4	Silver	1	ND		10.0	0.579		02-Apr-13 11:39	EJH
7440-28-0	Thallium	1	ND		10.0	1.05		02-Apr-13 11:39	EJH
7440-66-6	Zinc	1	14.8	J	20.0	3.52		02-Apr-13 11:39	EJH

12 compound(s) reported

Protocol 4/5/2013 19:10:06

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0329SW015A
Project ID: Magnolia, AR
Lab ID: 201077658
Description: None
Method: EPA 7470
Mercury Water

Project: 20152272
Site: None
Matrix: Water
% Moisture: n/a
Prep Level: Water
Batch: 205646
Collected: 29-Mar-13
Received: 30-Mar-13
Prepared: 02-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
7439-97-6	Mercury	1	ND		0.200	0.0340		03-Apr-13 09:32	EJH

1 compound(s) reported

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Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: TB011
Project: 20152272
Project ID: Magnolia, AR
Site: None
Lab ID: 201077659
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205553
Method: EPA 8260
GCMS VOAs Water
Collected: 29-Mar-13
Received: 30-Mar-13
Prepared: 01-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	8.88		01-Apr-13 14:08 MHM
71-43-2	Benzene	1	ND		5.00	0.518		01-Apr-13 14:08 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		01-Apr-13 14:08 MHM
75-25-2	Bromoform	1	ND		5.00	0.920		01-Apr-13 14:08 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855		01-Apr-13 14:08 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		01-Apr-13 14:08 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530		01-Apr-13 14:08 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		01-Apr-13 14:08 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662		01-Apr-13 14:08 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12		01-Apr-13 14:08 MHM
67-66-3	Chloroform	1	ND		5.00	0.853		01-Apr-13 14:08 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636		01-Apr-13 14:08 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		01-Apr-13 14:08 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		01-Apr-13 14:08 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		01-Apr-13 14:08 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		01-Apr-13 14:08 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565		01-Apr-13 14:08 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		01-Apr-13 14:08 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		01-Apr-13 14:08 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		01-Apr-13 14:08 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		01-Apr-13 14:08 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		01-Apr-13 14:08 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		01-Apr-13 14:08 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		01-Apr-13 14:08 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292		01-Apr-13 14:08 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28		01-Apr-13 14:08 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405		01-Apr-13 14:08 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36		01-Apr-13 14:08 MHM
75-09-2	Methylene chloride	1	3.75	J	5.00	1.44		01-Apr-13 14:08 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		01-Apr-13 14:08 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		01-Apr-13 14:08 MHM
100-42-5	Styrene	1	ND		5.00	0.571		01-Apr-13 14:08 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		01-Apr-13 14:08 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		01-Apr-13 14:08 MHM

Protocol 4/5/2013 19:10:06

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: TB011
Project ID: Magnolia, AR
Lab ID: 201077659
Description: None
Method: EPA 8260
GCMS VOAs Water

Project: 20152272
Site: None
Matrix: Water **% Moisture:** n/a
Prep Level: Water **Batch:** 205553
Collected: 29-Mar-13 **Received:** 30-Mar-13
Prepared: 01-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	ND		5.00	0.536		01-Apr-13 14:08 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		01-Apr-13 14:08 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915		01-Apr-13 14:08 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654		01-Apr-13 14:08 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575		01-Apr-13 14:08 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564		01-Apr-13 14:08 MHM
	m&p-Xylene	1	ND		5.00	0.937		01-Apr-13 14:08 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649		01-Apr-13 14:08 MHM

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Surrogate Recovery

Batch: 205649 **Project:** 20152272

Method: Water GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201078038	205649 BLANK 1		66	60						
201078039	205649 LCS 1		74	77						
201077658	MAAR0329SW015A		62	58						
201078040	MW-3 MS 1		90	74						
201078041	MW-3 MSD 1		78	61						
	QC limits:		12-110	25-113						

Sur 1: 2-Fluorobiphenyl (S)
Sur 2: Terphenyl-d14 (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Surrogate Recovery

Batch: 205770 **Project:** 20152272

Method: Water GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201078458	205770 BLANK 1		81	86	77	92	76	102		
201078459	205770 LCS 1		86	88	79	78	82	99		
201077658	MAAR0329SW015A		71	76	69	80	67	82		
QC limits:			25-145	34-117	10-118	33-120	15-134	24-133		

Sur 1: 2,4,6-Tribromophenol (S)
Sur 2: 2-Fluorobiphenyl (S)
Sur 3: 2-Fluorophenol (S)
Sur 4: Nitrobenzene-d5 (S)
Sur 5: Phenol-d5 (S)
Sur 6: Terphenyl-d14 (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Surrogate Recovery

Batch: 205553 **Project:** 20152272

Method: Water GC/MS Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201077705	205553 BLANK 1		90	96	93					
201078146	205553 BLANK 2		85	98	85					
201078418	205553 BLANK 3		85	99	88					
201077706	205553 LCS 1		98	95	98					
201078147	205553 LCS 2		91	100	92					
201078419	205553 LCS 3		92	98	92					
201077707	MAAR0328SW014A MS 1		94	94	97					
201077708	MAAR0328SW014A MSD 1		97	99	102					
201077658	MAAR0329SW015A		84	95	89					
201077659	TB011		91	90	90					
	QC limits:		68-124	72-126	79-119					

Sur 1: 4-Bromofluorobenzene (S)
Sur 2: Dibromofluoromethane (S)
Sur 3: Toluene-d8 (S)

*** denotes surrogate recovery outside of QC limits.**
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Surrogate Recovery

Batch: 205650 **Project:** 20152272

Method: Water GC Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201078042	205650 BLANK 1		79	73						
201078043	205650 LCS 1		69	64						
201077658	MAAR0329SW015A		39	75						
	QC limits:		16-137	10-121						

Sur 1: n-Pentacosane (S)
Sur 2: o-Terphenyl (S)

*** denotes surrogate recovery outside of QC limits.**
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Surrogate Recovery

Batch: 205443 **Project:** 20152272

Method: Water GC Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201077161	205443 BLANK 1		102							
201077836	205443 BLANK 2		102							
201077162	205443 LCS 1		105							
201077837	205443 LCS 2		107							
201077658	MAAR0329SW015A		104							
201077163	MW-3 MS 1		110							
201077164	MW-3 MSD 1		107							
	QC limits:		60-129							

Sur 1: 4-Bromofluorobenzene (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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(504) 469-0333

Batch: 205649 **Project:** 20152272 **LCS:** 201078039 02-Apr-13 17:09

Method: Water GC/MS Semivolatile Organics **MS:** 201078040 02-Apr-13 18:36

Units: ug/L **MSD:** 201078041 02-Apr-13 18:57

Original for MS: Batch Sample 201076977

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acenaphthene	2.00	1.49	75	2.00		1.79	1.70	90	85	5	39-115	10-131	20	
Acenaphthylene	2.00	1.06	53	2.00		1.50	1.40	75	70	7	30-115	10-131	20	
Anthracene	2.00	1.10	55	2.00		1.99	1.84	100	92	8	34-115	10-139	20	
Benzo(a)anthracene	2.00	1.43	72	2.00		1.48	1.28	74	64	14	33-115	12-115	20	
Benzo(b)fluoranthene	2.00	1.69	85	2.00		1.39	1.18	70	59	16	30-115	10-119	20	
Benzo(k)fluoranthene	2.00	1.60	80	2.00		1.13	1.04	57	52	8	31-115	10-122	20	
Benzo(g,h,i)perylene	2.00	1.66	83	2.00		1.11	0.940	56	47	17	27-115	10-123	20	
Benzo(a)pyrene	2.00	1.08	54	2.00		1.18	1.04	59	52	13	28-115	10-115	20	
Chrysene	2.00	1.22	61	2.00		1.28	1.09	64	55	16	36-115	10-116	20	
Dibenz(a,h)anthracene	2.00	1.58	79	2.00		1.17	0.970	59	49	19	23-115	10-128	20	
Fluoranthene	2.00	1.54	77	2.00		1.78	1.78	89	89	0	39-115	10-136	20	
Fluorene	2.00	1.48	74	2.00		1.77	1.72	89	86	3	38-115	10-129	20	
Indeno(1,2,3-cd)pyrene	2.00	1.64	82	2.00		1.25	1.03	63	52	19	28-115	10-124	20	
2-Methylnaphthalene	2.00	1.46	73	2.00	0.220	1.89	1.85	84	82	2	31-115	11-125	20	
Naphthalene	2.00	1.54	77	2.00	0.360	2.03	2.02	84	83	0	40-115	14-124	20	
Phenanthrene	2.00	1.49	75	2.00		1.88	1.77	94	89	6	38-115	10-130	20	
Pyrene	2.00	1.49	75	2.00		1.77	1.63	89	82	8	33-115	10-120	20	

17 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205770 **Project:** 20152272 **LCS:** 201078459 04-Apr-13 11:17

Method: Water GC/MS Semivolatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Benzoic acid	50.0	28.0	56								10-130			Q5
Benzyl alcohol	50.0	39.6	79								44-120			Q5
4-Bromophenylphenyl ether	50.0	40.8	82								49-120			Q5
Butylbenzylphthalate	50.0	38.2	76								46-120			Q5
Carbazole	50.0	45.3	91								51-127			Q5
4-Chloro-3-methylphenol	50.0	37.1	74								43-115			Q5
3&4-Chloroaniline	50.0	30.8	62								10-130			Q5
bis(2-Chloroethoxy)methane	50.0	35.6	71								43-115			Q5
bis(2-Chloroethyl) ether	50.0	40.9	82								47-115			Q5
2-Chloronaphthalene	50.0	41.6	83								52-115			Q5
2-Chlorophenol	50.0	43.8	88								48-115			Q5
4-Chlorophenylphenyl ether	50.0	41.2	82								52-116			Q5
Dibenzofuran	50.0	42.0	84								53-115			Q5
1,2-Dichlorobenzene	50.0	40.6	81								42-115			Q5
1,3-Dichlorobenzene	50.0	40.6	81								40-115			Q5
1,4-Dichlorobenzene	50.0	40.6	81								41-115			Q5
3,3'-Dichlorobenzidine	50.0	36.6	73								16-142			Q5
2,4-Dichlorophenol	50.0	38.6	77								45-115			Q5
Diethylphthalate	50.0	38.9	78								49-120			Q5
2,4-Dimethylphenol	50.0	38.1	76								23-116			Q5
Dimethylphthalate	50.0	38.0	76								52-115			Q5
Di-n-butylphthalate	50.0	37.4	75								50-117			Q5
4,6-Dinitro-2-methylphenol	50.0	41.1	82								44-122			Q5
2,4-Dinitrophenol	50.0	29.4	59								16-134			Q5
2,4-Dinitrotoluene	50.0	39.9	80								50-118			Q5
2,6-Dinitrotoluene	50.0	41.4	83								55-115			Q5
Di-n-octylphthalate	50.0	37.6	75								40-129			Q5
bis(2-Ethylhexyl)phthalate	50.0	40.4	81								46-124			Q5
Hexachloro-1,3-butadiene	50.0	38.9	78								32-115			Q5
Hexachlorobenzene	50.0	41.2	82								53-115			Q5
Hexachlorocyclopentadiene	50.0	35.4	71								10-115			Q5
Hexachloroethane	50.0	39.0	78								36-115			Q5
Isophorone	50.0	37.0	74								45-115			Q5
2-Methylphenol (o-Cresol)	50.0	44.0	88								46-115			Q5
3&4-Methylphenol	50.0	41.0	82								46-115			Q5
2-Nitroaniline	50.0	41.4	83								48-121			Q5
3-Nitroaniline	50.0	40.0	80								38-125			Q5
4-Nitroaniline	50.0	39.8	80								37-132			Q5
Nitrobenzene	50.0	37.0	74								44-118			Q5
2-Nitrophenol	50.0	39.6	79								45-115			Q5
4-Nitrophenol	50.0	33.0	66								29-134			Q5

QC Protocol 4/5/2013 19:10:09

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205770 **Project:** 20152272 **LCS:** 201078459 04-Apr-13 11:17

Method: Water GC/MS Semivolatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
N-Nitroso-di-n-propylamine	50.0	39.8	80								45-119			Q5
N-Nitrosodiphenylamine	50.0	49.3	99								42-134			Q5
2,2'-Oxybis(1-chloropropane)	50.0	44.2	88								40-120			Q5
Pentachlorophenol	50.0	38.6	77								34-124			Q5
Phenol	50.0	42.1	84								44-115			Q5
1,2,4-Trichlorobenzene	50.0	37.2	74								40-115			Q5
2,4,5-Trichlorophenol	50.0	42.7	86								49-115			Q5
2,4,6-Trichlorophenol	50.0	43.6	87								48-115			Q5

49 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205553 **Project:** 20152272 **LCS:** 201077706 01-Apr-13 12:07

Method: Water GC/MS Volatile Organics **MS:** 201077707 01-Apr-13 12:48

Units: ug/L **MSD:** 201077708 01-Apr-13 13:08

Original for MS: Batch Sample 201077363

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acetone	50.0	61.0	122	50.0		56.2	60.1	113	120	7	10-198	10-202	20	
Benzene	50.0	48.8	98	50.0	0.710	47.9	49.0	94	97	2	68-129	60-138	20	
Bromodichloromethane	50.0	50.1	100	50.0		47.5	48.9	95	98	3	68-132	66-137	20	
Bromoform	50.0	56.2	112	50.0		50.9	51.8	101	103	2	56-153	53-156	20	
Bromomethane	50.0	55.8	112	50.0		55.5	53.2	111	107	4	47-149	43-151	20	
2-Butanone (MEK)	50.0	58.1	116	50.0		49.9	54.5	100	109	9	18-173	14-184	20	
Carbon disulfide	50.0	53.6	107	50.0		52.4	55.9	105	112	6	25-166	17-176	20	
Carbon tetrachloride	50.0	50.9	102	50.0		50.1	51.8	100	104	3	56-146	51-151	20	
Chlorobenzene	50.0	52.0	104	50.0		51.1	52.0	102	104	2	74-131	71-135	20	
Chloroethane	50.0	53.5	107	50.0		40.8	49.9	82	100	20	28-190	21-191	20	
Chloroform	50.0	48.5	97	50.0		47.6	49.8	95	100	4	71-132	67-138	20	
Chloromethane	50.0	56.4	113	50.0		57.2	60.8	115	122	6	27-154	24-158	20	
1,2-Dibromo-3-chloropropane	50.0	52.5	105	50.0		49.6	49.3	99	99	1	40-155	38-162	20	
Dibromochloromethane	50.0	53.3	107	50.0		50.0	51.9	100	104	4	64-138	62-142	20	
1,2-Dibromoethane (EDB)	50.0	53.1	106	50.0		48.1	51.3	96	103	6	62-146	61-149	20	
Dichlorodifluoromethane	50.0	64.7	129	50.0		64.9	67.0	130	134	3	18-173	16-176	20	
1,1-Dichloroethane	50.0	47.2	94	50.0		46.6	49.9	93	100	7	63-135	61-141	20	
1,2-Dichloroethane	50.0	51.2	102	50.0		48.7	51.2	98	103	5	58-150	57-155	20	
1,1-Dichloroethene	50.0	53.1	106	50.0		51.3	55.2	103	110	7	50-151	40-163	20	
cis-1,2-Dichloroethene	50.0	52.3	105	50.0		49.7	53.1	99	106	7	65-132	61-138	20	
trans-1,2-Dichloroethene	50.0	52.8	106	50.0		51.9	53.5	104	107	3	56-137	52-144	20	
1,2-Dichloropropane	50.0	48.9	98	50.0		49.4	51.0	99	102	3	66-131	64-137	20	
cis-1,3-Dichloropropene	50.0	46.1	92	50.0		46.3	47.8	93	96	3	66-135	62-137	20	
trans-1,3-Dichloropropene	50.0	52.9	106	50.0		49.4	51.6	99	103	4	62-146	59-151	20	
Ethylbenzene	50.0	48.0	96	50.0	0.540	48.6	48.4	96	96	0	73-129	66-136	20	
2-Hexanone	50.0	52.6	105	50.0		46.5	49.6	93	99	7	29-158	27-165	20	
Isopropylbenzene (Cumene)	50.0	47.9	96	50.0		47.1	48.1	94	96	2	61-139	58-144	20	
Methylene chloride	50.0	62.2	124	50.0	4.52	59.0	63.6	109	118	7	41-171	35-165	20	
4-Methyl-2-pentanone (MIBK	50.0	56.5	113	50.0		51.8	52.2	104	105	1	46-159	43-165	20	
Methyl-tert-butyl ether	50.0	54.6	109	50.0		50.4	53.6	101	107	6	51-155	48-164	20	
Styrene	50.0	50.0	100	50.0		48.0	49.1	96	98	2	74-132	63-141	20	
1,1,2,2-Tetrachloroethane	50.0	49.7	99	50.0		45.6	47.0	91	94	3	46-153	41-160	20	
Tetrachloroethene	50.0	50.2	100	50.0		49.2	50.2	98	100	2	57-151	48-160	20	
Toluene	50.0	48.5	97	50.0	0.830	47.3	49.8	93	98	5	70-130	62-137	20	
1,1,1-Trichloroethane	50.0	51.3	103	50.0		50.6	51.8	101	104	2	65-132	61-138	20	
1,1,2-Trichloroethane	50.0	54.6	109	50.0		48.9	51.4	98	103	5	64-140	63-145	20	
Trichloroethene	50.0	48.4	97	50.0		46.6	48.5	93	97	4	71-131	62-142	20	
Trichlorofluoromethane	50.0	60.6	121	50.0		57.5	58.2	115	116	1	37-188	19-196	20	
Vinyl chloride	50.0	43.3	87	50.0		43.9	46.9	88	94	6	42-148	35-153	20	
m&p-Xylene	100.	99.1	99	100.		98.4	99.4	98	99	1	71-132	64-138	20	
o-Xylene	50.0	48.1	96	50.0	0.690	48.4	49.0	96	97	1	69-129	63-136	20	

QC Protocol 4/5/2013 19:10:09

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205553 **Project:** 20152272 **LCS:** 201077706 01-Apr-13 12:07

Method: Water GC/MS Volatile Organics **MS:** 201077707 01-Apr-13 12:48

Units: ug/L **MSD:** 201077708 01-Apr-13 13:08

Original for MS: Batch Sample 201077363

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu

41 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205553 **Project:** 20152272 **LCS:** 201078419 03-Apr-13 11:19

Method: Water GC/MS Volatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acetone	50.0	56.7	113								10-198			
Benzene	50.0	46.5	93								68-129			
Bromodichloromethane	50.0	47.7	95								68-132			
Bromoform	50.0	52.2	104								56-153			
Bromomethane	50.0	66.6	133								47-149			
2-Butanone (MEK)	50.0	58.1	116								18-173			
Carbon disulfide	50.0	56.9	114								25-166			
Carbon tetrachloride	50.0	45.2	90								56-146			
Chlorobenzene	50.0	50.8	102								74-131			
Chloroethane	50.0	71.5	143								28-190			
Chloroform	50.0	50.0	100								71-132			
Chloromethane	50.0	57.4	115								27-154			
1,2-Dibromo-3-chloropropane	50.0	46.1	92								40-155			
Dibromochloromethane	50.0	51.2	102								64-138			
1,2-Dibromoethane (EDB)	50.0	49.7	99								62-146			
Dichlorodifluoromethane	50.0	53.9	108								18-173			
1,1-Dichloroethane	50.0	49.6	99								63-135			
1,2-Dichloroethane	50.0	46.9	94								58-150			
1,1-Dichloroethene	50.0	53.7	107								50-151			
cis-1,2-Dichloroethene	50.0	52.9	106								65-132			
trans-1,2-Dichloroethene	50.0	54.1	108								56-137			
1,2-Dichloropropane	50.0	48.9	98								66-131			
cis-1,3-Dichloropropene	50.0	45.5	91								66-135			
trans-1,3-Dichloropropene	50.0	50.5	101								62-146			
Ethylbenzene	50.0	46.4	93								73-129			
2-Hexanone	50.0	47.6	95								29-158			
Isopropylbenzene (Cumene)	50.0	45.4	91								61-139			
Methylene chloride	50.0	59.5	119								41-171			
4-Methyl-2-pentanone (MIBK	50.0	53.6	107								46-159			
Methyl-tert-butyl ether	50.0	53.9	108								51-155			
Styrene	50.0	47.5	95								74-132			
1,1,2,2-Tetrachloroethane	50.0	47.0	94								46-153			
Tetrachloroethene	50.0	48.6	97								57-151			
Toluene	50.0	46.5	93								70-130			
1,1,1-Trichloroethane	50.0	51.0	102								65-132			
1,1,2-Trichloroethane	50.0	52.0	104								64-140			
Trichloroethene	50.0	47.2	94								71-131			
Trichlorofluoromethane	50.0	66.2	132								37-188			
Vinyl chloride	50.0	50.3	101								42-148			
m&p-Xylene	100.	94.7	95								71-132			
o-Xylene	50.0	46.4	93								69-129			

QC Protocol 4/5/2013 19:10:09

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Pace Analytical Services, Inc.
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(504) 469-0333

Batch: 205553 **Project:** 20152272 **LCS:** 201078419 03-Apr-13 11:19

Method: Water GC/MS Volatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu

41 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205650 **Project:** 20152272 **LCS:** 201078043 03-Apr-13 23:53

Method: Water GC Semivolatile Organics **MS:**

Units: mg/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Diesel Range Organics (C10-2	0.400	0.183	46								10-115			Q5

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205443 **Project:** 20152272 **LCS:** 201077837 01-Apr-13 12:34

Method: Water GC Volatile Organics **MS:** 201077163 01-Apr-13 16:15

Units: mg/L **MSD:** 201077164 01-Apr-13 16:42

Original for MS: Batch Sample 201076961

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Gasoline Range Organics(C6-	0.500	0.505	101	0.500	0.00163	0.531	0.531	106	106	0	61-136	15-147	20	
1 compound(s) reported														

Pace Analytical Services, Inc.
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Batch: 205543 **Project:** 20152272 **LCS:** 201077672 02-Apr-13 10:59

Method: Water ICP Metals **MS:** 201077673 02-Apr-13 11:06

Units: ug/L **MSD:** 201077674 02-Apr-13 11:10

Original for MS: Batch Sample 201077562

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Antimony	1000	1010	101	1000		1030	991.	103	99	4	82-120	80-120	20	
Arsenic	1000	991.	99	1000		1030	980.	103	98	5	84-117	80-120	20	
Beryllium	1000	989.	99	1000	0.326	1030	982.	103	98	5	85-117	80-120	20	
Cadmium	1000	994.	99	1000		1030	984.	103	98	4	85-115	80-120	20	
Chromium	1000	988.	99	1000	3.50	1030	982.	102	98	4	83-117	80-120	20	
Copper	1000	987.	99	1000	17.4	1030	985.	101	97	4	85-116	80-120	20	
Lead	1000	1020	102	1000	1.16	1050	1000	105	100	4	84-118	80-120	20	
Nickel	1000	1010	101	1000	9.18	1050	1010	104	100	4	85-118	80-120	20	
Selenium	1000	990.	99	1000		1020	974.	102	97	5	85-116	80-120	20	
Silver	500.	502.	100	500.		515.	497.	103	99	4	80-120	80-120	20	
Thallium	1000	984.	98	1000		1010	973.	101	97	3	85-118	80-120	20	
Zinc	1000	990.	99	1000	6.38	1030	986.	103	98	5	81-120	80-120	20	

12 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

QC Protocol 4/5/2013 19:10:09

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Batch: 205646 **Project:** 20152272 **LCS:** 201078028 03-Apr-13 9:30

Method: Water Mercury **MS:** 201078029 03-Apr-13 9:34

Units: ug/L **MSD:** 201078030 03-Apr-13 9:36

Original for MS: Client Sample 201077658

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Mercury	1.00	1.17	117	1.00		1.15	1.17	114	116	2	80-120	75-125	20	

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205649 BLANK 1 **Project:** 20152272

Lab ID: 201078038

Prep Level: Water **Batch:** 205649

Method: Water GC/MS Semivolatile Organics

Prepared: 02-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
83-32-9	Acenaphthene	1	ND		0.100	0.0520	02-Apr-13 16:48 JAM
208-96-8	Acenaphthylene	1	ND		0.100	0.0460	02-Apr-13 16:48 JAM
120-12-7	Anthracene	1	ND		0.100	0.0570	02-Apr-13 16:48 JAM
56-55-3	Benzo(a)anthracene	1	ND		0.100	0.0310	02-Apr-13 16:48 JAM
205-99-2	Benzo(b)fluoranthene	1	ND		0.100	0.0520	02-Apr-13 16:48 JAM
207-08-9	Benzo(k)fluoranthene	1	ND		0.100	0.0410	02-Apr-13 16:48 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		0.100	0.0200	02-Apr-13 16:48 JAM
50-32-8	Benzo(a)pyrene	1	ND		0.100	0.0410	02-Apr-13 16:48 JAM
218-01-9	Chrysene	1	ND		0.100	0.0250	02-Apr-13 16:48 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		0.100	0.0180	02-Apr-13 16:48 JAM
206-44-0	Fluoranthene	1	ND		0.100	0.0390	02-Apr-13 16:48 JAM
86-73-7	Fluorene	1	ND		0.100	0.0630	02-Apr-13 16:48 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		0.100	0.0180	02-Apr-13 16:48 JAM
91-57-6	2-Methylnaphthalene	1	ND		0.100	0.0780	02-Apr-13 16:48 JAM
91-20-3	Naphthalene	1	ND		0.100	0.0670	02-Apr-13 16:48 JAM
85-01-8	Phenanthrene	1	ND		0.100	0.0490	02-Apr-13 16:48 JAM
129-00-0	Pyrene	1	ND		0.100	0.0360	02-Apr-13 16:48 JAM

17 compound(s) reported

Protocol Blank 4/5/2013 19:10:10

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205770 BLANK 1 **Project:** 20152272

Lab ID: 201078458

Prep Level: Water **Batch:** 205770

Method: Water GC/MS Semivolatile Organics

Prepared: 03-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
83-32-9	Acenaphthene	1	ND		10.0	0.596	04-Apr-13 10:52 JAM
208-96-8	Acenaphthylene	1	ND		10.0	0.595	04-Apr-13 10:52 JAM
120-12-7	Anthracene	1	ND		10.0	0.726	04-Apr-13 10:52 JAM
56-55-3	Benzo(a)anthracene	1	ND		10.0	0.560	04-Apr-13 10:52 JAM
205-99-2	Benzo(b)fluoranthene	1	ND		10.0	0.645	04-Apr-13 10:52 JAM
207-08-9	Benzo(k)fluoranthene	1	ND		10.0	0.755	04-Apr-13 10:52 JAM
65-85-0	Benzoic acid	1	ND		25.0	1.56	04-Apr-13 10:52 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		10.0	0.669	04-Apr-13 10:52 JAM
50-32-8	Benzo(a)pyrene	1	ND		10.0	0.645	04-Apr-13 10:52 JAM
100-51-6	Benzyl alcohol	1	ND		10.0	0.959	04-Apr-13 10:52 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND		10.0	0.541	04-Apr-13 10:52 JAM
85-68-7	Butylbenzylphthalate	1	ND		10.0	0.825	04-Apr-13 10:52 JAM
86-74-8	Carbazole	1	ND		10.0	0.932	04-Apr-13 10:52 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND		10.0	0.812	04-Apr-13 10:52 JAM
106-47-8	3&4-Chloroaniline	1	ND		10.0	1.22	04-Apr-13 10:52 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	0.789	04-Apr-13 10:52 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	0.804	04-Apr-13 10:52 JAM
91-58-7	2-Chloronaphthalene	1	ND		10.0	0.713	04-Apr-13 10:52 JAM
95-57-8	2-Chlorophenol	1	ND		10.0	0.716	04-Apr-13 10:52 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND		10.0	0.638	04-Apr-13 10:52 JAM
218-01-9	Chrysene	1	ND		10.0	0.539	04-Apr-13 10:52 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		10.0	0.587	04-Apr-13 10:52 JAM
132-64-9	Dibenzofuran	1	ND		10.0	0.576	04-Apr-13 10:52 JAM
95-50-1	1,2-Dichlorobenzene	1	ND		10.0	0.867	04-Apr-13 10:52 JAM
541-73-1	1,3-Dichlorobenzene	1	ND		10.0	0.832	04-Apr-13 10:52 JAM
106-46-7	1,4-Dichlorobenzene	1	ND		10.0	0.652	04-Apr-13 10:52 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND		10.0	0.781	04-Apr-13 10:52 JAM
120-83-2	2,4-Dichlorophenol	1	ND		10.0	0.783	04-Apr-13 10:52 JAM
84-66-2	Diethylphthalate	1	ND		10.0	0.607	04-Apr-13 10:52 JAM
105-67-9	2,4-Dimethylphenol	1	ND		10.0	0.781	04-Apr-13 10:52 JAM
131-11-3	Dimethylphthalate	1	ND		10.0	0.594	04-Apr-13 10:52 JAM
84-74-2	Di-n-butylphthalate	1	ND		10.0	0.651	04-Apr-13 10:52 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		10.0	1.02	04-Apr-13 10:52 JAM
51-28-5	2,4-Dinitrophenol	1	ND		10.0	0.470	04-Apr-13 10:52 JAM

Protocol Blank 4/5/2013 19:10:10

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Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205770 BLANK 1 **Project:** 20152272

Lab ID: 201078458

Prep Level: Water **Batch:** 205770

Method: Water GC/MS Semivolatile Organics

Prepared: 03-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	0.741	04-Apr-13 10:52 JAM
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	0.780	04-Apr-13 10:52 JAM
117-84-0	Di-n-octylphthalate	1	ND		10.0	0.781	04-Apr-13 10:52 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	0.930	04-Apr-13 10:52 JAM
206-44-0	Fluoranthene	1	ND		10.0	0.674	04-Apr-13 10:52 JAM
86-73-7	Fluorene	1	ND		10.0	0.629	04-Apr-13 10:52 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		10.0	0.759	04-Apr-13 10:52 JAM
118-74-1	Hexachlorobenzene	1	ND		10.0	0.681	04-Apr-13 10:52 JAM
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	0.347	04-Apr-13 10:52 JAM
67-72-1	Hexachloroethane	1	ND		10.0	0.987	04-Apr-13 10:52 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		10.0	0.574	04-Apr-13 10:52 JAM
78-59-1	Isophorone	1	ND		10.0	0.628	04-Apr-13 10:52 JAM
91-57-6	2-Methylnaphthalene	1	ND		10.0	0.822	04-Apr-13 10:52 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	0.749	04-Apr-13 10:52 JAM
	3&4-Methylphenol	1	ND		10.0	0.948	04-Apr-13 10:52 JAM
91-20-3	Naphthalene	1	ND		10.0	0.756	04-Apr-13 10:52 JAM
88-74-4	2-Nitroaniline	1	ND		10.0	0.859	04-Apr-13 10:52 JAM
99-09-2	3-Nitroaniline	1	ND		10.0	0.877	04-Apr-13 10:52 JAM
100-01-6	4-Nitroaniline	1	ND		10.0	0.972	04-Apr-13 10:52 JAM
98-95-3	Nitrobenzene	1	ND		10.0	1.06	04-Apr-13 10:52 JAM
88-75-5	2-Nitrophenol	1	ND		10.0	0.772	04-Apr-13 10:52 JAM
100-02-7	4-Nitrophenol	1	ND		10.0	0.761	04-Apr-13 10:52 JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	0.919	04-Apr-13 10:52 JAM
86-30-6	N-Nitrosodiphenylamine	1	ND		10.0	0.715	04-Apr-13 10:52 JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		10.0	0.732	04-Apr-13 10:52 JAM
87-86-5	Pentachlorophenol	1	ND		10.0	0.860	04-Apr-13 10:52 JAM
85-01-8	Phenanthrene	1	ND		10.0	0.674	04-Apr-13 10:52 JAM
108-95-2	Phenol	1	ND		10.0	0.773	04-Apr-13 10:52 JAM
129-00-0	Pyrene	1	ND		10.0	0.663	04-Apr-13 10:52 JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	0.797	04-Apr-13 10:52 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		10.0	0.751	04-Apr-13 10:52 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	0.737	04-Apr-13 10:52 JAM

66 compound(s) reported

Protocol Blank 4/5/2013 19:10:10

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Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205553 BLANK 1 **Project:** 20152272

Lab ID: 201077705

Prep Level: Water **Batch:** 205553

Method: Water GC/MS Volatile Organics

Prepared: 01-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
67-64-1	Acetone	1	ND		10.0	8.88	01-Apr-13 11:47 MHM
71-43-2	Benzene	1	ND		5.00	0.518	01-Apr-13 11:47 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469	01-Apr-13 11:47 MHM
75-25-2	Bromoform	1	ND		5.00	0.920	01-Apr-13 11:47 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855	01-Apr-13 11:47 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66	01-Apr-13 11:47 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530	01-Apr-13 11:47 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528	01-Apr-13 11:47 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662	01-Apr-13 11:47 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12	01-Apr-13 11:47 MHM
67-66-3	Chloroform	1	ND		5.00	0.853	01-Apr-13 11:47 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636	01-Apr-13 11:47 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34	01-Apr-13 11:47 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630	01-Apr-13 11:47 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477	01-Apr-13 11:47 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553	01-Apr-13 11:47 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565	01-Apr-13 11:47 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738	01-Apr-13 11:47 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557	01-Apr-13 11:47 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578	01-Apr-13 11:47 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738	01-Apr-13 11:47 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579	01-Apr-13 11:47 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454	01-Apr-13 11:47 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526	01-Apr-13 11:47 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292	01-Apr-13 11:47 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28	01-Apr-13 11:47 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405	01-Apr-13 11:47 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36	01-Apr-13 11:47 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44	01-Apr-13 11:47 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10	01-Apr-13 11:47 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687	01-Apr-13 11:47 MHM
100-42-5	Styrene	1	ND		5.00	0.571	01-Apr-13 11:47 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12	01-Apr-13 11:47 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679	01-Apr-13 11:47 MHM

Protocol Blank 4/5/2013 19:10:10

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Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205553 BLANK 1 **Project:** 20152272

Lab ID: 201077705

Prep Level: Water **Batch:** 205553

Method: Water GC/MS Volatile Organics

Prepared: 01-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
108-88-3	Toluene	1	ND		5.00	0.536	01-Apr-13 11:47 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554	01-Apr-13 11:47 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915	01-Apr-13 11:47 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654	01-Apr-13 11:47 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575	01-Apr-13 11:47 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564	01-Apr-13 11:47 MHM
	m&p-Xylene	1	ND		5.00	0.937	01-Apr-13 11:47 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649	01-Apr-13 11:47 MHM

42 compound(s) reported

Protocol Blank 4/5/2013 19:10:10

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205553 BLANK 3 **Project:** 20152272

Lab ID: 201078418

Prep Level: Water **Batch:** 205553

Method: Water GC/MS Volatile Organics

Prepared: 03-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
67-64-1	Acetone	1	ND		10.0	8.88	03-Apr-13 10:58 MHM
71-43-2	Benzene	1	ND		5.00	0.518	03-Apr-13 10:58 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469	03-Apr-13 10:58 MHM
75-25-2	Bromoform	1	ND		5.00	0.920	03-Apr-13 10:58 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855	03-Apr-13 10:58 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66	03-Apr-13 10:58 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530	03-Apr-13 10:58 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528	03-Apr-13 10:58 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662	03-Apr-13 10:58 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12	03-Apr-13 10:58 MHM
67-66-3	Chloroform	1	ND		5.00	0.853	03-Apr-13 10:58 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636	03-Apr-13 10:58 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34	03-Apr-13 10:58 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630	03-Apr-13 10:58 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477	03-Apr-13 10:58 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553	03-Apr-13 10:58 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565	03-Apr-13 10:58 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738	03-Apr-13 10:58 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557	03-Apr-13 10:58 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578	03-Apr-13 10:58 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738	03-Apr-13 10:58 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579	03-Apr-13 10:58 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454	03-Apr-13 10:58 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526	03-Apr-13 10:58 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292	03-Apr-13 10:58 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28	03-Apr-13 10:58 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405	03-Apr-13 10:58 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36	03-Apr-13 10:58 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44	03-Apr-13 10:58 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10	03-Apr-13 10:58 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687	03-Apr-13 10:58 MHM
100-42-5	Styrene	1	ND		5.00	0.571	03-Apr-13 10:58 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12	03-Apr-13 10:58 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679	03-Apr-13 10:58 MHM

Protocol Blank 4/5/2013 19:10:10

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205553 BLANK 3 **Project:** 20152272

Lab ID: 201078418

Prep Level: Water **Batch:** 205553

Method: Water GC/MS Volatile Organics

Prepared: 03-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
108-88-3	Toluene	1	ND		5.00	0.536	03-Apr-13 10:58 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554	03-Apr-13 10:58 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915	03-Apr-13 10:58 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654	03-Apr-13 10:58 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575	03-Apr-13 10:58 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564	03-Apr-13 10:58 MHM
	m&p-Xylene	1	ND		5.00	0.937	03-Apr-13 10:58 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649	03-Apr-13 10:58 MHM

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205650 BLANK 1 **Project:** 20152272

Lab ID: 201078042

Prep Level: Water **Batch:** 205650

Method: Water GC Semivolatile Organics

Prepared: 02-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Diesel Range Organics (C10-28)	1	ND		0.150	0.0760	03-Apr-13 23:25 SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.150	0.0490	03-Apr-13 23:25 SNP1

2 compound(s) reported

Protocol Blank 4/5/2013 19:10:10

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205443 BLANK 2 **Project:** 20152272

Lab ID: 201077836

Prep Level: Water **Batch:** 205443

Method: Water GC Volatile Organics

Prepared: 01-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Gasoline Range Organics(C6-10)	1	0.0230	J	0.0500	0.0212	01-Apr-13 12:06 DHR1

1 compound(s) reported

Protocol Blank 4/5/2013 19:10:11

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205543 BLANK 1 **Project:** 20152272

Lab ID: 201077671

Prep Level: Water **Batch:** 205543

Method: Water ICP Metals

Prepared: 01-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis	
7440-36-0	Antimony	1	ND		60.0	1.35	02-Apr-13 10:56	EJH
7440-38-2	Arsenic	1	ND		10.0	1.04	02-Apr-13 10:56	EJH
7440-41-7	Beryllium	1	ND		5.00	0.282	02-Apr-13 10:56	EJH
7440-43-9	Cadmium	1	ND		5.00	0.361	02-Apr-13 10:56	EJH
7440-47-3	Chromium	1	ND		10.0	2.00	02-Apr-13 10:56	EJH
7440-50-8	Copper	1	ND		10.0	2.76	02-Apr-13 10:56	EJH
7439-92-1	Lead	1	ND		5.00	1.15	02-Apr-13 10:56	EJH
7440-02-0	Nickel	1	ND		40.0	0.253	02-Apr-13 10:56	EJH
7782-49-2	Selenium	1	ND		35.0	14.3	02-Apr-13 10:56	EJH
7440-22-4	Silver	1	ND		10.0	0.579	02-Apr-13 10:56	EJH
7440-28-0	Thallium	1	ND		10.0	1.05	02-Apr-13 10:56	EJH
7440-66-6	Zinc	1	ND		20.0	3.52	02-Apr-13 10:56	EJH

12 compound(s) reported

Protocol Blank 4/5/2013 19:10:11

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205646 BLANK 1 **Project:** 20152272

Lab ID: 201078027

Prep Level: Water **Batch:** 205646

Method: Water Mercury

Prepared: 02-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis	
7439-97-6	Mercury	1	ND		0.200	0.0340	03-Apr-13 09:29	EJH

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152272

Value	Description
Q5	Insufficient sample was provided to perform matrix spike analyses on any sample in this analytical batch. Method performance for this analyte has been demonstrated by the laboratory control sample recovery.
J	This estimated value for the analyte is below the adjusted reporting limit but above the instrument reporting limit.
U	The analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
B	This analyte was detected in the method blank.
E	The sample concentration is above the linear calibrated range of the analysis.
LCS	Laboratory Control Sample.
MS(D)	Matrix Spike (Duplicate).
DUP	Sample Duplicate.
RPD	Relative Percent Difference.

Pace Analytical Services, In
1000 Riverbend Blvd. Suite F
St. Rose, LA 7008
(504) 469-033

Chains of Custody

20152272 20-CTEH

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Re

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields m

Page: / of /

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: CTEH	Report To: Chase Ertzberger	Attention: CTEH
Address: 5120 Northshore Dr	Copy To: James McCormack(jmccormack@cteh.com	
N. Little Rock, AR 72118	40432samples@cteh.com	Address: 5120 Northshore Dr
Email To: Certzbèrger@cteh.com	Purchase Order No.:	Pace Quote Reference:
Phone: 501-366-0394 Fax:	Project Name: Delek @ Magnolia, AR	Pace Project Manager: Karen Brown
Requested Due Date/TAT Normal 10 WD	Project Number: 40432	Pace Profile #: 5831 / Line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: AR

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	8260	8270	8270-SIM (Low level)	Priority Pollutant List (6010)	TPH-GRO (8015)	TPH-DRO / ORO (8015)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MAAR03295W015A	WT	G	—	—	3-29	0900		11	4		1	6						3	2	1	1	3	1		2010 77658
2	TB001	L		—	—	—	—		2				2						2							" 77659
3																										
4																										
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										

Not Used 3-29-13 RS

Not Used 3-29-13 RS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Rich Shaver / CTEH	3-29	1300	UPS	3-29	1300				
	UPS	0830	0830	[signature]		0830	5.2	y	y	y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY):

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.06, 2-Feb-2007

Pace Analytical

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Sample Conditio

20152272 20-CTEH

Courier: ☐ Pace Courier ☐ Hired Courier ☐ Fed X ☒ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC] **Custody Seals intact:** ☒ Yes ☐ No

Therometer Used: ☐ Therm Fisher IR 5 ☒ Therm Fisher IR 6 ☐ Therm Fisher IR 7

Type of Ice: (Wet) Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC] Temp should be above freezing to 6°C

Date and Initials of person examining contents: 03-30-13 AT

Temp must be measured from Temperature blank when present

				Comments:
Temperature Blank Present"?	☒ Yes	☐ No	☐ N/A	1
Chain of Custody Present:	☒ Yes	☐ No	☐ N/A	2
Chain of Custody Complete:	☒ Yes	☐ No	☐ N/A	3
Chain of Custody Relinquished:	☒ Yes	☐ No	☐ N/A	4
Sampler Name & Signature on COC:	☒ Yes	☐ No	☐ N/A	5
Samples Arrived within Hold Time:	☒ Yes	☐ No	☐ N/A	6
Sufficient Volume:	☒ Yes	☐ No	☐ N/A	7
Correct Containers Used:	☒ Yes	☐ No	☐ N/A	8
Filtered vol. Rec. for Diss. tests	☐ Yes	☐ No	☒ N/A	9
Sample Labels match COC:	☒ Yes	☐ No	☐ N/A	10
All containers received within manufacture's precautionary and/or expiration dates.	☒ Yes	☐ No	☐ N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☒ Yes	☐ No	☐ N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	☒ Yes	☐ No	☐ N/A	13 If No, was preserative added? ☐ Yes ☐ No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐ Yes	☒ No	☐ N/A	14
Trip Blank Present:	☒ Yes	☐ No		15 (TB - HCl preserved - but not provided by PAST-NOCA)

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution:

Collection date of 3/29/13 was used to log TB# 11 (KS)

ALLC003rev.08, 15Feb2013 SCUR Form - mod

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

April 12, 2013

James McCormack
CTEH
5120 North Shore Drive
North Little Rock, AR 72118

RE: Project 20152345
Project ID: Magnolia, AR/Delek

Dear James McCormack:

Enclosed are the analytical results for sample(s) received by the laboratory on April 02, 2013. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Karen Brown
karen.brown@pacelabs.com

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

Laboratory Certifications

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152345

Client: CTEH

Project ID: Magnolia, AR/Delek

Washington Department of Ecology C2078
Oregon Environmental Laboratory Accreditation - LA200001
U.S. Dept. of Agriculture Foreign Soil Import P330-10-00119
Pennsylvania Dept. of Env Protection (NELAC) 68-04202
Texas Commission on Env. Quality (NELAC) T104704405-09-TX
Kansas Department of Health and Environment (NELAC) E-10266
Florida Department of Health (NELAC) E87595
Oklahoma Department of Environmental Quality - 2010-139
Illinois Environmental Protection Agency - 0025721
California Env. Lab Accreditation Program Branch - 11277CA
Louisiana Dept. of Environmental Quality (NELAC/LELAP) 02006

4/12/2013 17:21:35

Sample Cross Reference

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152345

Client: CTEH

Project ID: Magnolia, AR/Delek

Client Sample ID	Lab ID	Matrix	Collection Date/Time	Received Date/Time
MAAR0401SW016A	201078213	Water	01-Apr-13 15:00	02-Apr-13 11:00
TB013	201078214	Water	01-Apr-13 00:00	02-Apr-13 11:00

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152345

Narrative detail for GC/MS semi-volatiles analyses:

The sample chosen for QC for SIM batch 205830 was canceled. Acceptable method performance was demonstrated by the LCS recoveries.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152345

Sample Receipt Condition:

All samples were received in accordance with EPA protocol.

Holding Times:

All holding times were met.

Blanks:

All blank results were below reporting limits.

Laboratory Control Samples:

LCS recoveries outside of QC limits are qualified in the Report of Quality Control section.

Matrix Spikes and Duplicates:

All MS/MSD recoveries or duplicate RPDs were within QC limits.

Surrogates:

All surrogate recoveries were within QC limits.

QC Cross Reference

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152345

Analytical Method	Batch	Sample used for QC
EPA 8015/8021	205705	Project sample MAAR0401SW016A
EPA 6010	205642	Batch sample from another client
EPA 7470	205646	Client sample MAAR0329SW015A from project 20152272
EPA 8260	205712	Project sample MAAR0401SW016A

For the sample used as the original for the DUP or MS/MSD for the batch:

Project sample means a sample from this project was used.
Client sample means a sample from the same client but in a different project was used.
Batch sample means a sample from a different client was used.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0401SW016A
Project: 20152345
Project ID: Magnolia, AR/Delek
Site: None
Lab ID: 201078213
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205830
Method: EPA 8270
GCMS SVOAs SIM Water
Collected: 01-Apr-13
Received: 02-Apr-13
Prepared: 04-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
83-32-9	Acenaphthene	1	ND		0.100	0.0520		05-Apr-13 11:34	JAM
208-96-8	Acenaphthylene	1	ND		0.100	0.0460		05-Apr-13 11:34	JAM
120-12-7	Anthracene	1	ND		0.100	0.0570		05-Apr-13 11:34	JAM
56-55-3	Benzo(a)anthracene	1	ND		0.100	0.0310		05-Apr-13 11:34	JAM
205-99-2	Benzo(b)fluoranthene	1	ND		0.100	0.0520		05-Apr-13 11:34	JAM
207-08-9	Benzo(k)fluoranthene	1	ND		0.100	0.0410		05-Apr-13 11:34	JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		0.100	0.0200		05-Apr-13 11:34	JAM
50-32-8	Benzo(a)pyrene	1	ND		0.100	0.0410		05-Apr-13 11:34	JAM
218-01-9	Chrysene	1	ND		0.100	0.0250		05-Apr-13 11:34	JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		0.100	0.0180		05-Apr-13 11:34	JAM
206-44-0	Fluoranthene	1	ND		0.100	0.0390		05-Apr-13 11:34	JAM
86-73-7	Fluorene	1	ND		0.100	0.0630		05-Apr-13 11:34	JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		0.100	0.0180		05-Apr-13 11:34	JAM
91-57-6	2-Methylnaphthalene	1	0.130		0.100	0.0780		05-Apr-13 11:34	JAM
91-20-3	Naphthalene	1	0.160		0.100	0.0670		05-Apr-13 11:34	JAM
85-01-8	Phenanthrene	1	0.0500	J	0.100	0.0490		05-Apr-13 11:34	JAM
129-00-0	Pyrene	1	ND		0.100	0.0360		05-Apr-13 11:34	JAM

17 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0401SW016A
Project: 20152345
Project ID: Magnolia, AR/Delek
Site: None
Lab ID: 201078213
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205770
Method: EPA 8270
GCMS SVOAs Water
Collected: 01-Apr-13
Received: 02-Apr-13
Prepared: 03-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
65-85-0	Benzoic acid	1	ND		25.0	1.56		04-Apr-13 13:51 JAM
100-51-6	Benzyl alcohol	1	ND		10.0	0.959		04-Apr-13 13:51 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND		10.0	0.541		04-Apr-13 13:51 JAM
85-68-7	Butylbenzylphthalate	1	ND		10.0	0.825		04-Apr-13 13:51 JAM
86-74-8	Carbazole	1	ND		10.0	0.932		04-Apr-13 13:51 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND		10.0	0.812		04-Apr-13 13:51 JAM
106-47-8	3&4-Chloroaniline	1	ND		10.0	1.22		04-Apr-13 13:51 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	0.789		04-Apr-13 13:51 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	0.804		04-Apr-13 13:51 JAM
91-58-7	2-Chloronaphthalene	1	ND		10.0	0.713		04-Apr-13 13:51 JAM
95-57-8	2-Chlorophenol	1	ND		10.0	0.716		04-Apr-13 13:51 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND		10.0	0.638		04-Apr-13 13:51 JAM
132-64-9	Dibenzofuran	1	ND		10.0	0.576		04-Apr-13 13:51 JAM
95-50-1	1,2-Dichlorobenzene	1	ND		10.0	0.867		04-Apr-13 13:51 JAM
541-73-1	1,3-Dichlorobenzene	1	ND		10.0	0.832		04-Apr-13 13:51 JAM
106-46-7	1,4-Dichlorobenzene	1	ND		10.0	0.652		04-Apr-13 13:51 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND		10.0	0.781		04-Apr-13 13:51 JAM
120-83-2	2,4-Dichlorophenol	1	ND		10.0	0.783		04-Apr-13 13:51 JAM
84-66-2	Diethylphthalate	1	ND		10.0	0.607		04-Apr-13 13:51 JAM
105-67-9	2,4-Dimethylphenol	1	ND		10.0	0.781		04-Apr-13 13:51 JAM
131-11-3	Dimethylphthalate	1	ND		10.0	0.594		04-Apr-13 13:51 JAM
84-74-2	Di-n-butylphthalate	1	ND		10.0	0.651		04-Apr-13 13:51 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		10.0	1.02		04-Apr-13 13:51 JAM
51-28-5	2,4-Dinitrophenol	1	ND		10.0	0.470		04-Apr-13 13:51 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	0.741		04-Apr-13 13:51 JAM
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	0.780		04-Apr-13 13:51 JAM
117-84-0	Di-n-octylphthalate	1	ND		10.0	0.781		04-Apr-13 13:51 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	0.930		04-Apr-13 13:51 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		10.0	0.759		04-Apr-13 13:51 JAM
118-74-1	Hexachlorobenzene	1	ND		10.0	0.681		04-Apr-13 13:51 JAM
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	0.347		04-Apr-13 13:51 JAM
67-72-1	Hexachloroethane	1	ND		10.0	0.987		04-Apr-13 13:51 JAM
78-59-1	Isophorone	1	ND		10.0	0.628		04-Apr-13 13:51 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	0.749		04-Apr-13 13:51 JAM

Protocol 4/12/2013 17:22:48

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit
Limits are corrected for sample size, dilution and moisture content if applicable.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0401SW016A
Project: 20152345
Project ID: Magnolia, AR/Delek
Site: None
Lab ID: 201078213
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205770
Method: EPA 8270
GCMS SVOAs Water
Collected: 01-Apr-13
Received: 02-Apr-13
Prepared: 03-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
	3&4-Methylphenol	1	ND		10.0	0.948		04-Apr-13 13:51	JAM
88-74-4	2-Nitroaniline	1	ND		10.0	0.859		04-Apr-13 13:51	JAM
99-09-2	3-Nitroaniline	1	ND		10.0	0.877		04-Apr-13 13:51	JAM
100-01-6	4-Nitroaniline	1	ND		10.0	0.972		04-Apr-13 13:51	JAM
98-95-3	Nitrobenzene	1	ND		10.0	1.06		04-Apr-13 13:51	JAM
88-75-5	2-Nitrophenol	1	ND		10.0	0.772		04-Apr-13 13:51	JAM
100-02-7	4-Nitrophenol	1	ND		10.0	0.761		04-Apr-13 13:51	JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	0.919		04-Apr-13 13:51	JAM
86-30-6	N-Nitrosodiphenylamine	1	ND		10.0	0.715		04-Apr-13 13:51	JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		10.0	0.732		04-Apr-13 13:51	JAM
87-86-5	Pentachlorophenol	1	ND		10.0	0.860		04-Apr-13 13:51	JAM
108-95-2	Phenol	1	ND		10.0	0.773		04-Apr-13 13:51	JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	0.797		04-Apr-13 13:51	JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		10.0	0.751		04-Apr-13 13:51	JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	0.737		04-Apr-13 13:51	JAM

49 compound(s) reported

Protocol 4/12/2013 17:22:48

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0401SW016A
Project: 20152345
Project ID: Magnolia, AR/Delek
Site: None
Lab ID: 201078213
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205712
Method: EPA 8260
GCMS VOAs Water
Collected: 01-Apr-13
Received: 02-Apr-13
Prepared: 03-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	8.88		03-Apr-13 09:58 MHM
71-43-2	Benzene	1	0.970	J	5.00	0.518		03-Apr-13 09:58 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		03-Apr-13 09:58 MHM
75-25-2	Bromoform	1	ND		5.00	0.920		03-Apr-13 09:58 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855		03-Apr-13 09:58 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		03-Apr-13 09:58 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530		03-Apr-13 09:58 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		03-Apr-13 09:58 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662		03-Apr-13 09:58 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12		03-Apr-13 09:58 MHM
67-66-3	Chloroform	1	ND		5.00	0.853		03-Apr-13 09:58 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636		03-Apr-13 09:58 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		03-Apr-13 09:58 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		03-Apr-13 09:58 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		03-Apr-13 09:58 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		03-Apr-13 09:58 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565		03-Apr-13 09:58 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		03-Apr-13 09:58 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		03-Apr-13 09:58 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		03-Apr-13 09:58 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		03-Apr-13 09:58 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		03-Apr-13 09:58 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		03-Apr-13 09:58 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		03-Apr-13 09:58 MHM
100-41-4	Ethylbenzene	1	0.870	J	5.00	0.292		03-Apr-13 09:58 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28		03-Apr-13 09:58 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405		03-Apr-13 09:58 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36		03-Apr-13 09:58 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44		03-Apr-13 09:58 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		03-Apr-13 09:58 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		03-Apr-13 09:58 MHM
100-42-5	Styrene	1	ND		5.00	0.571		03-Apr-13 09:58 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		03-Apr-13 09:58 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		03-Apr-13 09:58 MHM

Protocol 4/12/2013 17:22:48

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0401SW016A
Project: 20152345
Project ID: Magnolia, AR/Delek
Site: None
Lab ID: 201078213
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205712
Method: EPA 8260
GCMS VOAs Water
Collected: 01-Apr-13
Received: 02-Apr-13
Prepared: 03-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	1.21	J	5.00	0.536		03-Apr-13 09:58 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		03-Apr-13 09:58 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915		03-Apr-13 09:58 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654		03-Apr-13 09:58 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575		03-Apr-13 09:58 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564		03-Apr-13 09:58 MHM
	m&p-Xylene	1	1.46	J	5.00	0.937		03-Apr-13 09:58 MHM
95-47-6	o-Xylene	1	0.870	J	5.00	0.649		03-Apr-13 09:58 MHM

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Pace Analytical Services, Inc.
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St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0401SW016A
Project: 20152345
Project ID: Magnolia, AR/Delek
Site: None
Lab ID: 201078213
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205937
Method: EPA 8015 Mod Ext
8015 TPH Extractables Water
Collected: 01-Apr-13
Received: 02-Apr-13
Prepared: 05-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
none	Diesel Range Organics (C10-28)	1	ND		0.250	0.0760		08-Apr-13 19:24	SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.500	0.0490		08-Apr-13 19:24	SNP1

2 compound(s) reported

Protocol 4/12/2013 17:22:48

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St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0401SW016A
Project: 20152345
Project ID: Magnolia, AR/Delek
Site: None
Lab ID: 201078213
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205705
Method: EPA 8015/8021
8015/8021 Water
Collected: 01-Apr-13
Received: 02-Apr-13
Prepared: 03-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
none	Gasoline Range Organics(C6-10)	1	0.0367	J	0.0500	0.0212		03-Apr-13 00:47	DHR1

1 compound(s) reported

Protocol 4/12/2013 17:22:48

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Pace Analytical Services, Inc.
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St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0401SW016A
Project: 20152345
Project ID: Magnolia, AR/Delek
Site: None
Lab ID: 201078213
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205642
Method: EPA 6010
Metals, ICP, Water
Collected: 01-Apr-13
Received: 02-Apr-13
Prepared: 02-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7440-36-0	Antimony	1	ND		60.0	1.35		03-Apr-13 15:59 MHB1
7440-38-2	Arsenic	1	ND		10.0	1.04		03-Apr-13 15:59 MHB1
7440-41-7	Beryllium	1	0.366	J	5.00	0.282		03-Apr-13 15:59 MHB1
7440-43-9	Cadmium	1	ND		5.00	0.361		03-Apr-13 15:59 MHB1
7440-47-3	Chromium	1	3.38	J	10.0	2.00		03-Apr-13 15:59 MHB1
7440-50-8	Copper	1	ND		10.0	2.76		03-Apr-13 15:59 MHB1
7439-92-1	Lead	1	3.22	J	5.00	1.15		03-Apr-13 15:59 MHB1
7440-02-0	Nickel	1	7.63	J	40.0	0.253		03-Apr-13 15:59 MHB1
7782-49-2	Selenium	1	ND		35.0	14.3		03-Apr-13 15:59 MHB1
7440-22-4	Silver	1	ND		10.0	0.579		03-Apr-13 15:59 MHB1
7440-28-0	Thallium	1	ND		10.0	1.05		03-Apr-13 15:59 MHB1
7440-66-6	Zinc	1	26.7		20.0	3.52		03-Apr-13 15:59 MHB1

12 compound(s) reported

Protocol 4/12/2013 17:22:48

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0401SW016A
Project: 20152345
Project ID: Magnolia, AR/Delek
Site: None
Lab ID: 201078213
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205646
Method: EPA 7470
Mercury Water
Collected: 01-Apr-13
Received: 02-Apr-13
Prepared: 02-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
7439-97-6	Mercury	1	ND		0.200	0.0340		03-Apr-13 09:43	EJH

1 compound(s) reported

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: TB013
Project: 20152345
Project ID: Magnolia, AR/Delek
Site: None
Lab ID: 201078214
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205712
Method: EPA 8260
GCMS VOAs Water
Collected: 01-Apr-13
Received: 02-Apr-13
Prepared: 03-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	8.88		03-Apr-13 11:01 MHM
71-43-2	Benzene	1	ND		5.00	0.518		03-Apr-13 11:01 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		03-Apr-13 11:01 MHM
75-25-2	Bromoform	1	ND		5.00	0.920		03-Apr-13 11:01 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855		03-Apr-13 11:01 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		03-Apr-13 11:01 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530		03-Apr-13 11:01 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		03-Apr-13 11:01 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662		03-Apr-13 11:01 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12		03-Apr-13 11:01 MHM
67-66-3	Chloroform	1	ND		5.00	0.853		03-Apr-13 11:01 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636		03-Apr-13 11:01 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		03-Apr-13 11:01 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		03-Apr-13 11:01 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		03-Apr-13 11:01 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		03-Apr-13 11:01 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565		03-Apr-13 11:01 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		03-Apr-13 11:01 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		03-Apr-13 11:01 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		03-Apr-13 11:01 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		03-Apr-13 11:01 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		03-Apr-13 11:01 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		03-Apr-13 11:01 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		03-Apr-13 11:01 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292		03-Apr-13 11:01 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28		03-Apr-13 11:01 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405		03-Apr-13 11:01 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36		03-Apr-13 11:01 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44		03-Apr-13 11:01 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		03-Apr-13 11:01 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		03-Apr-13 11:01 MHM
100-42-5	Styrene	1	ND		5.00	0.571		03-Apr-13 11:01 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		03-Apr-13 11:01 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		03-Apr-13 11:01 MHM

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: TB013
Project: 20152345
Project ID: Magnolia, AR/Delek
Site: None
Lab ID: 201078214
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205712
Method: EPA 8260
GCMS VOAs Water
Collected: 01-Apr-13
Received: 02-Apr-13
Prepared: 03-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	ND		5.00	0.536		03-Apr-13 11:01 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		03-Apr-13 11:01 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915		03-Apr-13 11:01 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654		03-Apr-13 11:01 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575		03-Apr-13 11:01 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564		03-Apr-13 11:01 MHM
	m&p-Xylene	1	ND		5.00	0.937		03-Apr-13 11:01 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649		03-Apr-13 11:01 MHM

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
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St. Rose, LA 70087
(504) 469-0333

Surrogate Recovery

Batch: 205770 **Project:** 20152345

Method: Water GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201078458	205770 BLANK 1		81	86	77	92	76	102		
201078459	205770 LCS 1		86	88	79	78	82	99		
201078213	MAAR0401SW016A		84	87	78	95	76	63		
QC limits:			25-145	34-117	10-118	33-120	15-134	24-133		

Sur 1: 2,4,6-Tribromophenol (S)
Sur 2: 2-Fluorobiphenyl (S)
Sur 3: 2-Fluorophenol (S)
Sur 4: Nitrobenzene-d5 (S)
Sur 5: Phenol-d5 (S)
Sur 6: Terphenyl-d14 (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Surrogate Recovery

Batch: 205830 **Project:** 20152345

Method: Water GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201078662	205830 BLANK 1		66	62						
201078663	205830 LCS 1		72	62						
201078213	MAAR0401SW016A		66	70						
	QC limits:		12-110	25-113						

Sur 1: 2-Fluorobiphenyl (S)
Sur 2: Terphenyl-d14 (S)

*** denotes surrogate recovery outside of QC limits.**
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Surrogate Recovery

Batch: 205712 **Project:** 20152345

Method: Water GC/MS Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201078318	205712 BLANK 1		86	90	90					
201078319	205712 LCS 1		89	91	92					
201078213	MAAR0401SW016A		89	91	92					
201078320	MAAR0401SW016A MS 1		89	91	92					
201078321	MAAR0401SW016A MSD 1		88	90	92					
201078214	TB013		86	86	90					
	QC limits:		68-124	72-126	79-119					

Sur 1: 4-Bromofluorobenzene (S)
Sur 2: Dibromofluoromethane (S)
Sur 3: Toluene-d8 (S)

*** denotes surrogate recovery outside of QC limits.**
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205937 **Project:** 20152345

Method: Water GC Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201079041	205937 BLANK 1		82	79						
201079042	205937 LCS 1		60	60						
201078213	MAAR0401SW016A		25	80						
	QC limits:		16-137	10-121						

Sur 1: n-Pentacosane (S)
Sur 2: o-Terphenyl (S)

Surrogates 4/12/2013 17:22:51

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205705 **Project:** 20152345

Method: Water GC Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201078252	205705 BLANK 1		105							
201078620	205705 BLANK 2		103							
201078253	205705 LCS 1		103							
201078621	205705 LCS 2		107							
201078213	MAAR0401SW016A		106							
201078254	MAAR0401SW016A MS 1		107							
201078255	MAAR0401SW016A MSD 1		109							
	QC limits:		60-129							

Sur 1: 4-Bromofluorobenzene (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Batch: 205770 **Project:** 20152345 **LCS:** 201078459 04-Apr-13 11:17

Method: Water GC/MS Semivolatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Benzoic acid	50.0	28.0	56								10-130			Q5
Benzyl alcohol	50.0	39.6	79								44-120			Q5
4-Bromophenylphenyl ether	50.0	40.8	82								49-120			Q5
Butylbenzylphthalate	50.0	38.2	76								46-120			Q5
Carbazole	50.0	45.3	91								51-127			Q5
4-Chloro-3-methylphenol	50.0	37.1	74								43-115			Q5
3&4-Chloroaniline	50.0	30.8	62								10-130			Q5
bis(2-Chloroethoxy)methane	50.0	35.6	71								43-115			Q5
bis(2-Chloroethyl) ether	50.0	40.9	82								47-115			Q5
2-Chloronaphthalene	50.0	41.6	83								52-115			Q5
2-Chlorophenol	50.0	43.8	88								48-115			Q5
4-Chlorophenylphenyl ether	50.0	41.2	82								52-116			Q5
Dibenzofuran	50.0	42.0	84								53-115			Q5
1,2-Dichlorobenzene	50.0	40.6	81								42-115			Q5
1,3-Dichlorobenzene	50.0	40.6	81								40-115			Q5
1,4-Dichlorobenzene	50.0	40.6	81								41-115			Q5
3,3'-Dichlorobenzidine	50.0	36.6	73								16-142			Q5
2,4-Dichlorophenol	50.0	38.6	77								45-115			Q5
Diethylphthalate	50.0	38.9	78								49-120			Q5
2,4-Dimethylphenol	50.0	38.1	76								23-116			Q5
Dimethylphthalate	50.0	38.0	76								52-115			Q5
Di-n-butylphthalate	50.0	37.4	75								50-117			Q5
4,6-Dinitro-2-methylphenol	50.0	41.1	82								44-122			Q5
2,4-Dinitrophenol	50.0	29.4	59								16-134			Q5
2,4-Dinitrotoluene	50.0	39.9	80								50-118			Q5
2,6-Dinitrotoluene	50.0	41.4	83								55-115			Q5
Di-n-octylphthalate	50.0	37.6	75								40-129			Q5
bis(2-Ethylhexyl)phthalate	50.0	40.4	81								46-124			Q5
Hexachloro-1,3-butadiene	50.0	38.9	78								32-115			Q5
Hexachlorobenzene	50.0	41.2	82								53-115			Q5
Hexachlorocyclopentadiene	50.0	35.4	71								10-115			Q5
Hexachloroethane	50.0	39.0	78								36-115			Q5
Isophorone	50.0	37.0	74								45-115			Q5
2-Methylphenol (o-Cresol)	50.0	44.0	88								46-115			Q5
3&4-Methylphenol	50.0	41.0	82								46-115			Q5
2-Nitroaniline	50.0	41.4	83								48-121			Q5
3-Nitroaniline	50.0	40.0	80								38-125			Q5
4-Nitroaniline	50.0	39.8	80								37-132			Q5
Nitrobenzene	50.0	37.0	74								44-118			Q5
2-Nitrophenol	50.0	39.6	79								45-115			Q5
4-Nitrophenol	50.0	33.0	66								29-134			Q5

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

QC Protocol 4/12/2013 17:22:53

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Batch: 205770 **Project:** 20152345 **LCS:** 201078459 04-Apr-13 11:17

Method: Water GC/MS Semivolatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
N-Nitroso-di-n-propylamine	50.0	39.8	80								45-119			Q5
N-Nitrosodiphenylamine	50.0	49.3	99								42-134			Q5
2,2'-Oxybis(1-chloropropane)	50.0	44.2	88								40-120			Q5
Pentachlorophenol	50.0	38.6	77								34-124			Q5
Phenol	50.0	42.1	84								44-115			Q5
1,2,4-Trichlorobenzene	50.0	37.2	74								40-115			Q5
2,4,5-Trichlorophenol	50.0	42.7	86								49-115			Q5
2,4,6-Trichlorophenol	50.0	43.6	87								48-115			Q5

49 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

QC Protocol 4/12/2013 17:22:53

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Batch: 205830 **Project:** 20152345 **LCS:** 201078663 05-Apr-13 9:46

Method: Water GC/MS Semivolatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acenaphthene	2.00	1.54	77								39-115			
Acenaphthylene	2.00	1.06	53								30-115			
Anthracene	2.00	1.56	78								34-115			
Benzo(a)anthracene	2.00	1.26	63								33-115			
Benzo(b)fluoranthene	2.00	1.43	72								30-115			
Benzo(k)fluoranthene	2.00	1.19	60								31-115			
Benzo(g,h,i)perylene	2.00	1.40	70								27-115			
Benzo(a)pyrene	2.00	1.10	55								28-115			
Chrysene	2.00	1.17	59								36-115			
Dibenz(a,h)anthracene	2.00	1.35	68								23-115			
Fluoranthene	2.00	1.58	79								39-115			
Fluorene	2.00	1.53	77								38-115			
Indeno(1,2,3-cd)pyrene	2.00	1.39	70								28-115			
2-Methylnaphthalene	2.00	1.48	74								31-115			
Naphthalene	2.00	1.58	79								40-115			
Phenanthrene	2.00	1.58	79								38-115			
Pyrene	2.00	1.54	77								33-115			

17 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205712 **Project:** 20152345 **LCS:** 201078319 03-Apr-13 9:38

Method: Water GC/MS Volatile Organics **MS:** 201078320 03-Apr-13 10:19

Units: ug/L **MSD:** 201078321 03-Apr-13 10:40

Original for MS: Client Sample 201078213

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acetone	50.0	98.0	196	50.0		45.9	54.4	92	109	17	10-198	10-202	20	
Benzene	50.0	49.0	98	50.0	0.970	50.1	50.4	98	99	1	68-129	60-138	20	
Bromodichloromethane	50.0	48.6	97	50.0		47.6	48.3	95	97	2	68-132	66-137	20	
Bromoform	50.0	53.9	108	50.0		47.7	48.0	94	95	1	56-153	53-156	20	
Bromomethane	50.0	47.7	95	50.0		50.8	50.7	102	101	0	47-149	43-151	20	
2-Butanone (MEK)	50.0	58.8	118	50.0		44.7	44.3	89	89	1	18-173	14-184	20	
Carbon disulfide	50.0	47.0	94	50.0		47.0	47.5	94	95	1	25-166	17-176	20	
Carbon tetrachloride	50.0	49.5	99	50.0		49.6	50.3	99	101	1	56-146	51-151	20	
Chlorobenzene	50.0	50.5	101	50.0		50.0	50.4	100	101	1	74-131	71-135	20	
Chloroethane	50.0	57.8	116	50.0		65.5	63.4	131	127	3	28-190	21-191	20	
Chloroform	50.0	48.8	98	50.0		48.7	49.4	97	99	1	71-132	67-138	20	
Chloromethane	50.0	48.6	97	50.0		49.2	50.7	98	101	3	27-154	24-158	20	
1,2-Dibromo-3-chloropropane	50.0	48.4	97	50.0		46.1	44.9	92	90	3	40-155	38-162	20	
Dibromochloromethane	50.0	50.5	101	50.0		47.1	47.2	94	94	0	64-138	62-142	20	
1,2-Dibromoethane (EDB)	50.0	47.7	95	50.0		47.7	47.4	95	95	1	62-146	61-149	20	
Dichlorodifluoromethane	50.0	45.4	91	50.0		45.2	46.2	90	92	2	18-173	16-176	20	
1,1-Dichloroethane	50.0	49.5	99	50.0		50.7	50.9	101	102	0	63-135	61-141	20	
1,2-Dichloroethane	50.0	49.7	99	50.0		47.3	47.6	95	95	1	58-150	57-155	20	
1,1-Dichloroethene	50.0	47.0	94	50.0		47.1	47.4	94	95	1	50-151	40-163	20	
cis-1,2-Dichloroethene	50.0	49.1	98	50.0		48.6	49.3	97	99	1	65-132	61-138	20	
trans-1,2-Dichloroethene	50.0	47.6	95	50.0		48.1	48.5	96	97	1	56-137	52-144	20	
1,2-Dichloropropane	50.0	50.4	101	50.0		49.7	49.7	99	99	0	66-131	64-137	20	
cis-1,3-Dichloropropene	50.0	45.0	90	50.0		46.5	46.4	93	93	0	66-135	62-137	20	
trans-1,3-Dichloropropene	50.0	53.6	107	50.0		51.9	52.6	104	105	1	62-146	59-151	20	
Ethylbenzene	50.0	50.5	101	50.0	0.870	50.2	50.1	99	99	0	73-129	66-136	20	
2-Hexanone	50.0	59.7	119	50.0		46.6	46.7	93	93	0	29-158	27-165	20	
Isopropylbenzene (Cumene)	50.0	85.9	172 *	50.0		48.6	48.1	97	96	1	61-139	58-144	20	Q10
Methylene chloride	50.0	48.2	97	50.0		47.4	47.9	95	96	1	41-171	35-165	20	
4-Methyl-2-pentanone (MIBK	50.0	52.0	104	50.0		45.3	45.0	91	90	1	46-159	43-165	20	
Methyl-tert-butyl ether	50.0	52.4	105	50.0		48.5	48.7	97	98	1	51-155	48-164	20	
Styrene	50.0	50.8	102	50.0		47.9	47.9	96	96	0	74-132	63-141	20	
1,1,2,2-Tetrachloroethane	50.0	46.7	93	50.0		46.1	44.4	92	89	4	46-153	41-160	20	
Tetrachloroethene	50.0	50.0	100	50.0		49.4	50.0	99	100	1	57-151	48-160	20	
Toluene	50.0	49.0	98	50.0	1.21	50.4	51.2	98	100	2	70-130	62-137	20	
1,1,1-Trichloroethane	50.0	50.0	100	50.0		51.6	52.5	103	105	2	65-132	61-138	20	
1,1,2-Trichloroethane	50.0	50.3	101	50.0		48.2	48.0	97	96	0	64-140	63-145	20	
Trichloroethene	50.0	48.1	96	50.0		47.3	48.3	95	97	2	71-131	62-142	20	
Trichlorofluoromethane	50.0	59.0	118	50.0		60.8	61.1	122	122	1	37-188	19-196	20	
Vinyl chloride	50.0	46.6	93	50.0		48.1	47.0	96	94	2	42-148	35-153	20	
m&p-Xylene	100.	99.9	100	100.	1.46	97.7	98.6	96	97	1	71-132	64-138	20	
o-Xylene	50.0	46.5	93	50.0	0.870	47.1	47.3	93	93	0	69-129	63-136	20	

QC Protocol 4/12/2013 17:22:53

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205712 **Project:** 20152345 **LCS:** 201078319 03-Apr-13 9:38

Method: Water GC/MS Volatile Organics **MS:** 201078320 03-Apr-13 10:19

Units: ug/L **MSD:** 201078321 03-Apr-13 10:40

Original for MS: Client Sample 201078213

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu

41 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205937 **Project:** 20152345 **LCS:** 201079042 08-Apr-13 18:00

Method: Water GC Semivolatile Organics **MS:**

Units: mg/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Diesel Range Organics (C10-	0.400	0.166	42								10-115			Q5
1 compound(s) reported														

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205705 **Project:** 20152345 **LCS:** 201078253 02-Apr-13 21:03

Method: Water GC Volatile Organics **MS:** 201078254 03-Apr-13 1:15

Units: mg/L **MSD:** 201078255 03-Apr-13 1:43

Original for MS: Client Sample 201078213

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Gasoline Range Organics(C6-	0.500	0.493	99	0.500	0.0367	0.493	0.469	91	87	5	61-136	15-147	20	
1 compound(s) reported														

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205642 **Project:** 20152345 **LCS:** 201078015 03-Apr-13 15:34

Method: Water ICP Metals **MS:** 201078016 03-Apr-13 15:41

Units: ug/L **MSD:** 201078017 03-Apr-13 15:44

Original for MS: Batch Sample 201077869

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Arsenic	1000	1040	104	1000	1.12	959.	972.	96	97	1	84-117	80-120	20	
Cadmium	1000	1060	106	1000		927.	939.	93	94	1	85-115	80-120	20	
Chromium	1000	1010	101	1000		929.	942.	93	94	1	83-117	80-120	20	
Copper	1000	1030	103	1000		971.	992.	97	99	2	85-116	80-120	20	
Lead	1000	1080	108	1000	2.17	921.	931.	92	93	1	84-118	80-120	20	
Nickel	1000	1070	107	1000	0.914	906.	915.	91	91	1	85-118	80-120	20	
Silver	500.	522.	104	500.		484.	491.	97	98	1	80-120	80-120	20	
Zinc	1000	1060	106	1000		915.	926.	91	93	1	81-120	80-120	20	

8 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205646 **Project:** 20152345 **LCS:** 201078028 03-Apr-13 9:30

Method: Water Mercury **MS:** 201078029 03-Apr-13 9:34

Units: ug/L **MSD:** 201078030 03-Apr-13 9:36

Original for MS: Batch Sample 201077658

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Mercury	1.00	1.17	117	1.00		1.15	1.17	114	116	2	80-120	75-125	20	

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Blank Results

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Blank ID: 205770 BLANK 1 **Project:** 20152345

Lab ID: 201078458

Prep Level: Water **Batch:** 205770

Method: Water GC/MS Semivolatile Organics

Prepared: 03-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
83-32-9	Acenaphthene	1	ND		10.0	0.596	04-Apr-13 10:52 JAM
208-96-8	Acenaphthylene	1	ND		10.0	0.595	04-Apr-13 10:52 JAM
120-12-7	Anthracene	1	ND		10.0	0.726	04-Apr-13 10:52 JAM
56-55-3	Benzo(a)anthracene	1	ND		10.0	0.560	04-Apr-13 10:52 JAM
205-99-2	Benzo(b)fluoranthene	1	ND		10.0	0.645	04-Apr-13 10:52 JAM
207-08-9	Benzo(k)fluoranthene	1	ND		10.0	0.755	04-Apr-13 10:52 JAM
65-85-0	Benzoic acid	1	ND		25.0	1.56	04-Apr-13 10:52 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		10.0	0.669	04-Apr-13 10:52 JAM
50-32-8	Benzo(a)pyrene	1	ND		10.0	0.645	04-Apr-13 10:52 JAM
100-51-6	Benzyl alcohol	1	ND		10.0	0.959	04-Apr-13 10:52 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND		10.0	0.541	04-Apr-13 10:52 JAM
85-68-7	Butylbenzylphthalate	1	ND		10.0	0.825	04-Apr-13 10:52 JAM
86-74-8	Carbazole	1	ND		10.0	0.932	04-Apr-13 10:52 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND		10.0	0.812	04-Apr-13 10:52 JAM
106-47-8	3&4-Chloroaniline	1	ND		10.0	1.22	04-Apr-13 10:52 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	0.789	04-Apr-13 10:52 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	0.804	04-Apr-13 10:52 JAM
91-58-7	2-Chloronaphthalene	1	ND		10.0	0.713	04-Apr-13 10:52 JAM
95-57-8	2-Chlorophenol	1	ND		10.0	0.716	04-Apr-13 10:52 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND		10.0	0.638	04-Apr-13 10:52 JAM
218-01-9	Chrysene	1	ND		10.0	0.539	04-Apr-13 10:52 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		10.0	0.587	04-Apr-13 10:52 JAM
132-64-9	Dibenzofuran	1	ND		10.0	0.576	04-Apr-13 10:52 JAM
95-50-1	1,2-Dichlorobenzene	1	ND		10.0	0.867	04-Apr-13 10:52 JAM
541-73-1	1,3-Dichlorobenzene	1	ND		10.0	0.832	04-Apr-13 10:52 JAM
106-46-7	1,4-Dichlorobenzene	1	ND		10.0	0.652	04-Apr-13 10:52 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND		10.0	0.781	04-Apr-13 10:52 JAM
120-83-2	2,4-Dichlorophenol	1	ND		10.0	0.783	04-Apr-13 10:52 JAM
84-66-2	Diethylphthalate	1	ND		10.0	0.607	04-Apr-13 10:52 JAM
105-67-9	2,4-Dimethylphenol	1	ND		10.0	0.781	04-Apr-13 10:52 JAM
131-11-3	Dimethylphthalate	1	ND		10.0	0.594	04-Apr-13 10:52 JAM
84-74-2	Di-n-butylphthalate	1	ND		10.0	0.651	04-Apr-13 10:52 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		10.0	1.02	04-Apr-13 10:52 JAM
51-28-5	2,4-Dinitrophenol	1	ND		10.0	0.470	04-Apr-13 10:52 JAM

Protocol Blank 4/12/2013 17:22:5

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank Results

Blank ID: 205770 BLANK 1 **Project:** 20152345

Lab ID: 201078458

Prep Level: Water **Batch:** 205770

Method: Water GC/MS Semivolatile Organics

Prepared: 03-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	0.741	04-Apr-13 10:52 JAM
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	0.780	04-Apr-13 10:52 JAM
117-84-0	Di-n-octylphthalate	1	ND		10.0	0.781	04-Apr-13 10:52 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	0.930	04-Apr-13 10:52 JAM
206-44-0	Fluoranthene	1	ND		10.0	0.674	04-Apr-13 10:52 JAM
86-73-7	Fluorene	1	ND		10.0	0.629	04-Apr-13 10:52 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		10.0	0.759	04-Apr-13 10:52 JAM
118-74-1	Hexachlorobenzene	1	ND		10.0	0.681	04-Apr-13 10:52 JAM
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	0.347	04-Apr-13 10:52 JAM
67-72-1	Hexachloroethane	1	ND		10.0	0.987	04-Apr-13 10:52 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		10.0	0.574	04-Apr-13 10:52 JAM
78-59-1	Isophorone	1	ND		10.0	0.628	04-Apr-13 10:52 JAM
91-57-6	2-Methylnaphthalene	1	ND		10.0	0.822	04-Apr-13 10:52 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	0.749	04-Apr-13 10:52 JAM
	3&4-Methylphenol	1	ND		10.0	0.948	04-Apr-13 10:52 JAM
91-20-3	Naphthalene	1	ND		10.0	0.756	04-Apr-13 10:52 JAM
88-74-4	2-Nitroaniline	1	ND		10.0	0.859	04-Apr-13 10:52 JAM
99-09-2	3-Nitroaniline	1	ND		10.0	0.877	04-Apr-13 10:52 JAM
100-01-6	4-Nitroaniline	1	ND		10.0	0.972	04-Apr-13 10:52 JAM
98-95-3	Nitrobenzene	1	ND		10.0	1.06	04-Apr-13 10:52 JAM
88-75-5	2-Nitrophenol	1	ND		10.0	0.772	04-Apr-13 10:52 JAM
100-02-7	4-Nitrophenol	1	ND		10.0	0.761	04-Apr-13 10:52 JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	0.919	04-Apr-13 10:52 JAM
86-30-6	N-Nitrosodiphenylamine	1	ND		10.0	0.715	04-Apr-13 10:52 JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		10.0	0.732	04-Apr-13 10:52 JAM
87-86-5	Pentachlorophenol	1	ND		10.0	0.860	04-Apr-13 10:52 JAM
85-01-8	Phenanthrene	1	ND		10.0	0.674	04-Apr-13 10:52 JAM
108-95-2	Phenol	1	ND		10.0	0.773	04-Apr-13 10:52 JAM
129-00-0	Pyrene	1	ND		10.0	0.663	04-Apr-13 10:52 JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	0.797	04-Apr-13 10:52 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		10.0	0.751	04-Apr-13 10:52 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	0.737	04-Apr-13 10:52 JAM

66 compound(s) reported

Protocol Blank 4/12/2013 17:22:5

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Pace Analytical Services, Inc.
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St. Rose, LA 70087
(504) 469-0333

Blank ID: 205830 BLANK 1 **Project:** 20152345

Lab ID: 201078662

Prep Level: Water **Batch:** 205830

Method: Water GC/MS Semivolatile Organics

Prepared: 04-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
83-32-9	Acenaphthene	1	ND		0.100	0.0520	05-Apr-13 09:24 JAM
208-96-8	Acenaphthylene	1	ND		0.100	0.0460	05-Apr-13 09:24 JAM
120-12-7	Anthracene	1	ND		0.100	0.0570	05-Apr-13 09:24 JAM
56-55-3	Benzo(a)anthracene	1	ND		0.100	0.0310	05-Apr-13 09:24 JAM
205-99-2	Benzo(b)fluoranthene	1	ND		0.100	0.0520	05-Apr-13 09:24 JAM
207-08-9	Benzo(k)fluoranthene	1	ND		0.100	0.0410	05-Apr-13 09:24 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		0.100	0.0200	05-Apr-13 09:24 JAM
50-32-8	Benzo(a)pyrene	1	ND		0.100	0.0410	05-Apr-13 09:24 JAM
218-01-9	Chrysene	1	ND		0.100	0.0250	05-Apr-13 09:24 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		0.100	0.0180	05-Apr-13 09:24 JAM
206-44-0	Fluoranthene	1	ND		0.100	0.0390	05-Apr-13 09:24 JAM
86-73-7	Fluorene	1	ND		0.100	0.0630	05-Apr-13 09:24 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		0.100	0.0180	05-Apr-13 09:24 JAM
91-57-6	2-Methylnaphthalene	1	ND		0.100	0.0780	05-Apr-13 09:24 JAM
91-20-3	Naphthalene	1	ND		0.100	0.0670	05-Apr-13 09:24 JAM
85-01-8	Phenanthrene	1	ND		0.100	0.0490	05-Apr-13 09:24 JAM
129-00-0	Pyrene	1	ND		0.100	0.0360	05-Apr-13 09:24 JAM

17 compound(s) reported

Protocol Blank 4/12/2013 17:22:5

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Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205712 BLANK 1 **Project:** 20152345

Lab ID: 201078318

Prep Level: Water **Batch:** 205712

Method: Water GC/MS Volatile Organics

Prepared: 03-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
67-64-1	Acetone	1	ND		10.0	8.88	03-Apr-13 08:52 MHM
71-43-2	Benzene	1	ND		5.00	0.518	03-Apr-13 08:52 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469	03-Apr-13 08:52 MHM
75-25-2	Bromoform	1	ND		5.00	0.920	03-Apr-13 08:52 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855	03-Apr-13 08:52 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66	03-Apr-13 08:52 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530	03-Apr-13 08:52 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528	03-Apr-13 08:52 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662	03-Apr-13 08:52 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12	03-Apr-13 08:52 MHM
67-66-3	Chloroform	1	ND		5.00	0.853	03-Apr-13 08:52 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636	03-Apr-13 08:52 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34	03-Apr-13 08:52 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630	03-Apr-13 08:52 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477	03-Apr-13 08:52 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553	03-Apr-13 08:52 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565	03-Apr-13 08:52 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738	03-Apr-13 08:52 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557	03-Apr-13 08:52 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578	03-Apr-13 08:52 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738	03-Apr-13 08:52 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579	03-Apr-13 08:52 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454	03-Apr-13 08:52 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526	03-Apr-13 08:52 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292	03-Apr-13 08:52 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28	03-Apr-13 08:52 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405	03-Apr-13 08:52 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36	03-Apr-13 08:52 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44	03-Apr-13 08:52 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10	03-Apr-13 08:52 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687	03-Apr-13 08:52 MHM
100-42-5	Styrene	1	ND		5.00	0.571	03-Apr-13 08:52 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12	03-Apr-13 08:52 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679	03-Apr-13 08:52 MHM

Protocol Blank 4/12/2013 17:22:5

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Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205712 BLANK 1 **Project:** 20152345

Lab ID: 201078318

Prep Level: Water **Batch:** 205712

Method: Water GC/MS Volatile Organics

Prepared: 03-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
108-88-3	Toluene	1	ND		5.00	0.536	03-Apr-13 08:52 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554	03-Apr-13 08:52 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915	03-Apr-13 08:52 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654	03-Apr-13 08:52 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575	03-Apr-13 08:52 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564	03-Apr-13 08:52 MHM
	m&p-Xylene	1	ND		5.00	0.937	03-Apr-13 08:52 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649	03-Apr-13 08:52 MHM

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205937 BLANK 1 **Project:** 20152345

Lab ID: 201079041

Prep Level: Water **Batch:** 205937

Method: Water GC Semivolatile Organics

Prepared: 05-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis	
none	Diesel Range Organics (C10-28)	1	ND		0.150	0.0760	08-Apr-13 17:32	SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.150	0.0490	08-Apr-13 17:32	SNP1

2 compound(s) reported

Protocol Blank 4/12/2013 17:22:5

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Blank Results

Pace Analytical Services, Inc.
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St. Rose, LA 70087
(504) 469-0333

Blank ID: 205705 BLANK 1 **Project:** 20152345

Lab ID: 201078252

Prep Level: Water **Batch:** 205705

Method: Water GC Volatile Organics

Prepared: 02-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Gasoline Range Organics(C6-10)	1	0.0240	J	0.0500	0.0212	02-Apr-13 20:36 DHR1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205642 BLANK 1 **Project:** 20152345

Lab ID: 201078014

Prep Level: Water **Batch:** 205642

Method: Water ICP Metals

Prepared: 02-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
7440-38-2	Arsenic	1	ND		10.0	1.04	03-Apr-13 15:30 MHB1
7440-43-9	Cadmium	1	ND		5.00	0.361	03-Apr-13 15:30 MHB1
7440-47-3	Chromium	1	ND		10.0	2.00	03-Apr-13 15:30 MHB1
7440-50-8	Copper	1	ND		10.0	2.76	03-Apr-13 15:30 MHB1
7439-92-1	Lead	1	1.28	J	5.00	1.15	03-Apr-13 15:30 MHB1
7440-02-0	Nickel	1	ND		40.0	0.253	03-Apr-13 15:30 MHB1
7440-22-4	Silver	1	ND		10.0	0.579	03-Apr-13 15:30 MHB1
7440-66-6	Zinc	1	ND		20.0	3.52	03-Apr-13 15:30 MHB1

8 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205646 BLANK 1 **Project:** 20152345

Lab ID: 201078027

Prep Level: Water **Batch:** 205646

Method: Water Mercury

Prepared: 02-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis	
7439-97-6	Mercury	1	ND		0.200	0.0340	03-Apr-13 09:29	EJH

1 compound(s) reported

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Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152345

Value	Description
Q10	The spike recovery was above the laboratory QC limits, however, the data are reported without qualification since the target analyte was not detected in the corresponding samples.
Q5	Insufficient sample was provided to perform matrix spike analyses on any sample in this analytical batch. Method performance for this analyte has been demonstrated by the laboratory control sample recovery.
J	This estimated value for the analyte is below the adjusted reporting limit but above the instrument reporting limit.
U	The analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
B	This analyte was detected in the method blank.
E	The sample concentration is above the linear calibrated range of the analysis.
LCS	Laboratory Control Sample.
MS(D)	Matrix Spike (Duplicate).
DUP	Sample Duplicate.
RPD	Relative Percent Difference.

Pace Analytical Services, In
1000 Riverbend Blvd. Suite F
St. Rose, LA 7008
(504) 469-033

Chains of Custody

20152345 20-CTEH

N-OF-CUSTODY / Analytical Request Document

of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

20152345

Section
Required

Section C
Invoice Information:

Page: 1 of 1

Company: CTEH	Report To: Chase Ertzberger	Attention: CTEH
Address: 5120 Northshore Dr	Copy To: James McCormack(jmccormack@cteh.com	
N. Little Rock, AR 72118	40432samples@cteh.com	Address: 5120 Northshore Dr
Email To: Certzberger@cteh.com	Purchase Order No.:	Pace Quote Reference:
Phone: 501-366-0394 Fax:	Project Name: Delek @ Magnolia, AR	Pace Project Manager: Karen Brown
Requested Due Date/TAT Normal 10 WD	Project Number: 40432	Pace Profile #: 5831 / Line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: AR

Section D
Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	8260	8270	8270-SIM (Low level)	Priority Pollutant List (6010)	TPH-GRO (8015)	TPH-DRO / ORO (8015)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MAAR04015W016A	WT	G	—	—	4.1.13	1500		11	4		1	6						3	2	1	1	3	1		20107813
2	TB013	1		—	—	—	—						2						2							214
3																										
4																										
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										

04.01.13

04.01.13

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	CTEH	04.01.13	1600	UPS	04.01.13	1600				
	UPS	4-2-13	1100	[signature]	4-2-13	1100	2.5	X	X	X

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ashley Mason

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 4-1-2013

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.06, 2-Feb-2007

20152345 20-CTEH

Pace Analytical

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Sample Condi

Project #: 20

Courier: ☐ Pace Courier ☐ Hired Courier ☐ Fed X ☑ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC] **Custody Seals Intact:** ☐Yes ☐No

Therometer Used:	☐ Therm Fisher IR 5 ☑ Therm Fisher IR 6 ☐ Therm Fisher IR 7

Type of Ice: (Wet) Blue None Samples on ice: [see COC]

Cooler Temperature: [see COC] Temp should be above freezing to 6°C

Date and Initials of person examining contents: 4-2-13

Temp must be measured from Temperature blank when present

				Comments:
Temperature Blank Present"?	☑Yes	☐No	☐N/A	1
Chain of Custody Present:	☑Yes	☐No	☐N/A	2
Chain of Custody Complete:	☑Yes	☐No	☐N/A	3
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	4
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	5
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	6
Sufficient Volume:	☑Yes	☐No	☐N/A	7
Correct Containers Used:	☑Yes	☐No	☐N/A	8
Filtered vol. Rec. for Diss. tests	☐Yes	☐No	☐N/A	9
Sample Labels match COC:	☑Yes	☐No	☐N/A	10
All containers received within manafacture's precautionary and/or expiration dates.	☑Yes	☐No	☐N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☑Yes	☐No	☐N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	☑Yes	☐No	☐N/A	13 If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO_3 _____ H_2SO_4 _____
Headspace in VOA Vials (>6mm):	☐Yes	☑No	☐N/A	14
Trip Blank Present:	☑Yes	☐No		15

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: Sample coll date of 4/2/13 used for TB 13

ALLC003rev.08, 15Feb2013 SCUR Form - mod

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

April 11, 2013

James McCormack
CTEH
5120 North Shore Drive
North Little Rock, AR 72118

RE: Project 20152423
Project ID: DELEK@MAGNOLIA,AR

Dear James McCormack:

Enclosed are the analytical results for sample(s) received by the laboratory on April 03, 2013. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Karen Brown
karen.brown@pacelabs.com

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

Laboratory Certifications

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152423

Client: CTEH

Project ID: DELEK@MAGNOLIA,AR

Washington Department of Ecology C2078
Oregon Environmental Laboratory Accreditation - LA200001
U.S. Dept. of Agriculture Foreign Soil Import P330-10-00119
Pennsylvania Dept. of Env Protection (NELAC) 68-04202
Texas Commission on Env. Quality (NELAC) T104704405-09-TX
Kansas Department of Health and Environment (NELAC) E-10266
Florida Department of Health (NELAC) E87595
Oklahoma Department of Environmental Quality - 2010-139
Illinois Environmental Protection Agency - 0025721
California Env. Lab Accreditation Program Branch - 11277CA
Louisiana Dept. of Environmental Quality (NELAC/LELAP) 02006

4/11/2013 17:39:37

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Cross Reference

Project: 20152423

Client: CTEH

Project ID: DELEK@MAGNOLIA,AR

Client Sample ID	Lab ID	Matrix	Collection Date/Time	Received Date/Time
MAAR0402SW017A	201078706	Water	02-Apr-13 10:30	03-Apr-13 10:40
TB014	201078707	Water	02-Apr-13 00:00	03-Apr-13 10:40

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(504) 469-0333

Project: 20152423

Sample Receipt Condition:

All samples were received in accordance with EPA protocol.

Holding Times:

All holding times were met.

Blanks:

All blank results were below reporting limits.

Laboratory Control Samples:

All LCS recoveries were within QC limits.

Matrix Spikes and Duplicates:

MS or MSD recoveries outside of QC limits are qualified in the Report of Quality Control section.

Surrogates:

All surrogate recoveries were within QC limits.

QC Cross Reference

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152423

Analytical Method	Batch	Sample used for QC
EPA 8015/8021	205876	Client sample MAAR0403SW018A from project 20152442
EPA 6010	205920	Batch sample from another client
EPA 7470	205911	Project sample MAAR0402SW017A
EPA 8270	206026	Batch sample from another client
EPA 8270	206026	Batch sample from another client
EPA 8260	205838	Batch sample from another client

For the sample used as the original for the DUP or MS/MSD for the batch:

Project sample means a sample from this project was used.
Client sample means a sample from the same client but in a different project was used.
Batch sample means a sample from a different client was used.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
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Client: CTEH

Client ID: MAAR0402SW017A
Project: 20152423
Project ID: DELEK@MAGNOLIA,AR
Site: None
Lab ID: 201078706
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 206026
Method: EPA 8270
GCMS SVOAs SIM Water
Collected: 02-Apr-13
Received: 03-Apr-13
Prepared: 08-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
83-32-9	Acenaphthene	1	ND		0.100	0.0520		09-Apr-13 15:32	JAM
208-96-8	Acenaphthylene	1	ND		0.100	0.0460		09-Apr-13 15:32	JAM
120-12-7	Anthracene	1	ND		0.100	0.0570		09-Apr-13 15:32	JAM
56-55-3	Benzo(a)anthracene	1	ND		0.100	0.0310		09-Apr-13 15:32	JAM
205-99-2	Benzo(b)fluoranthene	1	ND		0.100	0.0520		09-Apr-13 15:32	JAM
207-08-9	Benzo(k)fluoranthene	1	ND		0.100	0.0410		09-Apr-13 15:32	JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		0.100	0.0200		09-Apr-13 15:32	JAM
50-32-8	Benzo(a)pyrene	1	ND		0.100	0.0410		09-Apr-13 15:32	JAM
218-01-9	Chrysene	1	ND		0.100	0.0250		09-Apr-13 15:32	JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		0.100	0.0180		09-Apr-13 15:32	JAM
206-44-0	Fluoranthene	1	ND		0.100	0.0390		09-Apr-13 15:32	JAM
86-73-7	Fluorene	1	ND		0.100	0.0630		09-Apr-13 15:32	JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		0.100	0.0180		09-Apr-13 15:32	JAM
91-57-6	2-Methylnaphthalene	1	ND		0.100	0.0780		09-Apr-13 15:32	JAM
91-20-3	Naphthalene	1	ND		0.100	0.0670		09-Apr-13 15:32	JAM
85-01-8	Phenanthrene	1	ND		0.100	0.0490		09-Apr-13 15:32	JAM
129-00-0	Pyrene	1	ND		0.100	0.0360		09-Apr-13 15:32	JAM

17 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
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(504) 469-0333

Client: CTEH

Client ID: MAAR0402SW017A
Project: 20152423
Project ID: DELEK@MAGNOLIA,AR
Site: None
Lab ID: 201078706
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205930
Method: EPA 8270
GCMS SVOAs Water
Collected: 02-Apr-13
Received: 03-Apr-13
Prepared: 05-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
65-85-0	Benzoic acid	1	ND		25.0	1.56		10-Apr-13 17:06 JAM
100-51-6	Benzyl alcohol	1	ND		10.0	0.959		10-Apr-13 17:06 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND		10.0	0.541		10-Apr-13 17:06 JAM
85-68-7	Butylbenzylphthalate	1	ND		10.0	0.825		10-Apr-13 17:06 JAM
86-74-8	Carbazole	1	ND		10.0	0.932		10-Apr-13 17:06 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND		10.0	0.812		10-Apr-13 17:06 JAM
106-47-8	3&4-Chloroaniline	1	ND		10.0	1.22		10-Apr-13 17:06 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	0.789		10-Apr-13 17:06 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	0.804		10-Apr-13 17:06 JAM
91-58-7	2-Chloronaphthalene	1	ND		10.0	0.713		10-Apr-13 17:06 JAM
95-57-8	2-Chlorophenol	1	ND		10.0	0.716		10-Apr-13 17:06 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND		10.0	0.638		10-Apr-13 17:06 JAM
132-64-9	Dibenzofuran	1	ND		10.0	0.576		10-Apr-13 17:06 JAM
95-50-1	1,2-Dichlorobenzene	1	ND		10.0	0.867		10-Apr-13 17:06 JAM
541-73-1	1,3-Dichlorobenzene	1	ND		10.0	0.832		10-Apr-13 17:06 JAM
106-46-7	1,4-Dichlorobenzene	1	ND		10.0	0.652		10-Apr-13 17:06 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND		10.0	0.781		10-Apr-13 17:06 JAM
120-83-2	2,4-Dichlorophenol	1	ND		10.0	0.783		10-Apr-13 17:06 JAM
84-66-2	Diethylphthalate	1	ND		10.0	0.607		10-Apr-13 17:06 JAM
105-67-9	2,4-Dimethylphenol	1	ND		10.0	0.781		10-Apr-13 17:06 JAM
131-11-3	Dimethylphthalate	1	ND		10.0	0.594		10-Apr-13 17:06 JAM
84-74-2	Di-n-butylphthalate	1	ND		10.0	0.651		10-Apr-13 17:06 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		10.0	1.02		10-Apr-13 17:06 JAM
51-28-5	2,4-Dinitrophenol	1	ND		10.0	0.470		10-Apr-13 17:06 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	0.741		10-Apr-13 17:06 JAM
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	0.780		10-Apr-13 17:06 JAM
117-84-0	Di-n-octylphthalate	1	ND		10.0	0.781		10-Apr-13 17:06 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	0.930		10-Apr-13 17:06 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		10.0	0.759		10-Apr-13 17:06 JAM
118-74-1	Hexachlorobenzene	1	ND		10.0	0.681		10-Apr-13 17:06 JAM
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	0.347		10-Apr-13 17:06 JAM
67-72-1	Hexachloroethane	1	ND		10.0	0.987		10-Apr-13 17:06 JAM
78-59-1	Isophorone	1	ND		10.0	0.628		10-Apr-13 17:06 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	0.749		10-Apr-13 17:06 JAM

Protocol 4/11/2013 17:40:21

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0402SW017A
Project: 20152423
Project ID: DELEK@MAGNOLIA,AR
Site: None
Lab ID: 201078706
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205930
Method: EPA 8270
GCMS SVOAs Water
Collected: 02-Apr-13
Received: 03-Apr-13
Prepared: 05-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
	3&4-Methylphenol	1	ND		10.0	0.948		10-Apr-13 17:06	JAM
88-74-4	2-Nitroaniline	1	ND		10.0	0.859		10-Apr-13 17:06	JAM
99-09-2	3-Nitroaniline	1	ND		10.0	0.877		10-Apr-13 17:06	JAM
100-01-6	4-Nitroaniline	1	ND		10.0	0.972		10-Apr-13 17:06	JAM
98-95-3	Nitrobenzene	1	ND		10.0	1.06		10-Apr-13 17:06	JAM
88-75-5	2-Nitrophenol	1	ND		10.0	0.772		10-Apr-13 17:06	JAM
100-02-7	4-Nitrophenol	1	ND		10.0	0.761		10-Apr-13 17:06	JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	0.919		10-Apr-13 17:06	JAM
86-30-6	N-Nitrosodiphenylamine	1	ND		10.0	0.715		10-Apr-13 17:06	JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		10.0	0.732		10-Apr-13 17:06	JAM
87-86-5	Pentachlorophenol	1	ND		10.0	0.860		10-Apr-13 17:06	JAM
108-95-2	Phenol	1	ND		10.0	0.773		10-Apr-13 17:06	JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	0.797		10-Apr-13 17:06	JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		10.0	0.751		10-Apr-13 17:06	JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	0.737		10-Apr-13 17:06	JAM

49 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0402SW017A
Project: 20152423
Project ID: DELEK@MAGNOLIA,AR
Site: None
Lab ID: 201078706
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205838
Method: EPA 8260
GCMS VOAs Water
Collected: 02-Apr-13
Received: 03-Apr-13
Prepared: 04-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	8.88		04-Apr-13 12:47 MHM
71-43-2	Benzene	1	0.520	J	5.00	0.518		04-Apr-13 12:47 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		04-Apr-13 12:47 MHM
75-25-2	Bromoform	1	ND		5.00	0.920		04-Apr-13 12:47 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855		04-Apr-13 12:47 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		04-Apr-13 12:47 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530		04-Apr-13 12:47 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		04-Apr-13 12:47 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662		04-Apr-13 12:47 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12		04-Apr-13 12:47 MHM
67-66-3	Chloroform	1	ND		5.00	0.853		04-Apr-13 12:47 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636		04-Apr-13 12:47 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		04-Apr-13 12:47 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		04-Apr-13 12:47 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		04-Apr-13 12:47 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		04-Apr-13 12:47 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565		04-Apr-13 12:47 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		04-Apr-13 12:47 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		04-Apr-13 12:47 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		04-Apr-13 12:47 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		04-Apr-13 12:47 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		04-Apr-13 12:47 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		04-Apr-13 12:47 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		04-Apr-13 12:47 MHM
100-41-4	Ethylbenzene	1	0.600	J	5.00	0.292		04-Apr-13 12:47 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28		04-Apr-13 12:47 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405		04-Apr-13 12:47 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36		04-Apr-13 12:47 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44		04-Apr-13 12:47 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		04-Apr-13 12:47 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		04-Apr-13 12:47 MHM
100-42-5	Styrene	1	ND		5.00	0.571		04-Apr-13 12:47 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		04-Apr-13 12:47 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		04-Apr-13 12:47 MHM

Protocol 4/11/2013 17:40:21

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0402SW017A
Project: 20152423
Project ID: DELEK@MAGNOLIA,AR
Site: None
Lab ID: 201078706
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205838
Method: EPA 8260
GCMS VOAs Water
Collected: 02-Apr-13
Received: 03-Apr-13
Prepared: 04-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	0.570	J	5.00	0.536		04-Apr-13 12:47 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		04-Apr-13 12:47 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915		04-Apr-13 12:47 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654		04-Apr-13 12:47 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575		04-Apr-13 12:47 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564		04-Apr-13 12:47 MHM
	m&p-Xylene	1	ND		5.00	0.937		04-Apr-13 12:47 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649		04-Apr-13 12:47 MHM

42 compound(s) reported

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0402SW017A
Project: 20152423
Project ID: DELEK@MAGNOLIA,AR
Site: None
Lab ID: 201078706
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205937
Method: EPA 8015 Mod Ext
8015 TPH Extractables Water
Collected: 02-Apr-13
Received: 03-Apr-13
Prepared: 05-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Diesel Range Organics (C10-28)	1	ND		0.250	0.0760		08-Apr-13 18:28 SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.500	0.0490		08-Apr-13 18:28 SNP1

2 compound(s) reported

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Pace Analytical Services, Inc.
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St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0402SW017A
Project ID: DELEK@MAGNOLIA,AR
Lab ID: 201078706
Description: None
Method: EPA 8015/8021
8015/8021 Water

Project: 20152423
Site: None
Matrix: Water
% Moisture: n/a
Prep Level: Water
Batch: 205876
Collected: 02-Apr-13
Received: 03-Apr-13
Prepared: 04-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
none	Gasoline Range Organics(C6-10)	1	0.0282	J	0.0500	0.0212		04-Apr-13 13:49	DHR1

1 compound(s) reported

Protocol 4/11/2013 17:40:21

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
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St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0402SW017A
Project: 20152423
Project ID: DELEK@MAGNOLIA,AR
Site: None
Lab ID: 201078706
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205920
Method: EPA 6010
Metals, ICP, Water
Collected: 02-Apr-13
Received: 03-Apr-13
Prepared: 05-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7440-36-0	Antimony	1	ND		60.0	1.35		05-Apr-13 13:28 MHB1
7440-38-2	Arsenic	1	ND		10.0	1.04		05-Apr-13 13:28 MHB1
7440-41-7	Beryllium	1	0.646	J	5.00	0.282		05-Apr-13 13:28 MHB1
7440-43-9	Cadmium	1	ND		5.00	0.361		05-Apr-13 13:28 MHB1
7440-47-3	Chromium	1	2.07	J	10.0	2.00		05-Apr-13 13:28 MHB1
7440-50-8	Copper	1	ND		10.0	2.76		05-Apr-13 13:28 MHB1
7439-92-1	Lead	1	1.97	J	5.00	1.15		05-Apr-13 13:28 MHB1
7440-02-0	Nickel	1	7.31	J	40.0	0.253		05-Apr-13 13:28 MHB1
7782-49-2	Selenium	1	ND		35.0	14.3		05-Apr-13 13:28 MHB1
7440-22-4	Silver	1	ND		10.0	0.579		05-Apr-13 13:28 MHB1
7440-28-0	Thallium	1	ND		10.0	1.05		05-Apr-13 13:28 MHB1
7440-66-6	Zinc	1	22.4		20.0	3.52		05-Apr-13 13:28 MHB1

12 compound(s) reported

Protocol 4/11/2013 17:40:21

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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(504) 469-0333

Client: CTEH

Client ID: MAAR0402SW017A
Project ID: DELEK@MAGNOLIA,AR
Lab ID: 201078706
Description: None
Method: EPA 7470
Mercury Water

Project: 20152423
Site: None
Matrix: Water
Prep Level: Water
% Moisture: n/a
Batch: 205911
Collected: 02-Apr-13
Received: 03-Apr-13
Prepared: 05-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.200	0.0340		05-Apr-13 11:09 MHB1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Client: CTEH

Client ID: TB014
Project: 20152423
Project ID: DELEK@MAGNOLIA,AR
Site: None
Lab ID: 201078707
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205838
Method: EPA 8260
GCMS VOAs Water
Collected: 02-Apr-13
Received: 03-Apr-13
Prepared: 04-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	8.88		04-Apr-13 13:08 MHM
71-43-2	Benzene	1	ND		5.00	0.518		04-Apr-13 13:08 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		04-Apr-13 13:08 MHM
75-25-2	Bromoform	1	ND		5.00	0.920		04-Apr-13 13:08 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855		04-Apr-13 13:08 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		04-Apr-13 13:08 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530		04-Apr-13 13:08 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		04-Apr-13 13:08 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662		04-Apr-13 13:08 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12		04-Apr-13 13:08 MHM
67-66-3	Chloroform	1	31.0		5.00	0.853		04-Apr-13 13:08 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636		04-Apr-13 13:08 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		04-Apr-13 13:08 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		04-Apr-13 13:08 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		04-Apr-13 13:08 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		04-Apr-13 13:08 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565		04-Apr-13 13:08 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		04-Apr-13 13:08 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		04-Apr-13 13:08 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		04-Apr-13 13:08 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		04-Apr-13 13:08 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		04-Apr-13 13:08 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		04-Apr-13 13:08 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		04-Apr-13 13:08 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292		04-Apr-13 13:08 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28		04-Apr-13 13:08 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405		04-Apr-13 13:08 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36		04-Apr-13 13:08 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44		04-Apr-13 13:08 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		04-Apr-13 13:08 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		04-Apr-13 13:08 MHM
100-42-5	Styrene	1	ND		5.00	0.571		04-Apr-13 13:08 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		04-Apr-13 13:08 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		04-Apr-13 13:08 MHM

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(504) 469-0333

Client: CTEH

Client ID: TB014
Project ID: DELEK@MAGNOLIA,AR
Lab ID: 201078707
Description: None
Method: EPA 8260
GCMS VOAs Water

Project: 20152423
Site: None
Matrix: Water **% Moisture:** n/a
Prep Level: Water **Batch:** 205838

Collected: 02-Apr-13 **Received:** 03-Apr-13
Prepared: 04-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	ND		5.00	0.536		04-Apr-13 13:08 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		04-Apr-13 13:08 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915		04-Apr-13 13:08 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654		04-Apr-13 13:08 MHM
75-69-4	Trichlorofluoromethane	1	3.67	J	5.00	0.575		04-Apr-13 13:08 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564		04-Apr-13 13:08 MHM
	m&p-Xylene	1	ND		5.00	0.937		04-Apr-13 13:08 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649		04-Apr-13 13:08 MHM

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Surrogate Recovery

Batch: 205930 **Project:** 20152423

Method: Water GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201079024	205930 BLANK 1		74	80	70	89	73	95		
201079025	205930 LCS 1		84	87	78	76	81	99		
201078706	MAAR0402SW017A		87	87	77	94	80	87		
QC limits:			25-145	34-117	10-118	33-120	15-134	24-133		

Sur 1: 2,4,6-Tribromophenol (S)
Sur 2: 2-Fluorobiphenyl (S)
Sur 3: 2-Fluorophenol (S)
Sur 4: Nitrobenzene-d5 (S)
Sur 5: Phenol-d5 (S)
Sur 6: Terphenyl-d14 (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 206026 **Project:** 20152423

Method: Water GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201079561	206026 BLANK 1		69	72						
201079562	206026 LCS 1		74	79						
201079565	AVG-0813MW6Q-0413 MS 2		66	64						
201079566	AVG-0813MW6Q-0413 MSD 2		62	60						
201078706	MAAR0402SW017A		65	75						
201079563	PZ-223A MS 1		68	68						
201079564	PZ-223A MSD 1		70	74						
	QC limits:		12-110	25-113						

Sur 1: 2-Fluorobiphenyl (S)
Sur 2: Terphenyl-d14 (S)

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*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205838 **Project:** 20152423

Method: Water GC/MS Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201078685	205838 BLANK 1		85	90	90					
201078928	205838 BLANK 2		85	93	91					
201079664	205838 BLANK 3		84	89	89					
201078686	205838 LCS 1		90	92	94					
201078929	205838 LCS 2		86	91	93					
201079665	205838 LCS 3		86	88	91					
201078706	MAAR0402SW017A		86	90	91					
201078707	TB014		86	89	92					
201078750	WASCLF2Q-124766 MS 1		89	91	93					
201078751	WASCLF2Q-124766 MSD 1		90	88	94					
	QC limits:		68-124	72-126	79-119					

Sur 1: 4-Bromofluorobenzene (S)
Sur 2: Dibromofluoromethane (S)
Sur 3: Toluene-d8 (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205937 **Project:** 20152423

Method: Water GC Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201079041	205937 BLANK 1		82	79						
201079042	205937 LCS 1		60	60						
201078706	MAAR0402SW017A		20	72						
	QC limits:		16-137	10-121						

Sur 1: n-Pentacosane (S)
Sur 2: o-Terphenyl (S)

*** denotes surrogate recovery outside of QC limits.**
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205876 **Project:** 20152423

Method: Water GC Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201078817	205876 BLANK 1		102							
201078949	205876 BLANK 2		102							
201078818	205876 LCS 1		107							
201078950	205876 LCS 2		104							
201078706	MAAR0402SW017A		105							
201078951	MAAR0403SW018A MS 1		106							
201078952	MAAR0403SW018A MSD 1		108							
	QC limits:		60-129							

Sur 1: 4-Bromofluorobenzene (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Batch: 205930 **Project:** 20152423 **LCS:** 201079025 10-Apr-13 13:14

Method: Water GC/MS Semivolatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Benzoic acid	50.0	19.1	38								10-130			Q5
Benzyl alcohol	50.0	39.8	80								44-120			Q5
4-Bromophenylphenyl ether	50.0	39.9	80								49-120			Q5
Butylbenzylphthalate	50.0	37.5	75								46-120			Q5
Carbazole	50.0	43.9	88								51-127			Q5
4-Chloro-3-methylphenol	50.0	38.4	77								43-115			Q5
3&4-Chloroaniline	50.0	32.9	66								10-130			Q5
bis(2-Chloroethoxy)methane	50.0	34.7	69								43-115			Q5
bis(2-Chloroethyl) ether	50.0	38.5	77								47-115			Q5
2-Chloronaphthalene	50.0	40.5	81								52-115			Q5
2-Chlorophenol	50.0	42.1	84								48-115			Q5
4-Chlorophenylphenyl ether	50.0	42.4	85								52-116			Q5
Dibenzofuran	50.0	42.2	85								53-115			Q5
1,2-Dichlorobenzene	50.0	40.6	81								42-115			Q5
1,3-Dichlorobenzene	50.0	39.4	79								40-115			Q5
1,4-Dichlorobenzene	50.0	39.0	78								41-115			Q5
3,3'-Dichlorobenzidine	50.0	37.9	76								16-142			Q5
2,4-Dichlorophenol	50.0	39.6	79								45-115			Q5
Diethylphthalate	50.0	39.4	79								49-120			Q5
2,4-Dimethylphenol	50.0	36.0	72								23-116			Q5
Dimethylphthalate	50.0	38.4	77								52-115			Q5
Di-n-butylphthalate	50.0	37.3	75								50-117			Q5
4,6-Dinitro-2-methylphenol	50.0	45.1	90								44-122			Q5
2,4-Dinitrophenol	50.0	34.2	68								16-134			Q5
2,4-Dinitrotoluene	50.0	41.9	84								50-118			Q5
2,6-Dinitrotoluene	50.0	41.9	84								55-115			Q5
Di-n-octylphthalate	50.0	40.2	80								40-129			Q5
bis(2-Ethylhexyl)phthalate	50.0	39.6	79								46-124			Q5
Hexachloro-1,3-butadiene	50.0	39.9	80								32-115			Q5
Hexachlorobenzene	50.0	40.5	81								53-115			Q5
Hexachlorocyclopentadiene	50.0	29.9	60								10-115			Q5
Hexachloroethane	50.0	38.0	76								36-115			Q5
Isophorone	50.0	37.2	75								45-115			Q5
2-Methylphenol (o-Cresol)	50.0	43.2	86								46-115			Q5
3&4-Methylphenol	50.0	42.4	85								46-115			Q5
2-Nitroaniline	50.0	41.4	83								48-121			Q5
3-Nitroaniline	50.0	40.2	80								38-125			Q5
4-Nitroaniline	50.0	42.9	86								37-132			Q5
Nitrobenzene	50.0	36.2	72								44-118			Q5
2-Nitrophenol	50.0	39.3	79								45-115			Q5
4-Nitrophenol	50.0	40.7	81								29-134			Q5

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205930 **Project:** 20152423 **LCS:** 201079025 10-Apr-13 13:14

Method: Water GC/MS Semivolatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
N-Nitroso-di-n-propylamine	50.0	39.6	79								45-119			Q5
N-Nitrosodiphenylamine	50.0	47.9	96								42-134			Q5
2,2'-Oxybis(1-chloropropane)	50.0	41.7	83								40-120			Q5
Pentachlorophenol	50.0	28.5	57								34-124			Q5
Phenol	50.0	41.3	83								44-115			Q5
1,2,4-Trichlorobenzene	50.0	38.3	77								40-115			Q5
2,4,5-Trichlorophenol	50.0	42.5	85								49-115			Q5
2,4,6-Trichlorophenol	50.0	43.0	86								48-115			Q5

49 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 206026 **Project:** 20152423 **LCS:** 201079562 09-Apr-13 12:17

Method: Water GC/MS Semivolatile Organics **MS:** 201079565 09-Apr-13 13:00

Units: ug/L **MSD:** 201079566 09-Apr-13 13:22

Original for MS: Batch Sample 201079448

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acenaphthene	2.00	1.45	73	2.00		1.44	1.35	72	68	6	39-115	10-131	20	
Acenaphthylene	2.00	1.06	53	2.00		1.10	1.05	55	53	5	30-115	10-131	20	
Anthracene	2.00	1.03	52	2.00		1.55	1.43	78	72	8	34-115	10-139	20	
Benzo(a)anthracene	2.00	1.41	71	2.00		1.36	1.27	68	64	7	33-115	12-115	20	
Benzo(b)fluoranthene	2.00	1.77	89	2.00		1.40	1.25	70	63	11	30-115	10-119	20	
Benzo(k)fluoranthene	2.00	1.64	82	2.00		1.31	1.35	66	68	3	31-115	10-122	20	
Benzo(g,h,i)perylene	2.00	1.66	83	2.00		1.36	1.30	68	65	5	27-115	10-123	20	
Benzo(a)pyrene	2.00	1.04	52	2.00		1.29	1.25	65	63	3	28-115	10-115	20	
Chrysene	2.00	1.26	63	2.00		1.34	1.32	67	66	2	36-115	10-116	20	
Dibenz(a,h)anthracene	2.00	1.57	79	2.00		1.42	1.36	71	68	4	23-115	10-128	20	
Fluoranthene	2.00	1.54	77	2.00		1.47	1.36	74	68	8	39-115	10-136	20	
Fluorene	2.00	1.50	75	2.00		1.44	1.35	72	68	6	38-115	10-129	20	
Indeno(1,2,3-cd)pyrene	2.00	1.65	83	2.00		1.40	1.35	70	68	4	28-115	10-124	20	
2-Methylnaphthalene	2.00	1.47	74	2.00		1.41	1.29	71	65	9	31-115	11-125	20	
Naphthalene	2.00	1.52	76	2.00		1.47	1.38	73	68	6	40-115	14-124	20	
Phenanthrene	2.00	1.48	74	2.00		1.46	1.39	73	70	5	38-115	10-130	20	
Pyrene	2.00	1.53	77	2.00		1.43	1.33	72	67	7	33-115	10-120	20	

17 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 206026 **Project:** 20152423 **LCS:**

Method: Water GC/MS Semivolatile Organics **MS:** 201079563 09-Apr-13 18:03

Units: ug/L **MSD:** 201079564 09-Apr-13 18:25

Original for MS: Batch Sample 201079004

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acenaphthene				2.00		1.56	1.61	78	81	3		10-131	20	
Acenaphthylene				2.00		1.44	1.53	72	77	6		10-131	20	
Anthracene				2.00		1.78	1.87	89	94	5		10-139	20	
Benzo(a)anthracene				2.00		1.70	1.83	85	92	7		12-115	20	
Benzo(b)fluoranthene				2.00		1.40	1.47	70	74	5		10-119	20	
Benzo(k)fluoranthene				2.00		1.43	1.55	72	78	8		10-122	20	
Benzo(g,h,i)perylene				2.00		1.41	1.53	71	77	8		10-123	20	
Benzo(a)pyrene				2.00		1.60	1.74	80	87	8		10-115	20	
Chrysene				2.00		1.47	1.59	74	80	8		10-116	20	
Dibenz(a,h)anthracene				2.00		1.55	1.65	78	83	6		10-128	20	
Fluoranthene				2.00		1.77	1.87	89	94	5		10-136	20	
Fluorene				2.00		1.58	1.61	79	81	2		10-129	20	
Indeno(1,2,3-cd)pyrene				2.00		1.52	1.62	76	81	6		10-124	20	
2-Methylnaphthalene				2.00	0.100	1.54	1.63	72	77	6		11-125	20	
Naphthalene				2.00	0.250	1.69	1.81	72	78	7		14-124	20	
Phenanthrene				2.00	0.0200	1.64	1.70	81	84	4		10-130	20	
Pyrene				2.00		1.55	1.63	78	82	5		10-120	20	

17 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205838 **Project:** 20152423 **LCS:** 201078686 04-Apr-13 11:03

Method: Water GC/MS Volatile Organics **MS:** 201078750 04-Apr-13 12:05

Units: ug/L **MSD:** 201078751 04-Apr-13 12:26

Original for MS: Batch Sample 201078719

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acetone	50.0	48.1	96	50.0		63.1	57.4	111	100	9	10-198	10-202	20	
Benzene	50.0	48.7	98	50.0		48.2	48.8	97	98	1	68-129	60-138	20	
Bromodichloromethane	50.0	47.7	95	50.0	6.34	52.9	52.1	93	92	2	68-132	66-137	20	
Bromoform	50.0	51.5	103	50.0	0.980	47.0	48.5	92	95	3	56-153	53-156	20	
Bromomethane	50.0	44.8	90	50.0		43.8	44.7	88	90	2	47-149	43-151	20	
2-Butanone (MEK)	50.0	44.9	90	50.0		45.8	40.8	92	82	11	18-173	14-184	20	
Carbon disulfide	50.0	46.1	92	50.0		45.0	44.8	90	90	0	25-166	17-176	20	
Carbon tetrachloride	50.0	48.5	97	50.0		47.9	48.7	96	98	2	56-146	51-151	20	
Chlorobenzene	50.0	49.3	99	50.0		48.7	48.3	97	97	1	74-131	71-135	20	
Chloroethane	50.0	58.8	118	50.0		58.0	61.2	116	122	5	28-190	21-191	20	
Chloroform	50.0	49.3	99	50.0	95.9	79.3	74.5	0 *	0 *	6	71-132	67-138	20	Q1
Chloromethane	50.0	38.0	76	50.0	1.11	45.8	44.9	89	88	2	27-154	24-158	20	
1,2-Dibromo-3-chloropropane	50.0	49.4	99	50.0		42.2	45.2	84	90	7	40-155	38-162	20	
Dibromochloromethane	50.0	50.4	101	50.0	2.50	47.5	49.5	90	94	4	64-138	62-142	20	
1,2-Dibromoethane (EDB)	50.0	49.8	100	50.0		45.2	46.5	91	93	3	62-146	61-149	20	
Dichlorodifluoromethane	50.0	25.7	52	50.0		24.6	23.3	49	47	5	18-173	16-176	20	
1,1-Dichloroethane	50.0	50.1	100	50.0		50.0	48.5	100	97	3	63-135	61-141	20	
1,2-Dichloroethane	50.0	48.6	97	50.0		46.7	46.1	93	92	1	58-150	57-155	20	
1,1-Dichloroethene	50.0	45.5	91	50.0		42.9	42.9	86	86	0	50-151	40-163	20	
cis-1,2-Dichloroethene	50.0	48.6	97	50.0		47.5	46.0	95	92	3	65-132	61-138	20	
trans-1,2-Dichloroethene	50.0	46.1	92	50.0		46.0	44.5	92	89	3	56-137	52-144	20	
1,2-Dichloropropane	50.0	50.1	100	50.0		49.6	48.8	99	98	2	66-131	64-137	20	
cis-1,3-Dichloropropene	50.0	46.2	93	50.0		44.6	44.3	89	89	1	66-135	62-137	20	
trans-1,3-Dichloropropene	50.0	54.8	110	50.0		49.7	50.1	100	100	1	62-146	59-151	20	
Ethylbenzene	50.0	49.2	98	50.0		46.9	46.9	94	94	0	73-129	66-136	20	
2-Hexanone	50.0	56.1	112	50.0		45.0	47.9	90	96	6	29-158	27-165	20	
Isopropylbenzene (Cumene)	50.0	48.5	97	50.0		45.7	46.5	92	93	2	61-139	58-144	20	
Methylene chloride	50.0	49.0	98	50.0		46.9	46.8	92	92	0	41-171	35-165	20	
4-Methyl-2-pentanone (MIBK	50.0	53.0	106	50.0		42.1	45.2	84	90	7	46-159	43-165	20	
Methyl-tert-butyl ether	50.0	50.7	101	50.0		46.5	44.9	93	90	4	51-155	48-164	20	
Styrene	50.0	47.2	94	50.0			1.42	0 *	3 *	200 *	74-132	63-141	20	Q1
1,1,2,2-Tetrachloroethane	50.0	52.3	105	50.0		44.7	46.1	90	92	3	46-153	41-160	20	
Tetrachloroethene	50.0	48.5	97	50.0		46.3	46.8	93	94	1	57-151	48-160	20	
Toluene	50.0	49.0	98	50.0		47.4	48.0	95	96	1	70-130	62-137	20	
1,1,1-Trichloroethane	50.0	51.5	103	50.0		51.1	50.4	102	101	1	65-132	61-138	20	
1,1,2-Trichloroethane	50.0	51.7	103	50.0		47.0	47.8	94	96	2	64-140	63-145	20	
Trichloroethene	50.0	47.2	95	50.0		45.3	45.1	91	90	1	71-131	62-142	20	
Trichlorofluoromethane	50.0	55.4	111	50.0	8.85	56.6	57.5	96	97	2	37-188	19-196	20	
Vinyl chloride	50.0	39.4	79	50.0		37.1	36.8	74	74	1	42-148	35-153	20	
m&p-Xylene	100.	95.1	95	100.		82.9	78.3	83	78	6	71-132	64-138	20	
o-Xylene	50.0	45.1	90	50.0		42.0	41.7	84	83	1	69-129	63-136	20	

QC Protocol 4/11/2013 17:40:26

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205838 **Project:** 20152423 **LCS:** 201078686 04-Apr-13 11:03

Method: Water GC/MS Volatile Organics **MS:** 201078750 04-Apr-13 12:05

Units: ug/L **MSD:** 201078751 04-Apr-13 12:26

Original for MS: Batch Sample 201078719

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu

41 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205937 **Project:** 20152423 **LCS:** 201079042 08-Apr-13 18:00

Method: Water GC Semivolatile Organics **MS:**

Units: mg/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Diesel Range Organics (C10-	0.400	0.166	42								10-115			Q5
1 compound(s) reported														

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205876 **Project:** 20152423 **LCS:** 201078818 04-Apr-13 11:09

Method: Water GC Volatile Organics **MS:** 201078951 05-Apr-13 12:43

Units: mg/L **MSD:** 201078952 05-Apr-13 13:11

Original for MS: Batch Sample 201078794

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Gasoline Range Organics(C6-	0.500	0.484	97	0.500	0.0286	0.519	0.488	98	92	6	61-136	15-147	20	
1 compound(s) reported														

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205920 **Project:** 20152423 **LCS:** 201078981 05-Apr-13 13:11

Method: Water ICP Metals **MS:** 201078982 05-Apr-13 13:18

Units: ug/L **MSD:** 201078983 05-Apr-13 13:21

Original for MS: Batch Sample 201078978

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Antimony	1000	997.	100	1000	18.3	966.	962.	95	94	0	82-120	80-120	20	
Arsenic	1000	967.	97	1000	1.36	942.	938.	94	94	0	84-117	80-120	20	
Beryllium	1000	951.	95	1000		918.	916.	92	92	0	85-117	80-120	20	
Cadmium	1000	972.	97	1000		904.	898.	90	90	1	85-115	80-120	20	
Chromium	1000	953.	95	1000		917.	912.	92	91	1	83-117	80-120	20	
Copper	1000	995.	100	1000	3.55	963.	969.	96	97	1	85-116	80-120	20	
Lead	1000	1001	100	1000		910.	907.	91	91	0	84-118	80-120	20	
Nickel	1000	986.	99	1000	2.20	906.	898.	90	90	1	85-118	80-120	20	
Selenium	1000	995.	100	1000		949.	933.	95	93	2	85-116	80-120	20	
Silver	500.	497.	99	500.		475.	474.	95	95	0	80-120	80-120	20	
Thallium	1000	983.	98	1000	1.25	853.	846.	85	85	1	85-118	80-120	20	
Zinc	1000	963.	96	1000	6.05	901.	893.	90	89	1	81-120	80-120	20	

12 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205911 **Project:** 20152423 **LCS:** 201078945 05-Apr-13 11:08

Method: Water Mercury **MS:** 201078946 05-Apr-13 11:11

Units: ug/L **MSD:** 201078947 05-Apr-13 11:13

Original for MS: Client Sample 201078706

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Mercury	1.00	1.02	102	1.00		1.00	0.985	100	99	1	80-120	75-125	20	

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Blank Results

Blank ID: 205930 BLANK 1 **Project:** 20152423

Lab ID: 201079024

Prep Level: Water **Batch:** 205930

Method: Water GC/MS Semivolatile Organics

Prepared: 05-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
65-85-0	Benzoic acid	1	ND		25.0	1.56	10-Apr-13 12:49 JAM
100-51-6	Benzyl alcohol	1	ND		10.0	0.959	10-Apr-13 12:49 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND		10.0	0.541	10-Apr-13 12:49 JAM
85-68-7	Butylbenzylphthalate	1	ND		10.0	0.825	10-Apr-13 12:49 JAM
86-74-8	Carbazole	1	ND		10.0	0.932	10-Apr-13 12:49 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND		10.0	0.812	10-Apr-13 12:49 JAM
106-47-8	3&4-Chloroaniline	1	ND		10.0	1.22	10-Apr-13 12:49 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	0.789	10-Apr-13 12:49 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	0.804	10-Apr-13 12:49 JAM
91-58-7	2-Chloronaphthalene	1	ND		10.0	0.713	10-Apr-13 12:49 JAM
95-57-8	2-Chlorophenol	1	ND		10.0	0.716	10-Apr-13 12:49 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND		10.0	0.638	10-Apr-13 12:49 JAM
132-64-9	Dibenzofuran	1	ND		10.0	0.576	10-Apr-13 12:49 JAM
95-50-1	1,2-Dichlorobenzene	1	ND		10.0	0.867	10-Apr-13 12:49 JAM
541-73-1	1,3-Dichlorobenzene	1	ND		10.0	0.832	10-Apr-13 12:49 JAM
106-46-7	1,4-Dichlorobenzene	1	ND		10.0	0.652	10-Apr-13 12:49 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND		10.0	0.781	10-Apr-13 12:49 JAM
120-83-2	2,4-Dichlorophenol	1	ND		10.0	0.783	10-Apr-13 12:49 JAM
84-66-2	Diethylphthalate	1	ND		10.0	0.607	10-Apr-13 12:49 JAM
105-67-9	2,4-Dimethylphenol	1	ND		10.0	0.781	10-Apr-13 12:49 JAM
131-11-3	Dimethylphthalate	1	ND		10.0	0.594	10-Apr-13 12:49 JAM
84-74-2	Di-n-butylphthalate	1	ND		10.0	0.651	10-Apr-13 12:49 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		10.0	1.02	10-Apr-13 12:49 JAM
51-28-5	2,4-Dinitrophenol	1	ND		10.0	0.470	10-Apr-13 12:49 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	0.741	10-Apr-13 12:49 JAM
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	0.780	10-Apr-13 12:49 JAM
117-84-0	Di-n-octylphthalate	1	ND		10.0	0.781	10-Apr-13 12:49 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	0.930	10-Apr-13 12:49 JAM
206-44-0	Fluoranthene	1	ND		10.0	0.674	10-Apr-13 12:49 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		10.0	0.759	10-Apr-13 12:49 JAM
118-74-1	Hexachlorobenzene	1	ND		10.0	0.681	10-Apr-13 12:49 JAM
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	0.347	10-Apr-13 12:49 JAM
67-72-1	Hexachloroethane	1	ND		10.0	0.987	10-Apr-13 12:49 JAM
78-59-1	Isophorone	1	ND		10.0	0.628	10-Apr-13 12:49 JAM

Protocol Blank 4/11/2013 17:40:2

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Blank ID: 205930 BLANK 1 **Project:** 20152423

Lab ID: 201079024

Prep Level: Water **Batch:** 205930

Method: Water GC/MS Semivolatile Organics

Prepared: 05-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	0.749	10-Apr-13 12:49 JAM
	3&4-Methylphenol	1	ND		10.0	0.948	10-Apr-13 12:49 JAM
88-74-4	2-Nitroaniline	1	ND		10.0	0.859	10-Apr-13 12:49 JAM
99-09-2	3-Nitroaniline	1	ND		10.0	0.877	10-Apr-13 12:49 JAM
100-01-6	4-Nitroaniline	1	ND		10.0	0.972	10-Apr-13 12:49 JAM
98-95-3	Nitrobenzene	1	ND		10.0	1.06	10-Apr-13 12:49 JAM
88-75-5	2-Nitrophenol	1	ND		10.0	0.772	10-Apr-13 12:49 JAM
100-02-7	4-Nitrophenol	1	ND		10.0	0.761	10-Apr-13 12:49 JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	0.919	10-Apr-13 12:49 JAM
86-30-6	N-Nitrosodiphenylamine	1	ND		10.0	0.715	10-Apr-13 12:49 JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		10.0	0.732	10-Apr-13 12:49 JAM
87-86-5	Pentachlorophenol	1	ND		10.0	0.860	10-Apr-13 12:49 JAM
108-95-2	Phenol	1	ND		10.0	0.773	10-Apr-13 12:49 JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	0.797	10-Apr-13 12:49 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		10.0	0.751	10-Apr-13 12:49 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	0.737	10-Apr-13 12:49 JAM

50 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Blank ID: 206026 BLANK 1 **Project:** 20152423

Lab ID: 201079561

Prep Level: Water **Batch:** 206026

Method: Water GC/MS Semivolatile Organics

Prepared: 08-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
83-32-9	Acenaphthene	1	ND		0.100	0.0520	09-Apr-13 11:55 JAM
208-96-8	Acenaphthylene	1	ND		0.100	0.0460	09-Apr-13 11:55 JAM
120-12-7	Anthracene	1	ND		0.100	0.0570	09-Apr-13 11:55 JAM
56-55-3	Benzo(a)anthracene	1	ND		0.100	0.0310	09-Apr-13 11:55 JAM
205-99-2	Benzo(b)fluoranthene	1	ND		0.100	0.0520	09-Apr-13 11:55 JAM
207-08-9	Benzo(k)fluoranthene	1	ND		0.100	0.0410	09-Apr-13 11:55 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		0.100	0.0200	09-Apr-13 11:55 JAM
50-32-8	Benzo(a)pyrene	1	ND		0.100	0.0410	09-Apr-13 11:55 JAM
218-01-9	Chrysene	1	ND		0.100	0.0250	09-Apr-13 11:55 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		0.100	0.0180	09-Apr-13 11:55 JAM
206-44-0	Fluoranthene	1	ND		0.100	0.0390	09-Apr-13 11:55 JAM
86-73-7	Fluorene	1	ND		0.100	0.0630	09-Apr-13 11:55 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		0.100	0.0180	09-Apr-13 11:55 JAM
91-57-6	2-Methylnaphthalene	1	ND		0.100	0.0780	09-Apr-13 11:55 JAM
91-20-3	Naphthalene	1	ND		0.100	0.0670	09-Apr-13 11:55 JAM
85-01-8	Phenanthrene	1	ND		0.100	0.0490	09-Apr-13 11:55 JAM
129-00-0	Pyrene	1	ND		0.100	0.0360	09-Apr-13 11:55 JAM

17 compound(s) reported

Protocol Blank 4/11/2013 17:40:2

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205838 BLANK 1 **Project:** 20152423

Lab ID: 201078685

Prep Level: Water **Batch:** 205838

Method: Water GC/MS Volatile Organics

Prepared: 04-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
67-64-1	Acetone	1	ND		10.0	8.88	04-Apr-13 10:42 MHM
71-43-2	Benzene	1	ND		5.00	0.518	04-Apr-13 10:42 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469	04-Apr-13 10:42 MHM
75-25-2	Bromoform	1	ND		5.00	0.920	04-Apr-13 10:42 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855	04-Apr-13 10:42 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66	04-Apr-13 10:42 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530	04-Apr-13 10:42 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528	04-Apr-13 10:42 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662	04-Apr-13 10:42 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12	04-Apr-13 10:42 MHM
67-66-3	Chloroform	1	ND		5.00	0.853	04-Apr-13 10:42 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636	04-Apr-13 10:42 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34	04-Apr-13 10:42 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630	04-Apr-13 10:42 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477	04-Apr-13 10:42 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553	04-Apr-13 10:42 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565	04-Apr-13 10:42 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738	04-Apr-13 10:42 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557	04-Apr-13 10:42 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578	04-Apr-13 10:42 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738	04-Apr-13 10:42 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579	04-Apr-13 10:42 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454	04-Apr-13 10:42 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526	04-Apr-13 10:42 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292	04-Apr-13 10:42 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28	04-Apr-13 10:42 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405	04-Apr-13 10:42 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36	04-Apr-13 10:42 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44	04-Apr-13 10:42 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10	04-Apr-13 10:42 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687	04-Apr-13 10:42 MHM
100-42-5	Styrene	1	ND		5.00	0.571	04-Apr-13 10:42 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12	04-Apr-13 10:42 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679	04-Apr-13 10:42 MHM

Protocol Blank 4/11/2013 17:40:2

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205838 BLANK 1 **Project:** 20152423

Lab ID: 201078685

Prep Level: Water **Batch:** 205838

Method: Water GC/MS Volatile Organics

Prepared: 04-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
108-88-3	Toluene	1	ND		5.00	0.536	04-Apr-13 10:42 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554	04-Apr-13 10:42 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915	04-Apr-13 10:42 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654	04-Apr-13 10:42 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575	04-Apr-13 10:42 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564	04-Apr-13 10:42 MHM
	m&p-Xylene	1	ND		5.00	0.937	04-Apr-13 10:42 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649	04-Apr-13 10:42 MHM

42 compound(s) reported

Protocol Blank 4/11/2013 17:40:2

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205937 BLANK 1 **Project:** 20152423

Lab ID: 201079041

Prep Level: Water **Batch:** 205937

Method: Water GC Semivolatile Organics

Prepared: 05-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Diesel Range Organics (C10-28)	1	ND		0.150	0.0760	08-Apr-13 17:32 SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.150	0.0490	08-Apr-13 17:32 SNP1

2 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205876 BLANK 1 **Project:** 20152423

Lab ID: 201078817

Prep Level: Water **Batch:** 205876

Method: Water GC Volatile Organics

Prepared: 04-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Gasoline Range Organics(C6-10)	1	ND		0.0500	0.0212	04-Apr-13 10:42 DHR1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205920 BLANK 1 **Project:** 20152423

Lab ID: 201078980

Prep Level: Water **Batch:** 205920

Method: Water ICP Metals

Prepared: 05-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
7440-36-0	Antimony	1	ND		60.0	1.35	05-Apr-13 13:07 MHB1
7440-38-2	Arsenic	1	ND		10.0	1.04	05-Apr-13 13:07 MHB1
7440-41-7	Beryllium	1	ND		5.00	0.282	05-Apr-13 13:07 MHB1
7440-43-9	Cadmium	1	ND		5.00	0.361	05-Apr-13 13:07 MHB1
7440-47-3	Chromium	1	ND		10.0	2.00	05-Apr-13 13:07 MHB1
7440-50-8	Copper	1	ND		10.0	2.76	05-Apr-13 13:07 MHB1
7439-92-1	Lead	1	ND		5.00	1.15	05-Apr-13 13:07 MHB1
7440-02-0	Nickel	1	4.79	J	40.0	0.253	05-Apr-13 13:07 MHB1
7782-49-2	Selenium	1	ND		35.0	14.3	05-Apr-13 13:07 MHB1
7440-22-4	Silver	1	ND		10.0	0.579	05-Apr-13 13:07 MHB1
7440-28-0	Thallium	1	ND		10.0	1.05	05-Apr-13 13:07 MHB1
7440-66-6	Zinc	1	ND		20.0	3.52	05-Apr-13 13:07 MHB1

12 compound(s) reported

Protocol Blank 4/11/2013 17:40:2

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205911 BLANK 1 **Project:** 20152423

Lab ID: 201078944

Prep Level: Water **Batch:** 205911

Method: Water Mercury

Prepared: 05-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
7439-97-6	Mercury	1	ND		0.200	0.0340	05-Apr-13 11:06 MHB1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

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Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152423

Value	Description
Q1	The matrix spike recoveries are poor. Acceptable method performance for this analyte has been demonstrated by the laboratory control sample recovery.
Q5	Insufficient sample was provided to perform matrix spike analyses on any sample in this analytical batch. Method performance for this analyte has been demonstrated by the laboratory control sample recovery.
J	This estimated value for the analyte is below the adjusted reporting limit but above the instrument reporting limit.
U	The analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
B	This analyte was detected in the method blank.
E	The sample concentration is above the linear calibrated range of the analysis.
LCS	Laboratory Control Sample.
MS(D)	Matrix Spike (Duplicate).
DUP	Sample Duplicate.
RPD	Relative Percent Difference.

Pace Analytical Services, In
1000 Riverbend Blvd. Suite F
St. Rose, LA 7008
(504) 469-033

Chains of Custody

20152423 20-CTEH

TODY / Analytical Request Document

GAL DOCUMENT. All relevant fields must be completed accurately.

20152423

Page: 2 of 2

Section A Required Client Information:

Company: CTEH	Report To: Chase Ertzberger	Attention: CTEH
Address: 5120 Northshore Dr	Copy To: James McCormack(jmccormack@cteh.com	Address: 5120 Northshore Dr
N. Little Rock, AR 72118	40432samples@cteh.com	
Email To: Certzberger@cteh.com	Purchase Order No.:	Pace Quote Reference:
Phone: 501-366-0394 Fax:	Project Name: Delek @ Magnolia, AR	Pace Project Manager: Karen Brown
Requested Due Date/TAT Normal 10 WD	Project Number: 40432	Pace Profile #: 5831 / Line 1

Section C Invoice Information:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: AR

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: 8260	8270	8270-SIM (Low level)	Priority Pollutant List (6010)	TPH-GRO (8015)	TPH-DRO / ORO (8015)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MAAK040425WP017A	SW	G	4-2-13	1030				11 12			1	6					Y	6	1	2	1	3	1		20107870 6
2	TBP14	SW	G	4-2-13	—				2				2					Y	2							707
3																										
4																										
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	CTEH	4.2.13	1715	UPS	4.2.13	1715				
	UPS	4-3-13	1040	J Miller	4-3-13	1040	2.2	X	X	X

SAMPLER NAME AND SIGNATURE				
PRINT Name of SAMPLER:				
SIGNATURE of SAMPLER:	DATE Signed (MM/DD/YY):	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.06, 2-Feb-2007

Pace Analytical

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Sample Conc

20152423 20-CTEH

Courier: ☐ Pace Courier ☐ Hired Courier ☐ Fed X ☑ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC] **Custody Seals Intact:** ☑Yes ☐No

Therometer Used:	☐ Therm Fisher IR 5 ☐ Therm Fisher IR 6 ☑ Therm Fisher IR 7

Type of Ice: (Wet) Blue None Samples on ice: [see COC]

Cooler Temperature: [see COC] Temp should be above freezing to 6°C

Date and Initials of person examining contents: 4-4-13

Temp must be measured from Temperature blank when present

			Comments:
Temperature Blank Present"?	☐Yes ☑No ☐N/A	1	
Chain of Custody Present:	☑Yes ☐No ☐N/A	2	
Chain of Custody Complete:	☑Yes ☐No ☐N/A	3	
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	4	
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	5	
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	6	
Sufficient Volume:	☑Yes ☐No ☐N/A	7	
Correct Containers Used:	☑Yes ☐No ☐N/A	8	
Filtered vol. Rec. for Diss. tests	☐Yes ☑No ☐N/A	9	
Sample Labels match COC:	☑Yes ☐No ☐N/A	10	
All containers received within manafacture's precautionary and/or expiration dates.	☑Yes ☐No ☐N/A	11	
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☑Yes ☐No ☐N/A	12	
All containers preservation checked found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	13	If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐Yes ☑No ☐N/A	14	
Trip Blank Present:	☑Yes ☐No	15	

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

ALLC003rev.08, 15Feb2013 SCUR Form - mod

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

April 11, 2013

James McCormack
CTEH
5120 North Shore Drive
North Little Rock, AR 72118

RE: Project 20152442
Project ID: Magnolia, AR

Dear James McCormack:

Enclosed are the analytical results for sample(s) received by the laboratory on April 04, 2013. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Karen Brown
karen.brown@pacelabs.com

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

Laboratory Certifications

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152442

Client: CTEH

Project ID: Magnolia, AR

Washington Department of Ecology C2078
Oregon Environmental Laboratory Accreditation - LA200001
U.S. Dept. of Agriculture Foreign Soil Import P330-10-00119
Pennsylvania Dept. of Env Protection (NELAC) 68-04202
Texas Commission on Env. Quality (NELAC) T104704405-09-TX
Kansas Department of Health and Environment (NELAC) E-10266
Florida Department of Health (NELAC) E87595
Oklahoma Department of Environmental Quality - 2010-139
Illinois Environmental Protection Agency - 0025721
California Env. Lab Accreditation Program Branch - 11277CA
Louisiana Dept. of Environmental Quality (NELAC/LELAP) 02006

4/11/2013 17:45:40

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Cross Reference

Project: 20152442

Client: CTEH

Project ID: Magnolia, AR

Client Sample ID	Lab ID	Matrix	Collection Date/Time	Received Date/Time
MAAR0403SW018A	201078794	Water	03-Apr-13 16:30	04-Apr-13 10:30
TB015	201078795	Water	03-Apr-13 00:00	04-Apr-13 10:30

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152442

Sample Receipt Condition:

All samples were received in accordance with EPA protocol.

Holding Times:

All holding times were met.

Blanks:

All blank results were below reporting limits.

Laboratory Control Samples:

All LCS recoveries were within QC limits.

Matrix Spikes and Duplicates:

MS or MSD recoveries outside of QC limits are qualified in the Report of Quality Control section.

Surrogates:

All surrogate recoveries were within QC limits.

QC Cross Reference

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152442

Analytical Method	Batch	Sample used for QC
EPA 8015/8021	205876	Project sample MAAR0403SW018A
EPA 6010	205920	Batch sample from another client
EPA 7470	205911	Client sample MAAR0402SW017A from project 20152423
EPA 8270	206026	Batch sample from another client
EPA 8270	206026	Batch sample from another client
EPA 8260	205838	Batch sample from another client

For the sample used as the original for the DUP or MS/MSD for the batch:

Project sample means a sample from this project was used.
Client sample means a sample from the same client but in a different project was used.
Batch sample means a sample from a different client was used.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0403SW018A
Project: 20152442
Project ID: Magnolia, AR
Site: None
Lab ID: 201078794
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 206026
Method: EPA 8270
GCMS SVOAs SIM Water
Collected: 03-Apr-13
Received: 04-Apr-13
Prepared: 08-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
83-32-9	Acenaphthene	1	ND		0.100	0.0520		09-Apr-13 15:53	JAM
208-96-8	Acenaphthylene	1	ND		0.100	0.0460		09-Apr-13 15:53	JAM
120-12-7	Anthracene	1	ND		0.100	0.0570		09-Apr-13 15:53	JAM
56-55-3	Benzo(a)anthracene	1	ND		0.100	0.0310		09-Apr-13 15:53	JAM
205-99-2	Benzo(b)fluoranthene	1	ND		0.100	0.0520		09-Apr-13 15:53	JAM
207-08-9	Benzo(k)fluoranthene	1	ND		0.100	0.0410		09-Apr-13 15:53	JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		0.100	0.0200		09-Apr-13 15:53	JAM
50-32-8	Benzo(a)pyrene	1	ND		0.100	0.0410		09-Apr-13 15:53	JAM
218-01-9	Chrysene	1	ND		0.100	0.0250		09-Apr-13 15:53	JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		0.100	0.0180		09-Apr-13 15:53	JAM
206-44-0	Fluoranthene	1	ND		0.100	0.0390		09-Apr-13 15:53	JAM
86-73-7	Fluorene	1	ND		0.100	0.0630		09-Apr-13 15:53	JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		0.100	0.0180		09-Apr-13 15:53	JAM
91-57-6	2-Methylnaphthalene	1	ND		0.100	0.0780		09-Apr-13 15:53	JAM
91-20-3	Naphthalene	1	ND		0.100	0.0670		09-Apr-13 15:53	JAM
85-01-8	Phenanthrene	1	ND		0.100	0.0490		09-Apr-13 15:53	JAM
129-00-0	Pyrene	1	ND		0.100	0.0360		09-Apr-13 15:53	JAM

17 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0403SW018A
Project: 20152442
Project ID: Magnolia, AR
Site: None
Lab ID: 201078794
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205930
Method: EPA 8270
GCMS SVOAs Water
Collected: 03-Apr-13
Received: 04-Apr-13
Prepared: 05-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
65-85-0	Benzoic acid	1	ND		25.0	1.56		10-Apr-13 17:32 JAM
100-51-6	Benzyl alcohol	1	ND		10.0	0.959		10-Apr-13 17:32 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND		10.0	0.541		10-Apr-13 17:32 JAM
85-68-7	Butylbenzylphthalate	1	ND		10.0	0.825		10-Apr-13 17:32 JAM
86-74-8	Carbazole	1	ND		10.0	0.932		10-Apr-13 17:32 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND		10.0	0.812		10-Apr-13 17:32 JAM
106-47-8	3&4-Chloroaniline	1	ND		10.0	1.22		10-Apr-13 17:32 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	0.789		10-Apr-13 17:32 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	0.804		10-Apr-13 17:32 JAM
91-58-7	2-Chloronaphthalene	1	ND		10.0	0.713		10-Apr-13 17:32 JAM
95-57-8	2-Chlorophenol	1	ND		10.0	0.716		10-Apr-13 17:32 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND		10.0	0.638		10-Apr-13 17:32 JAM
132-64-9	Dibenzofuran	1	ND		10.0	0.576		10-Apr-13 17:32 JAM
95-50-1	1,2-Dichlorobenzene	1	ND		10.0	0.867		10-Apr-13 17:32 JAM
541-73-1	1,3-Dichlorobenzene	1	ND		10.0	0.832		10-Apr-13 17:32 JAM
106-46-7	1,4-Dichlorobenzene	1	ND		10.0	0.652		10-Apr-13 17:32 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND		10.0	0.781		10-Apr-13 17:32 JAM
120-83-2	2,4-Dichlorophenol	1	ND		10.0	0.783		10-Apr-13 17:32 JAM
84-66-2	Diethylphthalate	1	ND		10.0	0.607		10-Apr-13 17:32 JAM
105-67-9	2,4-Dimethylphenol	1	ND		10.0	0.781		10-Apr-13 17:32 JAM
131-11-3	Dimethylphthalate	1	ND		10.0	0.594		10-Apr-13 17:32 JAM
84-74-2	Di-n-butylphthalate	1	ND		10.0	0.651		10-Apr-13 17:32 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		10.0	1.02		10-Apr-13 17:32 JAM
51-28-5	2,4-Dinitrophenol	1	ND		10.0	0.470		10-Apr-13 17:32 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	0.741		10-Apr-13 17:32 JAM
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	0.780		10-Apr-13 17:32 JAM
117-84-0	Di-n-octylphthalate	1	ND		10.0	0.781		10-Apr-13 17:32 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	0.930		10-Apr-13 17:32 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		10.0	0.759		10-Apr-13 17:32 JAM
118-74-1	Hexachlorobenzene	1	ND		10.0	0.681		10-Apr-13 17:32 JAM
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	0.347		10-Apr-13 17:32 JAM
67-72-1	Hexachloroethane	1	ND		10.0	0.987		10-Apr-13 17:32 JAM
78-59-1	Isophorone	1	ND		10.0	0.628		10-Apr-13 17:32 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	0.749		10-Apr-13 17:32 JAM

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0403SW018A
Project: 20152442
Project ID: Magnolia, AR
Site: None
Lab ID: 201078794
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205930
Method: EPA 8270
GCMS SVOAs Water
Collected: 03-Apr-13
Received: 04-Apr-13
Prepared: 05-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
	3&4-Methylphenol	1	ND		10.0	0.948		10-Apr-13 17:32	JAM
88-74-4	2-Nitroaniline	1	ND		10.0	0.859		10-Apr-13 17:32	JAM
99-09-2	3-Nitroaniline	1	ND		10.0	0.877		10-Apr-13 17:32	JAM
100-01-6	4-Nitroaniline	1	ND		10.0	0.972		10-Apr-13 17:32	JAM
98-95-3	Nitrobenzene	1	ND		10.0	1.06		10-Apr-13 17:32	JAM
88-75-5	2-Nitrophenol	1	ND		10.0	0.772		10-Apr-13 17:32	JAM
100-02-7	4-Nitrophenol	1	ND		10.0	0.761		10-Apr-13 17:32	JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	0.919		10-Apr-13 17:32	JAM
86-30-6	N-Nitrosodiphenylamine	1	ND		10.0	0.715		10-Apr-13 17:32	JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		10.0	0.732		10-Apr-13 17:32	JAM
87-86-5	Pentachlorophenol	1	ND		10.0	0.860		10-Apr-13 17:32	JAM
108-95-2	Phenol	1	ND		10.0	0.773		10-Apr-13 17:32	JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	0.797		10-Apr-13 17:32	JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		10.0	0.751		10-Apr-13 17:32	JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	0.737		10-Apr-13 17:32	JAM

49 compound(s) reported

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0403SW018A
Project: 20152442
Project ID: Magnolia, AR
Site: None
Lab ID: 201078794
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205838
Method: EPA 8260
GCMS VOAs Water
Collected: 03-Apr-13
Received: 04-Apr-13
Prepared: 04-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	8.88		04-Apr-13 14:10 MHM
71-43-2	Benzene	1	ND		5.00	0.518		04-Apr-13 14:10 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		04-Apr-13 14:10 MHM
75-25-2	Bromoform	1	ND		5.00	0.920		04-Apr-13 14:10 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855		04-Apr-13 14:10 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		04-Apr-13 14:10 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530		04-Apr-13 14:10 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		04-Apr-13 14:10 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662		04-Apr-13 14:10 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12		04-Apr-13 14:10 MHM
67-66-3	Chloroform	1	ND		5.00	0.853		04-Apr-13 14:10 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636		04-Apr-13 14:10 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		04-Apr-13 14:10 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		04-Apr-13 14:10 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		04-Apr-13 14:10 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		04-Apr-13 14:10 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565		04-Apr-13 14:10 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		04-Apr-13 14:10 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		04-Apr-13 14:10 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		04-Apr-13 14:10 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		04-Apr-13 14:10 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		04-Apr-13 14:10 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		04-Apr-13 14:10 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		04-Apr-13 14:10 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292		04-Apr-13 14:10 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28		04-Apr-13 14:10 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405		04-Apr-13 14:10 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36		04-Apr-13 14:10 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44		04-Apr-13 14:10 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		04-Apr-13 14:10 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		04-Apr-13 14:10 MHM
100-42-5	Styrene	1	ND		5.00	0.571		04-Apr-13 14:10 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		04-Apr-13 14:10 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		04-Apr-13 14:10 MHM

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0403SW018A
Project: 20152442
Project ID: Magnolia, AR
Site: None
Lab ID: 201078794
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205838
Method: EPA 8260
GCMS VOAs Water
Collected: 03-Apr-13
Received: 04-Apr-13
Prepared: 04-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	0.640	J	5.00	0.536		04-Apr-13 14:10 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		04-Apr-13 14:10 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915		04-Apr-13 14:10 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654		04-Apr-13 14:10 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575		04-Apr-13 14:10 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564		04-Apr-13 14:10 MHM
	m&p-Xylene	1	ND		5.00	0.937		04-Apr-13 14:10 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649		04-Apr-13 14:10 MHM

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0403SW018A
Project: 20152442
Project ID: Magnolia, AR
Site: None
Lab ID: 201078794
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205937
Method: EPA 8015 Mod Ext
8015 TPH Extractables Water
Collected: 03-Apr-13
Received: 04-Apr-13
Prepared: 05-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Diesel Range Organics (C10-28)	1	ND		0.250	0.0760		08-Apr-13 18:56 SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.500	0.0490		08-Apr-13 18:56 SNP1

2 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0403SW018A
Project: 20152442
Project ID: Magnolia, AR
Site: None
Lab ID: 201078794
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205876
Method: EPA 8015/8021
8015/8021 Water
Collected: 03-Apr-13
Received: 04-Apr-13
Prepared: 04-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Gasoline Range Organics(C6-10)	1	0.0286	J	0.0500	0.0212		04-Apr-13 14:17 DHR1

1 compound(s) reported

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0403SW018A
Project: 20152442
Project ID: Magnolia, AR
Site: None
Lab ID: 201078794
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205920
Method: EPA 6010
Metals, ICP, Water
Collected: 03-Apr-13
Received: 04-Apr-13
Prepared: 05-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7440-36-0	Antimony	1	ND		60.0	1.35		05-Apr-13 13:32 MHB1
7440-38-2	Arsenic	1	1.45	J	10.0	1.04		05-Apr-13 13:32 MHB1
7440-41-7	Beryllium	1	0.521	J	5.00	0.282		05-Apr-13 13:32 MHB1
7440-43-9	Cadmium	1	ND		5.00	0.361		05-Apr-13 13:32 MHB1
7440-47-3	Chromium	1	2.92	J	10.0	2.00		05-Apr-13 13:32 MHB1
7440-50-8	Copper	1	ND		10.0	2.76		05-Apr-13 13:32 MHB1
7439-92-1	Lead	1	2.92	J	5.00	1.15		05-Apr-13 13:32 MHB1
7440-02-0	Nickel	1	6.90	J	40.0	0.253		05-Apr-13 13:32 MHB1
7782-49-2	Selenium	1	ND		35.0	14.3		05-Apr-13 13:32 MHB1
7440-22-4	Silver	1	ND		10.0	0.579		05-Apr-13 13:32 MHB1
7440-28-0	Thallium	1	ND		10.0	1.05		05-Apr-13 13:32 MHB1
7440-66-6	Zinc	1	20.9		20.0	3.52		05-Apr-13 13:32 MHB1

12 compound(s) reported

Protocol 4/11/2013 17:46:26

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MDL denotes method detection limit

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0403SW018A
Project ID: Magnolia, AR
Lab ID: 201078794
Description: None
Method: EPA 7470
Mercury Water

Project: 20152442
Site: None
Matrix: Water
% Moisture: n/a
Prep Level: Water
Batch: 205911
Collected: 03-Apr-13
Received: 04-Apr-13
Prepared: 05-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.200	0.0340		05-Apr-13 11:16 MHB1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: TB015
Project: 20152442
Project ID: Magnolia, AR
Site: None
Lab ID: 201078795
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205838
Method: EPA 8260
GCMS VOAs Water
Collected: 03-Apr-13
Received: 04-Apr-13
Prepared: 04-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	8.88		04-Apr-13 14:31 MHM
71-43-2	Benzene	1	ND		5.00	0.518		04-Apr-13 14:31 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		04-Apr-13 14:31 MHM
75-25-2	Bromoform	1	ND		5.00	0.920		04-Apr-13 14:31 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855		04-Apr-13 14:31 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		04-Apr-13 14:31 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530		04-Apr-13 14:31 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		04-Apr-13 14:31 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662		04-Apr-13 14:31 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12		04-Apr-13 14:31 MHM
67-66-3	Chloroform	1	ND		5.00	0.853		04-Apr-13 14:31 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636		04-Apr-13 14:31 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		04-Apr-13 14:31 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		04-Apr-13 14:31 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		04-Apr-13 14:31 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		04-Apr-13 14:31 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565		04-Apr-13 14:31 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		04-Apr-13 14:31 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		04-Apr-13 14:31 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		04-Apr-13 14:31 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		04-Apr-13 14:31 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		04-Apr-13 14:31 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		04-Apr-13 14:31 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		04-Apr-13 14:31 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292		04-Apr-13 14:31 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28		04-Apr-13 14:31 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405		04-Apr-13 14:31 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36		04-Apr-13 14:31 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44		04-Apr-13 14:31 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		04-Apr-13 14:31 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		04-Apr-13 14:31 MHM
100-42-5	Styrene	1	ND		5.00	0.571		04-Apr-13 14:31 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		04-Apr-13 14:31 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		04-Apr-13 14:31 MHM

Protocol 4/11/2013 17:46:26

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit
Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Client: CTEH

Client ID: TB015
Project: 20152442
Project ID: Magnolia, AR
Site: None
Lab ID: 201078795
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205838
Method: EPA 8260
GCMS VOAs Water
Collected: 03-Apr-13
Received: 04-Apr-13
Prepared: 04-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	ND		5.00	0.536		04-Apr-13 14:31 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		04-Apr-13 14:31 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915		04-Apr-13 14:31 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654		04-Apr-13 14:31 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575		04-Apr-13 14:31 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564		04-Apr-13 14:31 MHM
	m&p-Xylene	1	ND		5.00	0.937		04-Apr-13 14:31 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649		04-Apr-13 14:31 MHM

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Surrogate Recovery

Batch: 205930 **Project:** 20152442

Method: Water GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201079024	205930 BLANK 1		74	80	70	89	73	95		
201079025	205930 LCS 1		84	87	78	76	81	99		
201078794	MAAR0403SW018A		83	82	73	88	76	68		
	QC limits:		25-145	34-117	10-118	33-120	15-134	24-133		

Sur 1: 2,4,6-Tribromophenol (S)
Sur 2: 2-Fluorobiphenyl (S)
Sur 3: 2-Fluorophenol (S)
Sur 4: Nitrobenzene-d5 (S)
Sur 5: Phenol-d5 (S)
Sur 6: Terphenyl-d14 (S)

Surrogates 4/11/2013 17:46:28

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 206026 **Project:** 20152442

Method: Water GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201079561	206026 BLANK 1		69	72						
201079562	206026 LCS 1		74	79						
201079565	AVG-0813MW6Q-0413 MS 2		66	64						
201079566	AVG-0813MW6Q-0413 MSD 2		62	60						
201078794	MAAR0403SW018A		77	76						
201079563	PZ-223A MS 1		68	68						
201079564	PZ-223A MSD 1		70	74						
	QC limits:		12-110	25-113						

Sur 1: 2-Fluorobiphenyl (S)
Sur 2: Terphenyl-d14 (S)

Surrogates 4/11/2013 17:46:29

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205838 **Project:** 20152442

Method: Water GC/MS Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201078685	205838 BLANK 1		85	90	90					
201078928	205838 BLANK 2		85	93	91					
201079664	205838 BLANK 3		84	89	89					
201078686	205838 LCS 1		90	92	94					
201078929	205838 LCS 2		86	91	93					
201079665	205838 LCS 3		86	88	91					
201078794	MAAR0403SW018A		87	90	91					
201078795	TB015		83	87	89					
201078750	WASCLF2Q-124766 MS 1		89	91	93					
201078751	WASCLF2Q-124766 MSD 1		90	88	94					
	QC limits:		68-124	72-126	79-119					

Sur 1: 4-Bromofluorobenzene (S)
Sur 2: Dibromofluoromethane (S)
Sur 3: Toluene-d8 (S)

*** denotes surrogate recovery outside of QC limits.**
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205937 **Project:** 20152442

Method: Water GC Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201079041	205937 BLANK 1		82	79						
201079042	205937 LCS 1		60	60						
201078794	MAAR0403SW018A		34	73						
	QC limits:		16-137	10-121						

Sur 1: n-Pentacosane (S)
Sur 2: o-Terphenyl (S)

*** denotes surrogate recovery outside of QC limits.**
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

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Batch: 205876 **Project:** 20152442

Method: Water GC Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201078817	205876 BLANK 1		102							
201078949	205876 BLANK 2		102							
201078818	205876 LCS 1		107							
201078950	205876 LCS 2		104							
201078794	MAAR0403SW018A		105							
201078951	MAAR0403SW018A MS 1		106							
201078952	MAAR0403SW018A MSD 1		108							
	QC limits:		60-129							

Sur 1: 4-Bromofluorobenzene (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Batch: 205930 **Project:** 20152442 **LCS:** 201079025 10-Apr-13 13:14

Method: Water GC/MS Semivolatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Benzoic acid	50.0	19.1	38								10-130			Q5
Benzyl alcohol	50.0	39.8	80								44-120			Q5
4-Bromophenylphenyl ether	50.0	39.9	80								49-120			Q5
Butylbenzylphthalate	50.0	37.5	75								46-120			Q5
Carbazole	50.0	43.9	88								51-127			Q5
4-Chloro-3-methylphenol	50.0	38.4	77								43-115			Q5
3&4-Chloroaniline	50.0	32.9	66								10-130			Q5
bis(2-Chloroethoxy)methane	50.0	34.7	69								43-115			Q5
bis(2-Chloroethyl) ether	50.0	38.5	77								47-115			Q5
2-Chloronaphthalene	50.0	40.5	81								52-115			Q5
2-Chlorophenol	50.0	42.1	84								48-115			Q5
4-Chlorophenylphenyl ether	50.0	42.4	85								52-116			Q5
Dibenzofuran	50.0	42.2	85								53-115			Q5
1,2-Dichlorobenzene	50.0	40.6	81								42-115			Q5
1,3-Dichlorobenzene	50.0	39.4	79								40-115			Q5
1,4-Dichlorobenzene	50.0	39.0	78								41-115			Q5
3,3'-Dichlorobenzidine	50.0	37.9	76								16-142			Q5
2,4-Dichlorophenol	50.0	39.6	79								45-115			Q5
Diethylphthalate	50.0	39.4	79								49-120			Q5
2,4-Dimethylphenol	50.0	36.0	72								23-116			Q5
Dimethylphthalate	50.0	38.4	77								52-115			Q5
Di-n-butylphthalate	50.0	37.3	75								50-117			Q5
4,6-Dinitro-2-methylphenol	50.0	45.1	90								44-122			Q5
2,4-Dinitrophenol	50.0	34.2	68								16-134			Q5
2,4-Dinitrotoluene	50.0	41.9	84								50-118			Q5
2,6-Dinitrotoluene	50.0	41.9	84								55-115			Q5
Di-n-octylphthalate	50.0	40.2	80								40-129			Q5
bis(2-Ethylhexyl)phthalate	50.0	39.6	79								46-124			Q5
Hexachloro-1,3-butadiene	50.0	39.9	80								32-115			Q5
Hexachlorobenzene	50.0	40.5	81								53-115			Q5
Hexachlorocyclopentadiene	50.0	29.9	60								10-115			Q5
Hexachloroethane	50.0	38.0	76								36-115			Q5
Isophorone	50.0	37.2	75								45-115			Q5
2-Methylphenol (o-Cresol)	50.0	43.2	86								46-115			Q5
3&4-Methylphenol	50.0	42.4	85								46-115			Q5
2-Nitroaniline	50.0	41.4	83								48-121			Q5
3-Nitroaniline	50.0	40.2	80								38-125			Q5
4-Nitroaniline	50.0	42.9	86								37-132			Q5
Nitrobenzene	50.0	36.2	72								44-118			Q5
2-Nitrophenol	50.0	39.3	79								45-115			Q5
4-Nitrophenol	50.0	40.7	81								29-134			Q5

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

QC Protocol 4/11/2013 17:46:31

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Batch: 205930 **Project:** 20152442 **LCS:** 201079025 10-Apr-13 13:14

Method: Water GC/MS Semivolatile Organics **MS:**

Units: ug/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
N-Nitroso-di-n-propylamine	50.0	39.6	79								45-119			Q5
N-Nitrosodiphenylamine	50.0	47.9	96								42-134			Q5
2,2'-Oxybis(1-chloropropane)	50.0	41.7	83								40-120			Q5
Pentachlorophenol	50.0	28.5	57								34-124			Q5
Phenol	50.0	41.3	83								44-115			Q5
1,2,4-Trichlorobenzene	50.0	38.3	77								40-115			Q5
2,4,5-Trichlorophenol	50.0	42.5	85								49-115			Q5
2,4,6-Trichlorophenol	50.0	43.0	86								48-115			Q5

49 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 206026 **Project:** 20152442 **LCS:** 201079562 09-Apr-13 12:17

Method: Water GC/MS Semivolatile Organics **MS:** 201079565 09-Apr-13 13:00

Units: ug/L **MSD:** 201079566 09-Apr-13 13:22

Original for MS: Batch Sample 201079448

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acenaphthene	2.00	1.45	73	2.00		1.44	1.35	72	68	6	39-115	10-131	20	
Acenaphthylene	2.00	1.06	53	2.00		1.10	1.05	55	53	5	30-115	10-131	20	
Anthracene	2.00	1.03	52	2.00		1.55	1.43	78	72	8	34-115	10-139	20	
Benzo(a)anthracene	2.00	1.41	71	2.00		1.36	1.27	68	64	7	33-115	12-115	20	
Benzo(b)fluoranthene	2.00	1.77	89	2.00		1.40	1.25	70	63	11	30-115	10-119	20	
Benzo(k)fluoranthene	2.00	1.64	82	2.00		1.31	1.35	66	68	3	31-115	10-122	20	
Benzo(g,h,i)perylene	2.00	1.66	83	2.00		1.36	1.30	68	65	5	27-115	10-123	20	
Benzo(a)pyrene	2.00	1.04	52	2.00		1.29	1.25	65	63	3	28-115	10-115	20	
Chrysene	2.00	1.26	63	2.00		1.34	1.32	67	66	2	36-115	10-116	20	
Dibenz(a,h)anthracene	2.00	1.57	79	2.00		1.42	1.36	71	68	4	23-115	10-128	20	
Fluoranthene	2.00	1.54	77	2.00		1.47	1.36	74	68	8	39-115	10-136	20	
Fluorene	2.00	1.50	75	2.00		1.44	1.35	72	68	6	38-115	10-129	20	
Indeno(1,2,3-cd)pyrene	2.00	1.65	83	2.00		1.40	1.35	70	68	4	28-115	10-124	20	
2-Methylnaphthalene	2.00	1.47	74	2.00		1.41	1.29	71	65	9	31-115	11-125	20	
Naphthalene	2.00	1.52	76	2.00		1.47	1.38	73	68	6	40-115	14-124	20	
Phenanthrene	2.00	1.48	74	2.00		1.46	1.39	73	70	5	38-115	10-130	20	
Pyrene	2.00	1.53	77	2.00		1.43	1.33	72	67	7	33-115	10-120	20	

17 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 206026 **Project:** 20152442 **LCS:**

Method: Water GC/MS Semivolatile Organics **MS:** 201079563 09-Apr-13 18:03

Units: ug/L **MSD:** 201079564 09-Apr-13 18:25

Original for MS: Batch Sample 201079004

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acenaphthene				2.00		1.56	1.61	78	81	3		10-131	20	
Acenaphthylene				2.00		1.44	1.53	72	77	6		10-131	20	
Anthracene				2.00		1.78	1.87	89	94	5		10-139	20	
Benzo(a)anthracene				2.00		1.70	1.83	85	92	7		12-115	20	
Benzo(b)fluoranthene				2.00		1.40	1.47	70	74	5		10-119	20	
Benzo(k)fluoranthene				2.00		1.43	1.55	72	78	8		10-122	20	
Benzo(g,h,i)perylene				2.00		1.41	1.53	71	77	8		10-123	20	
Benzo(a)pyrene				2.00		1.60	1.74	80	87	8		10-115	20	
Chrysene				2.00		1.47	1.59	74	80	8		10-116	20	
Dibenz(a,h)anthracene				2.00		1.55	1.65	78	83	6		10-128	20	
Fluoranthene				2.00		1.77	1.87	89	94	5		10-136	20	
Fluorene				2.00		1.58	1.61	79	81	2		10-129	20	
Indeno(1,2,3-cd)pyrene				2.00		1.52	1.62	76	81	6		10-124	20	
2-Methylnaphthalene				2.00	0.100	1.54	1.63	72	77	6		11-125	20	
Naphthalene				2.00	0.250	1.69	1.81	72	78	7		14-124	20	
Phenanthrene				2.00	0.0200	1.64	1.70	81	84	4		10-130	20	
Pyrene				2.00		1.55	1.63	78	82	5		10-120	20	

17 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205838 **Project:** 20152442 **LCS:** 201078686 04-Apr-13 11:03

Method: Water GC/MS Volatile Organics **MS:** 201078750 04-Apr-13 12:05

Units: ug/L **MSD:** 201078751 04-Apr-13 12:26

Original for MS: Batch Sample 201078719

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acetone	50.0	48.1	96	50.0		63.1	57.4	111	100	9	10-198	10-202	20	
Benzene	50.0	48.7	98	50.0		48.2	48.8	97	98	1	68-129	60-138	20	
Bromodichloromethane	50.0	47.7	95	50.0	6.34	52.9	52.1	93	92	2	68-132	66-137	20	
Bromoform	50.0	51.5	103	50.0	0.980	47.0	48.5	92	95	3	56-153	53-156	20	
Bromomethane	50.0	44.8	90	50.0		43.8	44.7	88	90	2	47-149	43-151	20	
2-Butanone (MEK)	50.0	44.9	90	50.0		45.8	40.8	92	82	11	18-173	14-184	20	
Carbon disulfide	50.0	46.1	92	50.0		45.0	44.8	90	90	0	25-166	17-176	20	
Carbon tetrachloride	50.0	48.5	97	50.0		47.9	48.7	96	98	2	56-146	51-151	20	
Chlorobenzene	50.0	49.3	99	50.0		48.7	48.3	97	97	1	74-131	71-135	20	
Chloroethane	50.0	58.8	118	50.0		58.0	61.2	116	122	5	28-190	21-191	20	
Chloroform	50.0	49.3	99	50.0	95.9	79.3	74.5	0 *	0 *	6	71-132	67-138	20	Q1
Chloromethane	50.0	38.0	76	50.0	1.11	45.8	44.9	89	88	2	27-154	24-158	20	
1,2-Dibromo-3-chloropropane	50.0	49.4	99	50.0		42.2	45.2	84	90	7	40-155	38-162	20	
Dibromochloromethane	50.0	50.4	101	50.0	2.50	47.5	49.5	90	94	4	64-138	62-142	20	
1,2-Dibromoethane (EDB)	50.0	49.8	100	50.0		45.2	46.5	91	93	3	62-146	61-149	20	
Dichlorodifluoromethane	50.0	25.7	52	50.0		24.6	23.3	49	47	5	18-173	16-176	20	
1,1-Dichloroethane	50.0	50.1	100	50.0		50.0	48.5	100	97	3	63-135	61-141	20	
1,2-Dichloroethane	50.0	48.6	97	50.0		46.7	46.1	93	92	1	58-150	57-155	20	
1,1-Dichloroethene	50.0	45.5	91	50.0		42.9	42.9	86	86	0	50-151	40-163	20	
cis-1,2-Dichloroethene	50.0	48.6	97	50.0		47.5	46.0	95	92	3	65-132	61-138	20	
trans-1,2-Dichloroethene	50.0	46.1	92	50.0		46.0	44.5	92	89	3	56-137	52-144	20	
1,2-Dichloropropane	50.0	50.1	100	50.0		49.6	48.8	99	98	2	66-131	64-137	20	
cis-1,3-Dichloropropene	50.0	46.2	93	50.0		44.6	44.3	89	89	1	66-135	62-137	20	
trans-1,3-Dichloropropene	50.0	54.8	110	50.0		49.7	50.1	100	100	1	62-146	59-151	20	
Ethylbenzene	50.0	49.2	98	50.0		46.9	46.9	94	94	0	73-129	66-136	20	
2-Hexanone	50.0	56.1	112	50.0		45.0	47.9	90	96	6	29-158	27-165	20	
Isopropylbenzene (Cumene)	50.0	48.5	97	50.0		45.7	46.5	92	93	2	61-139	58-144	20	
Methylene chloride	50.0	49.0	98	50.0		46.9	46.8	92	92	0	41-171	35-165	20	
4-Methyl-2-pentanone (MIBK	50.0	53.0	106	50.0		42.1	45.2	84	90	7	46-159	43-165	20	
Methyl-tert-butyl ether	50.0	50.7	101	50.0		46.5	44.9	93	90	4	51-155	48-164	20	
Styrene	50.0	47.2	94	50.0			1.42	0 *	3 *	200 *	74-132	63-141	20	Q1
1,1,2,2-Tetrachloroethane	50.0	52.3	105	50.0		44.7	46.1	90	92	3	46-153	41-160	20	
Tetrachloroethene	50.0	48.5	97	50.0		46.3	46.8	93	94	1	57-151	48-160	20	
Toluene	50.0	49.0	98	50.0		47.4	48.0	95	96	1	70-130	62-137	20	
1,1,1-Trichloroethane	50.0	51.5	103	50.0		51.1	50.4	102	101	1	65-132	61-138	20	
1,1,2-Trichloroethane	50.0	51.7	103	50.0		47.0	47.8	94	96	2	64-140	63-145	20	
Trichloroethene	50.0	47.2	95	50.0		45.3	45.1	91	90	1	71-131	62-142	20	
Trichlorofluoromethane	50.0	55.4	111	50.0	8.85	56.6	57.5	96	97	2	37-188	19-196	20	
Vinyl chloride	50.0	39.4	79	50.0		37.1	36.8	74	74	1	42-148	35-153	20	
m&p-Xylene	100.	95.1	95	100.		82.9	78.3	83	78	6	71-132	64-138	20	
o-Xylene	50.0	45.1	90	50.0		42.0	41.7	84	83	1	69-129	63-136	20	

QC Protocol 4/11/2013 17:46:31

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205838 **Project:** 20152442 **LCS:** 201078686 04-Apr-13 11:03

Method: Water GC/MS Volatile Organics **MS:** 201078750 04-Apr-13 12:05

Units: ug/L **MSD:** 201078751 04-Apr-13 12:26

Original for MS: Batch Sample 201078719

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu

41 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205937 **Project:** 20152442 **LCS:** 201079042 08-Apr-13 18:00

Method: Water GC Semivolatile Organics **MS:**

Units: mg/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Diesel Range Organics (C10-	0.400	0.166	42								10-115			Q5
1 compound(s) reported														

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205876 **Project:** 20152442 **LCS:** 201078818 04-Apr-13 11:09

Method: Water GC Volatile Organics **MS:**

Units: mg/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Gasoline Range Organics(C6-	0.500	0.484	97								61-136			
1 compound(s) reported														

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205876 **Project:** 20152442 **LCS:** 201078950 05-Apr-13 10:46

Method: Water GC Volatile Organics **MS:** 201078951 05-Apr-13 12:43

Units: mg/L **MSD:** 201078952 05-Apr-13 13:11

Original for MS: Client Sample 201078794

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Gasoline Range Organics(C6-	0.500	0.499	100	0.500	0.0286	0.519	0.488	98	92	6	61-136	15-147	20	
1 compound(s) reported														

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205920 **Project:** 20152442 **LCS:** 201078981 05-Apr-13 13:11

Method: Water ICP Metals **MS:** 201078982 05-Apr-13 13:18

Units: ug/L **MSD:** 201078983 05-Apr-13 13:21

Original for MS: Batch Sample 201078978

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Antimony	1000	997.	100	1000	18.3	966.	962.	95	94	0	82-120	80-120	20	
Arsenic	1000	967.	97	1000	1.36	942.	938.	94	94	0	84-117	80-120	20	
Beryllium	1000	951.	95	1000		918.	916.	92	92	0	85-117	80-120	20	
Cadmium	1000	972.	97	1000		904.	898.	90	90	1	85-115	80-120	20	
Chromium	1000	953.	95	1000		917.	912.	92	91	1	83-117	80-120	20	
Copper	1000	995.	100	1000	3.55	963.	969.	96	97	1	85-116	80-120	20	
Lead	1000	1001	100	1000		910.	907.	91	91	0	84-118	80-120	20	
Nickel	1000	986.	99	1000	2.20	906.	898.	90	90	1	85-118	80-120	20	
Selenium	1000	995.	100	1000		949.	933.	95	93	2	85-116	80-120	20	
Silver	500.	497.	99	500.		475.	474.	95	95	0	80-120	80-120	20	
Thallium	1000	983.	98	1000	1.25	853.	846.	85	85	1	85-118	80-120	20	
Zinc	1000	963.	96	1000	6.05	901.	893.	90	89	1	81-120	80-120	20	

12 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205911 **Project:** 20152442 **LCS:** 201078945 05-Apr-13 11:08

Method: Water Mercury **MS:** 201078946 05-Apr-13 11:11

Units: ug/L **MSD:** 201078947 05-Apr-13 11:13

Original for MS: Batch Sample 201078706

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Mercury	1.00	1.02	102	1.00		1.00	0.985	100	99	1	80-120	75-125	20	

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Blank ID: 205930 BLANK 1 **Project:** 20152442

Lab ID: 201079024

Prep Level: Water **Batch:** 205930

Method: Water GC/MS Semivolatile Organics

Prepared: 05-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
65-85-0	Benzoic acid	1	ND		25.0	1.56	10-Apr-13 12:49 JAM
100-51-6	Benzyl alcohol	1	ND		10.0	0.959	10-Apr-13 12:49 JAM
101-55-3	4-Bromophenylphenyl ether	1	ND		10.0	0.541	10-Apr-13 12:49 JAM
85-68-7	Butylbenzylphthalate	1	ND		10.0	0.825	10-Apr-13 12:49 JAM
86-74-8	Carbazole	1	ND		10.0	0.932	10-Apr-13 12:49 JAM
59-50-7	4-Chloro-3-methylphenol	1	ND		10.0	0.812	10-Apr-13 12:49 JAM
106-47-8	3&4-Chloroaniline	1	ND		10.0	1.22	10-Apr-13 12:49 JAM
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	0.789	10-Apr-13 12:49 JAM
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	0.804	10-Apr-13 12:49 JAM
91-58-7	2-Chloronaphthalene	1	ND		10.0	0.713	10-Apr-13 12:49 JAM
95-57-8	2-Chlorophenol	1	ND		10.0	0.716	10-Apr-13 12:49 JAM
7005-72-3	4-Chlorophenylphenyl ether	1	ND		10.0	0.638	10-Apr-13 12:49 JAM
132-64-9	Dibenzofuran	1	ND		10.0	0.576	10-Apr-13 12:49 JAM
95-50-1	1,2-Dichlorobenzene	1	ND		10.0	0.867	10-Apr-13 12:49 JAM
541-73-1	1,3-Dichlorobenzene	1	ND		10.0	0.832	10-Apr-13 12:49 JAM
106-46-7	1,4-Dichlorobenzene	1	ND		10.0	0.652	10-Apr-13 12:49 JAM
91-94-1	3,3'-Dichlorobenzidine	1	ND		10.0	0.781	10-Apr-13 12:49 JAM
120-83-2	2,4-Dichlorophenol	1	ND		10.0	0.783	10-Apr-13 12:49 JAM
84-66-2	Diethylphthalate	1	ND		10.0	0.607	10-Apr-13 12:49 JAM
105-67-9	2,4-Dimethylphenol	1	ND		10.0	0.781	10-Apr-13 12:49 JAM
131-11-3	Dimethylphthalate	1	ND		10.0	0.594	10-Apr-13 12:49 JAM
84-74-2	Di-n-butylphthalate	1	ND		10.0	0.651	10-Apr-13 12:49 JAM
534-52-1	4,6-Dinitro-2-methylphenol	1	ND		10.0	1.02	10-Apr-13 12:49 JAM
51-28-5	2,4-Dinitrophenol	1	ND		10.0	0.470	10-Apr-13 12:49 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	0.741	10-Apr-13 12:49 JAM
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	0.780	10-Apr-13 12:49 JAM
117-84-0	Di-n-octylphthalate	1	ND		10.0	0.781	10-Apr-13 12:49 JAM
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	0.930	10-Apr-13 12:49 JAM
206-44-0	Fluoranthene	1	ND		10.0	0.674	10-Apr-13 12:49 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		10.0	0.759	10-Apr-13 12:49 JAM
118-74-1	Hexachlorobenzene	1	ND		10.0	0.681	10-Apr-13 12:49 JAM
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	0.347	10-Apr-13 12:49 JAM
67-72-1	Hexachloroethane	1	ND		10.0	0.987	10-Apr-13 12:49 JAM
78-59-1	Isophorone	1	ND		10.0	0.628	10-Apr-13 12:49 JAM

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ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Blank ID: 205930 BLANK 1 **Project:** 20152442

Lab ID: 201079024

Prep Level: Water **Batch:** 205930

Method: Water GC/MS Semivolatile Organics

Prepared: 05-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	0.749	10-Apr-13 12:49 JAM
	3&4-Methylphenol	1	ND		10.0	0.948	10-Apr-13 12:49 JAM
88-74-4	2-Nitroaniline	1	ND		10.0	0.859	10-Apr-13 12:49 JAM
99-09-2	3-Nitroaniline	1	ND		10.0	0.877	10-Apr-13 12:49 JAM
100-01-6	4-Nitroaniline	1	ND		10.0	0.972	10-Apr-13 12:49 JAM
98-95-3	Nitrobenzene	1	ND		10.0	1.06	10-Apr-13 12:49 JAM
88-75-5	2-Nitrophenol	1	ND		10.0	0.772	10-Apr-13 12:49 JAM
100-02-7	4-Nitrophenol	1	ND		10.0	0.761	10-Apr-13 12:49 JAM
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	0.919	10-Apr-13 12:49 JAM
86-30-6	N-Nitrosodiphenylamine	1	ND		10.0	0.715	10-Apr-13 12:49 JAM
108-60-1	2,2'-Oxybis(1-chloropropane)	1	ND		10.0	0.732	10-Apr-13 12:49 JAM
87-86-5	Pentachlorophenol	1	ND		10.0	0.860	10-Apr-13 12:49 JAM
108-95-2	Phenol	1	ND		10.0	0.773	10-Apr-13 12:49 JAM
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	0.797	10-Apr-13 12:49 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		10.0	0.751	10-Apr-13 12:49 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	0.737	10-Apr-13 12:49 JAM

50 compound(s) reported

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Blank Results

Blank ID: 206026 BLANK 1 **Project:** 20152442

Lab ID: 201079561

Prep Level: Water **Batch:** 206026

Method: Water GC/MS Semivolatile Organics

Prepared: 08-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
83-32-9	Acenaphthene	1	ND		0.100	0.0520	09-Apr-13 11:55 JAM
208-96-8	Acenaphthylene	1	ND		0.100	0.0460	09-Apr-13 11:55 JAM
120-12-7	Anthracene	1	ND		0.100	0.0570	09-Apr-13 11:55 JAM
56-55-3	Benzo(a)anthracene	1	ND		0.100	0.0310	09-Apr-13 11:55 JAM
205-99-2	Benzo(b)fluoranthene	1	ND		0.100	0.0520	09-Apr-13 11:55 JAM
207-08-9	Benzo(k)fluoranthene	1	ND		0.100	0.0410	09-Apr-13 11:55 JAM
191-24-2	Benzo(g,h,i)perylene	1	ND		0.100	0.0200	09-Apr-13 11:55 JAM
50-32-8	Benzo(a)pyrene	1	ND		0.100	0.0410	09-Apr-13 11:55 JAM
218-01-9	Chrysene	1	ND		0.100	0.0250	09-Apr-13 11:55 JAM
53-70-3	Dibenz(a,h)anthracene	1	ND		0.100	0.0180	09-Apr-13 11:55 JAM
206-44-0	Fluoranthene	1	ND		0.100	0.0390	09-Apr-13 11:55 JAM
86-73-7	Fluorene	1	ND		0.100	0.0630	09-Apr-13 11:55 JAM
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		0.100	0.0180	09-Apr-13 11:55 JAM
91-57-6	2-Methylnaphthalene	1	ND		0.100	0.0780	09-Apr-13 11:55 JAM
91-20-3	Naphthalene	1	ND		0.100	0.0670	09-Apr-13 11:55 JAM
85-01-8	Phenanthrene	1	ND		0.100	0.0490	09-Apr-13 11:55 JAM
129-00-0	Pyrene	1	ND		0.100	0.0360	09-Apr-13 11:55 JAM

17 compound(s) reported

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Blank Results

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(504) 469-0333

Blank ID: 205838 BLANK 1 **Project:** 20152442

Lab ID: 201078685

Prep Level: Water **Batch:** 205838

Method: Water GC/MS Volatile Organics

Prepared: 04-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
67-64-1	Acetone	1	ND		10.0	8.88	04-Apr-13 10:42 MHM
71-43-2	Benzene	1	ND		5.00	0.518	04-Apr-13 10:42 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469	04-Apr-13 10:42 MHM
75-25-2	Bromoform	1	ND		5.00	0.920	04-Apr-13 10:42 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855	04-Apr-13 10:42 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66	04-Apr-13 10:42 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530	04-Apr-13 10:42 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528	04-Apr-13 10:42 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662	04-Apr-13 10:42 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12	04-Apr-13 10:42 MHM
67-66-3	Chloroform	1	ND		5.00	0.853	04-Apr-13 10:42 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636	04-Apr-13 10:42 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34	04-Apr-13 10:42 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630	04-Apr-13 10:42 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477	04-Apr-13 10:42 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553	04-Apr-13 10:42 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565	04-Apr-13 10:42 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738	04-Apr-13 10:42 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557	04-Apr-13 10:42 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578	04-Apr-13 10:42 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738	04-Apr-13 10:42 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579	04-Apr-13 10:42 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454	04-Apr-13 10:42 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526	04-Apr-13 10:42 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292	04-Apr-13 10:42 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28	04-Apr-13 10:42 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405	04-Apr-13 10:42 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36	04-Apr-13 10:42 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44	04-Apr-13 10:42 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10	04-Apr-13 10:42 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687	04-Apr-13 10:42 MHM
100-42-5	Styrene	1	ND		5.00	0.571	04-Apr-13 10:42 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12	04-Apr-13 10:42 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679	04-Apr-13 10:42 MHM

Protocol Blank 4/11/2013 17:46:3

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Blank Results

Pace Analytical Services, Inc.
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(504) 469-0333

Blank ID: 205838 BLANK 1 **Project:** 20152442

Lab ID: 201078685

Prep Level: Water **Batch:** 205838

Method: Water GC/MS Volatile Organics

Prepared: 04-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
108-88-3	Toluene	1	ND		5.00	0.536	04-Apr-13 10:42 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554	04-Apr-13 10:42 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915	04-Apr-13 10:42 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654	04-Apr-13 10:42 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575	04-Apr-13 10:42 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564	04-Apr-13 10:42 MHM
	m&p-Xylene	1	ND		5.00	0.937	04-Apr-13 10:42 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649	04-Apr-13 10:42 MHM

42 compound(s) reported

Protocol Blank 4/11/2013 17:46:3

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Blank Results

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Blank ID: 205937 BLANK 1 **Project:** 20152442

Lab ID: 201079041

Prep Level: Water **Batch:** 205937

Method: Water GC Semivolatile Organics

Prepared: 05-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Diesel Range Organics (C10-28)	1	ND		0.150	0.0760	08-Apr-13 17:32 SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.150	0.0490	08-Apr-13 17:32 SNP1

2 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205876 BLANK 1 **Project:** 20152442

Lab ID: 201078817

Prep Level: Water **Batch:** 205876

Method: Water GC Volatile Organics

Prepared: 04-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Gasoline Range Organics(C6-10)	1	ND		0.0500	0.0212	04-Apr-13 10:42 DHR1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205876 BLANK 2 **Project:** 20152442

Lab ID: 201078949

Prep Level: Water **Batch:** 205876

Method: Water GC Volatile Organics

Prepared: 05-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Gasoline Range Organics(C6-10)	1	0.0300	J	0.0500	0.0212	05-Apr-13 10:19 DHR1

1 compound(s) reported

Protocol Blank 4/11/2013 17:46:3

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205920 BLANK 1 **Project:** 20152442

Lab ID: 201078980

Prep Level: Water **Batch:** 205920

Method: Water ICP Metals

Prepared: 05-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
7440-36-0	Antimony	1	ND		60.0	1.35	05-Apr-13 13:07 MHB1
7440-38-2	Arsenic	1	ND		10.0	1.04	05-Apr-13 13:07 MHB1
7440-41-7	Beryllium	1	ND		5.00	0.282	05-Apr-13 13:07 MHB1
7440-43-9	Cadmium	1	ND		5.00	0.361	05-Apr-13 13:07 MHB1
7440-47-3	Chromium	1	ND		10.0	2.00	05-Apr-13 13:07 MHB1
7440-50-8	Copper	1	ND		10.0	2.76	05-Apr-13 13:07 MHB1
7439-92-1	Lead	1	ND		5.00	1.15	05-Apr-13 13:07 MHB1
7440-02-0	Nickel	1	4.79	J	40.0	0.253	05-Apr-13 13:07 MHB1
7782-49-2	Selenium	1	ND		35.0	14.3	05-Apr-13 13:07 MHB1
7440-22-4	Silver	1	ND		10.0	0.579	05-Apr-13 13:07 MHB1
7440-28-0	Thallium	1	ND		10.0	1.05	05-Apr-13 13:07 MHB1
7440-66-6	Zinc	1	ND		20.0	3.52	05-Apr-13 13:07 MHB1

12 compound(s) reported

Protocol Blank 4/11/2013 17:46:3

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205911 BLANK 1 **Project:** 20152442

Lab ID: 201078944

Prep Level: Water **Batch:** 205911

Method: Water Mercury

Prepared: 05-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
7439-97-6	Mercury	1	ND		0.200	0.0340	05-Apr-13 11:06 MHB1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152442

Value	Description
Q1	The matrix spike recoveries are poor. Acceptable method performance for this analyte has been demonstrated by the laboratory control sample recovery.
Q5	Insufficient sample was provided to perform matrix spike analyses on any sample in this analytical batch. Method performance for this analyte has been demonstrated by the laboratory control sample recovery.
J	This estimated value for the analyte is below the adjusted reporting limit but above the instrument reporting limit.
U	The analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
B	This analyte was detected in the method blank.
E	The sample concentration is above the linear calibrated range of the analysis.
LCS	Laboratory Control Sample.
MS(D)	Matrix Spike (Duplicate).
DUP	Sample Duplicate.
RPD	Relative Percent Difference.

Pace Analytical Services, In
1000 Riverbend Blvd. Suite F
St. Rose, LA 7008
(504) 469-033

Chains of Custody

20152442 20-CTEH

CHAIN-OF-CUSTODY / Analytical Re

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields m

Section A Required Client Information:

Company:	CTEH
Address:	5120 Northshore Dr
	N. Little Rock, AR 72118
Email To:	Certzberger@cteh.com
Phone: 501-366-0394	Fax:
Requested Due Date/TAT Normal 10 WD	

Section B Required Project Information:

Report To:	Chase Ertzberger
Copy To:	James McCormack(jmccormack@cteh.com
	40432samples@cteh.com
Purchase Order No.:	
Project Name:	Delek @ Magnolia, AR
Project Number:	40432

Section C Invoice Information:

Attention:	CTEH
Address:	5120 Northshore Dr
Pace Quote Reference:	
Pace Project Manager:	Karen Brown
Pace Profile #:	5831 / Line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: AR

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Y/N	Analysis Test: 8260	8270	8270-SIM (Low level)	Priority Pollutant List (6010)	TPH-GRO (8015)	TPH-DRO / ORO (8015)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MAAR0403SW018A	WT	G	—	—	4-3-13	1630		11	4		1	6						3	2	1	1	3	1		20107879
2	TB015	L		—	—	—	—						2						2							8795
3																										
4																										
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										

Requested Analysis Filtered (Y/N)

04.03.13

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	CTEH	04.03.13	1715	UPS	04.03.13	1715	
	UPS	4-4-13	1030		4-4-13	1030	1-3 X X Y

SAMPLER NAME AND SIGNATURE: Chase Ertzberger

PRINT Name of SAMPLER: Chase Ertzberger

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 04.03.13

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Sample C

20152442 20-CTEH

Courier: ☐ Pace Courier ☐ Hired Courier ☐ Fed X ☑ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC] **Custody Seals intact:** ☑Yes ☐No

Therometer Used: ☐ Therm Fisher IR 5 ☐ Therm Fisher IR 6 ☒ Therm Fisher IR 7

Type of Ice: (Wet) Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC] Temp should be above freezing to 6°C

Date and Initials of person examining contents: 04-09-13

Temp must be measured from Temperature blank when present

			Comments:
Temperature Blank Present"?	☐Yes	☑No ☐N/A	1
Chain of Custody Present:	☑Yes	☐No ☐N/A	2
Chain of Custody Complete:	☑Yes	☐No ☐N/A	3
Chain of Custody Relinquished:	☑Yes	☐No ☐N/A	4
Sampler Name & Signature on COC:	☑Yes	☐No ☐N/A	5
Samples Arrived within Hold Time:	☑Yes	☐No ☐N/A	6
Sufficient Volume:	☑Yes	☐No ☐N/A	7
Correct Containers Used:	☑Yes	☐No ☐N/A	8
Filtered vol. Rec. for Diss. tests	☐Yes	☐No ☑N/A	9
Sample Labels match COC:	☑Yes	☐No ☐N/A	10
All containers received within manafacture's precautionary and/or expiration dates.	☑Yes	☐No ☐N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☑Yes	☐No ☐N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	☑Yes	☐No ☐N/A	13 If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐Yes	☑No ☐N/A	14
Trip Blank Present:	☑Yes	☐No	15

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Coll. date of 4/3/13 used for TB#15

ALLC003rev.08, 15Feb2013 SCUR Form - mod

ATTACHMENT E - ANA-LAB LABORATORY RESULTS

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Employee Owned Integrity Caring Continual Improvement

Printed 03/22/2013 Page 1 of 1

Report

Report To

Chase Entzderger
Center for Toxicology and
Environmental Health,L.L.C.
5120 North Shore Dr
North Little Ro, AR 72188

Table of Contents

Account
CTEH -L

Project
605681

40432-Magnolia, AR

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605681_r10_05_ProjectQC	Ana-Lab Project P:605681 C:CTEH Project Quality Control Groups	27
r99_09_CoC_605681__1_of_1	Ana-Lab CoC CTEH 605681_1_of_1	3
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Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com

Employee Owned Integrity Caring Continual Improvement

Results

Printed: 03/22/2013

Client: CTEH *Project:* 605681

40432-Magnolia, AR

Account	Project
CTEH-L	605681

Report To

Chase Entzderger
Center for Toxicology and
Environmental Health,L.L.C.
5120 North Shore Dr
North Little Ro, AR 72188

Results

Parameter		Results	Units	RL	Flags	CAS	Bottle
1196568	**MAAR0319SW004**						
Liquid Aqueous	*Collected by:* Client	*Affiliation:* Center for Toxicolog	03/19/2013	18:50:00			
	Prepared:	***514711***	*03/21/2013*	*11:30:00*			
EPA 6020A			*Analyzed: WOB*	*03/21/2013*	*16:56:40*	*QCgroup*	*514813*
N	**Antimony**	**<0.001**	**mg/L**	0.001		**7440-36-0**	12
N	**Arsenic**	**<0.002**	**mg/L**	0.002		**7440-38-2**	12
N	**Beryllium**	**<0.001**	**mg/L**	0.001		**7440-41-7**	12
N	**Cadmium**	**<0.001**	**mg/L**	0.001		**7440-43-9**	12
N	**Chromium**	**0.00258**	**mg/L**	0.001		**7440-47-3**	12
N	**Copper**	**0.00341**	**mg/L**	0.001		**7440-50-8**	12
N	**Lead**	**0.00145**	**mg/L**	0.001		**7439-92-1**	12
N	**Nickel**	**0.00195**	**mg/L**	0.001		**7440-02-0**	12
N	**Selenium**	**<0.002**	**mg/L**	0.002		**7782-49-2**	12
N	**Silver**	**<0.001**	**mg/L**	0.001		**7440-22-4**	12
N	**Thallium**	**<0.001**	**mg/L**	0.001		**7440-28-0**	12
N	**Zinc**	**0.018**	**mg/L**	0.005		**7440-66-6**	12
	Prepared:	***514733***	*03/21/2013*	*12:45:00*			
EPA 7470A			*Analyzed: WOB*	*03/22/2013*	*06:29:00*	*QCgroup*	*514839*
N	**Mercury**	**<0.200**	**ug/L**	0.200		**7439-97-6**	13
	Prepared:	***514376***	*03/19/2013*	*13:06:02*			
*EPA 8015B *MOD*			*Analyzed: BRU*	*03/21/2013*	*21:13:00*	*QCgroup*	*514935*
N	**TPH-G C6-C10**	**<1.03**	**mg/L**	1.03			16
	Prepared:	***514826***	*03/21/2013*	*16:28:00*			
EPA 8260B			*Analyzed: AAC*	*03/21/2013*	*16:28:00*	*QCgroup*	*514826*
N	**Acetone**	**<5.00**	**ug/L**	5.00		**67-64-1**	01
N	**Acrolein**	**<5.00**	**ug/L**	5.00	S	**107-02-8**	01
N	**Benzene**	**<1.00**	**ug/L**	1.00		**71-43-2**	01
N	**Bromobenzene**	**<1.00**	**ug/L**	1.00		**108-86-1**	01
N	**Bromochloromethane**	**<1.00**	**ug/L**	1.00		**74-97-5**	01
N	**Bromodichloromethane**	**<1.00**	**ug/L**	1.00		**75-27-4**	01
N	**Bromoform**	**<1.00**	**ug/L**	1.00		**75-25-2**	01
N	**Bromomethane (Methyl Bromi**	**<1.00**	**ug/L**	1.00		**74-83-9**	01
N	**n-Butylbenzene**	**<1.00**	**ug/L**	1.00		**104-51-8**	01
N	**sec-Butylbenzene**	**<1.00**	**ug/L**	1.00		**135-98-8**	01
N	**tert-Butylbenzene**	**<1.00**	**ug/L**	1.00		**98-06-6**	01
N	**tert-Butylmethylether (MTBE)**	**<1.00**	**ug/L**	1.00		**1634-04-4**	01
N	**Carbon Tetrachloride**	**<1.00**	**ug/L**	1.00		**56-23-5**	01

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com

Employee Owned Integrity Caring Continual Improvement

Results

Printed: 03/22/2013 Page 2 of 8

Client: CTEH *Project:* 605681

Results

Parameter		Results	Units	RL	Flags	CAS	Bottle
1196568	**MAAR0319SW004**						*Received:* 03/21/2013
Liquid Aqueous	*Collected by:* Client	*Affiliation:* Center for Toxicolog				03/19/2013	18:50:00
EPA 8260B			*Analyzed:* AAC	03/21/2013	16:28:00	*QCgroup*	514826
N	**Chlorobenzene**	**<1.00**	**ug/L**	1.00		**108-90-7**	01
N	**Chloroform**	**<1.00**	**ug/L**	1.00		**67-66-3**	01
N	**Chloromethane**	**<1.00**	**ug/L**	1.00		**74-87-3**	01
N	**1,2-Dibromo-3-chloropropane**	**<5.00**	**ug/L**	5.00		**96-12-8**	01
N	**2-Chlorotoluene**	**<1.00**	**ug/L**	1.00		**95-49-8**	01
N	**4-Chlorotoluene**	**<1.00**	**ug/L**	1.00		**106-43-4**	01
N	**Dibromochloromethane**	**<1.00**	**ug/L**	1.00		**124-48- 1**	01
N	**1,2-Dibromoethane**	**<1.00**	**ug/L**	1.00		**106-93-4**	01
N	**Dibromomethane**	**<1.00**	**ug/L**	1.00		**74-95-3**	01
N	**1,3-Dichlorobenzene**	**<1.00**	**ug/L**	1.00		**541-73-1**	01
N	**1,2-Dichlorobenzene**	**<1.00**	**ug/L**	1.00		**95-50-1**	01
N	**1,4-Dichlorobenzene**	**<1.00**	**ug/L**	1.00		**106-46-7**	01
N	**Dichlorodifluoromethane**	**<1.00**	**ug/L**	1.00		**75-71-8**	01
N	**1,1-Dichloroethane**	**<1.00**	**ug/L**	1.00		**75-34-3**	01
N	**1,2-Dichloroethane**	**<1.00**	**ug/L**	1.00		**107-06-2**	01
N	**trans-1,2-Dichloroethene**	**<1.00**	**ug/L**	1.00		**156-60-5**	01
N	**cis-1,2-Dichloroethene**	**<1.00**	**ug/L**	1.00		**156-59-2**	01
N	**1,1-Dichloroethylene**	**<1.00**	**ug/L**	1.00		**75-35-4**	01
N	**1,3-Dichloropropane**	**<1.00**	**ug/L**	1.00		**142-28-9**	01
N	**2,2-Dichloropropane**	**<1.00**	**ug/L**	1.00		**594-20-7**	01
N	**1,2-Dichloropropane**	**<1.00**	**ug/L**	1.00		**78-87-5**	01
N	**1,1-Dichloropropene**	**<1.00**	**ug/L**	1.00		**563-58-6**	01
N	**cis-1,3-Dichloropropene**	**<1.00**	**ug/L**	1.00		**10061-01-5**	01
N	**trans-1,3-Dichloropropene**	**<1.00**	**ug/L**	1.00		**10061-02-6**	01
N	**Ethylbenzene**	**<1.00**	**ug/L**	1.00		**100-41-4**	01
N	**Hexachlorobutadiene**	**<1.00**	**ug/L**	1.00		**87-68-3**	01
N	**Isopropylbenzene (Cumene)**	**<1.00**	**ug/L**	1.00		**98-82-8**	01
N	**p-Isopropyltoluene**	**<1.00**	**ug/L**	1.00		**99-87-6**	01
N	**Methyl ethyl ketone (Butanone)**	**<5.00**	**ug/L**	5.00		**78-93-3**	01
N	**Methyl Isobutyl Ketone**	**<1.00**	**ug/L**	1.00		**108-10-1**	01
N	**Methylene chloride**	**<1.00**	**ug/L**	1.00		**75-09-2**	01
N	**Naphthalene**	**<1.00**	**ug/L**	1.00		**91-20-3**	01
N	**n-Propylbenzene**	**<1.00**	**ug/L**	1.00		**103-65-1**	01
N	**Styrene**	**<1.00**	**ug/L**	1.00		**100-42-5**	01
N	**1,1,1,2-Tetrachloroethane**	**<1.00**	**ug/L**	1.00		**630-20-6**	01
N	**1,1,2,2-Tetrachloroethane**	**<1.00**	**ug/L**	1.00		**79-34-5**	01
N	**Tetrachloroethylene**	**<1.00**	**ug/L**	1.00		**127-18-4**	01
N	**Toluene**	**<1.00**	**ug/L**	1.00		**108-88-3**	01
N	**1,2,3-Trichlorobenzene**	**<1.00**	**ug/L**	1.00		**87-61-6**	01
N	**1,2,4-Trichlorobenzene**	**<1.00**	**ug/L**	1.00		**120-82-1**	01
N	**1,1,1-Trichloroethane**	**<1.00**	**ug/L**	1.00		**71-55-6**	01
N	**1,1,2-Trichloroethane**	**<1.00**	**ug/L**	1.00		**79-00-5**	01
N	**Trichloroethylene**	**<1.00**	**ug/L**	1.00		**79-01-6**	01
N	**Trichlorofluoromethane**	**<1.00**	**ug/L**	1.00		**75-69-4**	01
N	**1,2,3-Trichloropropane**	**<1.00**	**ug/L**	1.00		**96-18-4**	01

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com

Employee Owned Integrity Caring Continual Improvement

Results

Printed: 03/22/2013

Client: CTEH *Project:* 605681

Results

Parameter		Results	Units	RL	Flags	CAS	Bottle
1196568	**MAAR0319SW004**						*Received:* 03/21/2013
Liquid Aqueous	*Collected by:* Client		*Affiliation:* Center for Toxicolog			03/19/2013	18:50:00
EPA 8260B			*Analyzed:* AAC	*03/21/2013*	*16:28:00*	*QCgroup*	*514826*
N	**1,2,4-Trimethylbenzene**	**<1.00**	**ug/L**	1.00		**95-63-6**	01
N	**1,3,5-Trimethylbenzene**	**<1.00**	**ug/L**	1.00		**108-67-8**	01
N	**Vinyl chloride**	**<1.00**	**ug/L**	1.00		**75-01-4**	01
N	**m- and p-Xylene**	**<2.00**	**ug/L**	2.00		**ARC-mpXyl**	01
N	**o-Xylene**	**<1.00**	**ug/L**	1.00		**95-47-6**	01
	Prepared:	***514831***	*03/21/2013*		*16:57:00*		
EPA 8260B			*Analyzed:* AAC	*03/21/2013*	*16:57:00*	*QCgroup*	*514831*
N	**Chloroethane**	**<1.00**	**ug/L**	1.00		**75-00-3**	08
N	**2-Chloroethylvinyl ether**	**<1.00**	**ug/L**	1.00		**110-75-8**	08
	Prepared:	***514464***	*03/20/2013*		*10:30:00*		
EPA 8270C			*Analyzed:* KJS	*03/22/2013*	*09:15:00*	*QCgroup*	*514914*
N	**Acenaphthene**	**<1.09**	**ug/L**	1.09		**83-32-9**	11
N	**Acenaphthylene**	**<1.09**	**ug/L**	1.09		**208-96-8**	11
N	**Anthracene**	**<1.09**	**ug/L**	1.09		**120-12-7**	11
N	**Benzidine**	**<4.30**	**ug/L**	4.30		**92-87-5**	11
N	**Benzo(a)anthracene**	**<1.09**	**ug/L**	1.09		**56-55-3**	11
N	**Benzo(a)pyrene**	**<10.9**	**ug/L**	10.9		**50-32-8**	11
N	**Benzo(b)fluoranthene**	**<1.09**	**ug/L**	1.09		**205-99-2**	11
N	**Benzo(ghi)perylene**	**<1.09**	**ug/L**	1.09		**191-24-2**	11
N	**Benzo(k)fluoranthene**	**<1.09**	**ug/L**	1.09		**207-08-9**	11
N	**Benzyl Butyl phthalate**	**<1.09**	**ug/L**	1.09		**85-68-7**	11
N	**4-Bromophenyl phenyl ether**	**<1.09**	**ug/L**	1.09		**101-55-3**	11
N	**Di-n-butylphthalate**	**<5.43**	**ug/L**	5.43		**84-74-2**	11
N	**Indeno(1,2,3-cd)pyrene**	**<1.09**	**ug/L**	1.09		**193-39-5**	11
N	**Bis(2-chloroethoxy)methane**	**<1.09**	**ug/L**	1.09		**111-91-1**	11
N	**Bis(2-chloroethyl)ether**	**<1.09**	**ug/L**	1.09		**111-44-4**	11
N	**Bis(2-chloroisopropyl)ether**	**<1.85**	**ug/L**	1.85		**39638-32-9**	11
N	**2-Chloronaphthalene**	**<1.09**	**ug/L**	1.09		**91-58-7**	11
N	**2-Chlorophenol**	**<5.43**	**ug/L**	5.43		**95-57-8**	11
N	**4-Chlorophenyl phenyl ethe**	**<1.09**	**ug/L**	1.09		**7005-72-3**	11
N	**Chrysene (Benzo(a)phenanthrene)**	**<1.09**	**ug/L**	1.09		**218-01-9**	11
N	**Dibenz(a,h)anthracene**	**<1.09**	**ug/L**	1.09		**53-70-3**	11
N	**1,3-Dichlorobenzene**	**<2.17**	**ug/L**	2.17		**541-73-1**	11
N	**1,2-Dichlorobenzene**	**<2.17**	**ug/L**	2.17		**95-50-1**	11
N	**1,4-Dichlorobenzene**	**<2.17**	**ug/L**	2.17		**106-46-7**	11
N	**3,3'-Dichlorobenzidine**	**<2.17**	**ug/L**	2.17		**91-94-1**	11
N	**2,4-Dichlorophenol**	**<10.9**	**ug/L**	10.9		**120-83-2**	11
N	**2,6-Dichlorophenol**	**<10.9**	**ug/L**	10.9		**87-65-0**	11
N	**Diethyl phthalate**	**<3.98**	**ug/L**	3.98		**84-66-2**	11
N	**Dimethyl phthalate**	**<5.43**	**ug/L**	5.43		**131-11-3**	11
N	**2,4-Dimethylphenol**	**<2.17**	**ug/L**	2.17		**105-67-9**	11
N	**2,4-Dinitrophenol**	**<2.17**	**ug/L**	2.17		**51-28-5**	11
N	**2,4-Dinitrotoluene**	**<1.09**	**ug/L**	1.09		**121-14-2**	11
N	**2,6-Dinitrotoluene**	**<1.09**	**ug/L**	1.09		**606-20-2**	11

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Employee Owned Integrity Caring Continual Improvement

Results

Printed: 03/22/2013

Client: CTEH *Project:* 605681

Results

Parameter	Results	Units	RL	Flags	CAS	Bottle
1196568 **MAAR0319SW004**					*Received:* 03/21/2013	
Liquid Aqueous	*Collected by:* Client		*Affiliation:* Center for Toxicolog		03/19/2013 18:50:00	
EPA 8270C			*Analyzed:* KJS		03/22/2013 09:15:00 *QCgroup*	514914
N **Bis(2-ethylhexyl)phthalate**	**<2.17**	**ug/L**	2.17		**117-81-7**	11
N **Fluoranthene(Benzo(j,k)fluorene)**	**<1.09**	**ug/L**	1.09		**206-44-0**	11
N **Fluorene**	**<1.09**	**ug/L**	1.09		**86-73-7**	11
N **Hexachlorobenzene**	**<1.09**	**ug/L**	1.09		**118-74-1**	11
N **Hexachlorobutadiene**	**<2.17**	**ug/L**	2.17		**87-68-3**	11
N **Hexachlorocyclopentadiene**	**<2.17**	**ug/L**	2.17		**77-47-4**	11
N **Hexachloroethane**	**<2.17**	**ug/L**	2.17		**67-72-1**	11
N **Isophorone**	**<1.09**	**ug/L**	1.09		**78-59-1**	11
N **p-Chloro-m-Cresol (4-Chloro-3-me**	**<10.9**	**ug/L**	10.9		**59-50-7**	11
N **4,6-Dinitro-2-methylphenol**	**<2.17**	**ug/L**	2.17		**534-52-1**	11
N **Naphthalene**	**<1.15**	**ug/L**	1.15		**91-20-3**	11
N **Nitrobenzene**	**<1.09**	**ug/L**	1.09		**98-95-3**	11
N **2-Nitrophenol**	**<1.09**	**ug/L**	1.09		**88-75-5**	11
N **4-Nitrophenol**	**<1.09**	**ug/L**	1.09		**100-02-7**	11
N **N-Nitrosodimethylamine**	**<5.43**	**ug/L**	5.43		**62-75-9**	11
N **N-Nitrosodiphenylamine (as DPA**	**<10.9**	**ug/L**	10.9		**86-30-6**	11
N **Di-n-octylphthalate**	**<7.02**	**ug/L**	7.02		**117-84-0**	11
N **Pentachlorophenol**	**<10.9**	**ug/L**	10.9		**87-86-5**	11
N **Phenanthrene**	**<1.09**	**ug/L**	1.09		**85-01-8**	11
N **Phenol**	**<5.43**	**ug/L**	5.43		**108-95-2**	11
N **N-Nitrosodi-n-propylamine**	**<1.09**	**ug/L**	1.09		**621-64-7**	11
N **Pyrene**	**<1.09**	**ug/L**	1.09		**129-00-0**	11
N **1,2,4-Trichlorobenzene**	**<2.17**	**ug/L**	2.17		**120-82-1**	11
N **2,4,6-Trichlorophenol**	**<10.9**	**ug/L**	10.9		**88-06-2**	11
N **2,4,5-Trichlorophenol**	**<5.43**	**ug/L**	5.43		**95-95-4**	11
Prepared:	***514376***	*03/19/2013*			*13:06:02*	
*SW-846 8015 * MOD*			*Analyzed:* BRU		03/21/2013 21:13:00 *QCgroup*	514935
N **TPH-Oil >C20-C28**	**<1.03**	**mg/L**	1.03		**ORO**	16
Prepared:	***514376***	*03/19/2013*			*13:06:02*	
SW-846 8015 MOD*			*Analyzed:* BRU		03/21/2013 21:13:00 *QCgroup*	514935
N **TPH-Oil >C28-C36**	**<1.03**	**mg/L**	1.03			16
Prepared:	***514376***	*03/19/2013*			*13:06:02*	
*SW-846 8015*MOD*			*Analyzed:* BRU		03/21/2013 21:13:00 *QCgroup*	514935
N **TPH-D >C10-C20**	**<0.978**	**mg/L**	0.978		**DRO**	16
Prepared:	***514826***	*03/21/2013*			*16:28:00*	
SW-846 8260B			*Analyzed:* AAC		03/21/2013 16:28:00 *QCgroup*	514826
N **Acrylonitrile**	**<1.00**	**ug/L**	1.00		**107-13-1**	01
Prepared:	***514464***	*03/20/2013*			*10:30:00*	
SW-846 8270C			*Analyzed:* KJS		03/22/2013 09:15:00 *QCgroup*	514914
N **1,2-DPH (as azobenzene)**	**<1.09**	**ug/L**	1.09		**122-66-7**	11

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Employee Owned Integrity Caring Continual Improvement

Results

Printed: 03/22/2013

Client: CTEH *Project:* 605681

Results

Parameter	Results	Units	RL	Flags	CAS	Bottle
1196573 TB002						*Received:* 03/21/2013
Liquid Aqueous	*Collected by:* Client		*Affiliation:* Center for Toxicolog			03/19/2013
	Prepared:	***514826***	*03/21/2013*		*16:06:00*	
EPA 8260B			*Analyzed: AAC*	*03/21/2013*	*16:06:00 QCgroup*	*514826*
N **Acetone**		**<5.00**	**ug/L**	5.00	**67-64-1**	01
N **Acrolein**		**<5.00**	**ug/L**	5.00 S	**107-02-8**	01
N **Benzene**		**<1.00**	**ug/L**	1.00	**71-43-2**	01
N **Bromobenzene**		**<1.00**	**ug/L**	1.00	**108-86-1**	01
N **Bromochloromethane**		**<1.00**	**ug/L**	1.00	**74-97-5**	01
N **Bromodichloromethane**		**<1.00**	**ug/L**	1.00	**75-27-4**	01
N **Bromoform**		**<1.00**	**ug/L**	1.00	**75-25-2**	01
N **Bromomethane (Methyl Bromi**		**<1.00**	**ug/L**	1.00	**74-83-9**	01
N **n-Butylbenzene**		**<1.00**	**ug/L**	1.00	**104-51-8**	01
N **sec-Butylbenzene**		**<1.00**	**ug/L**	1.00	**135-98-8**	01
N **tert-Butylbenzene**		**<1.00**	**ug/L**	1.00	**98-06-6**	01
N **tert-Butylmethylether (MTBE)**		**<1.00**	**ug/L**	1.00	**1634-04-4**	01
N **Carbon Tetrachloride**		**<1.00**	**ug/L**	1.00	**56-23-5**	01
N **Chlorobenzene**		**<1.00**	**ug/L**	1.00	**108-90-7**	01
N **Chloroform**		**<1.00**	**ug/L**	1.00	**67-66-3**	01
N **Chloromethane**		**<1.00**	**ug/L**	1.00	**74-87-3**	01
N **1,2-Dibromo-3-chloropropane**		**<5.00**	**ug/L**	5.00	**96-12-8**	01
N **2-Chlorotoluene**		**<1.00**	**ug/L**	1.00	**95-49-8**	01
N **4-Chlorotoluene**		**<1.00**	**ug/L**	1.00	**106-43-4**	01
N **Dibromochloromethane**		**<1.00**	**ug/L**	1.00	**124-48- 1**	01
N **1,2-Dibromoethane**		**<1.00**	**ug/L**	1.00	**106-93-4**	01
N **Dibromomethane**		**<1.00**	**ug/L**	1.00	**74-95-3**	01
N **1,3-Dichlorobenzene**		**<1.00**	**ug/L**	1.00	**541-73-1**	01
N **1,2-Dichlorobenzene**		**<1.00**	**ug/L**	1.00	**95-50-1**	01
N **1,4-Dichlorobenzene**		**<1.00**	**ug/L**	1.00	**106-46-7**	01
N **Dichlorodifluoromethane**		**<1.00**	**ug/L**	1.00	**75-71-8**	01
N **1,1-Dichloroethane**		**<1.00**	**ug/L**	1.00	**75-34-3**	01
N **1,2-Dichloroethane**		**<1.00**	**ug/L**	1.00	**107-06-2**	01
N **trans-1,2-Dichloroethene**		**<1.00**	**ug/L**	1.00	**156-60-5**	01
N **cis-1,2-Dichloroethene**		**<1.00**	**ug/L**	1.00	**156-59-2**	01
N **1,1-Dichloroethylene**		**<1.00**	**ug/L**	1.00	**75-35-4**	01
N **1,3-Dichloropropane**		**<1.00**	**ug/L**	1.00	**142-28-9**	01
N **2,2-Dichloropropane**		**<1.00**	**ug/L**	1.00	**594-20-7**	01
N **1,2-Dichloropropane**		**<1.00**	**ug/L**	1.00	**78-87-5**	01
N **1,1-Dichloropropene**		**<1.00**	**ug/L**	1.00	**563-58-6**	01
N **cis-1,3-Dichloropropene**		**<1.00**	**ug/L**	1.00	**10061-01-5**	01
N **trans-1,3-Dichloropropene**		**<1.00**	**ug/L**	1.00	**10061-02-6**	01
N **Ethylbenzene**		**<1.00**	**ug/L**	1.00	**100-41-4**	01
N **Hexachlorobutadiene**		**<1.00**	**ug/L**	1.00	**87-68-3**	01
N **Isopropylbenzene (Cumene)**		**<1.00**	**ug/L**	1.00	**98-82-8**	01
N **p-Isopropyltoluene**		**<1.00**	**ug/L**	1.00	**99-87-6**	01
N **Methyl ethyl ketone (Butanone)**		**<5.00**	**ug/L**	5.00	**78-93-3**	01
N **Methyl Isobutyl Ketone**		**<1.00**	**ug/L**	1.00	**108-10-1**	01
N **Methylene chloride**		**<1.00**	**ug/L**	1.00	**75-09-2**	01

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Employee Owned Integrity Caring Continual Improvement

Results

Printed: 03/22/2013 Page 6 of 8

Client: CTEH *Project:* 605681

Results

Parameter		Results	Units	RL	Flags	CAS	Bottle
1196573	**TB002**						*Received:* 03/21/2013
Liquid Aqueous	*Collected by:* Client	*Affiliation:* Center for Toxicolog	03/19/2013				
EPA 8260B			*Analyzed:* AAC	03/21/2013	16:06:00	*QCgroup*	514826
N	**Naphthalene**	**<1.00**	**ug/L**	1.00		**91-20-3**	01
N	**n-Propylbenzene**	**<1.00**	**ug/L**	1.00		**103-65-1**	01
N	**Styrene**	**<1.00**	**ug/L**	1.00		**100-42-5**	01
N	**1,1,1,2-Tetrachloroethane**	**<1.00**	**ug/L**	1.00		**630-20-6**	01
N	**1,1,2,2-Tetrachloroethane**	**<1.00**	**ug/L**	1.00		**79-34-5**	01
N	**Tetrachloroethylene**	**<1.00**	**ug/L**	1.00		**127-18-4**	01
N	**Toluene**	**<1.00**	**ug/L**	1.00		**108-88-3**	01
N	**1,2,3-Trichlorobenzene**	**<1.00**	**ug/L**	1.00		**87-61-6**	01
N	**1,2,4-Trichlorobenzene**	**<1.00**	**ug/L**	1.00		**120-82-1**	01
N	**1,1,1-Trichloroethane**	**<1.00**	**ug/L**	1.00		**71-55-6**	01
N	**1,1,2-Trichloroethane**	**<1.00**	**ug/L**	1.00		**79-00-5**	01
N	**Trichloroethylene**	**<1.00**	**ug/L**	1.00		**79-01-6**	01
N	**Trichlorofluoromethane**	**<1.00**	**ug/L**	1.00		**75-69-4**	01
N	**1,2,3-Trichloropropane**	**<1.00**	**ug/L**	1.00		**96-18-4**	01
N	**1,2,4-Trimethylbenzene**	**<1.00**	**ug/L**	1.00		**95-63-6**	01
N	**1,3,5-Trimethylbenzene**	**<1.00**	**ug/L**	1.00		**108-67-8**	01
N	**Vinyl chloride**	**<1.00**	**ug/L**	1.00		**75-01-4**	01
N	**m- and p-Xylene**	**<2.00**	**ug/L**	2.00		**ARC-mpXyl**	01
N	**o-Xylene**	**<1.00**	**ug/L**	1.00		**95-47-6**	01
	Prepared:	***514831***	*03/21/2013*		*16:57:00*		
EPA 8260B			*Analyzed:* AAC	03/21/2013	16:28:00	*QCgroup*	514831
N	**Chloroethane**	**<1.00**	**ug/L**	1.00		**75-00-3**	02
N	**2-Chloroethylvinyl ether**	**<1.00**	**ug/L**	1.00		**110-75-8**	02
	Prepared:	***514826***	*03/21/2013*		*16:06:00*		
SW-846 8260B			*Analyzed:* AAC	03/21/2013	16:06:00	*QCgroup*	514826
N	**Acrylonitrile**	**<1.00**	**ug/L**	1.00		**107-13-1**	01

Sample Preparation

1196568	**MAAR0319SW004**						*Received:* 03/21/2013
	Prepared:	***514711***	*03/21/2013*		*11:30:00*		
EPA 3010			*Analyzed:* TES	03/21/2013	11:30:00	*QCgroup*	514711
N	**Liquid Metals Digestion**	**50/50**	**ml**				04
	Prepared:	***514733***	*03/21/2013*		*12:45:00*		
EPA 7470A			*Analyzed:* PJD	03/21/2013	12:45:00	*QCgroup*	514733
N	**Mercury Liquid Metals Digestion**	**50/25**	**ml**				04
	Prepared:	***514464***	*03/20/2013*		*10:30:00*		
SW 3510C			*Analyzed:* CVE	03/20/2013	10:30:00	*QCgroup*	514464

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Employee Owned Integrity Caring Continual Improvement

Results

Printed: 03/22/2013

Client: CTEH *Project:* 605681

Sample Preparation

1196568 **MAAR0319SW004** *Received:* 03/21/2013

SW 3510C			*Analyzed:*	*CVE*	*03/20/2013*	*10:30:00*	*QCgroup*	*514464*
N	**Liquid-Liquid Extraction, BNA**	**1/920**	**ml**					01
	Prepared:	***514376***	*03/19/2013*			*13:06:02*		
*SW-846 8015*MOD:*			*Analyzed:*	*LPI*	*03/19/2013*	*13:06:02*	*QCgroup*	*514376*
N	**TPH Extraction Liquid**	**3/117**	**ml**					05
	Prepared:	***514376***	*03/19/2013*			*13:06:02*		
*SW-846 8015B*MOD*			*Analyzed:*	*BRU*	*03/21/2013*	*21:13:00*	*QCgroup*	*514935*
N	**TPH C6 to C36**	**Entered**						16
	Prepared:	***514831***	*03/21/2013*			*16:57:00*		
SW-846 8260B			*Analyzed:*	*AAC*	*03/21/2013*	*16:57:00*	*QCgroup*	*514831*
N	**Volatiles by GC/MS**	**Entered**						08
	Prepared:	***514464***	*03/20/2013*			*10:30:00*		
SW-846 8270C			*Analyzed:*	*KJS*	*03/22/2013*	*09:15:00*	*QCgroup*	*514914*
N	**Semivolatile Hydrocarbons**	**Entered**						11

1196573 **TB002** *Received:* 03/21/2013

	Prepared:	***514831***	*03/21/2013*			*16:57:00*		
SW-846 8260B			*Analyzed:*	*AAC*	*03/21/2013*	*16:28:00*	*QCgroup*	*514831*
N	**Volatiles by GC/MS**	**Entered**						02

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Employee Owned Integrity Caring Continual Improvement

Results

Printed: 03/22/2013 Page 8 of 8

Client: CTEH *Project:* 605681

Qualifiers:

S - Standard reads lower than desired

We report results on an 'As Received' or wet basis unless marked 'Dry Weight'. Unless otherwise noted, testing was performed at Ana-lab's corporate laboratory that holds the following Federal and State certificates: Texas Department of Health Lead Firm Certificate 2110076, US Department of Agriculture Soil Import Permit S-37592, Texas Commisson on Environmental Quality Drinking Water Laboratory Certificate TX219, Texas Commission on Environmental Quality NELAP T104704201, Oklahoma Department of Environmental Quality Drinking Water Certification Lab ID# D9913, EPA Lab Number TX00063, USEPA Approved Perchlorate Testing Lab, Oklahoma Department of Environmental Quality Laboratory Certificate 8125, Arkansas Department of Environmental Quality Certification #03-070-0, Louisiana Department of Environmental Quality Laboratory Certification (NELAP, LELAP) #02008, Louisiana Department of Health and Hospitals Drinking Water (NELAP) # LA030020, US Department of Energy Approved, State of Kansas Department of Health and Environment Waste Water and Solid/Hazardous Waste Cert. E-10365. The Accredited column designates accreditation by N -- NELAC, or z -- not covered under NELAC scope of accreditation.

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RL is the Reporting Limit (sample specific quantitation limit) and is at or above the Method Detection Limit (MDL). CAS is Chemical Abstract Service number.

C. H. Whiteside, Ph.D., President

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40432-Magnolia AR

Account	*Project*
CTEH -L	605681

Report To

Chase Entzderger
Center for Toxicology and
Environmental Health,L.L.C.
5120 North Shore Dr
North Little Ro, AR 72188

514813 **M** **Liquid Aqueous** **EPA 6020A**

Blank

Parameter	*PrepSet*	*Reading*	*MDL*	*MQL*	*Units*	*File*
Antimony	514711	ND	0.000399	0.001	mg/L	113305423
Arsenic	514711	ND	0.000525	0.002	mg/L	113305423
Beryllium	514711	ND	0.00006050	0.001	mg/L	113305423
Cadmium	514711	ND	0.000209	0.001	mg/L	113305423
Chromium	514711	ND	0.000282	0.001	mg/L	113305423
Copper	514711	ND	0.000425	0.001	mg/L	113305423
Lead	514711	ND	0.000227	0.001	mg/L	113305423
Nickel	514711	ND	0.000264	0.001	mg/L	113305423
Selenium	514711	ND	0.000728	0.002	mg/L	113305423
Silver	514711	ND	0.00006280	0.001	mg/L	113305423
Thallium	514711	ND	0.000174	0.001	mg/L	113305423
Zinc	514711	ND	0.00123	0.005	mg/L	113305423

CCV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
Antimony	0.0505	0.05	mg/L	101	90.0 - 110		113305422
Antimony	0.0511	0.05	mg/L	102	90.0 - 110		113305425
Antimony	0.0507	0.05	mg/L	101	90.0 - 110		113305430
Antimony	0.0501	0.05	mg/L	100	90.0 - 110		113305433
Antimony	0.0497	0.05	mg/L	99.4	90.0 - 110		113305441
Arsenic	0.0501	0.05	mg/L	100	90.0 - 110		113305422
Arsenic	0.0501	0.05	mg/L	100	90.0 - 110		113305425
Arsenic	0.0497	0.05	mg/L	99.4	90.0 - 110		113305430
Arsenic	0.0496	0.05	mg/L	99.2	90.0 - 110		113305433
Arsenic	0.0491	0.05	mg/L	98.2	90.0 - 110		113305441
Beryllium	0.0504	0.05	mg/L	101	90.0 - 110		113305422
Beryllium	0.0494	0.05	mg/L	98.8	90.0 - 110		113305425
Beryllium	0.0493	0.05	mg/L	98.6	90.0 - 110		113305430
Beryllium	0.0501	0.05	mg/L	100	90.0 - 110		113305433
Beryllium	0.0493	0.05	mg/L	98.6	90.0 - 110		113305441
Cadmium	0.0501	0.05	mg/L	100	90.0 - 110		113305422
Cadmium	0.0505	0.05	mg/L	101	90.0 - 110		113305425
Cadmium	0.050	0.05	mg/L	100	90.0 - 110		113305430
Cadmium	0.050	0.05	mg/L	100	90.0 - 110		113305433
Cadmium	0.0496	0.05	mg/L	99.2	90.0 - 110		113305441
Chromium	0.0496	0.05	mg/L	99.2	90.0 - 110		113305422
Chromium	0.0499	0.05	mg/L	99.8	90.0 - 110		113305425
Chromium	0.050	0.05	mg/L	100	90.0 - 110		113305430
Chromium	0.0508	0.05	mg/L	102	90.0 - 110		113305433

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514813 **M** **Liquid Aqueous** **EPA 6020A**

CCV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
Chromium	0.0495	0.05	mg/L	99.0	90.0 - 110		113305441
Copper	0.0481	0.05	mg/L	96.2	90.0 - 110		113305422
Copper	0.0481	0.05	mg/L	96.2	90.0 - 110		113305425
Copper	0.0478	0.05	mg/L	95.6	90.0 - 110		113305430
Copper	0.0488	0.05	mg/L	97.6	90.0 - 110		113305433
Copper	0.0476	0.05	mg/L	95.2	90.0 - 110		113305441
Lead	0.0479	0.05	mg/L	95.8	90.0 - 110		113305422
Lead	0.0478	0.05	mg/L	95.6	90.0 - 110		113305425
Lead	0.0478	0.05	mg/L	95.6	90.0 - 110		113305430
Lead	0.0472	0.05	mg/L	94.4	90.0 - 110		113305433
Lead	0.0473	0.05	mg/L	94.6	90.0 - 110		113305441
Nickel	0.0487	0.05	mg/L	97.4	90.0 - 110		113305422
Nickel	0.0493	0.05	mg/L	98.6	90.0 - 110		113305425
Nickel	0.0489	0.05	mg/L	97.8	90.0 - 110		113305430
Nickel	0.0497	0.05	mg/L	99.4	90.0 - 110		113305433
Nickel	0.0489	0.05	mg/L	97.8	90.0 - 110		113305441
Selenium	0.0503	0.05	mg/L	101	90.0 - 110		113305422
Selenium	0.0512	0.05	mg/L	102	90.0 - 110		113305425
Selenium	0.0514	0.05	mg/L	103	90.0 - 110		113305430
Selenium	0.0479	0.05	mg/L	95.8	90.0 - 110		113305433
Selenium	0.0497	0.05	mg/L	99.4	90.0 - 110		113305441
Silver	0.0501	0.05	mg/L	100	90.0 - 110		113305422
Silver	0.0503	0.05	mg/L	101	90.0 - 110		113305425
Silver	0.0499	0.05	mg/L	99.8	90.0 - 110		113305430
Silver	0.0499	0.05	mg/L	99.8	90.0 - 110		113305433
Silver	0.0497	0.05	mg/L	99.4	90.0 - 110		113305441
Thallium	0.0483	0.05	mg/L	96.6	90.0 - 110		113305422
Thallium	0.0484	0.05	mg/L	96.8	90.0 - 110		113305425
Thallium	0.0482	0.05	mg/L	96.4	90.0 - 110		113305430
Thallium	0.0477	0.05	mg/L	95.4	90.0 - 110		113305433
Thallium	0.048	0.05	mg/L	96.0	90.0 - 110		113305441
Zinc	0.0498	0.05	mg/L	99.6	90.0 - 110		113305422
Zinc	0.0496	0.05	mg/L	99.2	90.0 - 110		113305425
Zinc	0.0497	0.05	mg/L	99.4	90.0 - 110		113305430
Zinc	0.0497	0.05	mg/L	99.4	90.0 - 110		113305433
Zinc	0.0494	0.05	mg/L	98.8	90.0 - 110		113305441

ICV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
Antimony	0.0509	0.05	mg/L	102	90.0 - 110		113305420
Arsenic	0.0503	0.05	mg/L	101	90.0 - 110		113305420
Beryllium	0.051	0.05	mg/L	102	90.0 - 110		113305420
Cadmium	0.0513	0.05	mg/L	103	90.0 - 110		113305420
Chromium	0.0507	0.05	mg/L	101	90.0 - 110		113305420
Copper	0.0512	0.05	mg/L	102	90.0 - 110		113305420
Lead	0.0504	0.05	mg/L	101	90.0 - 110		113305420
Nickel	0.0511	0.05	mg/L	102	90.0 - 110		113305420

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514813 **M** **Liquid Aqueous** **EPA 6020A**

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Selenium	0.0508	0.05	mg/L	102	90.0 - 110		113305420
Silver	0.0518	0.05	mg/L	104	90.0 - 110		113305420
Thallium	0.051	0.05	mg/L	102	90.0 - 110		113305420
Zinc	0.0507	0.05	mg/L	101	90.0 - 110		113305420

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
Antimony	514711	0.505	0.500	mg/L	101	88.2 - 111	113305424	
Arsenic	514711	0.497	0.500	mg/L	99.3	92.0 - 110	113305424	
Beryllium	514711	0.191	0.200	mg/L	95.4	86.7 - 108	113305424	
Cadmium	514711	0.247	0.250	mg/L	98.8	88.7 - 108	113305424	
Chromium	514711	0.487	0.500	mg/L	97.4	85.5 - 113	113305424	
Copper	514711	0.469	0.500	mg/L	93.8	86.7 - 107	113305424	
Lead	514711	0.476	0.500	mg/L	95.2	87.9 - 109	113305424	
Nickel	514711	0.467	0.500	mg/L	93.4	85.6 - 106	113305424	
Selenium	514711	0.497	0.500	mg/L	99.4	90.4 - 112	113305424	
Silver	514711	0.0987	0.100	mg/L	98.7	88.4 - 107	113305424	
Thallium	514711	0.455	0.500	mg/L	90.9	83.9 - 105	113305424	
Zinc	514711	0.472	0.500	mg/L	94.4	88.3 - 112	113305424	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Antimony	514711	0.505	0.506	0.500	88.2 - 111	101	101	mg/L	0.198	20.0
Arsenic	514711	0.497	0.500	0.500	92.0 - 110	99.3	100	mg/L	0.602	20.0
Beryllium	514711	0.191	0.189	0.200	86.7 - 108	95.4	94.7	mg/L	1.05	20.0
Cadmium	514711	0.247	0.246	0.250	88.7 - 108	98.8	98.4	mg/L	0.406	20.0
Chromium	514711	0.487	0.489	0.500	85.5 - 113	97.4	97.9	mg/L	0.410	20.0
Copper	514711	0.469	0.465	0.500	86.7 - 107	93.8	93.0	mg/L	0.857	20.0
Lead	514711	0.476	0.472	0.500	87.9 - 109	95.2	94.5	mg/L	0.844	20.0
Nickel	514711	0.467	0.461	0.500	85.6 - 106	93.4	92.3	mg/L	1.29	20.0
Selenium	514711	0.497	0.504	0.500	90.4 - 112	99.4	101	mg/L	1.40	20.0
Silver	514711	0.0987	0.0979	0.100	88.4 - 107	98.7	97.9	mg/L	0.814	20.0
Thallium	514711	0.455	0.450	0.500	83.9 - 105	90.9	90.1	mg/L	1.10	20.0
Zinc	514711	0.472	0.470	0.500	88.3 - 112	94.4	94.0	mg/L	0.425	20.0

LDR

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Antimony	9.70	10	mg/L	97.0	90.0 - 110		113305421
Arsenic	9.61	10	mg/L	96.1	90.0 - 110		113305421
Beryllium	9.95	10	mg/L	99.5	90.0 - 110		113305421
Cadmium	9.63	10	mg/L	96.3	90.0 - 110		113305421
Chromium	9.35	10	mg/L	93.5	90.0 - 110		113305421
Copper	9.03	10	mg/L	90.3	90.0 - 110		113305421
Lead	9.43	10	mg/L	94.3	90.0 - 110		113305421
Nickel	9.14	10	mg/L	91.4	90.0 - 110		113305421
Selenium	10.0	10	mg/L	100	90.0 - 110		113305421
Silver	9.69	10	mg/L	96.9	90.0 - 110		113305421
Thallium	9.07	10	mg/L	90.7	90.0 - 110		113305421

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514813 M Liquid Aqueous — EPA 6020A

LDR

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Zinc	9.48	10	mg/L	94.8	90.0 - 110		113305421

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Antimony	1196410	0.507	0	0.000514	0.500	90.5 - 109	101		mg/L		20.0
Arsenic	1196410	0.503	0	0.000699	0.500	93.2 - 110	100		mg/L		20.0
Beryllium	1196410	0.190	0	ND	0.200	85.5 - 110	95.0		mg/L		20.0
Cadmium	1196410	0.244	0	ND	0.250	88.7 - 107	97.6		mg/L		20.0
Chromium	1196410	0.484	0	0.000922	0.500	83.3 - 111	96.6		mg/L		20.0
Copper	1196410	0.454	0	0.00193	0.500	84.4 - 105	90.4		mg/L		20.0
Lead	1196410	0.465	0	ND	0.500	86.3 - 107	93.0		mg/L		20.0
Nickel	1196410	0.460	0	0.00413	0.500	83.4 - 103	91.2		mg/L		20.0
Selenium	1196410	0.496	0	ND	0.500	90.3 - 111	99.2		mg/L		20.0
Silver	1196410	0.096	0	ND	0.100	86.9 - 106	96.0		mg/L		20.0
Thallium	1196410	0.443	0	ND	0.500	74.9 - 107	88.6		mg/L		20.0
Zinc	1196410	0.463	0	0.00465	0.500	88.1 - 108	91.7		mg/L		20.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Antimony	1196410	0.507	0.512	0.000514	0.500	90.5 - 109	101	102	mg/L	0.985	20.0
Arsenic	1196410	0.503	0.505	0.000699	0.500	93.2 - 110	100	101	mg/L	0.995	20.0
Beryllium	1196410	0.190	0.193	ND	0.200	85.5 - 110	95.0	96.5	mg/L	1.57	20.0
Cadmium	1196410	0.244	0.246	ND	0.250	88.7 - 107	97.6	98.4	mg/L	0.816	20.0
Chromium	1196410	0.484	0.485	0.000922	0.500	83.3 - 111	96.6	96.8	mg/L	0.207	20.0
Copper	1196410	0.454	0.454	0.00193	0.500	84.4 - 105	90.4	90.4	mg/L	0	20.0
Lead	1196410	0.465	0.468	ND	0.500	86.3 - 107	93.0	93.6	mg/L	0.643	20.0
Nickel	1196410	0.460	0.459	0.00413	0.500	83.4 - 103	91.2	91.0	mg/L	0.220	20.0
Selenium	1196410	0.496	0.498	ND	0.500	90.3 - 111	99.2	99.6	mg/L	0.402	20.0
Silver	1196410	0.096	0.0969	ND	0.100	86.9 - 106	96.0	96.9	mg/L	0.933	20.0
Thallium	1196410	0.443	0.447	ND	0.500	74.9 - 107	88.6	89.4	mg/L	0.899	20.0
Zinc	1196410	0.463	0.461	0.00465	0.500	88.1 - 108	91.7	91.3	mg/L	0.437	20.0

514839 M Liquid Aqueous — EPA 7470A

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Mercury	514733	ND	0.072	0.100	ug/L	113306256

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Mercury	5.17	5.000	ug/L	103	90.0 - 110		113306255
Mercury	5.22	5.000	ug/L	104	90.0 - 110		113306265

ICL

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Mercury	19.4	20.00	ug/L	97.0	90.0 - 110		113306254

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File

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514839 M Liquid Aqueous — EPA 7470A

ICV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Mercury	4.92	5.000	ug/L	98.4	90.0 - 110		113306253

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
Mercury	514733	5.02	5.00	ug/L	100	86.0 - 115	113306257	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Mercury	514733	5.02	4.90	5.00	86.0 - 115	100	98.0	ug/L	2.42	20.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Mercury	1196568	10.3	0	ND	10.0	79.4 - 123	103		ug/L		14.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Mercury	1196568	10.3	10.2	ND	10.0	79.4 - 123	103	102	ug/L	0.976	14.0

514826 O Liquid Aqueous — SW-846 8260B

BFB

Parameter	Sample	RefMass	Reading	%	Limits%	Out	File
BFB Mass 173	514826	174	291	1.5	0 - 2.00		113305979
BFB Mass 174	514826	95.0	18776	95.8	50.0 - 100		113305979
BFB Mass 175	514826	174	1574	8.4	5.00 - 9.00		113305979
BFB Mass 176	514826	174	18145	96.6	95.0 - 101		113305979
BFB Mass 177	514826	176	1294	7.1	5.00 - 9.00		113305979
BFB Mass 50	514826	95.0	3496	17.8	15.0 - 40.0		113305979
BFB Mass 75	514826	95.0	7475	38.1	30.0 - 60.0		113305979
BFB Mass 95	514826	95.0	19608	100.0	100 - 100		113305979
BFB Mass 96	514826	95.0	1378	7.0	5.00 - 9.00		113305979

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
1,1,1,2-Tetrachloroethane	514826	ND	0.388	1.00	ug/L	113305982
1,1,1-Trichloroethane	514826	ND	0.265	1.00	ug/L	113305982
1,1,2,2-Tetrachloroethane	514826	ND	0.270	1.00	ug/L	113305982
1,1,2-Trichloroethane	514826	ND	0.425	1.00	ug/L	113305982
1,1-Dichloroethane	514826	ND	0.496	1.00	ug/L	113305982
1,1-Dichloroethylene	514826	ND	0.404	1.00	ug/L	113305982
1,1-Dichloropropene	514826	ND	0.514	1.00	ug/L	113305982
1,2,3-Trichlorobenzene	514826	ND	0.411	1.00	ug/L	113305982
1,2,3-Trichloropropane	514826	ND	0.956	1.00	ug/L	113305982
1,2,4-Trichlorobenzene	514826	ND	0.499	1.00	ug/L	113305982
1,2,4-Trimethylbenzene	514826	ND	0.302	1.00	ug/L	113305982
1,2-Dibromo-3-chloropropane	514826	ND	2.09	5.00	ug/L	113305982
1,2-Dibromoethane	514826	ND	0.275	1.00	ug/L	113305982
1,2-Dichlorobenzene	514826	ND	0.292	1.00	ug/L	113305982

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514826 **O** **Liquid Aqueous** **SW-846 8260B**

Blank

Parameter	*PrepSet*	*Reading*	*MDL*	*MQL*	*Units*	*File*
1,2-Dichloroethane	514826	ND	0.456	1.00	ug/L	113305982
1,2-Dichloropropane	514826	ND	0.415	1.00	ug/L	113305982
1,3,5-Trimethylbenzene	514826	ND	0.243	1.00	ug/L	113305982
1,3-Dichlorobenzene	514826	ND	0.315	1.00	ug/L	113305982
1,3-Dichloropropane	514826	ND	0.334	1.00	ug/L	113305982
1,4-Dichlorobenzene	514826	ND	0.294	1.00	ug/L	113305982
2,2-Dichloropropane	514826	ND	0.484	1.00	ug/L	113305982
2-Chlorotoluene	514826	ND	0.318	1.00	ug/L	113305982
4-Chlorotoluene	514826	ND	0.354	1.00	ug/L	113305982
Acetone	514826	ND	2.07	5.00	ug/L	113305982
Acrolein	514826	ND	4.78	5.00	ug/L	113305982
Acrylonitrile	514826	ND	0.698	1.00	ug/L	113305982
Benzene	514826	ND	0.187	1.00	ug/L	113305982
Bromobenzene	514826	ND	0.585	1.00	ug/L	113305982
Bromochloromethane	514826	ND	0.476	1.00	ug/L	113305982
Bromodichloromethane	514826	ND	0.307	1.00	ug/L	113305982
Bromoform	514826	ND	0.288	1.00	ug/L	113305982
Bromomethane (Methyl Bromi	514826	ND	0.554	1.00	ug/L	113305982
Carbon Tetrachloride	514826	ND	0.459	1.00	ug/L	113305982
Chlorobenzene	514826	ND	0.226	1.00	ug/L	113305982
Chloroform	514826	ND	0.211	1.00	ug/L	113305982
Chloromethane	514826	ND	0.391	1.00	ug/L	113305982
cis-1,2-Dichloroethene	514826	ND	0.502	1.00	ug/L	113305982
cis-1,3-Dichloropropene	514826	ND	0.488	1.00	ug/L	113305982
Dibromochloromethane	514826	ND	0.185	1.00	ug/L	113305982
Dibromomethane	514826	ND	0.382	1.00	ug/L	113305982
Dichlorodifluoromethane	514826	ND	0.405	1.00	ug/L	113305982
Ethylbenzene	514826	ND	0.180	1.00	ug/L	113305982
Hexachlorobutadiene	514826	ND	0.793	1.00	ug/L	113305982
Isopropylbenzene (Cumene)	514826	ND	0.383	1.00	ug/L	113305982
m- and p-Xylene	514826	ND	0.325	2.00	ug/L	113305982
Methyl ethyl ketone (Butanone)	514826	ND	0.382	5.00	ug/L	113305982
Methyl Isobutyl Ketone	514826	ND	0.458	1.00	ug/L	113305982
Methylene chloride	514826	ND	0.570	1.00	ug/L	113305982
Naphthalene	514826	ND	0.194	1.00	ug/L	113305982
n-Butylbenzene	514826	ND	0.493	1.00	ug/L	113305982
n-Propylbenzene	514826	ND	0.277	1.00	ug/L	113305982
o-Xylene	514826	ND	0.190	1.00	ug/L	113305982
p-Isopropyltoluene	514826	ND	0.261	1.00	ug/L	113305982
sec-Butylbenzene	514826	ND	0.182	1.00	ug/L	113305982
Styrene	514826	ND	0.254	1.00	ug/L	113305982
tert-Butylbenzene	514826	ND	0.217	1.00	ug/L	113305982
Tetrachloroethylene	514826	ND	0.391	1.00	ug/L	113305982
Toluene	514826	ND	0.314	1.00	ug/L	113305982
trans-1,2-Dichloroethene	514826	ND	0.518	1.00	ug/L	113305982

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Quality Control

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514826 **O** **Liquid Aqueous** **SW-846 8260B**

Blank

Parameter	*PrepSet*	*Reading*	*MDL*	*MQL*	*Units*	*File*
trans-1,3-Dichloropropene	514826	ND	0.223	1.00	ug/L	113305982
Trichloroethylene	514826	ND	0.562	1.00	ug/L	113305982
Trichlorofluoromethane	514826	ND	0.514	1.00	ug/L	113305982
Vinyl chloride	514826	ND	0.228	1.00	ug/L	113305982

CCV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
1,1,1,2-Tetrachloroethane	21.8	20.0	ug/L	109	70.0 - 130		113305978
1,1,1-Trichloroethane	21.4	20.0	ug/L	107	70.0 - 130		113305978
1,1,2,2-Tetrachloroethane	22.3	20.0	ug/L	112	70.0 - 130		113305978
1,1,2-Trichloroethane	20.8	20.0	ug/L	104	70.0 - 130		113305978
1,1-Dichloroethane	21.7	20.0	ug/L	108	70.0 - 130		113305978
1,1-Dichloroethylene	25.9	20.0	ug/L	130	70.0 - 130		113305978
1,1-Dichloropropene	21.3	20.0	ug/L	106	70.0 - 130		113305978
1,2,3-Trichlorobenzene	23.3	20.0	ug/L	116	70.0 - 130		113305978
1,2,3-Trichloropropane	23.6	20.0	ug/L	118	70.0 - 130		113305978
1,2,4-Trichlorobenzene	22.6	20.0	ug/L	113	70.0 - 130		113305978
1,2,4-Trimethylbenzene	21.3	20.0	ug/L	106	70.0 - 130		113305978
1,2-Dibromo-3-chloropropane	17.4	20.0	ug/L	87.0	70.0 - 130		113305978
1,2-Dibromoethane	22.0	20.0	ug/L	110	70.0 - 130		113305978
1,2-Dichlorobenzene	21.8	20.0	ug/L	109	70.0 - 130		113305978
1,2-Dichloroethane	22.5	20.0	ug/L	112	70.0 - 130		113305978
1,2-Dichloropropane	21.2	20.0	ug/L	106	70.0 - 130		113305978
1,3,5-Trimethylbenzene	21.2	20.0	ug/L	106	70.0 - 130		113305978
1,3-Dichlorobenzene	21.5	20.0	ug/L	108	70.0 - 130		113305978
1,3-Dichloropropane	22.1	20.0	ug/L	110	70.0 - 130		113305978
1,4-Dichlorobenzene	22.0	20.0	ug/L	110	70.0 - 130		113305978
2,2-Dichloropropane	20.3	20.0	ug/L	102	70.0 - 130		113305978
2-Chlorotoluene	21.3	20.0	ug/L	106	70.0 - 130		113305978
4-Chlorotoluene	20.8	20.0	ug/L	104	70.0 - 130		113305978
Acetone	19.8	20.0	ug/L	99.0	70.0 - 130		113305978
Acrolein	15.4	40.0	ug/L	38.5	70.0 - 130	*	113305978
Acrylonitrile	35.0	40.0	ug/L	87.5	70.0 - 130		113305978
Benzene	21.3	20.0	ug/L	106	70.0 - 130		113305978
Bromobenzene	22.8	20.0	ug/L	114	70.0 - 130		113305978
Bromochloromethane	23.8	20.0	ug/L	119	70.0 - 130		113305978
Bromodichloromethane	20.4	20.0	ug/L	102	70.0 - 130		113305978
Bromoform	17.9	20.0	ug/L	89.5	70.0 - 130		113305978
Bromomethane (Methyl Bromi	17.9	20.0	ug/L	89.5	70.0 - 130		113305978
Carbon Tetrachloride	21.8	20.0	ug/L	109	70.0 - 130		113305978
Chlorobenzene	21.2	20.0	ug/L	106	70.0 - 130		113305978
Chloroform	22.7	20.0	ug/L	114	70.0 - 130		113305978
Chloromethane	17.0	20.0	ug/L	85.0	70.0 - 130		113305978
cis-1,2-Dichloroethene	22.0	20.0	ug/L	110	70.0 - 130		113305978
cis-1,3-Dichloropropene	19.5	20.0	ug/L	97.5	70.0 - 130		113305978
Dibromochloromethane	18.8	20.0	ug/L	94.0	70.0 - 130		113305978

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514826 **O** **Liquid Aqueous** **SW-846 8260B**

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Dibromomethane	22.4	20.0	ug/L	112	70.0 - 130		113305978
Dichlorodifluoromethane	20.4	20.0	ug/L	102	70.0 - 130		113305978
Ethylbenzene	20.1	20.0	ug/L	100	70.0 - 130		113305978
Hexachlorobutadiene	23.1	20.0	ug/L	116	70.0 - 130		113305978
Isopropylbenzene (Cumene)	21.2	20.0	ug/L	106	70.0 - 130		113305978
m- and p-Xylene	39.8	40.0	ug/L	99.5	70.0 - 130		113305978
Methyl ethyl ketone (Butanone)	19.9	20.0	ug/L	99.5	70.0 - 130		113305978
Methyl Isobutyl Ketone	17.4	20.0	ug/L	87.0	70.0 - 130		113305978
Methylene chloride	22.8	20.0	ug/L	114	70.0 - 130		113305978
Naphthalene	21.2	20.0	ug/L	106	70.0 - 130		113305978
n-Butylbenzene	21.2	20.0	ug/L	106	70.0 - 130		113305978
n-Propylbenzene	21.2	20.0	ug/L	106	70.0 - 130		113305978
o-Xylene	19.9	20.0	ug/L	99.5	70.0 - 130		113305978
p-Isopropyltoluene	20.9	20.0	ug/L	104	70.0 - 130		113305978
sec-Butylbenzene	21.2	20.0	ug/L	106	70.0 - 130		113305978
Styrene	18.8	20.0	ug/L	94.0	70.0 - 130		113305978
tert-Butylbenzene	21.2	20.0	ug/L	106	70.0 - 130		113305978
tert-Butylmethylether (MTBE)	19.9	20.0	ug/L	99.5	70.0 - 130		113305978
Tetrachloroethylene	22.7	20.0	ug/L	114	70.0 - 130		113305978
Toluene	20.6	20.0	ug/L	103	70.0 - 130		113305978
trans-1,2-Dichloroethene	21.2	20.0	ug/L	106	70.0 - 130		113305978
trans-1,3-Dichloropropene	18.8	20.0	ug/L	94.0	70.0 - 130		113305978
Trichloroethylene	21.4	20.0	ug/L	107	70.0 - 130		113305978
Trichlorofluoromethane	21.5	20.0	ug/L	108	70.0 - 130		113305978
Vinyl chloride	21.7	20.0	ug/L	108	70.0 - 130		113305978

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	514826	LCS	84680	80730	40360	121100		113305980	514826
1,4-DichlorobenzeneD4 (ISTD)	514826	LCS Dup	81200	80730	40360	121100		113305981	514826
1,4-DichlorobenzeneD4 (ISTD)	514826	Blank	71820	80730	40360	121100		113305982	514826
ChlorobenzeneD5 (ISTD)	514826	LCS	146000	140300	70170	210500		113305980	514826
ChlorobenzeneD5 (ISTD)	514826	LCS Dup	140300	140300	70170	210500		113305981	514826
ChlorobenzeneD5 (ISTD)	514826	Blank	135700	140300	70170	210500		113305982	514826
1,4-DichlorobenzeneD4 (ISTD)	1196568	UNKNOWN	71570	80730	40360	121100		113305984	1196568
ChlorobenzeneD5 (ISTD)	1196568	UNKNOWN	133800	140300	70170	210500		113305984	1196568
1,4-DichlorobenzeneD4 (ISTD)	1196573	UNKNOWN	73400	80730	40360	121100		113305983	1196573
ChlorobenzeneD5 (ISTD)	1196573	UNKNOWN	140400	140300	70170	210500		113305983	1196573

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	514826	LCS	12.01	12.01	11.95	12.07		113305980	514826

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514826 **O** **Liquid Aqueous** **SW-846 8260B**

IS RetTime

Parameter	*Sample*	*Type*	*Reading*	*CCVISM*	*Low*	*High*	*Out*	*File*	*PrepSet*
1,4-DichlorobenzeneD4 (ISTD)	514826	LCS Dup	12.01	12.01	11.95	12.07		113305981	514826
1,4-DichlorobenzeneD4 (ISTD)	514826	Blank	12.01	12.01	11.95	12.07		113305982	514826
ChlorobenzeneD5 (ISTD)	514826	LCS	9.622	9.622	9.562	9.682		113305980	514826
ChlorobenzeneD5 (ISTD)	514826	LCS Dup	9.622	9.622	9.562	9.682		113305981	514826
ChlorobenzeneD5 (ISTD)	514826	Blank	9.622	9.622	9.562	9.682		113305982	514826
1,4-DichlorobenzeneD4 (ISTD)	1196568	UNKNOWN	12.01	12.01	11.95	12.07		113305984	1196568
ChlorobenzeneD5 (ISTD)	1196568	UNKNOWN	9.622	9.622	9.562	9.682		113305984	1196568
1,4-DichlorobenzeneD4 (ISTD)	1196573	UNKNOWN	12.01	12.01	11.95	12.07		113305983	1196573
ChlorobenzeneD5 (ISTD)	1196573	UNKNOWN	9.622	9.622	9.562	9.682		113305983	1196573

LCS

Parameter	*PrepSet*	*Reading*	*Known*	*Units*	*Recover%*	*Limits*	*File*	*Out*
1,1,1,2-Tetrachloroethane	514826	19.0	20.0	ug/L	95.0	81.0 - 118	113305980	
1,1,1-Trichloroethane	514826	19.2	20.0	ug/L	96.0	75.0 - 125	113305980	
1,1,2,2-Tetrachloroethane	514826	19.2	20.0	ug/L	96.1	60.0 - 140	113305980	
1,1,2-Trichloroethane	514826	19.0	20.0	ug/L	95.2	71.0 - 129	113305980	
1,1-Dichloroethane	514826	19.1	20.0	ug/L	95.6	72.0 - 128	113305980	
1,1-Dichloroethylene	514826	19.9	20.0	ug/L	99.4	50.0 - 150	113305980	
1,1-Dichloropropene	514826	18.2	20.0	ug/L	90.8	81.0 - 120	113305980	
1,2,3-Trichlorobenzene	514826	20.8	20.0	ug/L	104	60.0 - 145	113305980	
1,2,3-Trichloropropane	514826	21.1	20.0	ug/L	106	75.0 - 126	113305980	
1,2,4-Trichlorobenzene	514826	20.2	20.0	ug/L	101	70.0 - 134	113305980	
1,2,4-Trimethylbenzene	514826	18.2	20.0	ug/L	91.2	82.0 - 112	113305980	
1,2-Dibromo-3-chloropropane	514826	16.6	20.0	ug/L	83.2	57.0 - 144	113305980	
1,2-Dibromoethane	514826	20.0	20.0	ug/L	100	79.0 - 116	113305980	
1,2-Dichlorobenzene	514826	21.8	20.0	ug/L	109	63.0 - 137	113305980	
1,2-Dichloroethane	514826	19.9	20.0	ug/L	99.7	68.0 - 132	113305980	
1,2-Dichloropropane	514826	19.0	20.0	ug/L	94.8	34.0 - 166	113305980	
1,3,5-Trimethylbenzene	514826	18.4	20.0	ug/L	92.0	83.0 - 115	113305980	
1,3-Dichlorobenzene	514826	21.4	20.0	ug/L	107	73.0 - 127	113305980	
1,3-Dichloropropane	514826	18.8	20.0	ug/L	93.8	83.0 - 116	113305980	
1,4-Dichlorobenzene	514826	19.9	20.0	ug/L	99.7	63.0 - 137	113305980	
2,2-Dichloropropane	514826	17.7	20.0	ug/L	88.6	46.0 - 171	113305980	
2-Chlorotoluene	514826	20.2	20.0	ug/L	101	82.0 - 115	113305980	
4-Chlorotoluene	514826	20.4	20.0	ug/L	102	82.0 - 118	113305980	
Acetone	514826	24.5	20.0	ug/L	123	45.0 - 185	113305980	
Acrolein	514826	13.8	40.0	ug/L	34.5	0.100 - 425	113305980	
Acrylonitrile	514826	35.4	40.0	ug/L	88.4	71.0 - 117	113305980	
Benzene	514826	19.0	20.0	ug/L	95.2	64.0 - 136	113305980	
Bromobenzene	514826	21.0	20.0	ug/L	105	83.0 - 116	113305980	
Bromochloromethane	514826	21.6	20.0	ug/L	108	82.0 - 124	113305980	
Bromodichloromethane	514826	19.3	20.0	ug/L	96.4	65.0 - 135	113305980	
Bromoform	514826	16.1	20.0	ug/L	80.6	71.0 - 129	113305980	

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514826 **O** **Liquid Aqueous** **SW-846 8260B**

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
Bromomethane (Methyl Bromi	514826	16.2	20.0	ug/L	81.2	14.0 - 186	113305980	
Carbon Tetrachloride	514826	19.4	20.0	ug/L	96.8	73.0 - 127	113305980	
Chlorobenzene	514826	20.4	20.0	ug/L	102	66.0 - 134	113305980	
Chloroform	514826	19.8	20.0	ug/L	98.9	67.0 - 133	113305980	
Chloromethane	514826	15.5	20.0	ug/L	77.3	10.0 - 204	113305980	
cis-1,2-Dichloroethene	514826	19.0	20.0	ug/L	94.8	78.0 - 114	113305980	
cis-1,3-Dichloropropene	514826	15.3	20.0	ug/L	76.6	24.0 - 176	113305980	
Dibromochloromethane	514826	16.6	20.0	ug/L	83.1	67.0 - 133	113305980	
Dibromomethane	514826	20.5	20.0	ug/L	102	87.0 - 117	113305980	
Dichlorodifluoromethane	514826	15.0	20.0	ug/L	74.8	45.0 - 146	113305980	
Ethylbenzene	514826	18.4	20.0	ug/L	91.9	59.0 - 141	113305980	
Hexachlorobutadiene	514826	20.0	20.0	ug/L	99.8	71.0 - 132	113305980	
Isopropylbenzene (Cumene)	514826	19.2	20.0	ug/L	96.0	91.0 - 125	113305980	
m- and p-Xylene	514826	37.2	40.0	ug/L	93.1	80.0 - 117	113305980	
Methyl ethyl ketone (Butanone)	514826	17.8	20.0	ug/L	88.8	61.0 - 139	113305980	
Methyl Isobutyl Ketone	514826	15.4	20.0	ug/L	77.0	61.0 - 120	113305980	
Methylene chloride	514826	20.6	20.0	ug/L	103	60.0 - 140	113305980	
Naphthalene	514826	19.0	20.0	ug/L	95.2	62.0 - 138	113305980	
n-Butylbenzene	514826	19.0	20.0	ug/L	95.0	86.0 - 120	113305980	
n-Propylbenzene	514826	20.6	20.0	ug/L	103	87.0 - 118	113305980	
o-Xylene	514826	19.8	20.0	ug/L	98.8	82.0 - 118	113305980	
p-Isopropyltoluene	514826	19.3	20.0	ug/L	96.7	90.0 - 121	113305980	
sec-Butylbenzene	514826	19.6	20.0	ug/L	98.2	85.0 - 114	113305980	
Styrene	514826	17.1	20.0	ug/L	85.5	83.0 - 111	113305980	
tert-Butylbenzene	514826	20.0	20.0	ug/L	99.8	83.0 - 118	113305980	
tert-Butylmethylether (MTBE)	514826	17.2	20.0	ug/L	86.2	70.0 - 138	113305980	
Tetrachloroethylene	514826	20.3	20.0	ug/L	102	73.0 - 126	113305980	
Toluene	514826	18.4	20.0	ug/L	92.0	74.0 - 126	113305980	
trans-1,2-Dichloroethene	514826	19.0	20.0	ug/L	94.9	69.0 - 131	113305980	
trans-1,3-Dichloropropene	514826	16.5	20.0	ug/L	82.4	50.0 - 150	113305980	
Trichloroethylene	514826	18.8	20.0	ug/L	94.2	66.0 - 133	113305980	
Trichlorofluoromethane	514826	16.6	20.0	ug/L	82.9	48.0 - 152	113305980	
Vinyl chloride	514826	17.8	20.0	ug/L	89.2	10.0 - 196	113305980	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
1,1,1,2-Tetrachloroethane	514826	19.0	19.0	20.0	81.0 - 118	95.0	95.2	ug/L	0.210	14.0
1,1,1-Trichloroethane	514826	19.2	18.8	20.0	75.0 - 125	96.0	94.0	ug/L	2.11	30.0
1,1,2,2-Tetrachloroethane	514826	19.2	19.3	20.0	60.0 - 140	96.1	96.4	ug/L	0.312	30.0
1,1,2-Trichloroethane	514826	19.0	19.5	20.0	71.0 - 129	95.2	97.6	ug/L	2.49	30.0
1,1-Dichloroethane	514826	19.1	19.7	20.0	72.0 - 128	95.6	98.6	ug/L	3.09	30.0
1,1-Dichloroethylene	514826	19.9	20.6	20.0	50.0 - 150	99.4	103	ug/L	3.56	30.0
1,1-Dichloropropene	514826	18.2	17.4	20.0	81.0 - 120	90.8	87.0	ug/L	4.27	30.0
1,2,3-Trichlorobenzene	514826	20.8	21.0	20.0	60.0 - 145	104	105	ug/L	0.957	30.0
1,2,3-Trichloropropane	514826	21.1	21.0	20.0	75.0 - 126	106	105	ug/L	0.948	30.0

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Quality Control

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514826 **O** **Liquid Aqueous** **SW-846 8260B**

LCS Dup

Parameter	*PrepSet*	*LCS*	*LCSD*	*Known*	*Limits%*	*LCS%*	*LCSD%*	*Units*	*RPD*	*Limit%*
1,2,4-Trichlorobenzene	514826	20.2	20.8	20.0	70.0 - 134	101	104	ug/L	2.93	30.0
1,2,4-Trimethylbenzene	514826	18.2	18.6	20.0	82.0 - 112	91.2	93.2	ug/L	2.17	30.0
1,2-Dibromo-3-chloropropane	514826	16.6	16.9	20.0	57.0 - 144	83.2	84.4	ug/L	1.43	30.0
1,2-Dibromoethane	514826	20.0	20.0	20.0	79.0 - 116	100	100	ug/L	0	30.0
1,2-Dichlorobenzene	514826	21.8	21.8	20.0	63.0 - 137	109	109	ug/L	0	30.0
1,2-Dichloroethane	514826	19.9	20.2	20.0	68.0 - 132	99.7	101	ug/L	1.30	30.0
1,2-Dichloropropane	514826	19.0	19.2	20.0	34.0 - 166	94.8	96.0	ug/L	1.26	30.0
1,3,5-Trimethylbenzene	514826	18.4	18.5	20.0	83.0 - 115	92.0	92.7	ug/L	0.758	30.0
1,3-Dichlorobenzene	514826	21.4	21.6	20.0	73.0 - 127	107	108	ug/L	0.930	30.0
1,3-Dichloropropane	514826	18.8	19.2	20.0	83.0 - 116	93.8	96.2	ug/L	2.53	30.0
1,4-Dichlorobenzene	514826	19.9	20.2	20.0	63.0 - 137	99.7	101	ug/L	1.30	30.0
2,2-Dichloropropane	514826	17.7	17.6	20.0	46.0 - 171	88.6	88.0	ug/L	0.680	30.0
2-Chlorotoluene	514826	20.2	20.6	20.0	82.0 - 115	101	103	ug/L	1.96	30.0
4-Chlorotoluene	514826	20.4	20.2	20.0	82.0 - 118	102	101	ug/L	0.985	30.0
Acetone	514826	24.5	22.1	20.0	45.0 - 185	123	111	ug/L	10.3	30.0
Acrolein	514826	13.8	9.53	40.0	0.100 - 425	34.5	23.8	ug/L	36.7 *	30.0
Acrylonitrile	514826	35.4	37.8	40.0	71.0 - 117	88.4	94.4	ug/L	6.56	30.0
Benzene	514826	19.0	19.3	20.0	64.0 - 136	95.2	96.4	ug/L	1.25	30.0
Bromobenzene	514826	21.0	20.9	20.0	83.0 - 116	105	104	ug/L	0.957	30.0
Bromochloromethane	514826	21.6	21.9	20.0	82.0 - 124	108	109	ug/L	0.922	30.0
Bromodichloromethane	514826	19.3	19.0	20.0	65.0 - 135	96.4	94.8	ug/L	1.67	30.0
Bromoform	514826	16.1	16.1	20.0	71.0 - 129	80.6	80.7	ug/L	0.124	30.0
Bromomethane (Methyl Bromi	514826	16.2	16.3	20.0	14.0 - 186	81.2	81.4	ug/L	0.246	30.0
Carbon Tetrachloride	514826	19.4	19.8	20.0	73.0 - 127	96.8	99.2	ug/L	2.45	30.0
Chlorobenzene	514826	20.4	20.5	20.0	66.0 - 134	102	103	ug/L	0.976	30.0
Chloroform	514826	19.8	20.2	20.0	67.0 - 133	98.9	101	ug/L	2.10	30.0
Chloromethane	514826	15.5	15.0	20.0	10.0 - 204	77.3	74.9	ug/L	3.15	30.0
cis-1,2-Dichloroethene	514826	19.0	19.4	20.0	78.0 - 114	94.8	96.9	ug/L	2.19	14.0
cis-1,3-Dichloropropene	514826	15.3	15.6	20.0	24.0 - 176	76.6	78.0	ug/L	1.81	30.0
Dibromochloromethane	514826	16.6	17.2	20.0	67.0 - 133	83.1	85.8	ug/L	3.20	30.0
Dibromomethane	514826	20.5	20.8	20.0	87.0 - 117	102	104	ug/L	1.94	30.0
Dichlorodifluoromethane	514826	15.0	14.6	20.0	45.0 - 146	74.8	73.2	ug/L	2.16	14.0
Ethylbenzene	514826	18.4	18.6	20.0	59.0 - 141	91.9	93.2	ug/L	1.40	30.0
Hexachlorobutadiene	514826	20.0	20.3	20.0	71.0 - 132	99.8	101	ug/L	1.20	30.0
Isopropylbenzene (Cumene)	514826	19.2	19.8	20.0	91.0 - 125	96.0	99.2	ug/L	3.28	30.0
m- and p-Xylene	514826	37.2	36.8	40.0	80.0 - 117	93.1	92.1	ug/L	1.08	14.0
Methyl ethyl ketone (Butanone)	514826	17.8	17.6	20.0	61.0 - 139	88.8	87.8	ug/L	1.13	30.0
Methyl Isobutyl Ketone	514826	15.4	15.8	20.0	61.0 - 120	77.0	78.8	ug/L	2.31	30.0
Methylene chloride	514826	20.6	20.5	20.0	60.0 - 140	103	103	ug/L	0	30.0
Naphthalene	514826	19.0	19.2	20.0	62.0 - 138	95.2	95.8	ug/L	0.628	30.0
n-Butylbenzene	514826	19.0	19.1	20.0	86.0 - 120	95.0	95.4	ug/L	0.420	30.0
n-Propylbenzene	514826	20.6	21.1	20.0	87.0 - 118	103	106	ug/L	2.87	30.0
o-Xylene	514826	19.8	19.8	20.0	82.0 - 118	98.8	99.1	ug/L	0.303	14.0
p-Isopropyltoluene	514826	19.3	19.8	20.0	90.0 - 121	96.7	99.0	ug/L	2.35	30.0
sec-Butylbenzene	514826	19.6	20.0	20.0	85.0 - 114	98.2	99.8	ug/L	1.62	30.0

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514826 **O** **Liquid Aqueous** **SW-846 8260B**

LCS Dup

Parameter	*PrepSet*	*LCS*	*LCSD*	*Known*	*Limits%*	*LCS%*	*LCSD%*	*Units*	*RPD*	*Limit%*
Styrene	514826	17.1	17.7	20.0	83.0 - 111	85.5	88.7	ug/L	3.67	30.0
tert-Butylbenzene	514826	20.0	20.1	20.0	83.0 - 118	99.8	100	ug/L	0.200	30.0
tert-Butylmethylether (MTBE)	514826	17.2	17.5	20.0	70.0 - 138	86.2	87.4	ug/L	1.38	30.0
Tetrachloroethylene	514826	20.3	20.0	20.0	73.0 - 126	102	100	ug/L	1.98	30.0
Toluene	514826	18.4	18.3	20.0	74.0 - 126	92.0	91.4	ug/L	0.654	30.0
trans-1,2-Dichloroethene	514826	19.0	19.2	20.0	69.0 - 131	94.9	96.2	ug/L	1.36	30.0
trans-1,3-Dichloropropene	514826	16.5	16.6	20.0	50.0 - 150	82.4	82.8	ug/L	0.484	30.0
Trichloroethylene	514826	18.8	19.1	20.0	66.0 - 133	94.2	95.4	ug/L	1.27	30.0
Trichlorofluoromethane	514826	16.6	15.9	20.0	48.0 - 152	82.9	79.4	ug/L	4.31	30.0
Vinyl chloride	514826	17.8	16.6	20.0	10.0 - 196	89.2	83.1	ug/L	7.08	30.0

MS

Parameter	*Sample*	*MS*	*MSD*	*UNK*	*Known*	*Limits*	*MS%*	*MSD%*	*Units*	*RPD*	*Limit%*
1,1,1,2-Tetrachloroethane	1196430	971	0	0	1000	70.0 - 130	97.1		ug/L		30.0
1,1,1-Trichloroethane	1196430	1000	0	0	1000	52.0 - 162	100		ug/L		30.0
1,1,2,2-Tetrachloroethane	1196430	980	0	0	1000	46.0 - 157	98.0		ug/L		30.0
1,1,2-Trichloroethane	1196430	1000	0	0	1000	52.0 - 150	100		ug/L		30.0
1,1-Dichloroethane	1196430	1030	0	0	1000	59.0 - 155	103		ug/L		30.0
1,1-Dichloroethylene	1196430	1080	0	0	1000	0.100 - 234	108		ug/L		30.0
1,1-Dichloropropene	1196430	980	0	0	1000	70.0 - 130	98.0		ug/L		30.0
1,2,3-Trichlorobenzene	1196430	1100	0	0	1000	70.0 - 130	110		ug/L		30.0
1,2,3-Trichloropropane	1196430	1060	0	0	1000	70.0 - 130	106		ug/L		30.0
1,2,4-Trichlorobenzene	1196430	1050	0	0	1000	70.0 - 130	105		ug/L		30.0
1,2,4-Trimethylbenzene	1196430	1740	0	670	1000	70.0 - 130	107		ug/L		30.0
1,2-Dibromo-3-chloropropane	1196430	848	0	0	1000	70.0 - 130	84.8		ug/L		30.0
1,2-Dibromoethane	1196430	1040	0	0	1000	70.0 - 130	104		ug/L		30.0
1,2-Dichlorobenzene	1196430	1140	0	0	1000	18.0 - 190	114		ug/L		30.0
1,2-Dichloroethane	1196430	1070	0	0	1000	49.0 - 155	107		ug/L		30.0
1,2-Dichloropropane	1196430	990	0	0	1000	0.100 - 210	99.0		ug/L		30.0
1,3,5-Trimethylbenzene	1196430	1170	0	165	1000	70.0 - 130	100		ug/L		30.0
1,3-Dichlorobenzene	1196430	1100	0	0	1000	59.0 - 156	110		ug/L		30.0
1,3-Dichloropropane	1196430	1040	0	0	1000	70.0 - 130	104		ug/L		30.0
1,4-Dichlorobenzene	1196430	1050	0	0	1000	18.0 - 190	105		ug/L		30.0
2,2-Dichloropropane	1196430	952	0	0	1000	70.0 - 130	95.2		ug/L		30.0
2-Chlorotoluene	1196430	1130	0	0	1000	70.0 - 130	113		ug/L		30.0
4-Chlorotoluene	1196430	1100	0	0	1000	70.0 - 130	110		ug/L		30.0
Acetone	1196430	1000	0	0	1000	70.0 - 130	100		ug/L		30.0
Acrylonitrile	1196430	1680	0	0	2000	70.0 - 130	84.0		ug/L		30.0
Benzene	1196430	5310	0	4030	1000	37.0 - 151	128		ug/L		30.0
Bromobenzene	1196430	1060	0	0	1000	70.0 - 130	106		ug/L		30.0
Bromochloromethane	1196430	1110	0	0	1000	70.0 - 130	111		ug/L		30.0
Bromodichloromethane	1196430	976	0	0	1000	35.0 - 155	97.6		ug/L		30.0
Bromoform	1196430	821	0	0	1000	45.0 - 169	82.1		ug/L		30.0
Bromomethane (Methyl Bromi	1196430	850	0	0	1000	0.100 - 242	85.0		ug/L		30.0
Carbon Tetrachloride	1196430	1050	0	0	1000	70.0 - 140	105		ug/L		30.0

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MS

Parameter	*Sample*	*MS*	*MSD*	*UNK*	*Known*	*Limits*	*MS%*	*MSD%*	*Units*	*RPD*	*Limit%*
Chlorobenzene	1196430	1100	0	0	1000	37.0 - 160	110		ug/L		30.0
Chloroform	1196430	1050	0	0	1000	51.0 - 138	105		ug/L		30.0
Chloromethane	1196430	803	0	0	1000	0.100 - 273	80.3		ug/L		30.0
cis-1,2-Dichloroethene	1196430	1010	0	0	1000	70.0 - 130	101		ug/L		30.0
cis-1,3-Dichloropropene	1196430	797	0	0	1000	0.100 - 227	79.7		ug/L		30.0
Dibromochloromethane	1196430	867	0	0	1000	53.0 - 149	86.7		ug/L		30.0
Dibromomethane	1196430	1090	0	0	1000	70.0 - 130	109		ug/L		30.0
Dichlorodifluoromethane	1196430	779	0	0	1000	70.0 - 130	77.9		ug/L		30.0
Ethylbenzene	1196430	1750	0	665	1000	37.0 - 162	108		ug/L		30.0
Hexachlorobutadiene	1196430	1050	0	0	1000	70.0 - 130	105		ug/L		30.0
Isopropylbenzene (Cumene)	1196430	1070	0	29.5	1000	70.0 - 130	104		ug/L		30.0
m- and p-Xylene	1196430	4720	0	2350	2000	70.0 - 130	118		ug/L		30.0
Methyl ethyl ketone (Butanone)	1196430	944	0	0	1000	70.0 - 130	94.4		ug/L		30.0
Methyl Isobutyl Ketone	1196430	878	0	0	1000	70.0 - 130	87.8		ug/L		30.0
Methylene chloride	1196430	1070	0	0	1000	0.100 - 221	107		ug/L		30.0
Naphthalene	1196430	1140	0	123	1000	70.0 - 130	102		ug/L		30.0
n-Butylbenzene	1196430	1030	0	0	1000	70.0 - 130	103		ug/L		30.0
n-Propylbenzene	1196430	1190	0	83.0	1000	70.0 - 130	111		ug/L		30.0
o-Xylene	1196430	2060	0	838	1000	70.0 - 130	122		ug/L		30.0
p-Isopropyltoluene	1196430	1050	0	0	1000	70.0 - 130	105		ug/L		30.0
sec-Butylbenzene	1196430	1040	0	0	1000	70.0 - 130	104		ug/L		30.0
Styrene	1196430	960	0	0	1000	70.0 - 130	96.0		ug/L		30.0
tert-Butylbenzene	1196430	1180	0	106	1000	70.0 - 130	107		ug/L		30.0
tert-Butylmethylether (MTBE)	1196430	1020	0	108	1000	70.0 - 130	91.2		ug/L		30.0
Tetrachloroethylene	1196430	1090	0	0	1000	64.0 - 148	109		ug/L		30.0
Toluene	1196430	1900	0	810	1000	47.0 - 150	109		ug/L		30.0
trans-1,2-Dichloroethene	1196430	1010	0	0	1000	54.0 - 156	101		ug/L		30.0
trans-1,3-Dichloropropene	1196430	842	0	0	1000	17.0 - 183	84.2		ug/L		30.0
Trichloroethylene	1196430	1040	0	0	1000	71.0 - 157	104		ug/L		30.0
Trichlorofluoromethane	1196430	856	0	0	1000	17.0 - 181	85.6		ug/L		30.0
Vinyl chloride	1196430	954	0	0	1000	0.100 - 251	95.4		ug/L		30.0

MSD

Parameter	*Sample*	*MS*	*MSD*	*UNK*	*Known*	*Limits*	*MS%*	*MSD%*	*Units*	*RPD*	*Limit%*
1,1,1,2-Tetrachloroethane	1196430	971	984	0	1000	70.0 - 130	97.1	98.4	ug/L	1.33	30.0
1,1,1-Trichloroethane	1196430	1000	991	0	1000	52.0 - 162	100	99.1	ug/L	0.904	30.0
1,1,2,2-Tetrachloroethane	1196430	980	1020	0	1000	46.0 - 157	98.0	102	ug/L	4.00	30.0
1,1,2-Trichloroethane	1196430	1000	994	0	1000	52.0 - 150	100	99.4	ug/L	0.602	30.0
1,1-Dichloroethane	1196430	1030	1040	0	1000	59.0 - 155	103	104	ug/L	0.966	30.0
1,1-Dichloroethylene	1196430	1080	1080	0	1000	0.100 - 234	108	108	ug/L	0	30.0
1,1-Dichloropropene	1196430	980	960	0	1000	70.0 - 130	98.0	96.0	ug/L	2.06	30.0
1,2,3-Trichlorobenzene	1196430	1100	1110	0	1000	70.0 - 130	110	111	ug/L	0.905	30.0
1,2,3-Trichloropropane	1196430	1060	1100	0	1000	70.0 - 130	106	110	ug/L	3.70	30.0
1,2,4-Trichlorobenzene	1196430	1050	1110	0	1000	70.0 - 130	105	111	ug/L	5.56	30.0
1,2,4-Trimethylbenzene	1196430	1740	1790	670	1000	70.0 - 130	107	112	ug/L	4.57	30.0

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514826 **O** **Liquid Aqueous** **SW-846 8260B**

MSD

Parameter	*Sample*	*MS*	*MSD*	*UNK*	*Known*	*Limits*	*MS%*	*MSD%*	*Units*	*RPD*	*Limit%*
1,2-Dibromo-3-chloropropane	1196430	848	860	0	1000	70.0 - 130	84.8	86.0	ug/L	1.41	30.0
1,2-Dibromoethane	1196430	1040	1050	0	1000	70.0 - 130	104	105	ug/L	0.957	30.0
1,2-Dichlorobenzene	1196430	1140	1180	0	1000	18.0 - 190	114	118	ug/L	3.45	30.0
1,2-Dichloroethane	1196430	1070	1040	0	1000	49.0 - 155	107	104	ug/L	2.84	30.0
1,2-Dichloropropane	1196430	990	1020	0	1000	0.100 - 210	99.0	102	ug/L	2.99	30.0
1,3,5-Trimethylbenzene	1196430	1170	1190	165	1000	70.0 - 130	100	102	ug/L	1.98	30.0
1,3-Dichlorobenzene	1196430	1100	1160	0	1000	59.0 - 156	110	116	ug/L	5.31	30.0
1,3-Dichloropropane	1196430	1040	1020	0	1000	70.0 - 130	104	102	ug/L	1.94	30.0
1,4-Dichlorobenzene	1196430	1050	1090	0	1000	18.0 - 190	105	109	ug/L	3.74	30.0
2,2-Dichloropropane	1196430	952	927	0	1000	70.0 - 130	95.2	92.7	ug/L	2.66	30.0
2-Chlorotoluene	1196430	1130	1180	0	1000	70.0 - 130	113	118	ug/L	4.33	30.0
4-Chlorotoluene	1196430	1100	1150	0	1000	70.0 - 130	110	115	ug/L	4.44	30.0
Acetone	1196430	1000	945	0	1000	70.0 - 130	100	94.5	ug/L	5.66	30.0
Acrylonitrile	1196430	1680	1780	0	2000	70.0 - 130	84.0	89.1	ug/L	5.89	30.0
Benzene	1196430	5310	5360	4030	1000	37.0 - 151	128	133	ug/L	3.83	30.0
Bromobenzene	1196430	1060	1110	0	1000	70.0 - 130	106	111	ug/L	4.61	30.0
Bromochloromethane	1196430	1110	1130	0	1000	70.0 - 130	111	113	ug/L	1.79	30.0
Bromodichloromethane	1196430	976	980	0	1000	35.0 - 155	97.6	98.0	ug/L	0.409	30.0
Bromoform	1196430	821	860	0	1000	45.0 - 169	82.1	86.0	ug/L	4.64	30.0
Bromomethane (Methyl Bromi	1196430	850	845	0	1000	0.100 - 242	85.0	84.5	ug/L	0.590	30.0
Carbon Tetrachloride	1196430	1050	1030	0	1000	70.0 - 140	105	103	ug/L	1.92	30.0
Chlorobenzene	1196430	1100	1100	0	1000	37.0 - 160	110	110	ug/L	0	30.0
Chloroform	1196430	1050	1050	0	1000	51.0 - 138	105	105	ug/L	0	30.0
Chloromethane	1196430	803	762	0	1000	0.100 - 273	80.3	76.2	ug/L	5.24	30.0
cis-1,2-Dichloroethene	1196430	1010	1000	0	1000	70.0 - 130	101	100	ug/L	0.995	30.0
cis-1,3-Dichloropropene	1196430	797	788	0	1000	0.100 - 227	79.7	78.8	ug/L	1.14	30.0
Dibromochloromethane	1196430	867	895	0	1000	53.0 - 149	86.7	89.5	ug/L	3.18	30.0
Dibromomethane	1196430	1090	1110	0	1000	70.0 - 130	109	111	ug/L	1.82	30.0
Dichlorodifluoromethane	1196430	779	756	0	1000	70.0 - 130	77.9	75.6	ug/L	3.00	30.0
Ethylbenzene	1196430	1750	1750	665	1000	37.0 - 162	108	108	ug/L	0	30.0
Hexachlorobutadiene	1196430	1050	1060	0	1000	70.0 - 130	105	106	ug/L	0.948	30.0
Isopropylbenzene (Cumene)	1196430	1070	1080	29.5	1000	70.0 - 130	104	105	ug/L	0.957	30.0
m- and p-Xylene	1196430	4720	4720	2350	2000	70.0 - 130	118	118	ug/L	0	30.0
Methyl ethyl ketone (Butanone)	1196430	944	941	0	1000	70.0 - 130	94.4	94.1	ug/L	0.318	30.0
Methyl Isobutyl Ketone	1196430	878	851	0	1000	70.0 - 130	87.8	85.1	ug/L	3.12	30.0
Methylene chloride	1196430	1070	1080	0	1000	0.100 - 221	107	108	ug/L	0.930	30.0
Naphthalene	1196430	1140	1170	123	1000	70.0 - 130	102	105	ug/L	2.90	30.0
n-Butylbenzene	1196430	1030	1030	0	1000	70.0 - 130	103	103	ug/L	0	30.0
n-Propylbenzene	1196430	1190	1230	83.0	1000	70.0 - 130	111	115	ug/L	3.54	30.0
o-Xylene	1196430	2060	2080	838	1000	70.0 - 130	122	124	ug/L	1.63	30.0
p-Isopropyltoluene	1196430	1050	1070	0	1000	70.0 - 130	105	107	ug/L	1.89	30.0
sec-Butylbenzene	1196430	1040	1100	0	1000	70.0 - 130	104	110	ug/L	5.61	30.0
Styrene	1196430	960	950	0	1000	70.0 - 130	96.0	95.0	ug/L	1.05	30.0
tert-Butylbenzene	1196430	1180	1230	106	1000	70.0 - 130	107	112	ug/L	4.57	30.0

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514826 **O** **Liquid Aqueous** **SW-846 8260B**

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
tert-Butylmethylether (MTBE)	1196430	1020	1020	108	1000	70.0 - 130	91.2	91.2	ug/L	0	30.0
Tetrachloroethylene	1196430	1090	1090	0	1000	64.0 - 148	109	109	ug/L	0	30.0
Toluene	1196430	1900	1900	810	1000	47.0 - 150	109	109	ug/L	0	30.0
trans-1,2-Dichloroethene	1196430	1010	1020	0	1000	54.0 - 156	101	102	ug/L	0.985	30.0
trans-1,3-Dichloropropene	1196430	842	848	0	1000	17.0 - 183	84.2	84.8	ug/L	0.710	30.0
Trichloroethylene	1196430	1040	1020	0	1000	71.0 - 157	104	102	ug/L	1.94	30.0
Trichlorofluoromethane	1196430	856	838	0	1000	17.0 - 181	85.6	83.8	ug/L	2.13	30.0
Vinyl chloride	1196430	954	866	0	1000	0.100 - 251	95.4	86.6	ug/L	9.67	30.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
1,2-DCA-d4 (SURR)	514826	CCV	20.7	20.0	ug/L	104	70.0 - 130	113305978
1,2-DCA-d4 (SURR)	514826	LCS	20.7	20.0	ug/L	104	70.0 - 130	113305980
1,2-DCA-d4 (SURR)	514826	LCS Dup	20.9	20.0	ug/L	104	70.0 - 130	113305981
1,2-DCA-d4 (SURR)	514826	Blank	21.4	20.0	ug/L	107	70.0 - 130	113305982
Bromofluorobenzene (SURR)	514826	CCV	19.2	20.0	ug/L	96.0	70.0 - 142	113305978
Bromofluorobenzene (SURR)	514826	LCS	19.5	20.0	ug/L	97.5	70.0 - 142	113305980
Bromofluorobenzene (SURR)	514826	LCS Dup	19.7	20.0	ug/L	98.5	70.0 - 142	113305981
Bromofluorobenzene (SURR)	514826	Blank	19.3	20.0	ug/L	96.5	70.0 - 142	113305982
Dibromofluoromethane (SURR)	514826	CCV	20.2	20.0	ug/L	101	70.0 - 140	113305978
Dibromofluoromethane (SURR)	514826	LCS	20.9	20.0	ug/L	104	70.0 - 140	113305980
Dibromofluoromethane (SURR)	514826	LCS Dup	20.2	20.0	ug/L	101	70.0 - 140	113305981
Dibromofluoromethane (SURR)	514826	Blank	19.9	20.0	ug/L	99.5	70.0 - 140	113305982
ToluneD8 (SURR)	514826	CCV	19.3	20.0	ug/L	96.5	70.0 - 140	113305978
ToluneD8 (SURR)	514826	LCS	19.4	20.0	ug/L	97.0	70.0 - 140	113305980
ToluneD8 (SURR)	514826	LCS Dup	19.7	20.0	ug/L	98.5	70.0 - 140	113305981
ToluneD8 (SURR)	514826	Blank	19.5	20.0	ug/L	97.5	70.0 - 140	113305982
1,2-DCA-d4 (SURR)	1196430	MS	20.2	20.0	ug/L	101	70.0 - 130	113305986
1,2-DCA-d4 (SURR)	1196430	MSD	20.4	20.0	ug/L	102	70.0 - 130	113305987
Bromofluorobenzene (SURR)	1196430	MS	18.5	20.0	ug/L	92.5	70.0 - 142	113305986
Bromofluorobenzene (SURR)	1196430	MSD	19.3	20.0	ug/L	96.5	70.0 - 142	113305987
Dibromofluoromethane (SURR)	1196430	MS	20.3	20.0	ug/L	102	70.0 - 140	113305986
Dibromofluoromethane (SURR)	1196430	MSD	20.3	20.0	ug/L	102	70.0 - 140	113305987
ToluneD8 (SURR)	1196430	MS	19.4	20.0	ug/L	97.0	70.0 - 140	113305986
ToluneD8 (SURR)	1196430	MSD	19.8	20.0	ug/L	99.0	70.0 - 140	113305987
1,2-DCA-d4 (SURR)	1196568	UNKNOWN	21.1	20.0	ug/L	106	70.0 - 130	113305984
Bromofluorobenzene (SURR)	1196568	UNKNOWN	19.5	20.0	ug/L	97.5	70.0 - 142	113305984

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514826 O Liquid Aqueous — SW-846 8260B

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
Dibromofluoromethane (SURR)	1196568	UNKNOWN	21.0	20.0	ug/L	105	70.0 - 140	113305984
TolueneD8 (SURR)	1196568	UNKNOWN	19.1	20.0	ug/L	95.5	70.0 - 140	113305984
1,2-DCA-d4 (SURR)	1196573	UNKNOWN	21.3	20.0	ug/L	106	70.0 - 130	113305983
Bromofluorobenzene (SURR)	1196573	UNKNOWN	19.6	20.0	ug/L	98.0	70.0 - 142	113305983
Dibromofluoromethane (SURR)	1196573	UNKNOWN	20.7	20.0	ug/L	104	70.0 - 140	113305983
TolueneD8 (SURR)	1196573	UNKNOWN	19.5	20.0	ug/L	97.5	70.0 - 140	113305983

514831 O Liquid Aqueous — SW-846 8260B

BFB

Parameter	Sample	RefMass	Reading	%	Limits%	Out	File
BFB Mass 173	514831	174	4	0.2	0 - 2.00		113306074
BFB Mass 174	514831	95.0	2130	80.6	50.0 - 100		113306074
BFB Mass 175	514831	174	158	7.4	5.00 - 9.00		113306074
BFB Mass 176	514831	174	2067	97.0	95.0 - 101		113306074
BFB Mass 177	514831	176	130	6.3	5.00 - 9.00		113306074
BFB Mass 50	514831	95.0	460	17.4	15.0 - 40.0		113306074
BFB Mass 75	514831	95.0	1190	45.0	30.0 - 60.0		113306074
BFB Mass 95	514831	95.0	2643	100.0	100 - 100		113306074
BFB Mass 96	514831	95.0	180	6.8	5.00 - 9.00		113306074

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
1,1,1,2-Tetrachloroethane	514831	ND	0.224	1.00	ug/L	113306078
1,1,1-Trichloroethane	514831	ND	0.172	1.00	ug/L	113306078
1,1,2,2-Tetrachloroethane	514831	ND	0.310	1.00	ug/L	113306078
1,1,2-Trichloroethane	514831	ND	0.162	1.00	ug/L	113306078
1,1-Dichloroethylene	514831	ND	0.463	1.00	ug/L	113306078
1,1-Dichloropropene	514831	ND	0.283	1.00	ug/L	113306078
1,2,3-Trichlorobenzene	514831	ND	2.38	4.00	ug/L	113306078
1,2,3-Trichloropropane	514831	ND	0.381	1.00	ug/L	113306078
1,2,4-Trichlorobenzene	514831	ND	1.70	1.70	ug/L	113306078
1,2,4-Trimethylbenzene	514831	ND	0.373	1.00	ug/L	113306078
1,2-Dibromoethane	514831	ND	0.270	1.00	ug/L	113306078
1,2-Dichlorobenzene	514831	ND	0.190	1.00	ug/L	113306078
1,2-Dichloroethane	514831	ND	0.276	1.00	ug/L	113306078
1,2-Dichloropropane	514831	ND	0.206	1.00	ug/L	113306078
1,3,5-Trimethylbenzene	514831	ND	0.415	1.00	ug/L	113306078
1,3-Dichlorobenzene	514831	ND	0.265	1.00	ug/L	113306078
1,3-Dichloropropane	514831	ND	0.174	1.00	ug/L	113306078
1,4-Dichlorobenzene	514831	ND	0.291	1.00	ug/L	113306078
2,2-Dichloropropane	514831	ND	0.199	1.00	ug/L	113306078
2-Chloroethylvinyl ether	514831	ND	0.216	1.00	ug/L	113306078
2-Chlorotoluene	514831	ND	0.190	1.00	ug/L	113306078
4-Chlorotoluene	514831	ND	0.193	1.00	ug/L	113306078

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514831 **O** **Liquid Aqueous** **SW-846 8260B**

Blank

Parameter	*PrepSet*	*Reading*	*MDL*	*MQL*	*Units*	*File*
Acetone	514831	ND	6.85	10.0	ug/L	113306078
Acrolein	514831	ND	3.35	4.00	ug/L	113306078
Acrylonitrile	514831	ND	1.74	2.00	ug/L	113306078
Benzene	514831	ND	0.199	1.00	ug/L	113306078
Bromobenzene	514831	ND	0.0805	1.00	ug/L	113306078
Bromochloromethane	514831	ND	0.224	1.00	ug/L	113306078
Bromodichloromethane	514831	ND	0.219	1.00	ug/L	113306078
Bromoform	514831	ND	0.121	1.00	ug/L	113306078
Bromomethane (Methyl Bromi	514831	0.770	0.649	1.00	ug/L	113306078
Carbon Tetrachloride	514831	ND	0.238	1.00	ug/L	113306078
Chlorobenzene	514831	ND	0.178	1.00	ug/L	113306078
Chloroethane	514831	ND	0.687	1.00	ug/L	113306078
Chloroform	514831	ND	0.136	1.00	ug/L	113306078
Chloromethane	514831	ND	0.220	1.00	ug/L	113306078
cis-1,2-Dichloroethene	514831	ND	0.224	1.00	ug/L	113306078
cis-1,3-Dichloropropene	514831	ND	0.0945	1.00	ug/L	113306078
Dibromochloromethane	514831	ND	0.141	1.00	ug/L	113306078
Dibromomethane	514831	ND	0.268	1.00	ug/L	113306078
Dichlorodifluoromethane	514831	ND	0.268	1.00	ug/L	113306078
Ethylbenzene	514831	ND	0.111	1.00	ug/L	113306078
Hexachlorobutadiene	514831	ND	3.66	4.00	ug/L	113306078
Isopropylbenzene (Cumene)	514831	ND	0.258	1.00	ug/L	113306078
m- and p-Xylene	514831	ND	0.404	1.00	ug/L	113306078
Methyl Isobutyl Ketone	514831	ND	0.470	1.00	ug/L	113306078
Methylene chloride	514831	ND	0.460	1.00	ug/L	113306078
Naphthalene	514831	ND	0.438	1.00	ug/L	113306078
n-Butylbenzene	514831	ND	1.96	2.00	ug/L	113306078
n-Propylbenzene	514831	ND	0.355	1.00	ug/L	113306078
o-Xylene	514831	ND	0.129	1.00	ug/L	113306078
p-Isopropyltoluene	514831	ND	1.25	2.00	ug/L	113306078
sec-Butylbenzene	514831	ND	1.23	2.00	ug/L	113306078
Styrene	514831	ND	0.133	1.00	ug/L	113306078
tert-Butylbenzene	514831	ND	0.651	1.00	ug/L	113306078
Tetrachloroethylene	514831	ND	0.130	1.00	ug/L	113306078
Toluene	514831	ND	0.160	1.00	ug/L	113306078
trans-1,2-Dichloroethene	514831	ND	1.04	1.04	ug/L	113306078
trans-1,3-Dichloropropene	514831	ND	0.137	1.00	ug/L	113306078
Trichloroethylene	514831	ND	0.281	1.00	ug/L	113306078
Trichlorofluoromethane	514831	ND	0.274	1.00	ug/L	113306078
Vinyl chloride	514831	ND	0.429	1.00	ug/L	113306078

CCV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
1,1,1,2-Tetrachloroethane	20.3	20.0	ug/L	102	70.0 - 130		113306075
1,1,1-Trichloroethane	19.3	20.0	ug/L	96.5	70.0 - 130		113306075
1,1,2,2-Tetrachloroethane	16.7	20.0	ug/L	83.5	70.0 - 130		113306075
1,1,2-Trichloroethane	17.9	20.0	ug/L	89.5	70.0 - 130		113306075

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CCV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
1,1-Dichloroethylene	19.8	20.0	ug/L	99.0	70.0 - 130		113306075
1,1-Dichloropropene	16.3	20.0	ug/L	81.5	70.0 - 130		113306075
1,2,3-Trichlorobenzene	17.5	20.0	ug/L	87.5	70.0 - 130		113306075
1,2,3-Trichloropropane	18.6	20.0	ug/L	93.0	70.0 - 130		113306075
1,2,4-Trichlorobenzene	18.4	20.0	ug/L	92.0	70.0 - 130		113306075
1,2,4-Trimethylbenzene	18.5	20.0	ug/L	92.5	70.0 - 130		113306075
1,2-Dibromoethane	18.2	20.0	ug/L	91.0	70.0 - 130		113306075
1,2-Dichlorobenzene	19.6	20.0	ug/L	98.0	70.0 - 130		113306075
1,2-Dichloroethane	18.3	20.0	ug/L	91.5	70.0 - 130		113306075
1,2-Dichloropropane	17.5	20.0	ug/L	87.5	70.0 - 130		113306075
1,3,5-Trimethylbenzene	18.3	20.0	ug/L	91.5	70.0 - 130		113306075
1,3-Dichlorobenzene	19.1	20.0	ug/L	95.5	70.0 - 130		113306075
1,3-Dichloropropane	18.1	20.0	ug/L	90.5	70.0 - 130		113306075
1,4-Dichlorobenzene	20.1	20.0	ug/L	100	70.0 - 130		113306075
2,2-Dichloropropane	21.2	20.0	ug/L	106	70.0 - 130		113306075
2-Chloroethylvinyl ether	17.0	20.0	ug/L	85.0	70.0 - 130		113306075
2-Chlorotoluene	17.8	20.0	ug/L	89.0	70.0 - 130		113306075
4-Chlorotoluene	18.7	20.0	ug/L	93.5	70.0 - 130		113306075
Acetone	19.6	20.0	ug/L	98.0	70.0 - 130		113306075
Benzene	18.5	20.0	ug/L	92.5	70.0 - 130		113306075
Bromobenzene	19.1	20.0	ug/L	95.5	70.0 - 130		113306075
Bromochloromethane	19.6	20.0	ug/L	98.0	70.0 - 130		113306075
Bromodichloromethane	18.6	20.0	ug/L	93.0	70.0 - 130		113306075
Bromoform	19.5	20.0	ug/L	97.5	70.0 - 130		113306075
Bromomethane (Methyl Bromi	18.0	20.0	ug/L	90.0	70.0 - 130		113306075
Carbon Tetrachloride	21.6	20.0	ug/L	108	70.0 - 130		113306075
Chlorobenzene	19.3	20.0	ug/L	96.5	70.0 - 130		113306075
Chloroethane	18.8	20.0	ug/L	94.0	70.0 - 130		113306075
Chloroform	20.0	20.0	ug/L	100	70.0 - 130		113306075
Chloromethane	16.6	20.0	ug/L	83.0	70.0 - 130		113306075
cis-1,2-Dichloroethene	20.9	20.0	ug/L	104	70.0 - 130		113306075
cis-1,3-Dichloropropene	17.9	20.0	ug/L	89.5	70.0 - 130		113306075
Dibromochloromethane	19.2	20.0	ug/L	96.0	70.0 - 130		113306075
Dibromomethane	18.0	20.0	ug/L	90.0	70.0 - 130		113306075
Dichlorodifluoromethane	15.3	20.0	ug/L	76.5	70.0 - 130		113306075
Ethylbenzene	18.8	20.0	ug/L	94.0	70.0 - 130		113306075
Hexachlorobutadiene	20.2	20.0	ug/L	101	70.0 - 130		113306075
Isopropylbenzene (Cumene)	18.0	20.0	ug/L	90.0	70.0 - 130		113306075
m- and p-Xylene	40.2	40.0	ug/L	100	70.0 - 130		113306075
Methyl Isobutyl Ketone	14.8	20.0	ug/L	74.0	70.0 - 130		113306075
Methylene chloride	19.9	20.0	ug/L	99.5	70.0 - 130		113306075
Naphthalene	16.9	20.0	ug/L	84.5	70.0 - 130		113306075
n-Butylbenzene	16.9	20.0	ug/L	84.5	70.0 - 130		113306075
n-Propylbenzene	17.5	20.0	ug/L	87.5	70.0 - 130		113306075
o-Xylene	20.2	20.0	ug/L	101	70.0 - 130		113306075
p-Isopropyltoluene	18.2	20.0	ug/L	91.0	70.0 - 130		113306075

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CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
sec-Butylbenzene	17.0	20.0	ug/L	85.0	70.0 - 130		113306075
Styrene	18.9	20.0	ug/L	94.5	70.0 - 130		113306075
tert-Butylbenzene	18.2	20.0	ug/L	91.0	70.0 - 130		113306075
tert-Butylmethylether (MTBE)	20.5	20.0	ug/L	102	70.0 - 130		113306075
Tetrachloroethylene	20.3	20.0	ug/L	102	70.0 - 130		113306075
Toluene	18.3	20.0	ug/L	91.5	70.0 - 130		113306075
trans-1,2-Dichloroethene	21.3	20.0	ug/L	106	70.0 - 130		113306075
trans-1,3-Dichloropropene	18.6	20.0	ug/L	93.0	70.0 - 130		113306075
Trichloroethylene	18.3	20.0	ug/L	91.5	70.0 - 130		113306075
Trichlorofluoromethane	21.2	20.0	ug/L	106	70.0 - 130		113306075
Vinyl chloride	17.7	20.0	ug/L	88.5	70.0 - 130		113306075

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	514831	LCS	30530	31510	15750	47260		113306076	514831
1,4-DichlorobenzeneD4 (ISTD)	514831	LCS Dup	30030	31510	15750	47260		113306077	514831
1,4-DichlorobenzeneD4 (ISTD)	514831	Blank	30820	31510	15750	47260		113306078	514831
ChlorobenzeneD5 (ISTD)	514831	LCS	69560	71960	35980	107900		113306076	514831
ChlorobenzeneD5 (ISTD)	514831	LCS Dup	68880	71960	35980	107900		113306077	514831
ChlorobenzeneD5 (ISTD)	514831	Blank	70350	71960	35980	107900		113306078	514831
1,4-DichlorobenzeneD4 (ISTD)	1196568	UNKNOWN	32850	31510	15750	47260		113306083	1196568
ChlorobenzeneD5 (ISTD)	1196568	UNKNOWN	65240	71960	35980	107900		113306083	1196568
1,4-DichlorobenzeneD4 (ISTD)	1196573	UNKNOWN	29230	31510	15750	47260		113306082	1196573
ChlorobenzeneD5 (ISTD)	1196573	UNKNOWN	65220	71960	35980	107900		113306082	1196573

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-DichlorobenzeneD4 (ISTD)	514831	LCS	13.99	14.00	13.94	14.06		113306076	514831
1,4-DichlorobenzeneD4 (ISTD)	514831	LCS Dup	14.00	14.00	13.94	14.06		113306077	514831
1,4-DichlorobenzeneD4 (ISTD)	514831	Blank	14.00	14.00	13.94	14.06		113306078	514831
ChlorobenzeneD5 (ISTD)	514831	LCS	10.33	10.33	10.27	10.39		113306076	514831
ChlorobenzeneD5 (ISTD)	514831	LCS Dup	10.34	10.33	10.27	10.39		113306077	514831
ChlorobenzeneD5 (ISTD)	514831	Blank	10.34	10.33	10.27	10.39		113306078	514831
1,4-DichlorobenzeneD4 (ISTD)	1196568	UNKNOWN	14.02	14.00	13.94	14.06		113306083	1196568
ChlorobenzeneD5 (ISTD)	1196568	UNKNOWN	10.36	10.33	10.27	10.39		113306083	1196568
1,4-DichlorobenzeneD4 (ISTD)	1196573	UNKNOWN	14.02	14.00	13.94	14.06		113306082	1196573
ChlorobenzeneD5 (ISTD)	1196573	UNKNOWN	10.35	10.33	10.27	10.39		113306082	1196573

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
1,1,1,2-Tetrachloroethane	514831	20.7	20.0	ug/L	103	81.0 - 118	113306076	

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514831 **O** **Liquid Aqueous** **SW-846 8260B**

LCS

Parameter	*PrepSet*	*Reading*	*Known*	*Units*	*Recover%*	*Limits*	*File*	*Out*
1,1,1-Trichloroethane	514831	20.1	20.0	ug/L	100	75.0 - 125	113306076	
1,1,2,2-Tetrachloroethane	514831	15.0	20.0	ug/L	75.2	60.0 - 140	113306076	
1,1,2-Trichloroethane	514831	17.9	20.0	ug/L	89.6	71.0 - 129	113306076	
1,1-Dichloroethylene	514831	21.0	20.0	ug/L	105	50.0 - 150	113306076	
1,1-Dichloropropene	514831	19.2	20.0	ug/L	95.8	81.0 - 120	113306076	
1,2,3-Trichlorobenzene	514831	19.7	20.0	ug/L	98.6	60.0 - 145	113306076	
1,2,3-Trichloropropane	514831	17.4	20.0	ug/L	86.8	75.0 - 126	113306076	
1,2,4-Trichlorobenzene	514831	19.9	20.0	ug/L	99.4	70.0 - 134	113306076	
1,2,4-Trimethylbenzene	514831	19.0	20.0	ug/L	95.2	82.0 - 112	113306076	
1,2-Dibromoethane	514831	18.5	20.0	ug/L	92.4	79.0 - 116	113306076	
1,2-Dichlorobenzene	514831	21.2	20.0	ug/L	106	63.0 - 137	113306076	
1,2-Dichloroethane	514831	19.6	20.0	ug/L	97.8	68.0 - 132	113306076	
1,2-Dichloropropane	514831	18.1	20.0	ug/L	90.4	34.0 - 166	113306076	
1,3,5-Trimethylbenzene	514831	19.4	20.0	ug/L	96.9	83.0 - 115	113306076	
1,3-Dichlorobenzene	514831	21.4	20.0	ug/L	107	73.0 - 127	113306076	
1,3-Dichloropropane	514831	17.8	20.0	ug/L	89.2	83.0 - 116	113306076	
1,4-Dichlorobenzene	514831	20.6	20.0	ug/L	103	63.0 - 137	113306076	
2,2-Dichloropropane	514831	21.5	20.0	ug/L	107	46.0 - 171	113306076	
2-Chloroethylvinyl ether	514831	15.4	20.0	ug/L	77.2	10.0 - 224	113306076	
2-Chlorotoluene	514831	19.8	20.0	ug/L	99.2	82.0 - 115	113306076	
4-Chlorotoluene	514831	20.5	20.0	ug/L	102	82.0 - 118	113306076	
Acetone	514831	21.7	20.0	ug/L	108	45.0 - 185	113306076	
Benzene	514831	19.7	20.0	ug/L	98.6	64.0 - 136	113306076	
Bromobenzene	514831	19.1	20.0	ug/L	95.7	83.0 - 116	113306076	
Bromochloromethane	514831	20.2	20.0	ug/L	101	82.0 - 124	113306076	
Bromodichloromethane	514831	18.9	20.0	ug/L	94.6	65.0 - 135	113306076	
Bromoform	514831	18.1	20.0	ug/L	90.5	71.0 - 129	113306076	
Bromomethane (Methyl Bromi	514831	18.3	20.0	ug/L	91.6	14.0 - 186	113306076	
Carbon Tetrachloride	514831	22.2	20.0	ug/L	111	73.0 - 127	113306076	
Chlorobenzene	514831	21.6	20.0	ug/L	108	66.0 - 134	113306076	
Chloroethane	514831	19.2	20.0	ug/L	95.8	38.0 - 162	113306076	
Chloroform	514831	20.4	20.0	ug/L	102	67.0 - 133	113306076	
Chloromethane	514831	20.1	20.0	ug/L	101	10.0 - 204	113306076	
cis-1,2-Dichloroethene	514831	21.1	20.0	ug/L	105	78.0 - 114	113306076	
cis-1,3-Dichloropropene	514831	16.5	20.0	ug/L	82.6	24.0 - 176	113306076	
Dibromochloromethane	514831	19.2	20.0	ug/L	96.2	67.0 - 133	113306076	
Dibromomethane	514831	17.9	20.0	ug/L	89.4	87.0 - 117	113306076	
Dichlorodifluoromethane	514831	16.5	20.0	ug/L	82.6	45.0 - 146	113306076	
Ethylbenzene	514831	19.7	20.0	ug/L	98.7	59.0 - 141	113306076	
Hexachlorobutadiene	514831	21.5	20.0	ug/L	107	71.0 - 132	113306076	
Isopropylbenzene (Cumene)	514831	19.5	20.0	ug/L	97.7	91.0 - 125	113306076	
m- and p-Xylene	514831	42.3	40.0	ug/L	106	80.0 - 117	113306076	
Methyl Isobutyl Ketone	514831	14.4	20.0	ug/L	71.8	61.0 - 120	113306076	
Methylene chloride	514831	20.3	20.0	ug/L	102	60.0 - 140	113306076	
Naphthalene	514831	17.9	20.0	ug/L	89.7	62.0 - 138	113306076	
n-Butylbenzene	514831	19.4	20.0	ug/L	97.1	86.0 - 120	113306076	

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514831 **O** **Liquid Aqueous** **SW-846 8260B**

LCS

Parameter	*PrepSet*	*Reading*	*Known*	*Units*	*Recover%*	*Limits*	*File*	*Out*
n-Propylbenzene	514831	20.5	20.0	ug/L	102	87.0 - 118	113306076	
o-Xylene	514831	22.9	20.0	ug/L	114	82.0 - 118	113306076	
p-Isopropyltoluene	514831	20.8	20.0	ug/L	104	90.0 - 121	113306076	
sec-Butylbenzene	514831	19.7	20.0	ug/L	98.4	85.0 - 114	113306076	
Styrene	514831	19.3	20.0	ug/L	96.4	83.0 - 111	113306076	
tert-Butylbenzene	514831	21.0	20.0	ug/L	105	83.0 - 118	113306076	
tert-Butylmethylether (MTBE)	514831	19.0	20.0	ug/L	95.2	70.0 - 138	113306076	
Tetrachloroethylene	514831	21.4	20.0	ug/L	107	73.0 - 126	113306076	
Toluene	514831	19.5	20.0	ug/L	97.5	74.0 - 126	113306076	
trans-1,2-Dichloroethene	514831	21.2	20.0	ug/L	106	69.0 - 131	113306076	
trans-1,3-Dichloropropene	514831	18.3	20.0	ug/L	91.4	50.0 - 150	113306076	
Trichloroethylene	514831	18.8	20.0	ug/L	93.8	66.0 - 133	113306076	
Trichlorofluoromethane	514831	19.7	20.0	ug/L	98.7	48.0 - 152	113306076	
Vinyl chloride	514831	18.1	20.0	ug/L	90.6	10.0 - 196	113306076	

LCS Dup

Parameter	*PrepSet*	*LCS*	*LCSD*	*Known*	*Limits%*	*LCS%*	*LCSD%*	*Units*	*RPD*	*Limit%*
1,1,1,2-Tetrachloroethane	514831	20.7	20.2	20.0	81.0 - 118	103	101	ug/L	1.96	14.0
1,1,1-Trichloroethane	514831	20.1	20.1	20.0	75.0 - 125	100	101	ug/L	0.995	30.0
1,1,2,2-Tetrachloroethane	514831	15.0	14.9	20.0	60.0 - 140	75.2	74.4	ug/L	1.07	30.0
1,1,2-Trichloroethane	514831	17.9	17.5	20.0	71.0 - 129	89.6	87.6	ug/L	2.26	30.0
1,1-Dichloroethylene	514831	21.0	22.1	20.0	50.0 - 150	105	111	ug/L	5.56	30.0
1,1-Dichloropropene	514831	19.2	19.5	20.0	81.0 - 120	95.8	97.7	ug/L	1.96	30.0
1,2,3-Trichlorobenzene	514831	19.7	19.8	20.0	60.0 - 145	98.6	99.2	ug/L	0.607	30.0
1,2,3-Trichloropropane	514831	17.4	17.8	20.0	75.0 - 126	86.8	88.8	ug/L	2.28	30.0
1,2,4-Trichlorobenzene	514831	19.9	20.3	20.0	70.0 - 134	99.4	101	ug/L	1.60	30.0
1,2,4-Trimethylbenzene	514831	19.0	19.5	20.0	82.0 - 112	95.2	97.6	ug/L	2.49	30.0
1,2-Dibromoethane	514831	18.5	17.9	20.0	79.0 - 116	92.4	89.3	ug/L	3.41	30.0
1,2-Dichlorobenzene	514831	21.2	21.2	20.0	63.0 - 137	106	106	ug/L	0	30.0
1,2-Dichloroethane	514831	19.6	19.7	20.0	68.0 - 132	97.8	98.6	ug/L	0.815	30.0
1,2-Dichloropropane	514831	18.1	18.0	20.0	34.0 - 166	90.4	89.8	ug/L	0.666	30.0
1,3,5-Trimethylbenzene	514831	19.4	19.3	20.0	83.0 - 115	96.9	96.4	ug/L	0.517	30.0
1,3-Dichlorobenzene	514831	21.4	21.3	20.0	73.0 - 127	107	106	ug/L	0.939	30.0
1,3-Dichloropropane	514831	17.8	17.7	20.0	83.0 - 116	89.2	88.5	ug/L	0.788	30.0
1,4-Dichlorobenzene	514831	20.6	20.8	20.0	63.0 - 137	103	104	ug/L	0.966	30.0
2,2-Dichloropropane	514831	21.5	22.3	20.0	46.0 - 171	107	112	ug/L	4.57	30.0
2-Chloroethylvinyl ether	514831	15.4	15.6	20.0	10.0 - 224	77.2	78.2	ug/L	1.29	30.0
2-Chlorotoluene	514831	19.8	20.2	20.0	82.0 - 115	99.2	101	ug/L	1.80	30.0
4-Chlorotoluene	514831	20.5	20.6	20.0	82.0 - 118	102	103	ug/L	0.976	30.0
Acetone	514831	21.7	23.7	20.0	45.0 - 185	108	119	ug/L	9.69	30.0
Benzene	514831	19.7	20.0	20.0	64.0 - 136	98.6	100	ug/L	1.41	30.0
Bromobenzene	514831	19.1	19.5	20.0	83.0 - 116	95.7	97.6	ug/L	1.97	30.0
Bromochloromethane	514831	20.2	20.1	20.0	82.0 - 124	101	101	ug/L	0	30.0
Bromodichloromethane	514831	18.9	19.3	20.0	65.0 - 135	94.6	96.4	ug/L	1.88	30.0
Bromoform	514831	18.1	18.0	20.0	71.0 - 129	90.5	89.8	ug/L	0.776	30.0
Bromomethane (Methyl Bromi	514831	18.3	20.6	20.0	14.0 - 186	91.6	103	ug/L	11.7	30.0

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514831 **O** **Liquid Aqueous** **SW-846 8260B**

LCS Dup

Parameter	*PrepSet*	*LCS*	*LCSD*	*Known*	*Limits%*	*LCS%*	*LCSD%*	*Units*	*RPD*	*Limit%*
Carbon Tetrachloride	514831	22.2	22.4	20.0	73.0 - 127	111	112	ug/L	0.897	30.0
Chlorobenzene	514831	21.6	21.1	20.0	66.0 - 134	108	105	ug/L	2.82	30.0
Chloroethane	514831	19.2	18.9	20.0	38.0 - 162	95.8	94.6	ug/L	1.26	30.0
Chloroform	514831	20.4	21.0	20.0	67.0 - 133	102	105	ug/L	2.90	30.0
Chloromethane	514831	20.1	20.7	20.0	10.0 - 204	101	103	ug/L	1.96	30.0
cis-1,2-Dichloroethene	514831	21.1	21.5	20.0	78.0 - 114	105	108	ug/L	2.82	14.0
cis-1,3-Dichloropropene	514831	16.5	16.5	20.0	24.0 - 176	82.6	82.6	ug/L	0	30.0
Dibromochloromethane	514831	19.2	18.5	20.0	67.0 - 133	96.2	92.6	ug/L	3.81	30.0
Dibromomethane	514831	17.9	18.0	20.0	87.0 - 117	89.4	89.9	ug/L	0.558	30.0
Dichlorodifluoromethane	514831	16.5	18.2	20.0	45.0 - 146	82.6	90.8	ug/L	9.46	14.0
Ethylbenzene	514831	19.7	19.7	20.0	59.0 - 141	98.7	98.7	ug/L	0	30.0
Hexachlorobutadiene	514831	21.5	22.1	20.0	71.0 - 132	107	110	ug/L	2.76	30.0
Isopropylbenzene (Cumene)	514831	19.5	18.8	20.0	91.0 - 125	97.7	93.8	ug/L	4.07	30.0
m- and p-Xylene	514831	42.3	41.6	40.0	80.0 - 117	106	104	ug/L	1.90	14.0
Methyl Isobutyl Ketone	514831	14.4	13.6	20.0	61.0 - 120	71.8	67.9	ug/L	5.58	30.0
Methylene chloride	514831	20.3	20.8	20.0	60.0 - 140	102	104	ug/L	1.94	30.0
Naphthalene	514831	17.9	18.1	20.0	62.0 - 138	89.7	90.5	ug/L	0.888	30.0
n-Butylbenzene	514831	19.4	19.8	20.0	86.0 - 120	97.1	98.8	ug/L	1.74	30.0
n-Propylbenzene	514831	20.5	20.6	20.0	87.0 - 118	102	103	ug/L	0.976	30.0
o-Xylene	514831	22.9	22.3	20.0	82.0 - 118	114	112	ug/L	1.77	14.0
p-Isopropyltoluene	514831	20.8	21.1	20.0	90.0 - 121	104	106	ug/L	1.90	30.0
sec-Butylbenzene	514831	19.7	20.0	20.0	85.0 - 114	98.4	99.9	ug/L	1.51	30.0
Styrene	514831	19.3	18.8	20.0	83.0 - 111	96.4	94.2	ug/L	2.31	30.0
tert-Butylbenzene	514831	21.0	21.1	20.0	83.0 - 118	105	105	ug/L	0	30.0
tert-Butylmethylether (MTBE)	514831	19.0	19.1	20.0	70.0 - 138	95.2	95.4	ug/L	0.210	30.0
Tetrachloroethylene	514831	21.4	20.7	20.0	73.0 - 126	107	104	ug/L	2.84	30.0
Toluene	514831	19.5	19.4	20.0	74.0 - 126	97.5	96.8	ug/L	0.721	30.0
trans-1,2-Dichloroethene	514831	21.2	21.9	20.0	69.0 - 131	106	110	ug/L	3.70	30.0
trans-1,3-Dichloropropene	514831	18.3	18.4	20.0	50.0 - 150	91.4	91.9	ug/L	0.546	30.0
Trichloroethylene	514831	18.8	18.8	20.0	66.0 - 133	93.8	94.1	ug/L	0.319	30.0
Trichlorofluoromethane	514831	19.7	20.9	20.0	48.0 - 152	98.7	104	ug/L	5.23	30.0
Vinyl chloride	514831	18.1	18.1	20.0	10.0 - 196	90.6	90.3	ug/L	0.332	30.0

Surrogate

Parameter	*Sample*	*Type*	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*File*
1,2-DCA-d4 (SURR)	514831	CCV	19.8	20.0	ug/L	99.0	70.0 - 130	113306075
1,2-DCA-d4 (SURR)	514831	LCS	20.2	20.0	ug/L	101	70.0 - 130	113306076
1,2-DCA-d4 (SURR)	514831	LCS Dup	20.3	20.0	ug/L	102	70.0 - 130	113306077
1,2-DCA-d4 (SURR)	514831	Blank	20.8	20.0	ug/L	104	70.0 - 130	113306078
Bromofluorobenzene (SURR)	514831	CCV	19.5	20.0	ug/L	97.5	70.0 - 142	113306075
Bromofluorobenzene (SURR)	514831	LCS	19.8	20.0	ug/L	99.0	70.0 - 142	113306076
Bromofluorobenzene (SURR)	514831	LCS Dup	19.9	20.0	ug/L	99.5	70.0 - 142	113306077
Bromofluorobenzene (SURR)	514831	Blank	19.7	20.0	ug/L	98.5	70.0 - 142	113306078

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514831 O Liquid Aqueous — SW-846 8260B

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
Dibromofluoromethane (SURR)	514831	CCV	19.3	20.0	ug/L	96.5	70.0 - 140	113306075
Dibromofluoromethane (SURR)	514831	LCS	19.9	20.0	ug/L	99.5	70.0 - 140	113306076
Dibromofluoromethane (SURR)	514831	LCS Dup	20.9	20.0	ug/L	104	70.0 - 140	113306077
Dibromofluoromethane (SURR)	514831	Blank	20.2	20.0	ug/L	101	70.0 - 140	113306078
ToleneD8 (SURR)	514831	CCV	18.9	20.0	ug/L	94.5	70.0 - 140	113306075
ToleneD8 (SURR)	514831	LCS	18.9	20.0	ug/L	94.5	70.0 - 140	113306076
ToleneD8 (SURR)	514831	LCS Dup	19.0	20.0	ug/L	95.0	70.0 - 140	113306077
ToleneD8 (SURR)	514831	Blank	19.0	20.0	ug/L	95.0	70.0 - 140	113306078
1,2-DCA-d4 (SURR)	1196568	UNKNOWN	19.4	20.0	ug/L	97.0	70.0 - 130	113306083
Bromofluorobenzene (SURR)	1196568	UNKNOWN	17.0	20.0	ug/L	85.0	70.0 - 142	113306083
Dibromofluoromethane (SURR)	1196568	UNKNOWN	19.3	20.0	ug/L	96.5	70.0 - 140	113306083
ToleneD8 (SURR)	1196568	UNKNOWN	19.3	20.0	ug/L	96.5	70.0 - 140	113306083
1,2-DCA-d4 (SURR)	1196573	UNKNOWN	20.6	20.0	ug/L	103	70.0 - 130	113306082
Bromofluorobenzene (SURR)	1196573	UNKNOWN	19.8	20.0	ug/L	99.0	70.0 - 142	113306082
Dibromofluoromethane (SURR)	1196573	UNKNOWN	19.2	20.0	ug/L	96.0	70.0 - 140	113306082
ToleneD8 (SURR)	1196573	UNKNOWN	19.7	20.0	ug/L	98.5	70.0 - 140	113306082

514914 O Liquid Aqueous — SW-846 8270C

CCC

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
1,4-Dichlorobenzene	48500	50000.0	ug/L	97.0	80.0 - 120		113307700
2,4,6-Trichlorophenol	56300	50000.0	ug/L	113	80.0 - 120		113307700
2,4-Dichlorophenol	58000	50000.0	ug/L	116	80.0 - 120		113307700
2-Nitrophenol	59600	50000.0	ug/L	119	80.0 - 120		113307700
Acenaphthene	47800	50000.0	ug/L	95.6	80.0 - 120		113307700
Benzo(a)pyrene	54000	50000.0	ug/L	108	80.0 - 120		113307700
Di-n-octylphthalate	55200	50000.0	ug/L	110	80.0 - 120		113307700
Fluoranthene(Benzo(j,k)fluorene)	52400	50000.0	ug/L	105	80.0 - 120		113307700
Hexachlorobutadiene	50800	50000.0	ug/L	102	80.0 - 120		113307700
N-Nitrosodiphenylamine (as DPA	53700	50000.0	ug/L	107	80.0 - 120		113307700
p-Chloro-m-Cresol (4-Chloro-3-me	58100	50000.0	ug/L	116	80.0 - 120		113307700
Pentachlorophenol	59000	50000.0	ug/L	118	80.0 - 120		113307700
Phenol	47400	50000.0	ug/L	94.8	80.0 - 120		113307700

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
1,2,4-Trichlorobenzene	47700	50000	ug/L	95.4	80.0 - 120		113307700
1,2-Dichlorobenzene	49300	50000	ug/L	98.6	80.0 - 120		113307700
1,2-DPH (as azobenzene)	48100	50000	ug/L	96.2	80.0 - 120		113307700

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514914 **O** **Liquid Aqueous** **SW-846 8270C**

CCV

Parameter	*Reading*	*Known*	*Units*	*Recover%*	*Limits%*	*Out*	*File*
1,3-Dichlorobenzene	48500	50000	ug/L	97.0	80.0 - 120		113307700
1,4-Dichlorobenzene	48500	50000	ug/L	97.0	80.0 - 120		113307700
2,4,5-Trichlorophenol	55800	50000	ug/L	112	80.0 - 120		113307700
2,4,6-Trichlorophenol	56300	50000	ug/L	113	80.0 - 120		113307700
2,4-Dichlorophenol	58000	50000	ug/L	116	80.0 - 120		113307700
2,4-Dimethylphenol	53000	50000	ug/L	106	80.0 - 120		113307700
2,4-Dinitrophenol	64500	50000	ug/L	129	80.0 - 120	*	113307700
2,4-Dinitrotoluene	59700	50000	ug/L	119	80.0 - 120		113307700
2,6-Dinitrotoluene	59300	50000	ug/L	119	80.0 - 120		113307700
2-Chloronaphthalene	48400	50000	ug/L	96.8	80.0 - 120		113307700
2-Chlorophenol	56100	50000	ug/L	112	80.0 - 120		113307700
2-Nitrophenol	59600	50000	ug/L	119	80.0 - 120		113307700
3,3'-Dichlorobenzidine	47400	50000	ug/L	94.8	80.0 - 120		113307700
4,6-Dinitro-2-methylphenol	65700	50000	ug/L	131	80.0 - 120	*	113307700
4-Bromophenyl phenyl ether	48500	50000	ug/L	97.0	80.0 - 120		113307700
4-Chlorophenyl phenyl ethe	42800	50000	ug/L	85.6	80.0 - 120		113307700
4-Nitrophenol	57400	50000	ug/L	115	80.0 - 120		113307700
Acenaphthene	47800	50000	ug/L	95.6	80.0 - 120		113307700
Acenaphthylene	48100	50000	ug/L	96.2	80.0 - 120		113307700
Anthracene	48100	50000	ug/L	96.2	80.0 - 120		113307700
Benzidine	45700	50000	ug/L	91.4	80.0 - 120		113307700
Benzo(a)anthracene	46100	50000	ug/L	92.2	80.0 - 120		113307700
Benzo(a)pyrene	54000	50000	ug/L	108	80.0 - 120		113307700
Benzo(b)fluoranthene	47400	50000	ug/L	94.8	80.0 - 120		113307700
Benzo(ghi)perylene	64800	50000	ug/L	130	80.0 - 120	*	113307700
Benzo(k)fluoranthene	43400	50000	ug/L	86.8	80.0 - 120		113307700
Benzyl Butyl phthalate	52100	50000	ug/L	104	80.0 - 120		113307700
Bis(2-chloroethoxy)methane	44100	50000	ug/L	88.2	80.0 - 120		113307700
Bis(2-chloroethyl)ether	42200	50000	ug/L	84.4	80.0 - 120		113307700
Bis(2-chloroisopropyl)ether	46400	50000	ug/L	92.8	80.0 - 120		113307700
Bis(2-ethylhexyl)phthalate	53100	50000	ug/L	106	80.0 - 120		113307700
Chrysene (Benzo(a)phenanthrene)	45800	50000	ug/L	91.6	80.0 - 120		113307700
Dibenz(a,h)anthracene	60100	50000	ug/L	120	80.0 - 120	*	113307700
Diethyl phthalate	52300	50000	ug/L	105	80.0 - 120		113307700
Dimethyl phthalate	51900	50000	ug/L	104	80.0 - 120		113307700
Di-n-butylphthalate	53100	50000	ug/L	106	80.0 - 120		113307700
Di-n-octylphthalate	55200	50000	ug/L	110	80.0 - 120		113307700
Fluoranthene(Benzo(j,k)fluorene)	52400	50000	ug/L	105	80.0 - 120		113307700
Fluorene	43000	50000	ug/L	86.0	80.0 - 120		113307700
Hexachlorobenzene	54200	50000	ug/L	108	80.0 - 120		113307700
Hexachlorobutadiene	50800	50000	ug/L	102	80.0 - 120		113307700
Hexachlorocyclopentadiene	48600	50000	ug/L	97.2	80.0 - 120		113307700
Hexachloroethane	52000	50000	ug/L	104	80.0 - 120		113307700
Indeno(1,2,3-cd)pyrene	61200	50000	ug/L	122	80.0 - 120	*	113307700
Isophorone	46000	50000	ug/L	92.0	80.0 - 120		113307700

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514914 **O** **Liquid Aqueous** **SW-846 8270C**

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
Naphthalene	57100	50000	ug/L	114	80.0 - 120		113307700
Nitrobenzene	46200	50000	ug/L	92.4	80.0 - 120		113307700
N-Nitrosodimethylamine	48000	50000	ug/L	96.0	80.0 - 120		113307700
N-Nitrosodi-n-propylamine	44900	50000	ug/L	89.8	80.0 - 120		113307700
N-Nitrosodiphenylamine (as DPA	53700	50000	ug/L	107	80.0 - 120		113307700
p-Chloro-m-Cresol (4-Chloro-3-me	58100	50000	ug/L	116	80.0 - 120		113307700
Pentachlorophenol	59000	50000	ug/L	118	80.0 - 120		113307700
Phenanthrene	53700	50000	ug/L	107	80.0 - 120		113307700
Phenol	47400	50000	ug/L	94.8	80.0 - 120		113307700
Pyrene	40700	50000	ug/L	81.4	80.0 - 120		113307700

DFTPP

Parameter		RefMass	Reading	%	Limits%	Out	File
DFTPP Mass 127	126291	198	102636	54.7	40.0 - 60.0		113307699
DFTPP Mass 197	126291	198	0	0.0	0 - 1.00		113307699
DFTPP Mass 198	126291	198	187482	100.0	100 - 100		113307699
DFTPP Mass 199	126291	198	12841	6.8	5.00 - 9.00		113307699
DFTPP Mass 275	126291	198	44306	23.6	10.0 - 30.0		113307699
DFTPP Mass 365	126291	198	4130	2.2	1.00 - 100		113307699
DFTPP Mass 441	126291	443	16867	75.3	0 - 100		113307699
DFTPP Mass 442	126291	198	114434	61.0	40.0 - 100		113307699
DFTPP Mass 443	126291	442	22409	19.6	17.0 - 23.0		113307699
DFTPP Mass 51	126291	198	57850	30.9	30.0 - 60.0		113307699
DFTPP Mass 68	126291	69.0	0	0.0	0 - 2.00		113307699
DFTPP Mass 69	126291	198	68443	36.5	0 - 100		113307699
DFTPP Mass 70	126291	69.0	283	0.4	0 - 2.00		113307699

IS Areas

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-Dichlorobenzene-d4-ISTD	129789	CCV	500300	500300	250200	750500		113307700	129789
Acenaphthene-d10-ISTD	129789	CCV	1080000	1080000	540100	1620000		113307700	129789
Chrysene-d12-ISTD	129789	CCV	1652000	1652000	826100	2478000		113307700	129789
Naphthalene-d8-ISTD	129789	CCV	1932000	1932000	966100	2898000		113307700	129789
Perylene-d12-ISTD	129789	CCV	1232000	1232000	616200	1848000		113307700	129789
Phenanthrene-d10-ISTD	129789	CCV	1595000	1595000	797600	2393000		113307700	129789
1,4-Dichlorobenzene-d4-ISTD	1196568	UNKNOWN	511700	500300	250200	750500		113307701	514464
Acenaphthene-d10-ISTD	1196568	UNKNOWN	960800	1080000	540100	1620000		113307701	514464
Chrysene-d12-ISTD	1196568	UNKNOWN	1332000	1652000	826100	2478000		113307701	514464
Naphthalene-d8-ISTD	1196568	UNKNOWN	1816000	1932000	966100	2898000		113307701	514464
Perylene-d12-ISTD	1196568	UNKNOWN	914600	1232000	616200	1848000		113307701	514464
Phenanthrene-d10-ISTD	1196568	UNKNOWN	1279000	1595000	797600	2393000		113307701	514464

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
1,4-Dichlorobenzene-d4-ISTD	129789	CCV	8.280	8.280	8.220	8.340		113307700	129789

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514914 O Liquid Aqueous — SW-846 8270C

IS RetTime

Parameter	Sample	Type	Reading	CCVISM	Low	High	Out	File	PrepSet
Acenaphthene-d10-ISTD	129789	CCV	14.77	14.77	14.71	14.83		113307700	129789
Chrysene-d12-ISTD	129789	CCV	22.21	22.21	22.15	22.27		113307700	129789
Naphthalene-d8-ISTD	129789	CCV	10.76	10.76	10.70	10.82		113307700	129789
Perylene-d12-ISTD	129789	CCV	26.56	26.56	26.50	26.62		113307700	129789
Phenanthrene-d10-ISTD	129789	CCV	17.38	17.38	17.32	17.44		113307700	129789
1,4-Dichlorobenzene-d4-ISTD	1196568	UNKNOWN	8.270	8.280	8.220	8.340		113307701	514464
Acenaphthene-d10-ISTD	1196568	UNKNOWN	14.76	14.77	14.71	14.83		113307701	514464
Chrysene-d12-ISTD	1196568	UNKNOWN	22.19	22.21	22.15	22.27		113307701	514464
Naphthalene-d8-ISTD	1196568	UNKNOWN	10.75	10.76	10.70	10.82		113307701	514464
Perylene-d12-ISTD	1196568	UNKNOWN	26.53	26.56	26.50	26.62		113307701	514464
Phenanthrene-d10-ISTD	1196568	UNKNOWN	17.37	17.38	17.32	17.44		113307701	514464

SPCC

Parameter	Sample	RF	Minimum	File
2,4-Dinitrophenol	129789	101	0.050	113307700
4-Nitrophenol	129789	153	0.050	113307700
Hexachlorocyclopentadiene	129789	188	0.050	113307700
N-Nitrosodi-n-propylamine	129789	840	0.050	113307700

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
2,4,6-Tribromophenol	129789	CCV	64000	100000	ug/L	64.0	13.3 - 147	113307700
2-Fluorobiphenyl-SURR	129789	CCV	49000	50000	ug/L	98.0	23.8 - 113	113307700
2-Fluorophenol-SURR	129789	CCV	54900	100000	ug/L	54.9	11.0 - 76.9	113307700
4-Terphenyl-d14-SURR	129789	CCV	43200	50000	ug/L	86.4	20.6 - 134	113307700
Nitrobenzene-d5-SURR	129789	CCV	55500	50000	ug/L	111	28.2 - 124	113307700
Phenol-d6-SURR	129789	CCV	47400	100000	ug/L	47.4	10.9 - 55.5	113307700
2,4,6-Tribromophenol	1196568	UNKNOWN	77.1	109	ug/L	70.7	13.3 - 147	113307701
2-Fluorobiphenyl-SURR	1196568	UNKNOWN	35.1	54.3	ug/L	64.6	23.8 - 113	113307701
2-Fluorophenol-SURR	1196568	UNKNOWN	46.7	109	ug/L	42.8	11.0 - 76.9	113307701
4-Terphenyl-d14-SURR	1196568	UNKNOWN	31.9	54.3	ug/L	58.7	20.6 - 134	113307701
Nitrobenzene-d5-SURR	1196568	UNKNOWN	39.9	54.3	ug/L	73.5	28.2 - 124	113307701
Phenol-d6-SURR	1196568	UNKNOWN	31.3	109	ug/L	28.7	10.9 - 55.5	113307701

514935 O Liquid Aqueous — SW-846 8015B*MOD

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
TPH-D >C10-C20	514376	ND	0.00139	0.040	mg/L	113307996
TPH-G C6-C10	514376	0.172	0.121	4.00	mg/L	113307996
TPH-Oil >C20-C28	514376	ND	0.00139	0.040	mg/L	113307996
TPH-Oil >C28-C36	514376	ND	0.139	4.00	mg/L	113307996

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TPH-D >C10-C20	477	500	mg/L	95.4	70.0 - 130		113307995
TPH-D >C10-C20	492	500	mg/L	98.4	70.0 - 130		113308003

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514935 **O** **Liquid Aqueous** **SW-846 8015B*MOD**

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	Out	File
TPH-D >C10-C20	526	500	mg/L	105	70.0 - 130		113308008
TPH-G C6-C10	563	500	mg/L	113	70.0 - 130		113307995
TPH-G C6-C10	612	500	mg/L	122	70.0 - 130		113308003
TPH-G C6-C10	580	500	mg/L	116	70.0 - 130		113308008

LCS

Parameter	PrepSet	Reading	Known	Units	Recover%	Limits	File	Out
TPH-D >C10-C20	514376	0.546	0.500	mg/L	109	75.0 - 125	113308223	
TPH-G C6-C10	514376	61.8	50.0	mg/L	124	75.0 - 125	113308223	

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
TPH-D >C10-C20	514376	0.546	0.511	0.500	75.0 - 125	109	102	mg/L	6.64	20.0
TPH-G C6-C10	514376	61.8	56.0	50.0	75.0 - 125	124	112	mg/L	10.2	20.0

MS

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TPH-D >C10-C20	1196251	7.73	0	ND	12.7	75.0 - 125	60.9 *		mg/L		20.0
TPH-G C6-C10	1196251	10.1	0	0.0688	12.7	75.0 - 125	79.0		mg/L		20.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
TPH-D >C10-C20	1196251	7.73	12.2	ND	12.7	75.0 - 125	60.9 *	96.1	mg/L	44.8 *	20.0
TPH-G C6-C10	1196251	10.1	13.3	0.0688	12.7	75.0 - 125	79.0	104	mg/L	27.3 *	20.0

Surrogate

Parameter	Sample	Type	Reading	Known	Units	Recover%	Limits%	File
1-Chlorooctane (Surrogate)	514376	Blank	38.2	25.0	mg/L	153 *	50.0 - 150	113307996
1-Chlorooctane (Surrogate)	514376	LCS	46.8	25.0	mg/L	187 *	50.0 - 150	113308223
1-Chlorooctane (Surrogate)	514376	LCS Dup	45.3	25.0	mg/L	181 *	50.0 - 150	113308253
oTerphenyl (Surrogate)	514376	Blank	35.7	25.0	mg/L	143	50.0 - 150	113307996
oTerphenyl (Surrogate)	514376	LCS	39.4	25.0	mg/L	158 *	50.0 - 150	113308223
oTerphenyl (Surrogate)	514376	LCS Dup	40.9	25.0	mg/L	164 *	50.0 - 150	113308253
1-Chlorooctane (Surrogate)	1196251	MS	7.48	6.36	mg/L	118	50.0 - 150	113308000
1-Chlorooctane (Surrogate)	1196251	MSD	10.0	6.36	mg/L	157 *	50.0 - 150	113308022
oTerphenyl (Surrogate)	1196251	MS	7.51	6.36	mg/L	118	50.0 - 150	113308000
oTerphenyl (Surrogate)	1196251	MSD	9.73	6.36	mg/L	153 *	50.0 - 150	113308022
1-Chlorooctane (Surrogate)	1196568	UNKNOWN	9.06	6.41	mg/L	141	50.0 - 150	113308002
oTerphenyl (Surrogate)	1196568	UNKNOWN	8.19	6.41	mg/L	128	50.0 - 150	113308002

RPD is Relative Percent Difference: abs(r1-r2) / mean(r1,r2) * 100%

Recover% is Recovery Percent: result / known * 100%

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Chain of Custody

Panhandle 806.355.3556 | Oklahoma 405.590.2533 | North Texas 972.837.9412 | Central Texas 512.821.0045
Rio Grand Valley 956.831.6437 | Louisiana 318.219.9300 | Gulf Coast 281.333.9414

Report To: Chase Ertzberger
Company Name: CTEH
Address: 5120 Northshore Dr.
City: N. Little Rock State: AR Zip: 72118
Phone: 501-366-0394 Fax: 501-801-8501
Sampler Signature: [signature] Printed Name: Chase Ertzberger
Project Name/Location: 40432 - Magnolia, AR
Billing Address (if different): Same
City: State: Zip:
Phone: Fax:
Affiliation:
PO Number:

Analysis Requested

Lab Number Do Not Use	Field Identification	Date	Time	Matrix	# of Containers	Notes	VOCs 8260	SVOCs 8270	Priority Pollutant List 6010	TPH-GRO 8015	TPH-DRO 8015	TPH-DRO 8015		
1196568	MAAR0319SW004	3-19-2013	1850	SW	10	HCl Preserved	X	X	X	X	X	X		
1196573	TB002	3-19-2013	—	SW	2		X							

005057 ☐ CF
005112 ☐ CF
003688 ☒ CF

<1°C

-0.145

Date	Time	Relinquished by: Printed Name	Signature	Affiliation	Received by: Printed Name	Signature	Affiliation
3-21-13	1030	Chase Ertzberger	[signature]	CTEH	Gayle Gardner Ana-Lab	Gayle Gardner	

☐ Wastewater ☐ Drinking Water ☐ SW846
Samples Contain? ☐ HF ☐ CN ☐ S= ☐ other##

Samples Received on Ice? ☒ Yes ☐ No
Cooler/Sample Secure? ☒ Yes ☐ No
##comments
Method of Shipment ☐ Bus ☐ FedEx ☐ Lone Star ☐ UPS ☒ Hand Delivered ☐ Airborne ☐ Other
Tracking or Shipping Number _____
Requested TAT ☐ Routine ☐ 3 day ☐ 2 Day ☐ Next Day ☒ ASAP

Ana-Lab personnel collect samples as specified by Ana-Lab SOP #000323.

Sample analysis will be provided according to Ana-Lab's Standard Terms and Conditions of Agreement, available upon request and at [illegible]
Any other terms proposed by Client are deemed material alterations and are rejected unless expressly agreed to in writing by [illegible]

RUSH!

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Chain of Custody

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CTEH -L

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Lab Number _____

PO Number _____

Phone 501/366-0394

Fax 501/614-2835

Report To

Chase Entzderger
Center for Toxicology and
Environmental Health,L.L.C.
5120 North Shore Dr
North Little Ro, AR 72188

Water from Magnolia, Ar

24 TAT

Matrix: Liquid Aqueous

Sample Collection Start

Date: _____ Time: _____

Sampler Printed Name: _____

Sampler Affiliation: _____

Sampler Signature:

	1	**Amber Glass Qt w/Teflon lined lid**		
N		**!ABN**	Semivolatile Hydrocarbons	SW-846 8270C
	2	**HCl to pH <2 glass 40 mL vial (Zero Headspace)**		
N		**!VOA**	Volatiles by GC/MS	SW-846 8260B
	1	**HNO3 to pH <2 Polyethylene 500 mL for Metals**		
N		**301L**	Liquid Metals Digestion	EPA 3010
N		***SbM**	Antimony	EPA 6020A
N		***AsM**	Arsenic	EPA 6020A
N		***BeM**	Beryllium	EPA 6020A
N		***CdM**	Cadmium	EPA 6020A
N		***CrM**	Chromium	EPA 6020A
N		***CuM**	Copper	EPA 6020A
N		***PbM**	Lead	EPA 6020A
N		***NiM**	Nickel	EPA 6020A
N		***SeM**	Selenium	EPA 6020A
N		***AgM**	Silver	EPA 6020A
N		***TlM**	Thallium	EPA 6020A
N		***ZnM**	Zinc	EPA 6020A
N		***Hg**	Mercury	EPA 7470A
N		**747L**	Mercury Liquid Metals Digestion	EPA 7470A
	3	**HCl to pH <2 125 glass w/septa (ZHE)**		
N		**LTPH**	TPH C6 to C36	SW-846 8015B*MOD

Ambient Conditions/Comments

605681 CoC Print Group 001 of 001

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com LELAP-accredited #02008

Employee Owned Integrity Caring Continual Improvement

Chain of Custody

COC Printed 03/21/2013 Page 2 of 2

CTEH -L

101

Report To

Chase Entzderger
Center for Toxicology and
Environmental Health,L.L.C.
5120 North Shore Dr
North Little Ro, AR 72188

Phone 501/366-0394
Fax 501/614-2835

Date	Time	Relinquished		Received	
		Printed Name	*Affiliation*	*Printed Name*	*Affiliation*
		Signature		*Signature*	
		Printed Name	*Affiliation*	*Printed Name*	*Affiliation*
		Signature		*Signature*	
		Printed Name	*Affiliation*	*Printed Name*	*Affiliation*
		Signature		*Signature*	
		Printed Name	*Affiliation*	*Printed Name*	*Affiliation*
		Signature		*Signature*	

Sample Received on Ice? ☐ *Yes* ☐ *No* **Method of Shipment:** ☐ *UPS* ☐ *Bus* ☐ *FedEx* ☐ *Lone Star* ☐ *Hand Delivered* ☐ *Other*

Cooler/Sample Secure? ☐ *Yes* ☐ *No* **Tracking/Shipping #**

The accredited column designates accreditation by A - A2LA, N - NELAC, or z - not listed under scope of accreditation. Unless otherwise specified, ANA-LAB shall provide these ordered services pursuant to our Standard Terms & Conditions Agreement (available for download from the welcome page at <http://www.ana-lab.com>). Ana-Lab personnel collect samples as specified by Ana-Lab SOP #000323.

Comments

ATTACHMENT F – AIR EQUIPMENT DESCRIPTIONS

Equipment Descriptions

This appendix serves to provide the reader with an equipment description for each of the air monitoring instruments used in Magnolia, AR at the crude oil release.

1.0 AreaRAE

AreaRAEs provided continuous recording of real-time monitoring using radio telemetry. Specific sensors were installed in the AreaRAEs to detect concentrations of hydrogen sulfide (H_2S), lower explosive limit (LEL), and volatile organic compounds (VOCs). Table 1 provides a detection summary for the sensors used in the AreaRAEs.

1.1 Radio Telemetry Systems

The radio telemetry systems provide continuous monitoring and ensure proper record keeping. Radio telemetry systems were combined with computer data basing capabilities to help provide continuous recorded monitoring in the work area and around the community. The AreaRAE transmits data obtained from real-time instruments within the unit. The system uses radio telemetry to communicate the status of the testing environment to a monitoring console where audible and visual alarms inform personnel of changes in air quality conditions. In addition to the environmental alarming capability, concentrations were continuously transmitted to the monitoring console where they are stored and compiled for each location. The data can be easily accessed at any time from the monitoring console in a database or graphical format.

1.2 Photoionization Detector

Monitors were equipped with photo ionization detectors (PIDs) to measure airborne concentrations of VOCs. Photo ionization is a nondestructive technique that is somewhat specific through selection of ultra-violet (UV) lamps of varying energies. PIDs use high energy UV light from a lamp housed within the detector to provide energy needed for ionizing VOCs. Ions are then collected in an ionization chamber with accelerating and collecting electrodes designed to measure current. Current produced during VOC ionization is proportional to VOC concentrations. The detection limit for the PID is 0.1 ppm.

1.3 Hydrogen Sulfide

An electrochemical sensor consists of a diffusion barrier, a sensing-electrode, a counter-electrode, and an electrolyte. The sensor works by reacting with specific gases and transmitting an electrical signal that is proportional to the gas concentration. Each sensor has its own response time and is capable of detecting a range of concentrations specific to the sensor.

1.4 Lower Explosive Limit

Monitors were equipped with lower explosive limit (LEL) sensors to monitor for flammable environments. The LEL is defined as the minimum concentration of chemical in the air that can ignite. The LEL sensor is made up of coils of platinum wire embedded within a catalytic bead that was used to measure combustible gases or vapors. Oxidation of combustible gases and vapors releases heat, changing the resistance of one element with respect to the other. This change is detected as an out-of-balance voltage in a bridge circuit, and the output signal is used for the detection of combustible gases and vapors. The LEL sensor has a rapid response time (< 30 seconds) with a 1 % resolution. Correction factors allow for the measurement of a wide variety of chemicals on a sensor calibrated with only a single standard gas. The methane-scale correction factor is the response of a methane calibrated LEL sensor to an equal concentration of the compound of interest. Methane-scale correction factors are calculated and provided by RAE Systems in Technical Note TN-156.

Table 1 Detection Limit Summary for MultiRAE and AreaRAE Sensors

Instrument	Analyte	Detection Limit
MultiRAE Plus and AreaRAE	H_2S	0.1 ppm
MultiRAE Plus and AreaRAE	VOCs	0.1 ppm
MultiRAE Plus and AreaRAE	LEL	1 %

2.0 MultiRAE

MultiRAEs are handheld instruments that provide instantaneous real-time data of environmental conditions. Similar to an AreaRAE, specific sensors were installed in the MultiRAEs to detect concentrations of H_2S, LEL, and VOCs. Table 1 provides a detection summary for the sensors used for this response in the MultiRAE.

2.1 Photoionization Detector

Please see 1.2 for description.

2.2 Hydrogen Sulfide

Please see 1.3 for description.

2.3 Lower Explosive Limit

Please see 1.4 for description.

3.0 Gastec Colorimetric Detectors

The Gastec GV-100 piston pump was used in conjunction with chemical-specific colorimetric detector tubes for benzene. The colorimetric detector tubes contain reagents specifically designed to detect the target gas. These thin glass tubes have printed calibration scales, which allow the user to directly read airborne concentrations of the substances being measured. According to the manufacturer, Gastec detector tubes are hermetically sealed, the inner diameters are controlled, and detecting reagents with long-term stability are selected. All detector tubes undergo stringent quality control, and each production lot is independently tested and calibrated. The Gastec colorimetric detector tubes used were calibrated by the manufacturer and did not require field calibration. Gastec tubes can require the application of correction factors based on the volume of air sampled and the temperature of the air. The results in this report reflect corrected values when applicable.

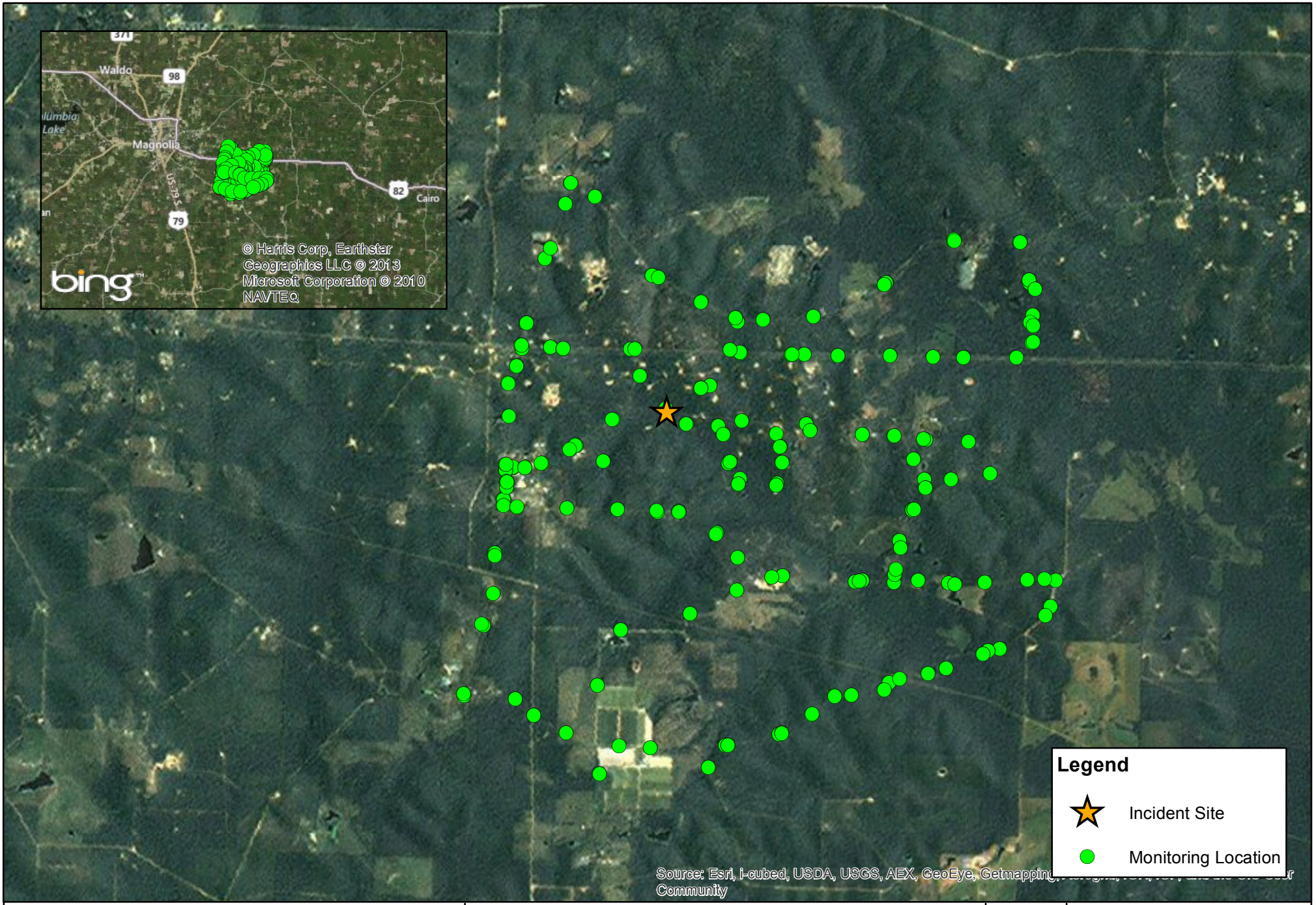
Table 2 Detection Limit for Gastec Colorimetric Tubes

Instrument	Analyte	Detection Limit
GV 100 Sampling Pump with Colorimetric Tube (Tube No. 121L; 1000 ml)	Benzene	0.05 ppm

4.0 Passive Dosimeters- Radiellos

Passive dosimeters are simple diffusion samplers. They allow air to diffuse across a membrane containing specific substrates, which capture chemicals present in the air. Passive dosimeters do not provide an instantaneous assessment, but must be sent in to a laboratory for analysis. The average exposure concentration over the time the badge was worn can then be calculated from the laboratory results and the sampling time. Dosimeters were analyzed for BTEX compounds (benzene, toluene, ethylbenzene, and xylene) under NIOSH method 1500/1501.

ATTACHMENT G - REAL-TIME AIR MONITORING MAPS



Manually Logged Real-Time Monitoring Locations

March 16, 2013 to March 17, 2013

0 0.3 0.6 1.2 1.8 2.4 3

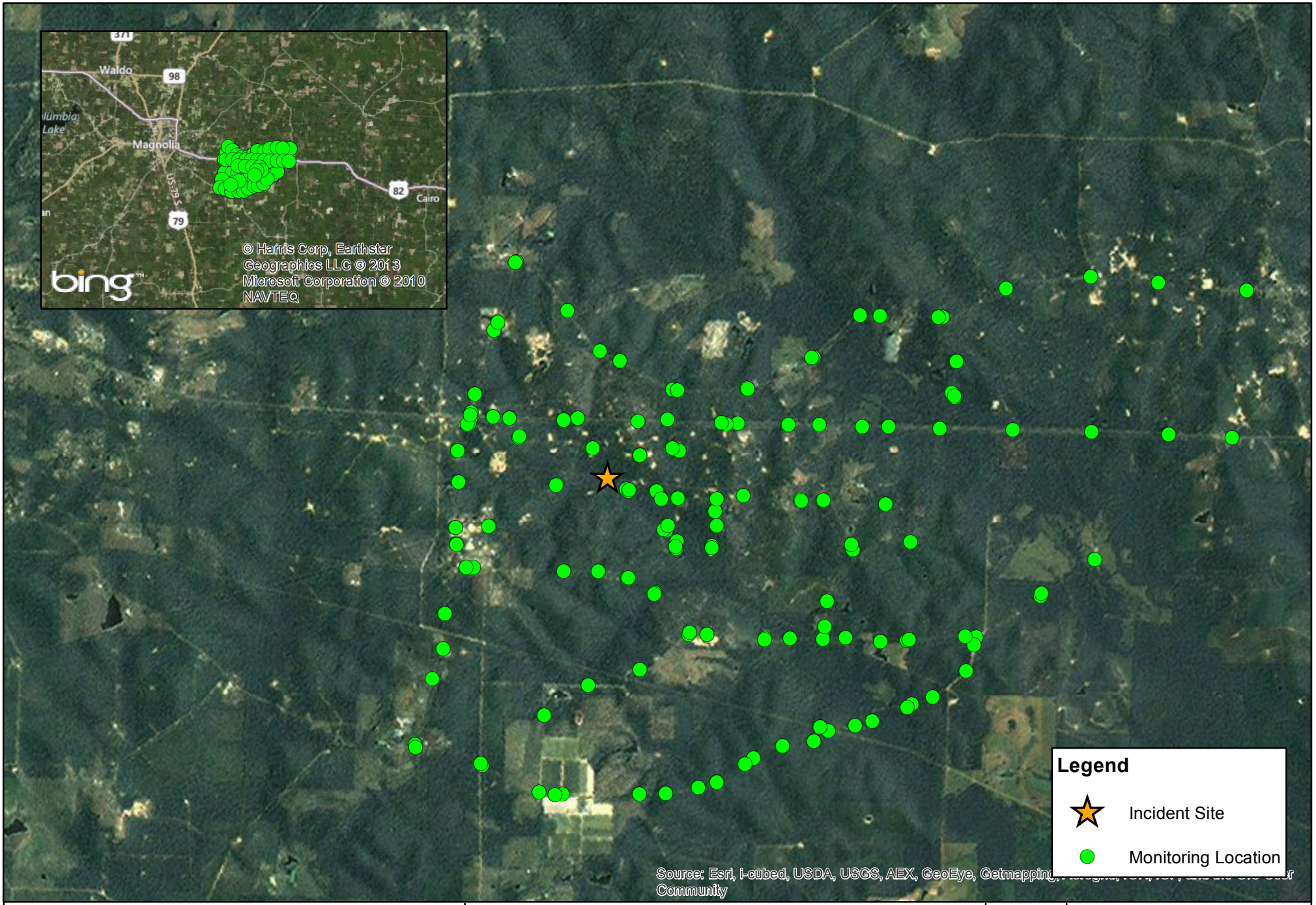
Miles

N

CTEH®

Project No. 40432

Delek US Holdings
Magnolia, AR
Columbia County
Print Date: 3/17/2013



Manually Logged Real-Time Monitoring Locations
March 18, 2013

0 0.3 0.6 1.2 1.8 2.4 3
Miles

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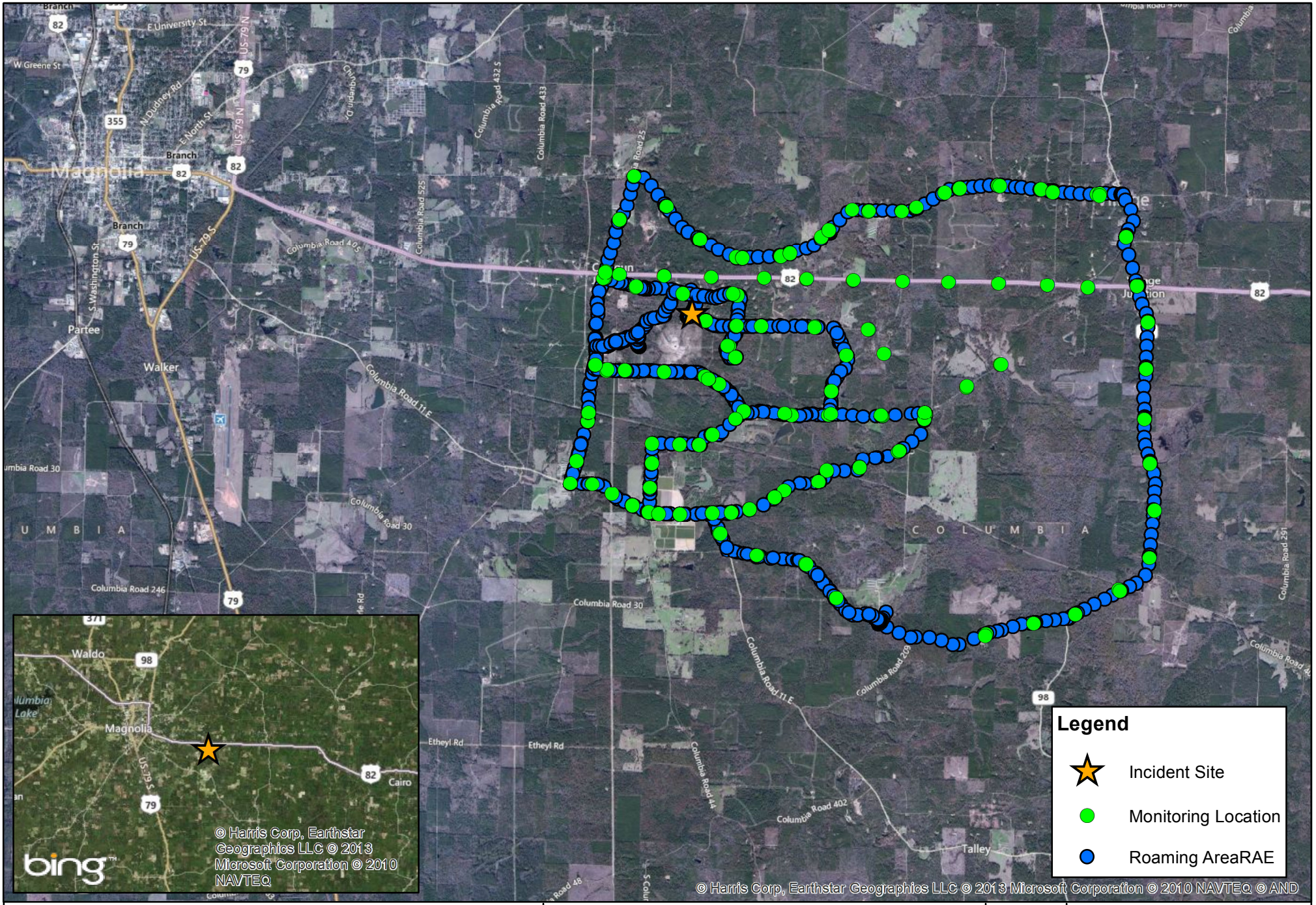
CTEH®

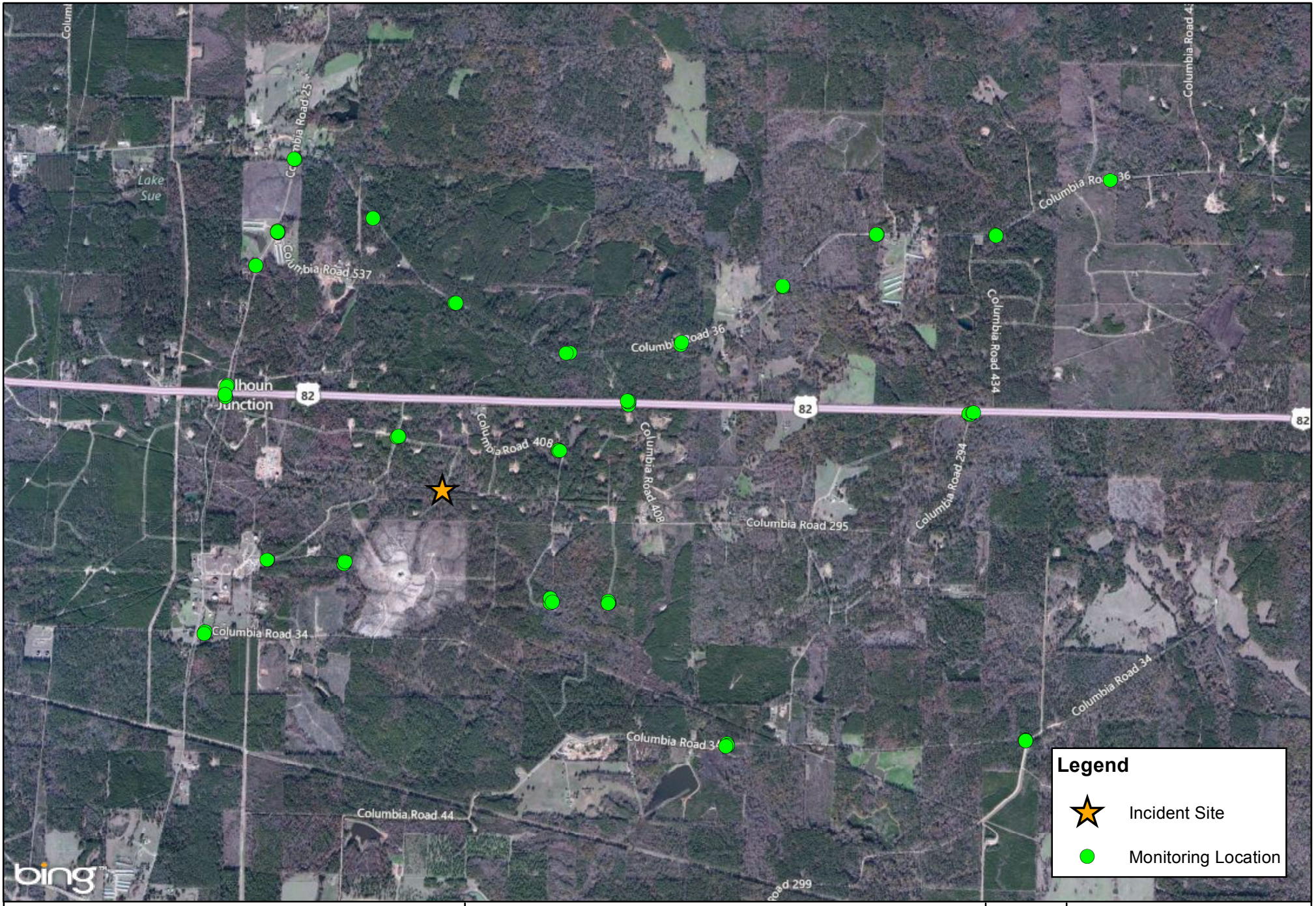
Project No.
40432

Delek US Holdings
Magnolia, AR
Columbia County
Print Date: 3/18/2013



Manually Logged Real-Time and Roaming AreaRAE Monitoring Locations
March 19, 2013

CTEH®	Delek US Holdings
Project No. 40432	Magnolia, AR
	Columbia County
	Print Date: 3/19/2013



Manually Logged Real-Time Monitoring Locations

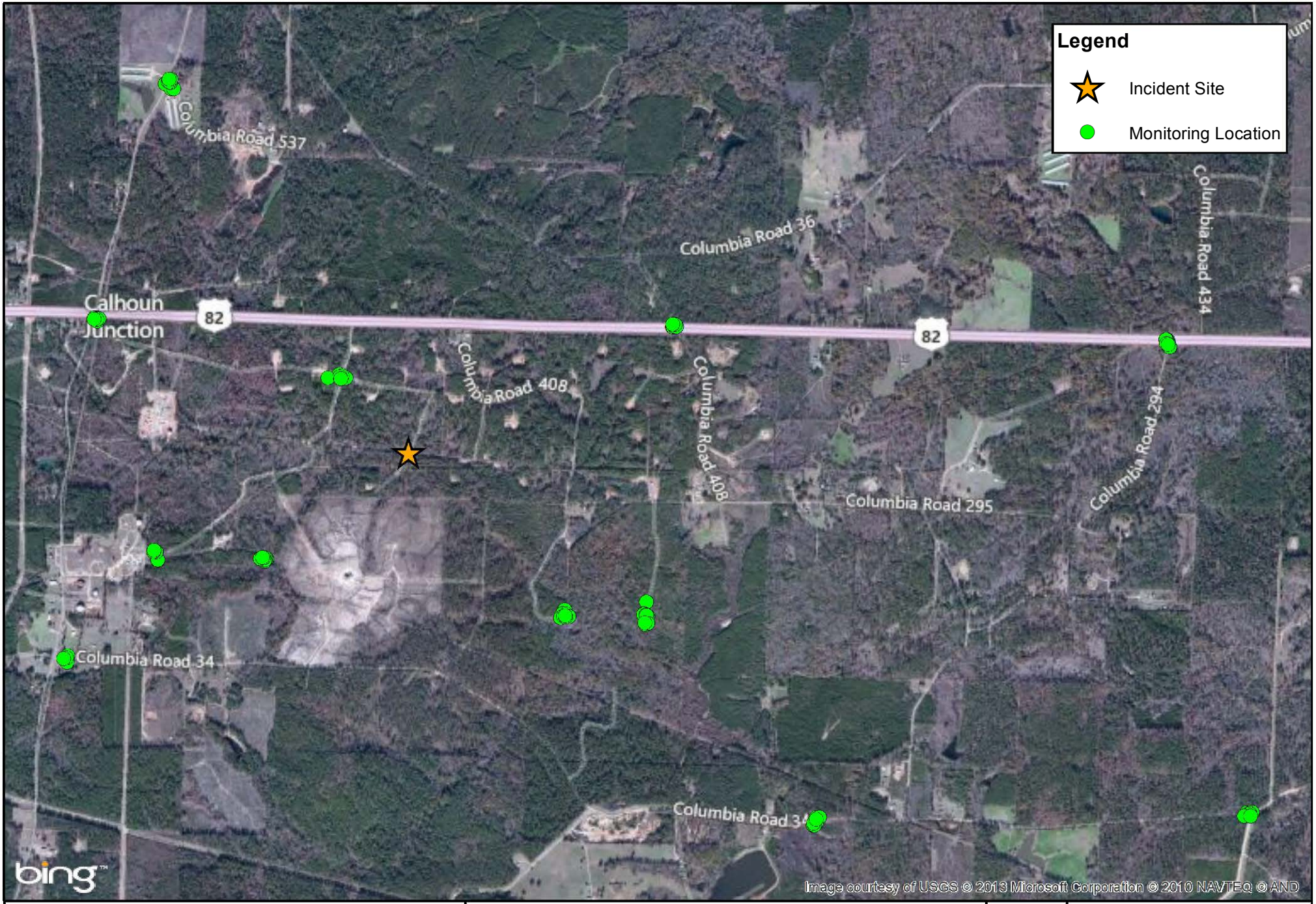
March 20, 2013

0 0.25 0.5 1 1.5 2

Miles

N

CTEH®	Delek US Holdings
	Magnolia, AR
Project No. 40432	Columbia County
	Print Date: 3/21/2013



Manually Logged Real-Time Monitoring Locations

March 21, 2013

0 0.175 0.35 0.7 1.05 1.4

Miles

N

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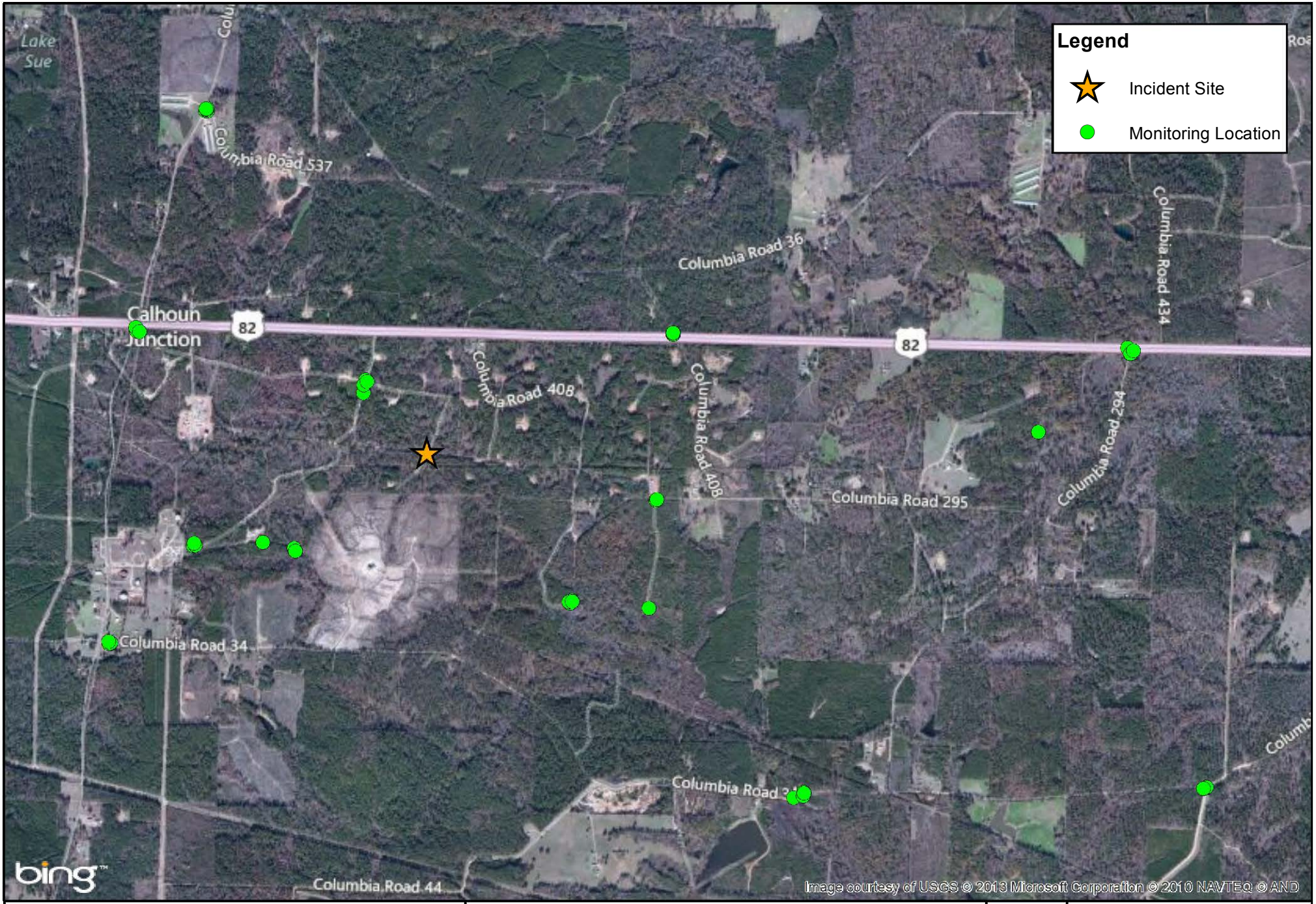
Project No. 40432

Delek US Holdings

Magnolia, AR

Columbia County

Print Date: 3/22/2013



Manually Logged Real-Time Monitoring Locations

March 22, 2013

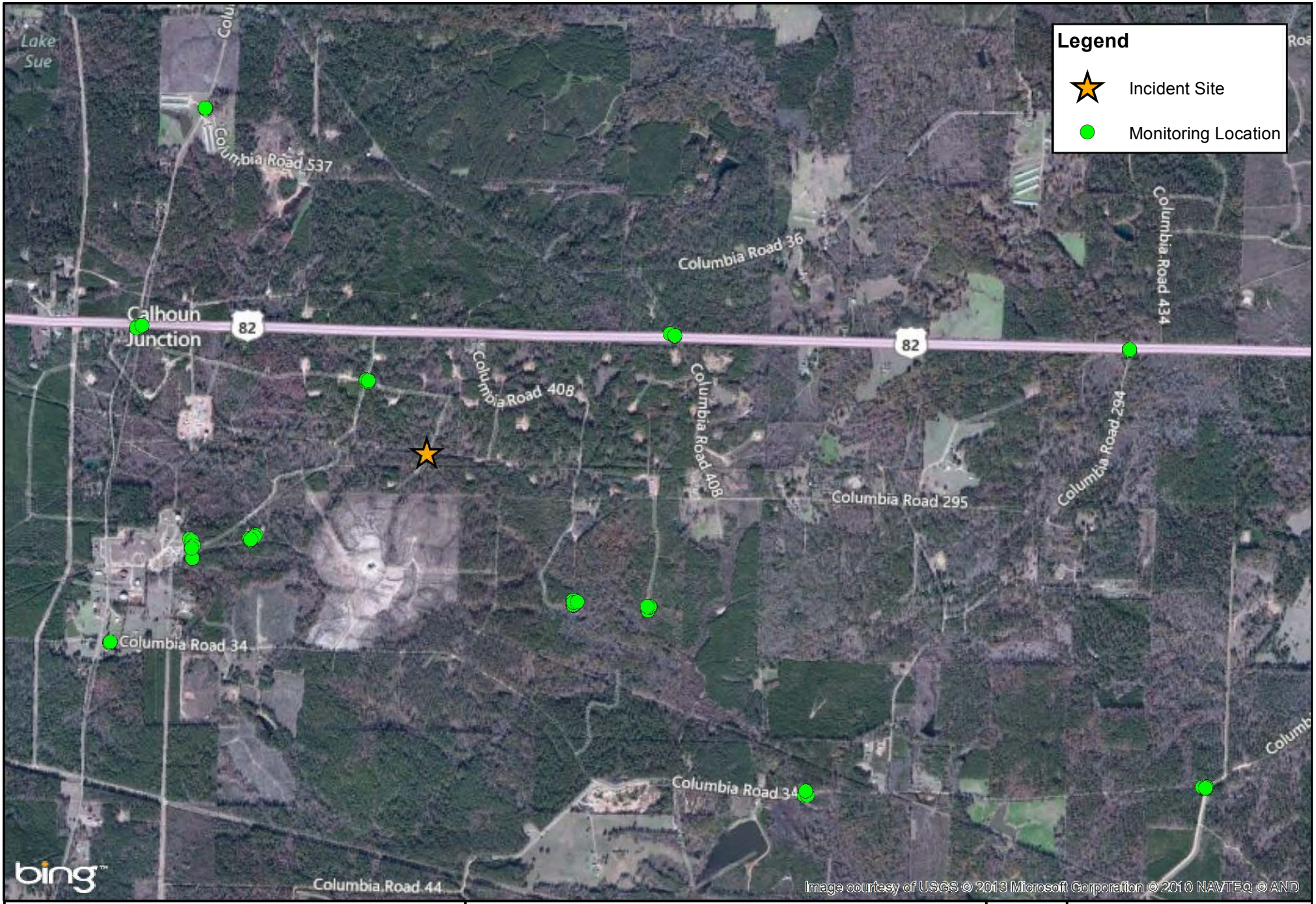
0 0.125 0.25 0.5 0.75 1 1.25 1.5

Miles

N

CTEH®

Project No.	40432
	Delek US Holdings
	Magnolia, AR
	Columbia County
	Print Date: 3/25/2013



Manually Logged Real-Time Monitoring Locations

March 23, 2013

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Miles

N

CTEH®

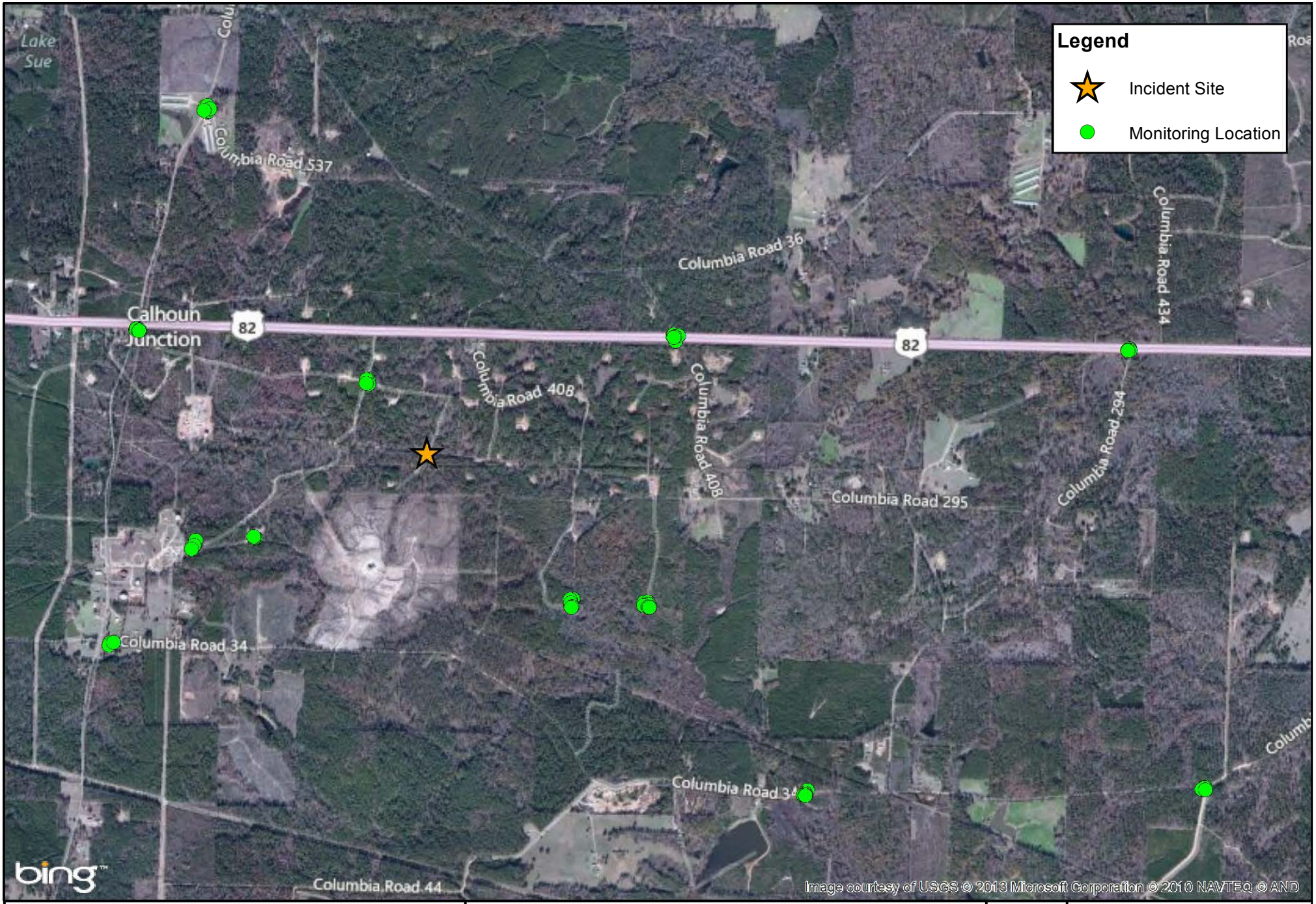
Project No. 40432

Delek US Holdings

Magnolia, AR

Columbia County

Print Date: 3/25/2013



Manually Logged Real-Time Monitoring Locations

March 24, 2013

0 0.125 0.25 0.5 0.75 1 1.25 1.5

Miles

N

CTEH®

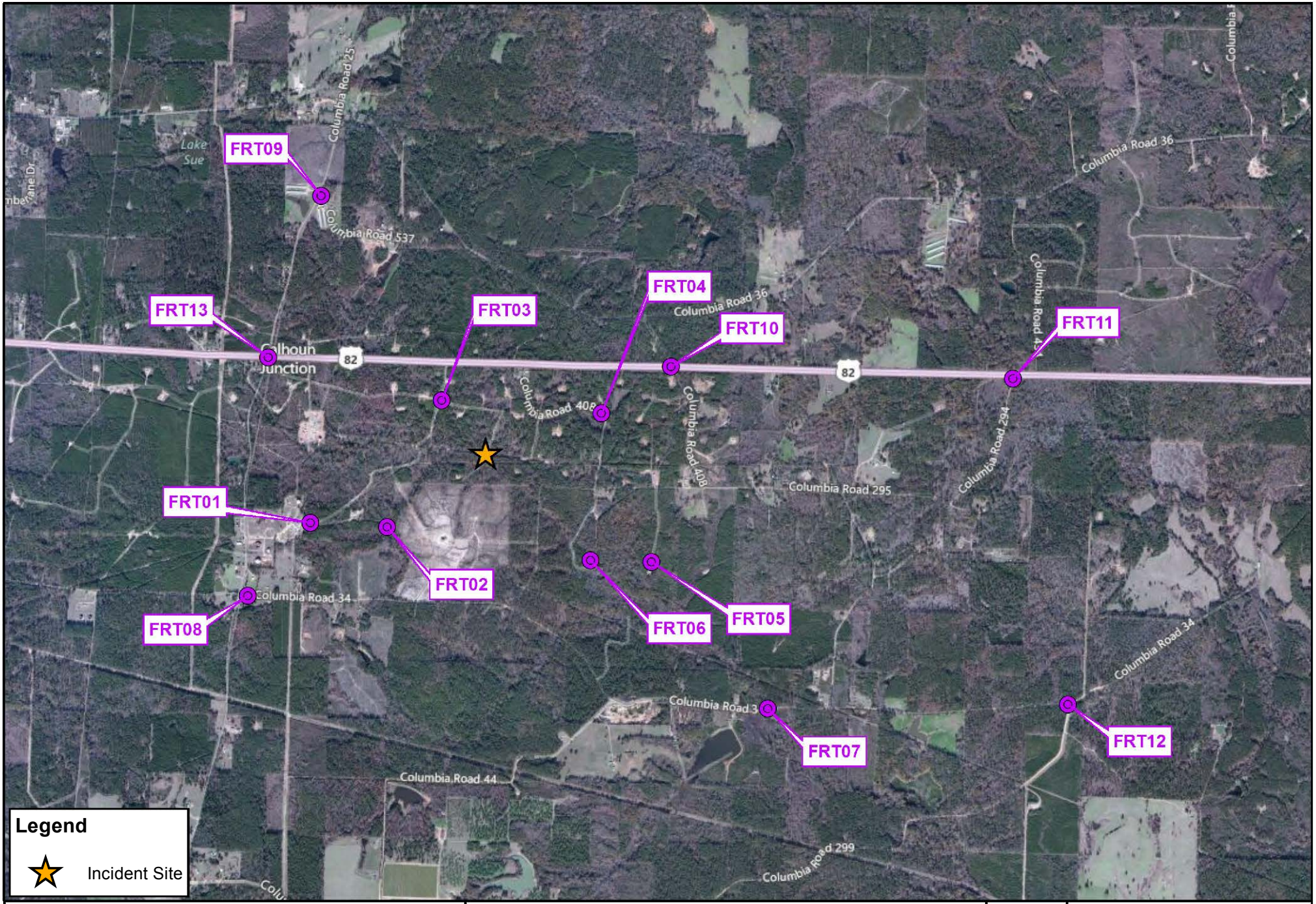
Project No. 40432

Delek US Holdings

Magnolia, AR

Columbia County

Print Date: 3/25/2013



Community Fixed Real-Time Monitoring Locations

March 20, 2013

0 0.25 0.5 1 1.5 2

Miles

N

CTEH®

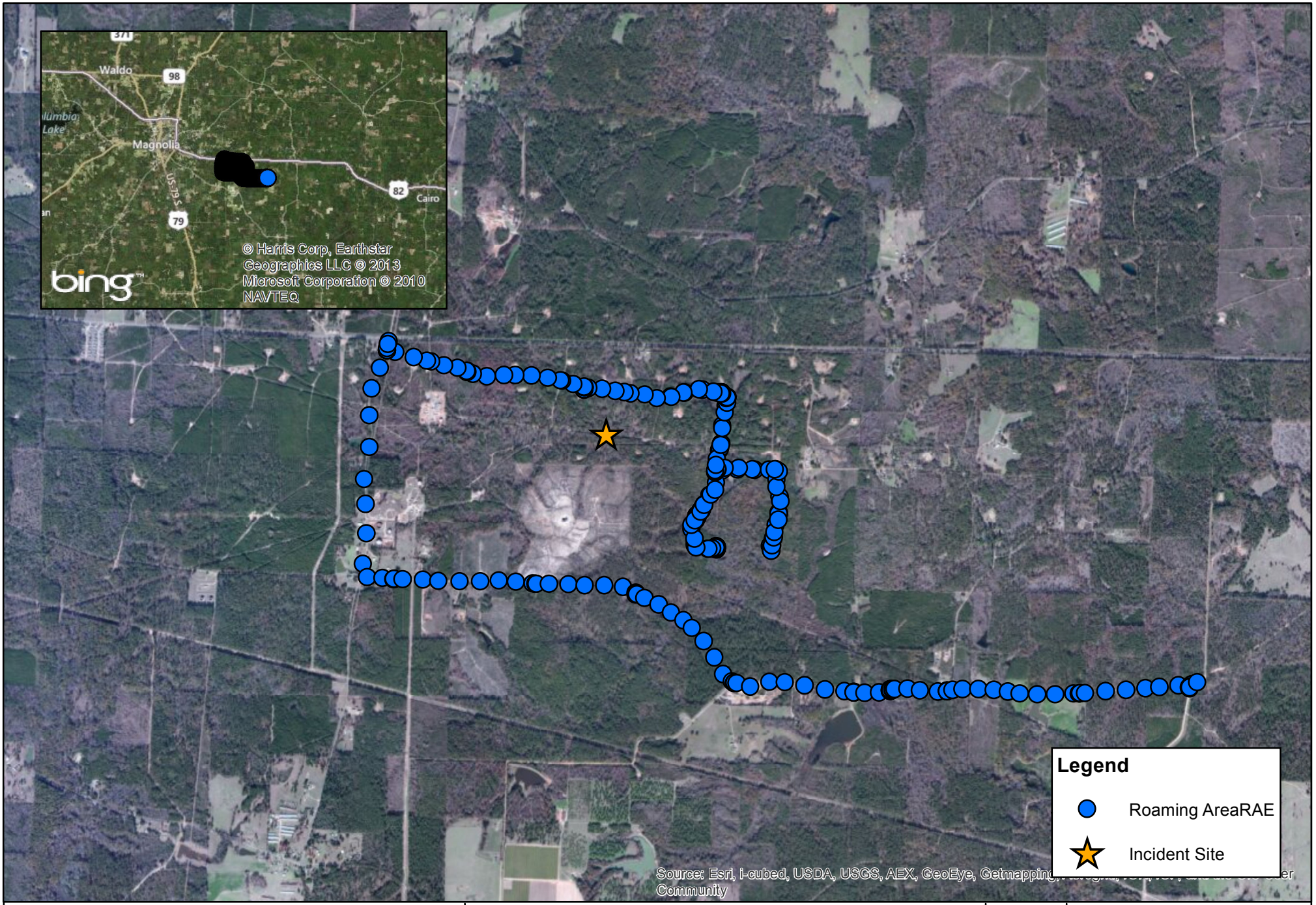
Project No. 40432

Delek US Holdings

Magnolia, AR

Columbia County

Print Date: 3/21/2013



Roaming AreaRAE Monitoring Locations

March 18, 2013

0 0.2 0.4 0.8 1.2 1.6 2

Miles

N

CTEH®

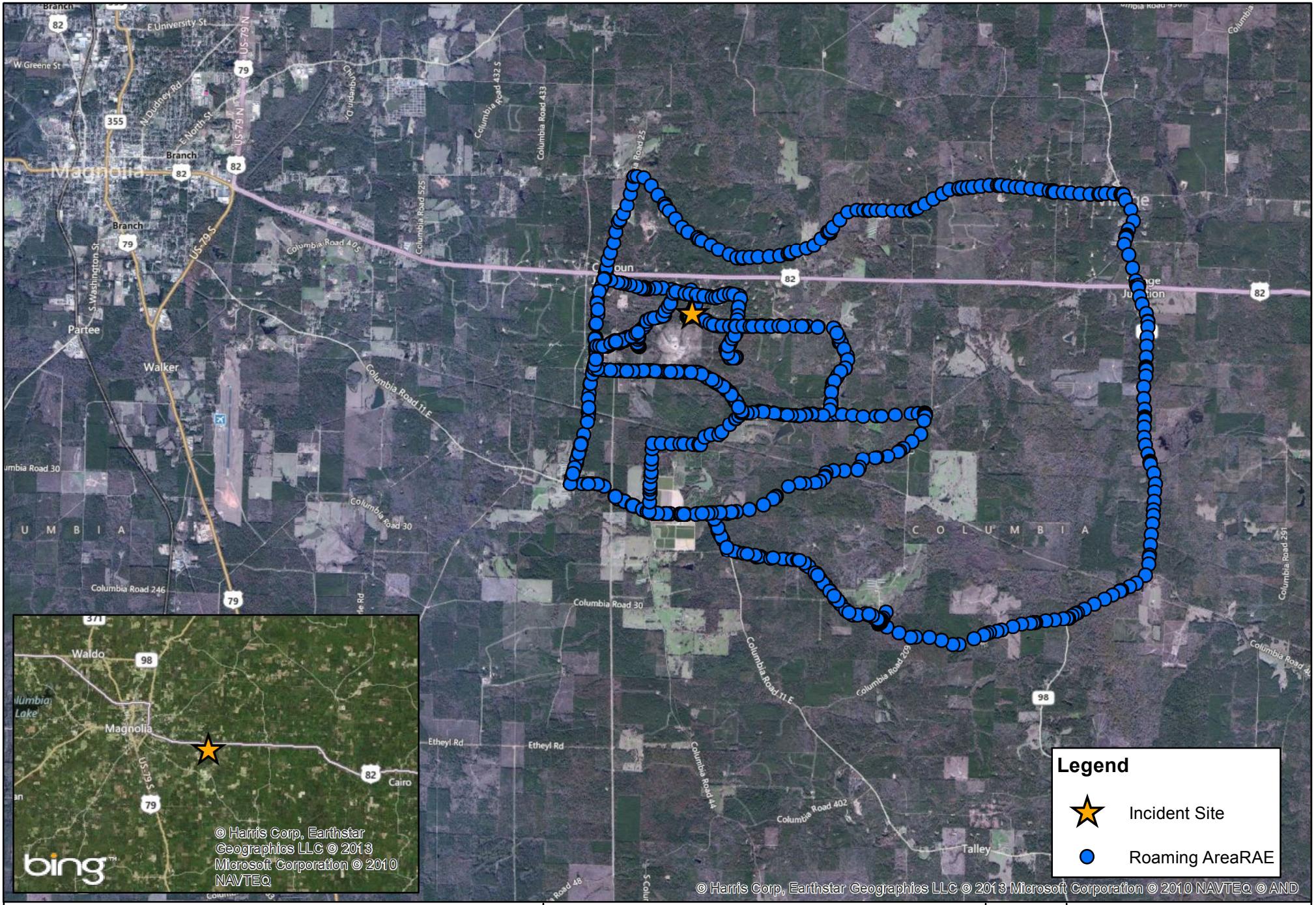
Project No. 40432

Delek US Holdings

Magnolia, AR

Columbia County

Print Date: 3/19/2013



Roaming AreaRAE Monitoring Locations
March 19, 2013

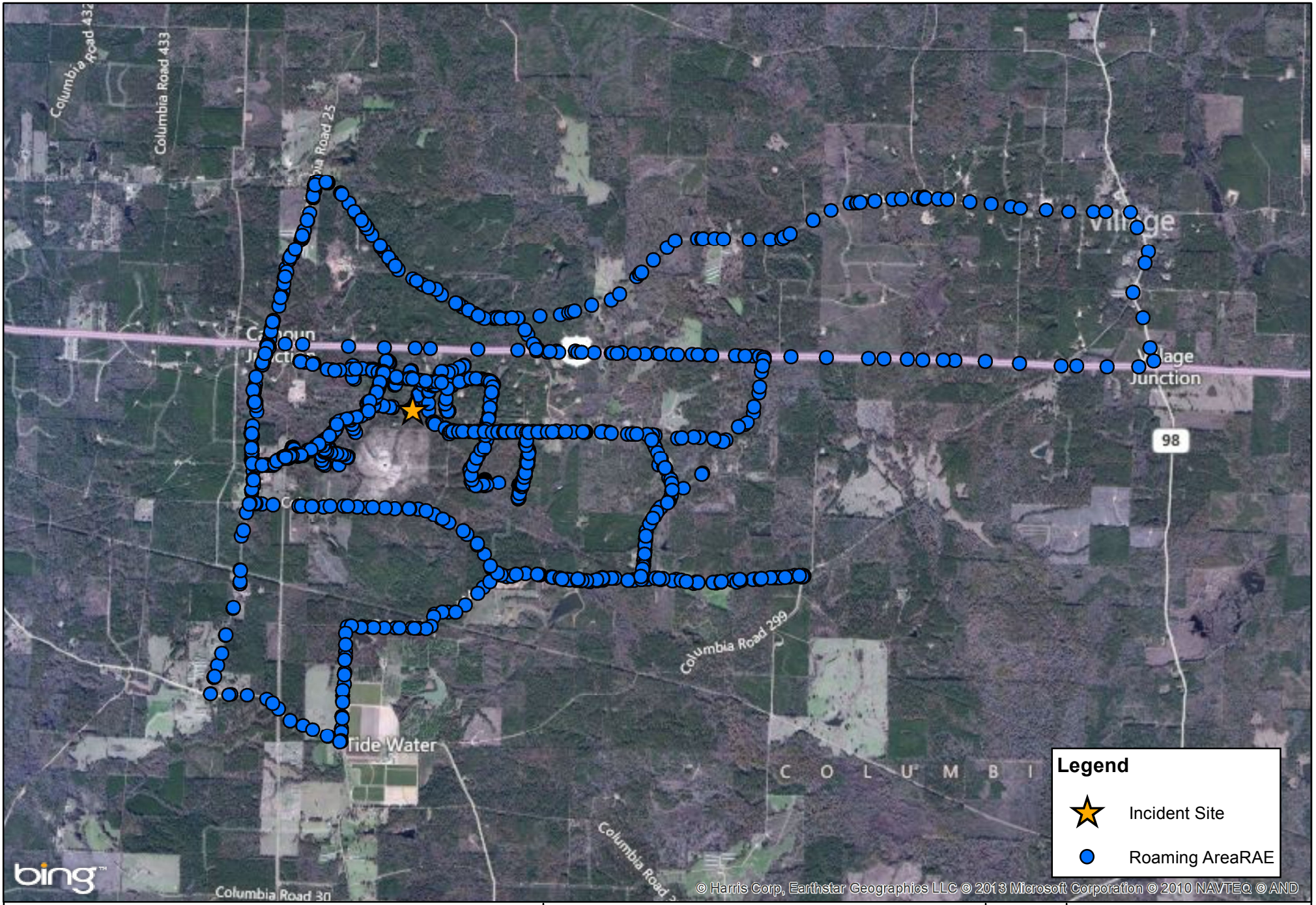
0 0.5 1 2 3 4
Miles

N

CTEH®

Project No.
40432

Delek US Holdings
Magnolia, AR
Columbia County
Print Date: 3/19/2013



Roaming AreaRAE
Monitoring Locations
March 20, 2013

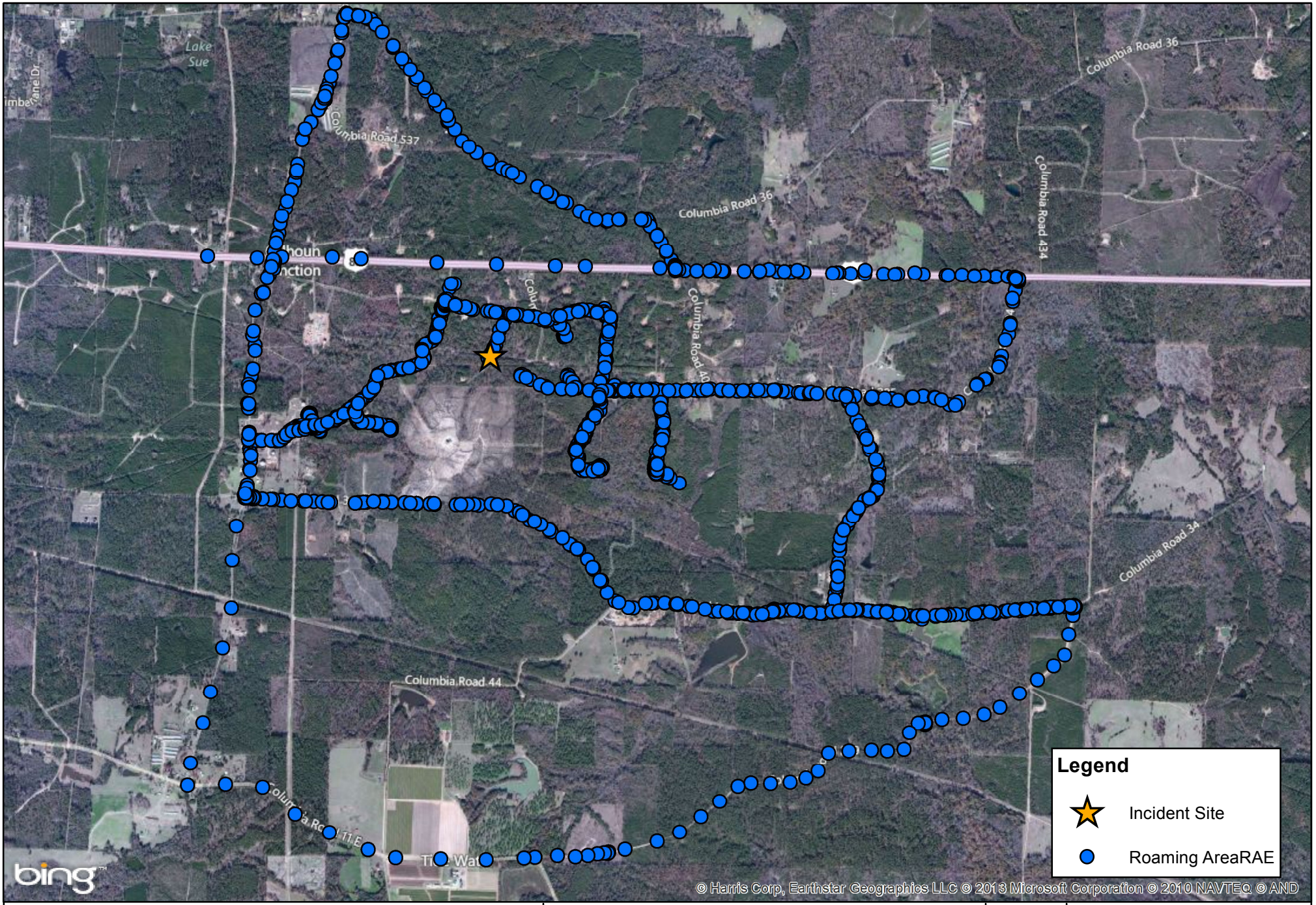
0 0.3 0.6 1.2 1.8 2.4
Miles

N

CTEH®

Project No.
40432

Delek US Holdings
Magnolia, AR
Columbia County
Print Date: 3/21/2013



Roaming AreaRAE
Monitoring Locations
March 21, 2013

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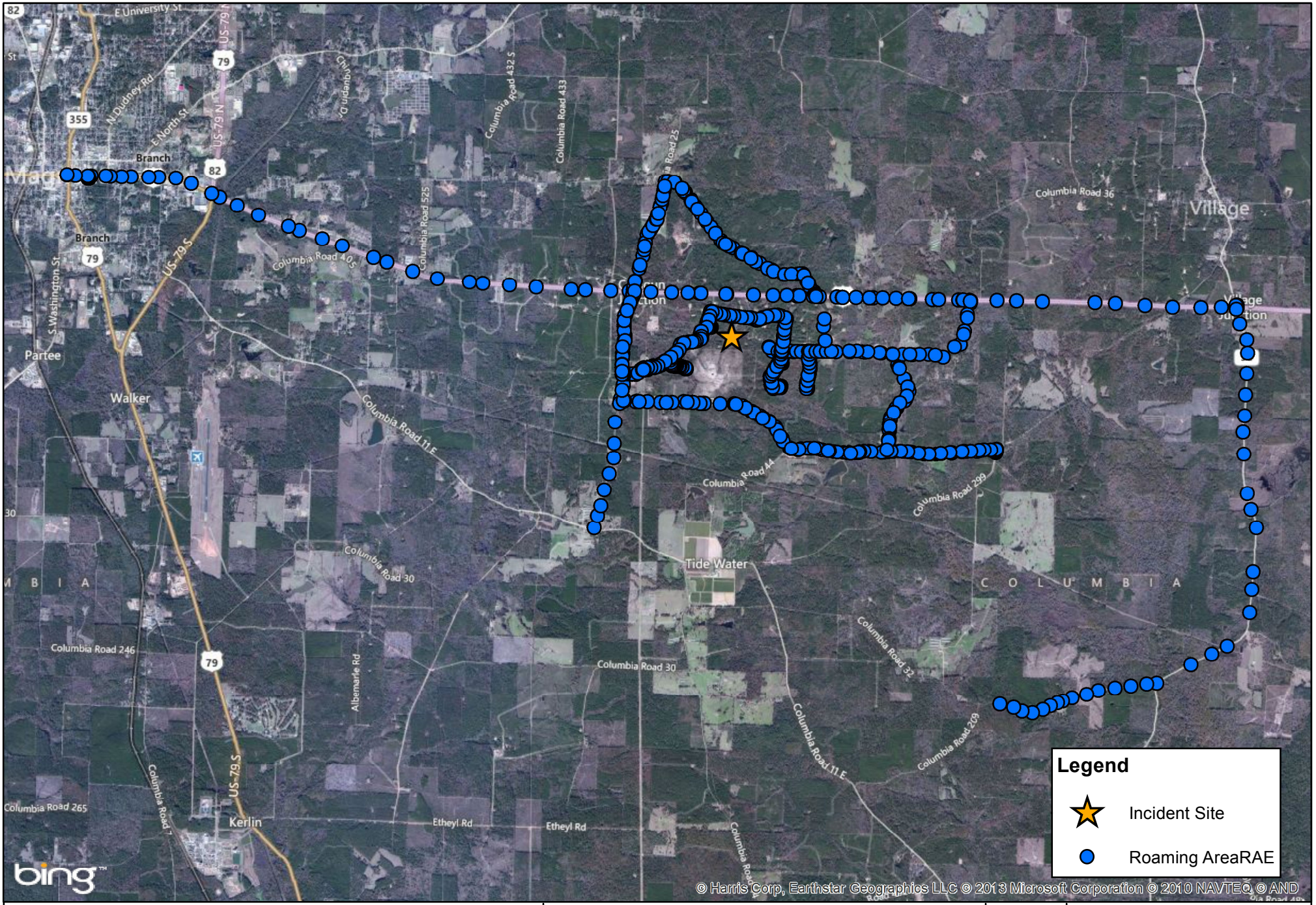
Miles

N

CTEH®

Project No.
40432

Delek US Holdings
Magnolia, AR
Columbia County
Print Date: 3/22/2013



Roaming AreaRAE Monitoring Locations

March 22, 2013

0 0.25 0.5 1 1.5 2 2.5 3

Miles

N

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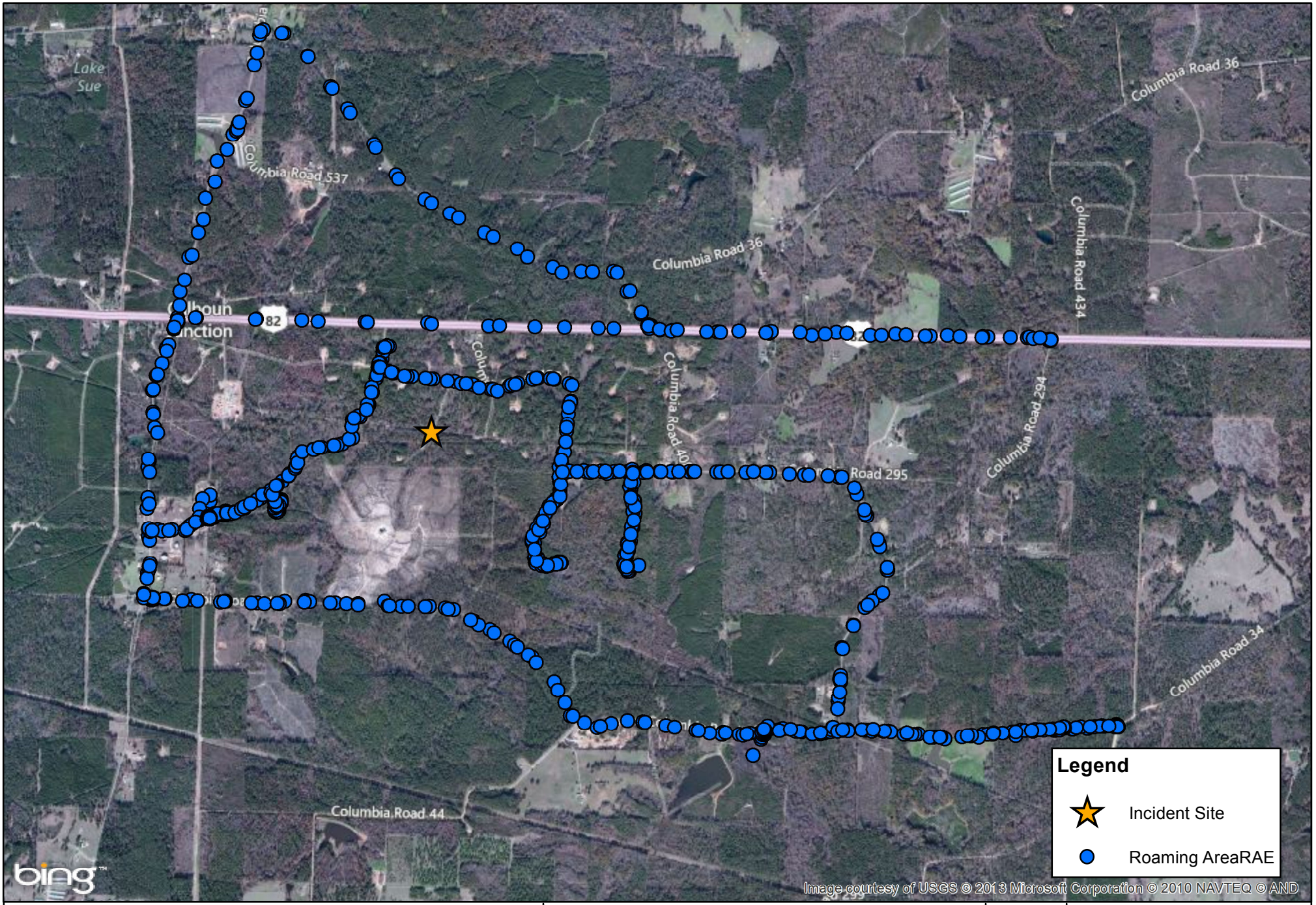
Project No.	40432
	Delek US Holdings
	Magnolia, AR
	Columbia County
	Print Date: 3/25/2013



Roaming AreaRAE
Monitoring Locations
March 23, 2013

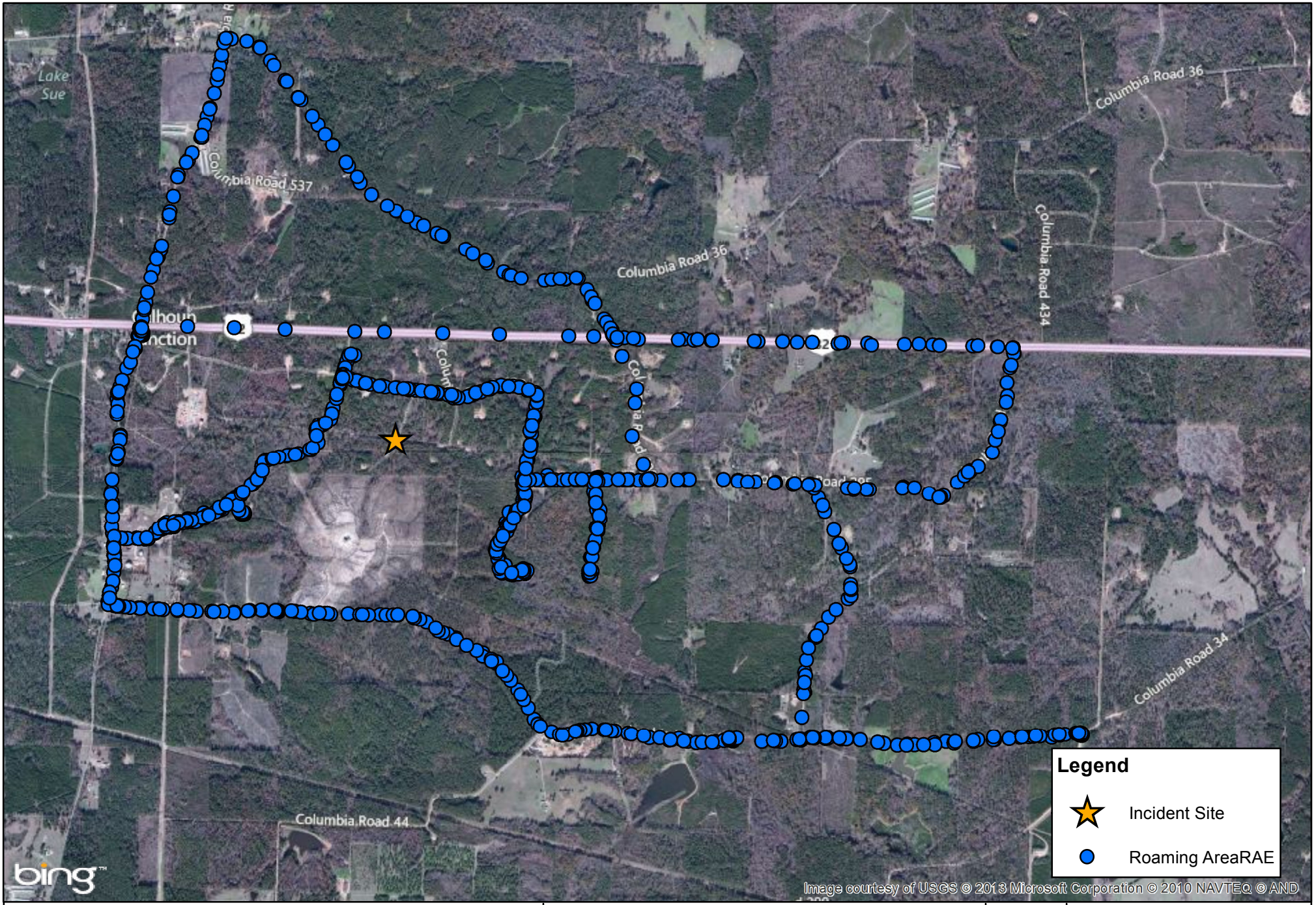
0 0.125 0.25 0.5 0.75 1 1.25
Miles

N

CTEH®

Project No.
40432

Delek US Holdings
Magnolia, AR
Columbia County
Print Date: 3/25/2013



Roaming AreaRAE Monitoring Locations
March 24, 2013

0 0.125 0.25 0.5 0.75 1 1.25
Miles

N

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Project No.	40432
	Delek US Holdings
	Magnolia, AR
	Columbia County
	Print Date: 3/25/2013

ATTACHMENT H - MANUALLY-LOGGED REAL-TIME DATA

Community Manually-Logged Real-Time Data Summary

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/16/2013	9:05 AM	Community	at the TAS command entrance	33.242364	-93.142414	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Workers present;	Rich Shaver
3/16/2013	9:11 AM	Community	at the tas command entrance	33.242348	-93.142459	MultiRAE	O2	20.9	%	No odor; No Visible Oil; Workers not present;	Rich Shaver
3/16/2013	9:15 AM	Community	at the TAS command entrance	33.242344	-93.142509	MultiRAE	LEL	<1	%	No odor; No Visible Oil; Workers present;	Rich Shaver
3/16/2013	9:23 AM	Community	on the road heading towards the spill site	33.242428	-93.142543	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Workers not present;	Rich Shaver
3/16/2013	9:26 AM	Community	on the road heading to the spill site	33.241986	-93.143125	MultiRAE	O2	20.9	%	No odor; No Visible Oil; No work activity; Workers not present;	Rich Shaver
3/16/2013	9:27 AM	Community	on the road heading to the spill site	33.241986	-93.143125	MultiRAE	LEL	<1	%	No odor; No Visible Oil; No work activity; Workers not present;	Rich Shaver
3/16/2013	9:28 AM	Community	heading to the spill site	33.241954	-93.143142	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Workers not present;	Rich Shaver
3/16/2013	9:31 AM	Community	by the guard shack at the main entrance to the site	33.240305	-93.149414	MultiRAE	LEL	<1	%	No odor; No Visible Oil; Workers present; Up wind;	Rich Shaver
3/16/2013	9:38 AM	Community	at the main entrance to the site	33.240322	-93.149348	MultiRAE	O2	20.9	%	No odor; No Visible Oil; Workers present; Up wind;	Rich Shaver
3/16/2013	9:39 AM	Community	at the main entrance to the site	33.240323	-93.149352	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Workers present; Up wind;	Rich Shaver
3/16/2013	9:41 AM	Community	at the main entrance	33.240375	-93.149366	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Workers present; Up wind;	Rich Shaver

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/16/2013	9:46 AM	Community	near the spill site and near the big storage tanks	33.240337	-93.148018	MultiRAE	H2S	<1	ppm	No Visible Oil; Workers present; Up wind; Slight Odor;	Rich Shaver
3/16/2013	9:51 AM	Community	near the spill site and near the big storage tanks	33.240361	-93.148026	MultiRAE	O2	20.9	%	No Visible Oil; Workers present; Up wind; Slight Odor;	Rich Shaver
3/16/2013	9:53 AM	Community	by the storage tanks			MultiRAE	LEL	<1	%	No Visible Oil; Workers present; Up wind;	Rich Shaver
3/16/2013	9:55 AM	Community	by the big storage tanks	33.240341	-93.148024	MultiRAE	VOC	<0.1	ppm	No Visible Oil; Workers present; Up wind;	Rich Shaver
3/16/2013	10:15 AM	Community	near the main entrance to the site on county road 25	33.240069	-93.150164	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Workers not present; Up wind;	Rich Shaver
3/16/2013	10:17 AM	Community	near the main entrance to the site on county road 25	33.240069	-93.150164	MultiRAE	O2	20.9	%	No odor; No Visible Oil; No work activity; Workers not present; Up wind;	Rich Shaver
3/16/2013	10:18 AM	Community	near the main entrance to the site on Columbia road 25	33.240078	-93.150154	MultiRAE	LEL	<1	%	No odor; No Visible Oil; No work activity; Workers not present; Up wind;	Rich Shaver
3/16/2013	10:20 AM	Community	near the main entrance to the site on Columbia road 25	33.240078	-93.150154	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Workers not present; Up wind;	Rich Shaver
3/16/2013	10:23 AM	Community	by 755 Columbia road 25	33.239081	-93.150086	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Workers not present; Up wind;	Rich Shaver
3/16/2013	10:24 AM	Community	by 755 Columbia road 25	33.238965	-93.14997	MultiRAE	LEL	<1	%	No odor; No Visible Oil; Residence; No work activity; Workers not present; Up wind;	Rich Shaver
3/16/2013	10:26 AM	Community	by 755 Columbia road 25	33.238977	-93.150003	MultiRAE	O2	20.9	%	No odor; No Visible Oil; Residence; No work activity; Workers not present; Up wind;	Rich Shaver

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/16/2013	10:27 AM	Community	by 755 Columbia road 25	33.238977	-93.150003	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Workers not present; Up wind;	Rich Shaver
3/16/2013	10:31 AM	Community	by 751 columbia road 25	33.237452	-93.150467	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Workers not present; Up wind;	Rich Shaver
3/16/2013	10:34 AM	Community	by 751 Columbia road 25	33.23738	-93.150384	MultiRAE	LEL	<1	%	No odor; No Visible Oil; Residence; No work activity; Workers not present; Up wind;	Rich Shaver
3/16/2013	10:35 AM	Community	by 751 Columbia road 25	33.237374	-93.150323	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Workers not present; Up wind;	Rich Shaver
3/16/2013	10:43 AM	Community	by 751 Columbia road 25	33.237389	-93.150339	Gastec - #121L	Benzene	<0.05	ppm	No odor; No Visible Oil; Residence; No work activity; Workers not present; Up wind; tube number 121L the reading that was taken was a non detect	Rich Shaver
3/16/2013	11:02 AM	Community	at the intersection of Columbia 295 and 234	33.229838	-93.107652	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; Down wind;	Rich Shaver
3/16/2013	11:04 AM	Community	at the intersection of Columbia 295 and 234	33.229839	-93.107649	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Workers not present; Down wind;	Rich Shaver
3/16/2013	11:08 AM	Community	on Columbia road 295	33.233599	-93.107062	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Workers not present; Down wind;	Rich Shaver
3/16/2013	11:09 AM	Community	on Columbia road 295	33.233586	-93.107025	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Workers not present; Down wind;	Rich Shaver
3/16/2013	11:10 AM	Community	on Columbia road 295	33.233585	-93.107025	Gastec - #121L	Benzene	<0.05	ppm	No odor; No Visible Oil; Residence; No work activity; Workers not present; Down wind; tube number 121L the reading that was entered is a non detect	Rich Shaver
3/16/2013	11:22 AM	Community	on Columbia road 295	33.236512	-93.105456	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Workers not present; Down wind;	Rich Shaver

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/16/2013	11:24 AM	Community	on Columbia road 295	33.236506	-93.105458	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Workers not present; Down wind;	Rich Shaver
3/16/2013	11:28 AM	Community	on Columbia road 295	33.24109	-93.105486	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Workers not present; Down wind;	Rich Shaver
3/16/2013	11:28 AM	Community	on Columbia road 295	33.241093	-93.105474	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Workers not present; Down wind;	Rich Shaver
3/16/2013	11:30 AM	Community	on Columbia road 295	33.242957	-93.104393	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Workers not present; Down wind;	Rich Shaver
3/16/2013	11:31 AM	Community	on Columbia road 295	33.242958	-93.104392	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Workers not present; Down wind;	Rich Shaver
3/16/2013	11:33 AM	Community	on columbia road 295	33.242713	-93.099492	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Workers not present; Down wind;	Rich Shaver
3/16/2013	11:34 AM	Community	on Columbia road 295	33.24271	-93.099488	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Workers not present; Down wind;	Rich Shaver
3/16/2013	11:38 AM	Community	near 550 and 551 Columbia road 295	33.239784	-93.097074	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Workers not present; Down wind;	Rich Shaver
3/16/2013	11:39 AM	Community	near 550 and 551 Columbia road 295	33.239785	-93.097075	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Workers not present; Down wind;	Rich Shaver
3/16/2013	11:42 AM	Community	on Columbia road 295	33.239254	-93.101387	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Workers not present; Down wind;	Rich Shaver
3/16/2013	11:43 AM	Community	on Columbia road 295	33.239254	-93.101385	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Workers not present; Down wind;	Rich Shaver
3/16/2013	11:46 AM	Community	near 248 Columbia road 295	33.236412	-93.105611	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Workers not present; Down wind;	Rich Shaver
3/16/2013	11:47 AM	Community	near 248 Columbia road 295	33.236414	-93.105618	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Workers not present; Down wind;	Rich Shaver

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/16/2013	11:54 AM	Community	on Columbia road 295	33.243412	-93.120495	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Down wind;	Rich Shaver
3/16/2013	11:55 AM	Community	on Columbia road 295	33.236414	-93.105618	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Down wind;	Rich Shaver
3/16/2013	12:56 PM	Community	on the side of hwy 82	33.251369	-93.14526	MultiRAE	H2S	<1	ppm	No odor; Up wind;	Rich Shaver
3/16/2013	12:59 PM	Community	on the side of hwy 82	33.251332	-93.145236	MultiRAE	VOC	<0.1	ppm	No odor; Up wind;	Rich Shaver
3/16/2013	1:04 PM	Community	on the side of hwy 82	33.251332	-93.145236	MultiRAE	H2S	<1	ppm	No odor; Up wind;	Rich Shaver
3/16/2013	1:05 PM	Community	on the side of hwy82	33.251154	-93.136495	MultiRAE	VOC	<0.1	ppm	No odor; Up wind;	Rich Shaver
3/16/2013	1:09 PM	Community	on the side of hwy 82	33.250893	-93.124474	MultiRAE	H2S	<1	ppm	No odor; Up wind;	Rich Shaver
3/16/2013	1:11 PM	Community	on the side of hwy 82	33.250812	-93.124454	MultiRAE	VOC	<0.1	ppm	No odor; Up wind;	Rich Shaver
3/16/2013	1:18 PM	Community	on the side of hwy 82	33.250601	-93.11374	MultiRAE	VOC	<0.1	ppm	No odor; Down wind;	Rich Shaver
3/16/2013	1:19 PM	Community	on the side of hwy 82	33.250602	-93.113738	MultiRAE	H2S	<1	ppm	No odor; Down wind;	Rich Shaver
3/16/2013	1:22 PM	Community	on the side of hwy 82	33.250495	-93.103328	MultiRAE	H2S	<1	ppm	No odor; Down wind;	Rich Shaver
3/16/2013	1:23 PM	Community	on the side of hwy 82	33.250432	-93.103328	MultiRAE	VOC	<0.1	ppm	No odor; Down wind;	Rich Shaver
3/16/2013	1:28 PM	Community	at the intersection of Columbia road and hwy 82			MultiRAE	H2S	<1	ppm	No odor; Down wind;	Rich Shaver
3/16/2013	1:29 PM	Community	at the inter section of hwy 82 and Columbia road 294	33.250379	-93.094219	MultiRAE	VOC	<0.1	ppm	No odor; Down wind;	Rich Shaver
3/16/2013	1:32 PM	Community	on Columbia road 434	33.251766	-93.092533	MultiRAE	VOC	<0.1	ppm	No odor; Down wind;	Rich Shaver

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/16/2013	1:34 PM	Community	on Columbia road 434	33.25185	-93.092379	MultiRAE	H2S	<1	ppm	No odor;	Rich Shaver
3/16/2013	1:37 PM	Community	on Columbia road 434	33.254308	-93.092393	MultiRAE	VOC	<0.1	ppm	No odor;	Rich Shaver
3/16/2013	1:38 PM	Community	on Columbia road 434 north of the incident site	33.254301	-93.092419	MultiRAE	H2S	<1	ppm	No odor;	Rich Shaver
3/16/2013	1:42 PM	Community	on Columbia road 434	33.257232	-93.092807	Gastec - #121L	Benzene	<0.05	ppm	No odor; tube number 121L and the reading was a nondetect	Rich Shaver
3/16/2013	1:47 PM	Community	on Columbia road 434	33.257444	-93.092832	MultiRAE	H2S	<1	ppm	No odor;	Rich Shaver
3/16/2013	1:47 PM	Community	on Columbia road 434	33.257444	-93.092832	MultiRAE	VOC	<0.1	ppm	No odor;	Rich Shaver
3/16/2013	1:51 PM	Community	at the intersection of Columbia 434 and 36	33.257444	-93.092832	MultiRAE	H2S	<1	ppm	No odor;	Rich Shaver
3/16/2013	1:52 PM	Community	at the intersection of Columbia 434 and 36	33.260954	-93.09385	MultiRAE	VOC	<0.1	ppm	No odor;	Rich Shaver
3/16/2013	1:56 PM	Community	on Columbia road 36	33.261095	-93.101124	MultiRAE	H2S	<1	ppm	No odor;	Rich Shaver
3/16/2013	1:57 PM	Community	on Columbia road 36	33.26119	-93.101089	MultiRAE	VOC	<0.1	ppm	No odor;	Rich Shaver
3/16/2013	2:00 PM	Community	near a bridge on Columbia road 36	33.257273	-93.108475	MultiRAE	H2S	<1	ppm	No odor;	Rich Shaver
3/16/2013	2:01 PM	Community	by a bridge on Columbia road 36	33.257217	-93.108506	MultiRAE	VOC	<0.1	ppm	No odor;	Rich Shaver
3/16/2013	2:20 PM	Community	Columbia rd 36 residence 3287	33.25383	-93.12196	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; Slight breeze	Reagan Moore
3/16/2013	2:20 PM	Community	Columbia rd 36 residence 3287	33.25383	-93.12196	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/16/2013	2:23 PM	Community	Columbia rd 36 headed NE	33.253636	-93.12474	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	2:23 PM	Community	Columbia rd 36 headed NE	33.253636	-93.12474	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	2:23 PM	Community	Columbia rd 36 headed NE	33.255516	-93.128714	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	2:23 PM	Community	Columbia rd 36 headed NE	33.255473	-93.128754	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	2:23 PM	Community	Columbia rd 36 headed NE	33.257901	-93.13412	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	2:23 PM	Community	Columbia rd 36 headed NE	33.257901	-93.13412	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	2:23 PM	Community	Columbia rd 36 headed NE	33.265085	-93.140356	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	2:23 PM	Community	Columbia rd 36 headed NE	33.265085	-93.140356	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	2:37 PM	Community	Columbia RD 25 headed North	33.264478	-93.143592	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	2:37 PM	Community	Columbia RD 25 headed North	33.253539	-93.147903	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	2:37 PM	Community	Columbia RD 25 headed North	33.25354	-93.147903	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	2:37 PM	Community	Columbia RD 25 headed North	33.259462	-93.145856	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	2:37 PM	Community	Columbia RD 25 headed North	33.264478	-93.143592	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	2:37 PM	Community	Columbia RD 25 headed North	33.259462	-93.145856	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	2:46 PM	Community	Columbia RD 25 headed north	33.249641	-93.148939	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	2:46 PM	Community	Columbia RD 25 headed north	33.249641	-93.148939	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	3:07 PM	Community	Columbia rd 25 headed North	33.225874	-93.152542	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/16/2013	3:07 PM	Community	Columbia rd 25 headed North	33.219444	-93.154715	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	3:07 PM	Community	Columbia rd 25 headed North	33.238529	-93.150059	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	3:07 PM	Community	Columbia rd 25 headed North	33.238529	-93.150059	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	3:07 PM	Community	Columbia rd 25 headed North	33.232512	-93.151312	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	3:07 PM	Community	Columbia rd 25 headed North	33.232512	-93.151312	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	3:07 PM	Community	Columbia rd 25 headed North	33.225874	-93.152542	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	3:07 PM	Community	Columbia rd 25 headed North	33.219446	-93.154715	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	3:20 PM	Community	Columbia Ed 11 E headed East	33.216051	-93.143514	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	3:20 PM	Community	Columbia Ed 11 E headed East	33.214651	-93.134302	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Business; No work activity; Slight breeze	Reagan Moore
3/16/2013	3:20 PM	Community	Columbia Ed 11 E headed East	33.216051	-93.143515	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	3:20 PM	Community	Columbia Ed 11 E	33.212862	-93.127943	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	3:20 PM	Community	Columbia Ed 11 E headed East	33.214651	-93.134301	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Business; No work activity; Slight breeze	Reagan Moore
3/16/2013	3:20 PM	Community	Columbia Ed 11 E	33.212862	-93.127943	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	3:20 PM	Community	Columbia Ed 11 E headed East	33.219135	-93.149063	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	3:20 PM	Community	Columbia Ed 11 E headed East	33.219135	-93.149063	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	3:23 PM	Community	Columbia 44 county Rd headed SE	33.212305	-93.139841	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/16/2013	3:23 PM	Community	Columbia 44 county Rd headed SE	33.212305	-93.139841	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	3:33 PM	Community	County RD 299 headed NE	33.220621	-93.108174	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	3:33 PM	Community	County RD 299 headed NE	33.227628	-93.090494	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	3:33 PM	Community	County RD 299 headed NE	33.227628	-93.090494	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	3:33 PM	Community	County RD 299 headed NE	33.223755	-93.096064	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	3:33 PM	Community	County RD 299 headed NE	33.223755	-93.096064	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	3:33 PM	Community	County RD 299 headed NE	33.221952	-93.101937	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	3:33 PM	Community	County RD 299 headed NE	33.214908	-93.126068	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	3:33 PM	Community	County RD 299 headed NE	33.214908	-93.126068	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	3:33 PM	Community	County RD 299 headed NE	33.219408	-93.114109	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	3:33 PM	Community	County RD 299 headed NE	33.219456	-93.114106	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	3:33 PM	Community	County RD 299 headed NE	33.215924	-93.120248	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	3:33 PM	Community	County RD 299 headed NE	33.215924	-93.120248	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	3:33 PM	Community	County RD 299 headed NE	33.220621	-93.108174	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	3:33 PM	Community	County RD 299 headed NE	33.221952	-93.101937	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	4:00 PM	Community	Columbia Rd 34 headed NW	33.230038	-93.093055	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/16/2013	4:00 PM	Community	Columbia Rd 34 headed NW	33.229753	-93.101663	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	4:00 PM	Community	Columbia Rd 34 headed NW	33.230038	-93.093055	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	4:00 PM	Community	Columbia Rd 34 headed NW	33.229753	-93.101663	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	4:05 PM	Community	County Rd 295 headed East	33.24288	-93.104138	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	4:05 PM	Community	County Rd 295 headed North	33.232958	-93.10692	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	4:05 PM	Community	County Rd 295 headed North	33.239266	-93.104308	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	4:05 PM	Community	County Rd 295 headed East	33.24288	-93.104138	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	4:05 PM	Community	County Rd 295 headed North	33.230559	-93.107527	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	4:05 PM	Community	County Rd 295 headed North	33.230559	-93.107527	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	4:05 PM	Community	County Rd 295 headed North	33.232958	-93.10692	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	4:05 PM	Community	County Rd 295 headed North	33.239266	-93.104308	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	4:25 PM	Community	Columbia RD 34 headed North	33.23633	-93.131189	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	4:25 PM	Community	Columbia RD 25 headed S	33.228782	-93.151506	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Church; No work activity; Slight breeze	Reagan Moore
3/16/2013	4:25 PM	Community	Columbia RD 34 headed North	33.236835	-93.150357	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	4:25 PM	Community	Columbia RD 34 headed North	33.236835	-93.150357	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	4:25 PM	Community	Columbia RD 34 headed North	33.236626	-93.143439	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	4:25 PM	Community	Columbia RD 34 headed North	33.236626	-93.143439	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/16/2013	4:25 PM	Community	Columbia RD 34 headed North	33.236454	-93.137901	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	4:25 PM	Community	Columbia RD 34 headed North	33.236454	-93.137902	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	4:25 PM	Community	Columbia RD 34 headed North	33.236231	-93.131204	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	4:25 PM	Community	Columbia RD 25 headed S	33.228782	-93.151506	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Church; No work activity; Slight breeze	Reagan Moore
3/16/2013	4:25 PM	Community	Columbia RD 34 headed North	33.23633	-93.131189	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	4:25 PM	Community	Columbia RD 34 headed North	33.232061	-93.124738	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	4:25 PM	Community	Columbia RD 34 headed North	33.232082	-93.124703	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	4:25 PM	Community	Columbia RD 34 headed SE	33.230434	-93.119807	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	4:25 PM	Community	Columbia RD 34 headed SE	33.230434	-93.119807	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	4:25 PM	Community	Columbia RD 34 headed SE	33.229989	-93.1111	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	4:25 PM	Community	Columbia RD 34 headed SE	33.229989	-93.1111	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	4:25 PM	Community	Columbia RD 34 headed North	33.236231	-93.131204	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	4:30 PM	Community	in the work area	33.24873	-93.135447	MultiRAE	H2S	<1	ppm	Slight Odor; there is no visible oil but there is a slight odor	Rich Shaver
3/16/2013	5:20 PM	Community	Columbia Rd 44 headed East	33.226907	-93.129939	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	5:20 PM	Community	Columbia Rd 44 headed East	33.22908	-93.124863	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	5:20 PM	Community	Columbia Rd 44 headed East	33.229081	-93.124862	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	5:20 PM	Community	Columbia Rd 44 headed East	33.226907	-93.129937	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/16/2013	5:20 PM	Community	Columbia Rd 44 headed East	33.225489	-93.137538	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	5:20 PM	Community	Columbia Rd 44 headed NE	33.220398	-93.140077	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	5:20 PM	Community	Columbia Rd 44 headed NE	33.220398	-93.140077	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	5:20 PM	Community	Columbia Rd 44 headed East	33.225489	-93.137538	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	6:34 PM	Community	Columbia RD 295 headed north	33.243338	-93.111117	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	6:34 PM	Community	Columbia RD 295 headed north	33.243338	-93.111117	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	6:34 PM	Community	Columbia RD 408 headed north	33.244319	-93.117213	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	6:34 PM	Community	Columbia RD 408 headed north	33.244319	-93.117213	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/16/2013	6:45 PM	Community	Columbia RD 408 meets 82	33.250619	-93.118876	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity;	Reagan Moore
3/16/2013	6:45 PM	Community	Columbia RD 408 meets 82	33.250619	-93.118876	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity;	Reagan Moore
3/16/2013	6:53 PM	Community	Columbia Rd 408 headed North	33.244651	-93.124307	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	6:53 PM	Community	Columbia Rd 408 headed North	33.24783	-93.127786	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	6:53 PM	Community	Columbia Rd 408 headed North	33.244651	-93.124307	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/16/2013	6:53 PM	Community	Columbia Rd 408 headed North	33.24783	-93.127785	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/17/2013	10:09 AM	Community	Columbia RD 295 by oil pump	33.244121	-93.1269	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/17/2013	10:09 AM	Community	Columbia RD 295 by oil pump	33.244119	-93.126861	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/17/2013	10:53 AM	Community	Route to Weir 1	33.240648	-93.125758	MultiRAE	VOC	<0.1	ppm	No odor; Visible Oil; Workers present; Sight of workers on side of the road in the creek	Reagan Moore
3/17/2013	10:54 AM	Community	Route to weir 1	33.240721	-93.125737	MultiRAE	H2S	<1	ppm	No odor; Visible Oil; Workers present; Site of workers on side of the road in the creek	Reagan Moore
3/17/2013	11:09 AM	Community	on the side of Columbia road 25 near the main entrance to the site	33.240614	-93.15014	MultiRAE	H2S	<1	ppm	No odor; Up wind;	Rich Shaver
3/17/2013	11:11 AM	Community	on the side of Columbia road 25 near the main entrance to the site	33.240622	-93.15014	MultiRAE	VOC	<0.1	ppm	No odor; Up wind;	Rich Shaver
3/17/2013	11:14 AM	Community	on the side of Columbia road 25	33.240629	-93.150097	MultiRAE	H2S	<1	ppm	No odor; Up wind;	Rich Shaver
3/17/2013	11:15 AM	Community	on the side of Columbia road 25	33.24503	-93.149757	MultiRAE	VOC	<0.1	ppm	No odor; Up wind;	Rich Shaver
3/17/2013	11:18 AM	Community	at the intersection of Columbia road 25 and hwy 82	33.251189	-93.148351	MultiRAE	H2S	<1	ppm	No odor; Up wind;	Rich Shaver
3/17/2013	11:19 AM	Community	at the intersection of Columbia road 2 and hwy 82	33.251199	-93.14835	MultiRAE	VOC	<0.1	ppm	No odor; Up wind;	Rich Shaver
3/17/2013	11:31 AM	Community	on the side of hwy 82	33.251175	-93.143861	MultiRAE	H2S	<1	ppm	No odor; Up wind;	Rich Shaver
3/17/2013	11:32 AM	Community	on the side of hwy 82	33.251176	-93.143861	MultiRAE	VOC	<0.1	ppm	No odor; Up wind;	Rich Shaver

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/17/2013	11:34 AM	Community	on the side of hwy 82	33.251218	-93.143831	MultiRAE	H2S	<1	ppm	No odor; Up wind;	Rich Shaver
3/17/2013	11:35 AM	Community	on the side of hwy 82	33.251196	-93.135974	MultiRAE	VOC	<0.1	ppm	No odor; Up wind;	Rich Shaver
3/17/2013	11:37 AM	Community	on the side of hwy 82	33.251173	-93.135968	MultiRAE	VOC	<0.1	ppm	No odor; Up wind;	Rich Shaver
3/17/2013	11:38 AM	Community	on the side if hwy 82	33.251082	-93.125585	MultiRAE	H2S	<1	ppm	No odor; Up wind;	Rich Shaver
3/17/2013	11:41 AM	Community	on the side of hwy 82 near mile marker 8	33.251082	-93.125585	MultiRAE	H2S	<1	ppm	No odor; Up wind;	Rich Shaver
3/17/2013	11:41 AM	Community	on the side of hwy 82 near mile marker 8	33.250704	-93.117452	MultiRAE	VOC	<0.1	ppm	No odor; Up wind;	Rich Shaver
3/17/2013	11:44 AM	Community	on the side of hwy 82 near 3216 hwy 82	33.250704	-93.117452	MultiRAE	H2S	<1	ppm	No odor;	Rich Shaver
3/17/2013	11:44 AM	Community	near 3216 Hwy 82 on the side of the road	33.250596	-93.108072	MultiRAE	VOC	<0.1	ppm	No odor;	Rich Shaver
3/17/2013	11:46 AM	Community	on the side of hwy 82 near mile marker 9	33.250596	-93.108072	MultiRAE	VOC	<0.1	ppm	No odor; Down wind;	Rich Shaver
3/17/2013	11:47 AM	Community	on the side of hwy 82 near mile marker 9	33.250394	-93.100031	MultiRAE	H2S	<1	ppm	No odor; Down wind;	Rich Shaver
3/17/2013	11:49 AM	Community	at the intersection of Columbia road 434 and Hwy 82	33.250394	-93.100031	MultiRAE	H2S	<1	ppm	No odor; Down wind;	Rich Shaver
3/17/2013	11:50 AM	Community	at the intersection of Columbia road 434 and hwy 82	33.250394	-93.100031	MultiRAE	VOC	<0.1	ppm	No odor; Down wind;	Rich Shaver
3/17/2013	11:54 AM	Community	on Columbia road 434	33.253238	-93.092378	MultiRAE	H2S	<1	ppm	No odor;	Rich Shaver
3/17/2013	11:55 AM	Community	on Columbia road 434	33.253621	-93.0927	MultiRAE	VOC	<0.1	ppm	No odor; Down wind;	Rich Shaver

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/17/2013	11:56 AM	Community	on Columbia road 434	33.253396	-93.092426	MultiRAE	LEL	<1	%	No odor; Down wind;	Rich Shaver
3/17/2013	11:59 AM	Community	on Columbia road 434	33.253344	-93.092409	MultiRAE	H2S	<1	ppm	No odor; Down wind;	Rich Shaver
3/17/2013	12:00 PM	Community	on Columbia road 434	33.256672	-93.09218	MultiRAE	VOC	<0.1	ppm	No odor; Down wind;	Rich Shaver
3/17/2013	12:02 PM	Community	at the intersection of Columbia road 434 and 36	33.256672	-93.09218	MultiRAE	H2S	<1	ppm	No odor; Down wind;	Rich Shaver
3/17/2013	12:02 PM	Community	at the intersection of Columbia road 434 and 36	33.260956	-93.093798	MultiRAE	VOC	<0.1	ppm	No odor; Down wind;	Rich Shaver
3/17/2013	12:05 PM	Community	on the side of Columbia road 36	33.260945	-93.093804	MultiRAE	H2S	<1	ppm	No odor;	Rich Shaver
3/17/2013	12:05 PM	Community	on the side of Columbia road 36	33.261078	-93.101026	MultiRAE	VOC	<0.1	ppm	No odor;	Rich Shaver
3/17/2013	12:09 PM	Community	on the side of Columbia road 36 near a bridge	33.257056	-93.108692	MultiRAE	H2S	<1	ppm	No odor; Down wind;	Rich Shaver
3/17/2013	12:10 PM	Community	on the side of Columbia road 36	33.257059	-93.10869	MultiRAE	VOC	<0.1	ppm	No odor; Down wind;	Rich Shaver
3/17/2013	12:12 PM	Community	on the side of Columbia road 36	33.257059	-93.10869	MultiRAE	H2S	<1	ppm	No odor; Down wind;	Rich Shaver
3/17/2013	12:13 PM	Community	on the side of Columbia road 36	33.254133	-93.116432	MultiRAE	VOC	<0.1	ppm	No odor; Down wind;	Rich Shaver
3/17/2013	12:15 PM	Community	on the side of Columbia road 36	33.254133	-93.116432	MultiRAE	VOC	<0.1	ppm	No odor; Down wind;	Rich Shaver
3/17/2013	12:16 PM	Community	on the side of Columbia road 36	33.254014	-93.124997	MultiRAE	H2S	<1	ppm	No odor; Down wind;	Rich Shaver

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/17/2013	12:16 PM	Community	on the side of Columbia road 36	33.254009	-93.125003	MultiRAE	LEL	<1	%	No odor; Down wind;	Rich Shaver
3/17/2013	12:18 PM	Community	on the side of Columbia road 36	33.254009	-93.125003	MultiRAE	H2S	<1	ppm	No odor;	Rich Shaver
3/17/2013	12:19 PM	Community	on the side of Columbia road 36	33.257711	-93.13341	MultiRAE	VOC	<0.1	ppm	No odor;	Rich Shaver
3/17/2013	12:23 PM	Community	at the intersection of Columbia road 36 and Columbia road 25	33.266334	-93.143018	MultiRAE	H2S	<1	ppm	No odor; Residence; Up wind;	Rich Shaver
3/17/2013	12:25 PM	Community	at the intersection of Columbia road 36 and Columbia road 25	33.266343	-93.143035	MultiRAE	VOC	<0.1	ppm	No odor; Residence; Up wind;	Rich Shaver
3/17/2013	12:28 PM	Community	on. Columbia road 25	33.266334	-93.143018	MultiRAE	H2S	<1	ppm	No odor; Residence; Up wind;	Rich Shaver
3/17/2013	12:29 PM	Community	on the side of Columbia road 25	33.260435	-93.14523	MultiRAE	VOC	<0.1	ppm	No odor; Residence; Up wind;	Rich Shaver
3/17/2013	12:32 PM	Community	on the side of Columbia road 25	33.253576	-93.147869	MultiRAE	VOC	<0.1	ppm	No odor; Up wind;	Rich Shaver
3/17/2013	12:33 PM	Community	on the side of Columbia road 25	33.253558	-93.14786	MultiRAE	H2S	<1	ppm	No odor; Up wind;	Rich Shaver
3/17/2013	12:34 PM	Community	at the intersection of hwy 82 and Columbia road 25	33.253558	-93.14786	MultiRAE	H2S	<1	ppm	No odor; Up wind;	Rich Shaver

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/17/2013	12:36 PM	Community	at the intersection of hwy 82 and Columbia road 25	33.251552	-93.148438	MultiRAE	VOC	<0.1	ppm	No odor; Up wind;	Rich Shaver
3/17/2013	12:37 PM	Community	at the intersection of hwy 82 and. Columbia road 25	33.251539	-93.148394	MultiRAE	LEL	<1	%	No odor; Up wind;	Rich Shaver
3/17/2013	12:42 PM	Community	on the side of Columbia road 25	33.248069	-93.149883	MultiRAE	H2S	<1	ppm	No odor; Up wind;	Rich Shaver
3/17/2013	12:43 PM	Community	on the side of Columbia road 25	33.248039	-93.149849	MultiRAE	VOC	<0.1	ppm	No odor; Up wind;	Rich Shaver
3/17/2013	12:46 PM	Community	on the side of Columbia road 25	33.239065	-93.150048	MultiRAE	H2S	<1	ppm	No odor; Residence; Up wind;	Rich Shaver
3/17/2013	12:46 PM	Community	on the side of Columbia road 25	33.238975	-93.149989	MultiRAE	VOC	<0.1	ppm	No odor; Residence; Up wind;	Rich Shaver
3/17/2013	12:49 PM	Community	on the side Columbia road 25	33.238975	-93.149989	MultiRAE	H2S	<1	ppm	No odor; Park; Up wind;	Rich Shaver
3/17/2013	12:50 PM	Community	on the side if Columbia road 25	33.232281	-93.151347	MultiRAE	VOC	<0.1	ppm	No odor; Up wind;	Rich Shaver
3/17/2013	12:52 PM	Community	near 211 Columbia road 25	33.232274	-93.151339	MultiRAE	H2S	<1	ppm	No odor; Residence; Up wind;	Rich Shaver
3/17/2013	12:52 PM	Community	near 211 Columbia road 25	33.226004	-93.152775	MultiRAE	VOC	<0.1	ppm	No odor; Residence; Up wind;	Rich Shaver
3/17/2013	12:55 PM	Community	at the intersection of Columbia road 25 and Columbia 11 east			MultiRAE	H2S	<1	ppm	No odor; Residence; Up wind;	Rich Shaver

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/17/2013	12:57 PM	Community	at the intersection of Columbia road 25 and Columbia road 11east			MultiRAE	VOC	<0.1	ppm	No odor; Residence; Up wind;	Rich Shaver
3/17/2013	12:58 PM	Community	at the intersection of Columbia road 25 and Columbia road 11 east	33.219641	-93.154743	MultiRAE	LEL	<1	%	No odor; Residence; Up wind;	Rich Shaver
3/17/2013	1:01 PM	Community	on the side of Columbia road 11 east	33.219646	-93.154742	MultiRAE	H2S	<1	ppm	No odor; Up wind;	Rich Shaver
3/17/2013	1:02 PM	Community	on the side if Columbia road 11 east	33.217658	-93.147064	MultiRAE	VOC	<0.1	ppm	No odor; Up wind;	Rich Shaver
3/17/2013	1:04 PM	Community	on the side of Columbia road 11 east	33.217658	-93.147064	MultiRAE	H2S	<1	ppm	No odor; Residence; Up wind;	Rich Shaver
3/17/2013	1:05 PM	Community	on the side of Columbia road 11 east	33.214872	-93.137717	MultiRAE	VOC	<0.1	ppm	No odor; Residence; Up wind;	Rich Shaver
3/17/2013	1:21 PM	Community	on the side of Columbia road 299	33.214903	-93.125809	MultiRAE	H2S	<1	ppm	No odor;	Rich Shaver
3/17/2013	1:23 PM	Community	on the side of Columbia 299	33.214904	-93.125815	MultiRAE	VOC	<0.1	ppm	No odor;	Rich Shaver
3/17/2013	1:26 PM	Community	on the side of Columbia road 299	33.214904	-93.125815	MultiRAE	H2S	<1	ppm	No odor;	Rich Shaver
3/17/2013	1:27 PM	Community	on the side of Columbia road 299	33.216005	-93.119907	MultiRAE	VOC	<0.1	ppm	No odor;	Rich Shaver
3/17/2013	1:28 PM	Community	on the side if Columbia road 299	33.216039	-93.119909	MultiRAE	LEL	<1	%	No odor;	Rich Shaver

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/17/2013	1:32 PM	Community	on the side of Cumbria road 299	33.216039	-93.119909	MultiRAE	H2S	<1	ppm	No odor;	Rich Shaver
3/17/2013	1:32 PM	Community	on the side of Columbia road 299	33.219486	-93.112307	MultiRAE	VOC	<0.1	ppm	No odor;	Rich Shaver
3/17/2013	1:35 PM	Community	on Columbia road 299	33.219466	-93.112315	MultiRAE	VOC	<0.1	ppm	No odor;	Rich Shaver
3/17/2013	1:36 PM	Community	on Columbia road 299	33.220968	-93.107011	MultiRAE	H2S	<1	ppm	No odor;	Rich Shaver
3/17/2013	1:43 PM	Community	on Columbia road 299	33.223551	-93.097342	MultiRAE	H2S	<1	ppm	No odor;	Rich Shaver
3/17/2013	1:45 PM	Community	on Columbia road 299	33.223546	-93.097332	MultiRAE	VOC	<0.1	ppm	No odor;	Rich Shaver
3/17/2013	1:48 PM	Community	at the intersection of Columbia road 34 and Columbia road 299	33.223546	-93.097332	MultiRAE	LEL	<1	%	No odor; Down wind;	Rich Shaver
3/17/2013	1:51 PM	Community	at the intersection of Columbia road 34 and Columbia road 299	33.223546	-93.097332	MultiRAE	VOC	<0.1	ppm	No odor; Down wind;	Rich Shaver
3/17/2013	1:52 PM	Community	at the intersection of Columbia road 34 and Columbia road 299	33.230005	-93.08994	MultiRAE	H2S	<1	ppm	No odor; Down wind;	Rich Shaver
3/17/2013	3:02 PM	Community	on Columbia road 34	33.229788	-93.097698	MultiRAE	H2S	<1	ppm	No odor;	Rich Shaver
3/17/2013	3:03 PM	Community	on Columbia road 34	33.229789	-93.097701	MultiRAE	VOC	<0.1	ppm	No odor;	Rich Shaver
3/17/2013	3:05 PM	Community	on Columbia road 34	33.229979	-93.104999	MultiRAE	H2S	<1	ppm	No odor;	Rich Shaver

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/17/2013	3:06 PM	Community	on Columbia road 34	33.229994	-93.10499	MultiRAE	VOC	<0.1	ppm	No odor;	Rich Shaver
3/17/2013	3:07 PM	Community	on Columbia road 295	33.229994	-93.10499	MultiRAE	H2S	<1	ppm	No odor;	Rich Shaver
3/17/2013	3:09 PM	Community	on Columbia road 295	33.231021	-93.107401	MultiRAE	VOC	<0.1	ppm	No odor;	Rich Shaver
3/17/2013	3:12 PM	Community	on Columbia road 295	33.238496	-93.104139	MultiRAE	H2S	<1	ppm	No odor; Down wind;	Rich Shaver
3/17/2013	3:12 PM	Community	on Columbia road 295	33.238497	-93.104162	MultiRAE	VOC	<0.1	ppm	No odor; Down wind;	Rich Shaver
3/17/2013	3:13 PM	Community	on Columbia road 295	33.238496	-93.104162	MultiRAE	LEL	<1	%	No odor; Down wind;	Rich Shaver
3/17/2013	3:14 PM	Community	on Columbia road 295	33.238496	-93.104162	MultiRAE	H2S	<1	ppm	No odor; Residence; Down wind;	Rich Shaver
3/17/2013	3:15 PM	Community	on Columbia road 295	33.243226	-93.107578	MultiRAE	VOC	<0.1	ppm	No odor; Residence; Down wind;	Rich Shaver
3/17/2013	3:18 PM	Community	at the intersection of Columbia 408 and Columbia 295	33.243225	-93.107573	MultiRAE	H2S	<1	ppm	No odor; Down wind;	Rich Shaver
3/17/2013	3:19 PM	Community	at the intersection of Columbia 408 and Columbia 295	33.243718	-93.116829	MultiRAE	VOC	<0.1	ppm	No odor; Down wind;	Rich Shaver
3/17/2013	3:22 PM	Community	at the intersection of hwy 82 and Columbia 408	33.243718	-93.116829	MultiRAE	H2S	<1	ppm	No odor;	Rich Shaver
3/17/2013	3:23 PM	Community	at the intersection of hwy 82 and Columbia 408	33.250654	-93.118856	MultiRAE	VOC	<0.1	ppm	No odor;	Rich Shaver
3/17/2013	3:23 PM	Community	at the intersection of Columbia 408 and hwy 82	33.250672	-93.118789	MultiRAE	LEL	<1	%	No odor;	Rich Shaver

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/17/2013	3:27 PM	Community	Road to wier 2	33.2389	-93.120418	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Slight breeZe	Reagan Moore
3/17/2013	3:27 PM	Community	Road to wier 2	33.2389	-93.120418	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Slight breeZe	Reagan Moore
3/17/2013	3:30 PM	Community	Rd to Weir 2	33.240795	-93.119884	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Workers not present; Slight breeze	Reagan Moore
3/17/2013	3:30 PM	Community	Rd to Weir 2	33.240795	-93.119884	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/17/2013	3:37 PM	Community	Rd to Weir 1	33.240838	-93.125566	MultiRAE	VOC	<0.1	ppm	Crude oil odor; Visible Oil; No work activity; Slight breeze	Reagan Moore
3/17/2013	3:39 PM	Community	Rd to weir 1	33.240838	-93.125566	MultiRAE	H2S	<1	ppm	Crude oil odor; Visible Oil; Workers not present; Slight breeze	Reagan Moore
3/17/2013	3:47 PM	Community	Turn off to Weir 1	33.239288	-93.124472	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Workers present; Slight breeze	Reagan Moore
3/17/2013	3:48 PM	Community	Turn off to Weir 1	33.239216	-93.124465	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Workers present; Slight breeze	Reagan Moore
3/17/2013	5:47 PM	Community	on Columbia road 34	33.236745	-93.148893	MultiRAE	H2S	<1	ppm	No odor; Up wind;	Rich Shaver
3/17/2013	5:48 PM	Community	on Columbia road 34	33.236694	-93.148926	MultiRAE	VOC	<0.1	ppm	No odor; Up wind;	Rich Shaver
3/17/2013	5:52 PM	Community	on Columbia road 34	33.236288	-93.133534	MultiRAE	H2S	<1	ppm	No odor;	Rich Shaver
3/17/2013	5:53 PM	Community	on Columbia road 34	33.236382	-93.133607	MultiRAE	VOC	<0.1	ppm	No odor;	Rich Shaver
3/17/2013	6:34 PM	Community	Columbia RD 34	33.23435	-93.12703	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/17/2013	6:35 PM	Community	Columbia rd 34	33.234209	-93.127129	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/17/2013	6:38 PM	Community	Columbia rd 34	33.230306	-93.121002	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/17/2013	6:39 PM	Community	Columbia rd 34	33.230306	-93.121002	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/17/2013	6:42 PM	Community	Columbia rd 34	33.229952	-93.111411	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/17/2013	6:42 PM	Community	Columbia rd 34	33.229952	-93.111411	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/17/2013	6:49 PM	Community	Columbia rd 34	33.229632	-93.100954	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/17/2013	6:49 PM	Community	Columbia rd 34	33.229632	-93.100954	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/17/2013	6:53 PM	Community	Columbia rd 34	33.230078	-93.091174	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/17/2013	6:53 PM	Community	Columbia rd 299	33.217757	-93.116604	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/17/2013	6:53 PM	Community	Columbia rd 299	33.226764	-93.091081	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/17/2013	6:53 PM	Community	Columbia rd 299	33.223241	-93.097876	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/17/2013	6:53 PM	Community	Columbia rd 299	33.223241	-93.097876	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/17/2013	6:53 PM	Community	Columbia rd 299	33.22145	-93.103892	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/17/2013	6:53 PM	Community	Columbia rd 299	33.22145	-93.103889	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/17/2013	6:53 PM	Community	Columbia rd 299	33.21997	-93.108676	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/17/2013	6:53 PM	Community	Columbia rd 299	33.21997	-93.108676	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/17/2013	6:53 PM	Community	Columbia rd 299	33.217734	-93.116641	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/17/2013	6:53 PM	Community	Columbia rd 299	33.226764	-93.091081	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	9:17 AM	Community	Road to Weir 1	33.240356	-93.125743	MultiRAE	VOC	<0.1	ppm	Visible Oil; No work activity; Slight breeze. No workers are at the station	Reagan Moore
3/18/2013	9:18 AM	Community	road to wier 1	33.240418	-93.126018	MultiRAE	H2S	<1	ppm	No work activity;	Bryan Lamb

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/18/2013	9:19 AM	Community	Road to Weir 1	33.240356	-93.125743	MultiRAE	H2S	<1	ppm	Visible Oil; No work activity; Slight breeze. Workers are not present at this time	Reagan Moore
3/18/2013	9:21 AM	Community	Weir one	33.238599	-93.124597	MultiRAE	VOC	<0.1	ppm	No Visible Oil; Workers present; Slight breeze	Reagan Moore
3/18/2013	9:21 AM	Community	Weir one	33.238599	-93.124597	MultiRAE	H2S	<1	ppm	No Visible Oil; Workers present; Slight breeze	Reagan Moore
3/18/2013	9:37 AM	Community	Columbia Rd 408	33.248049	-93.124239	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	9:39 AM	Community	Columbia Rd 408	33.248049	-93.124239	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	9:43 AM	Community	Columbia Rd 408	33.248282	-93.134214	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	9:46 AM	Community	Columbia road 408	33.249389	-93.142709	MultiRAE	VOC	<0.1	ppm	No work activity;	Bryan Lamb
3/18/2013	9:46 AM	Community	Columbia rd 408	33.249275	-93.142788	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	9:49 AM	Community	Columbia road 408 and 25 intersection	33.250654	-93.14853	MultiRAE	VOC	<0.1	ppm	No work activity;	Bryan Lamb
3/18/2013	9:49 AM	Community	Columbia rd 408 meets 25	33.250664	-93.148739	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; Slight breeze	Reagan Moore
3/18/2013	9:54 AM	Community	Columbia road 34	33.236771	-93.147984	MultiRAE	VOC	<0.1	ppm	No work activity;	Bryan Lamb
3/18/2013	9:54 AM	Community	Columbia RD 34	33.236625	-93.148094	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/18/2013	9:57 AM	Community	Columbia road 34	33.236446	-93.137612	MultiRAE	VOC	<0.1	ppm	No work activity;	Bryan Lamb
3/18/2013	9:57 AM	Community	Columbia rd 34	33.236435	-93.137603	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/18/2013	10:00 AM	Community	Columbia RD 34	33.235767	-93.130228	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	10:00 AM	Community	Columbia road 34	33.235728	-93.130139	MultiRAE	VOC	<0.1	ppm	No work activity;	Bryan Lamb

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/18/2013	10:03 AM	Community	Columbia road 34	33.230457	-93.123043	MultiRAE	VOC	<0.1	ppm	No work activity;	Bryan Lamb
3/18/2013	10:03 AM	Community	Columbia rd 34 meets 44	33.230303	-93.123136	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	10:06 AM	Community	Columbia road 34	33.229771	-93.114366	MultiRAE	VOC	<0.1	ppm	No work activity;	Bryan Lamb
3/18/2013	10:06 AM	Community	Columbia rd 34	33.22989	-93.114327	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/18/2013	10:15 AM	Community	Columbia road 34 at Columbia road 295	33.229849	-93.10763	MultiRAE	VOC	<0.1	ppm	No work activity;	Bryan Lamb
3/18/2013	10:15 AM	Community	Columbia rd 34	33.229788	-93.107646	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/18/2013	10:19 AM	Community	Columbia road 34	33.229711	-93.09793	MultiRAE	VOC	<0.1	ppm	No work activity;	Bryan Lamb
3/18/2013	10:19 AM	Community	Columbia 34	33.229681	-93.097786	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	10:22 AM	Community	Columbia road 34 at Columbia road 299	33.230059	-93.08994	MultiRAE	VOC	<0.1	ppm	No work activity;	Bryan Lamb
3/18/2013	10:22 AM	Community	Columbia rd 34 meets 299	33.229989	-93.089962	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	10:25 AM	Community	Columbia rd 34	33.234027	-93.082478	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	10:25 AM	Community	CR34	33.234254	-93.082364	MultiRAE	VOC	<0.1	ppm	No work activity;	Bryan Lamb
3/18/2013	10:29 AM	Community	Columbia rd 34	33.237554	-93.07629	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/18/2013	10:29 AM	Community	Columbia 34	33.237574	-93.076184	MultiRAE	VOC	<0.1	ppm	No work activity;	Bryan Lamb
3/18/2013	11:33 AM	Community	Columbia rd 25	33.251737	-93.148289	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	11:34 AM	Community	Columbia rd 25	33.251763	-93.148305	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/18/2013	11:36 AM	Community	Columbia rd 25	33.259684	-93.145624	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	11:37 AM	Community	Columbia rd 25	33.259709	-93.145646	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	11:39 AM	Community	Columbia rd 25 and 36 intersection	33.266241	-93.143161	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/18/2013	11:39 AM	Community	Columbia rd 25 and 36 intersection	33.266241	-93.143161	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/18/2013	11:42 AM	Community	Columbia rd 36	33.261607	-93.137156	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	11:43 AM	Community	Columbia rd 36	33.261633	-93.137179	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	11:45 AM	Community	Columbia rd 36	33.256726	-93.13111	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	11:45 AM	Community	Columbia rd 36	33.256726	-93.13111	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	11:49 AM	Community	Columbia rd 36	33.253881	-93.124438	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	11:49 AM	Community	Columbia rd 36	33.253877	-93.124494	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	11:52 AM	Community	Columbia rd 36	33.25404	-93.116333	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	11:52 AM	Community	Columbia rd 36	33.254021	-93.116339	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	11:56 AM	Community	Columbia rd 36	33.257023	-93.10893	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	11:56 AM	Community	Columbia rd 36	33.257001	-93.108871	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	11:58 AM	Community	Columbia rd 36	33.26112	-93.103342	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	11:59 AM	Community	Columbia rd 36	33.26112	-93.103342	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/18/2013	12:03 PM	Community	Columbia 36	33.260919	-93.09426	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	12:03 PM	Community	Columbia rd 36	33.260919	-93.09426	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	12:06 PM	Community	Columbia rd 36	33.263745	-93.086453	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	12:06 PM	Community	Columbia rd 36	33.263745	-93.086453	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	12:10 PM	Community	Columbia rd 36	33.264846	-93.076687	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	12:10 PM	Community	Columbia rd 36	33.264846	-93.076687	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	12:13 PM	Community	Columbia rd 36	33.264261	-93.068879	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	12:14 PM	Community	Columbia rd 36	33.264262	-93.068879	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	12:16 PM	Community	Columbia rd 36	33.263498	-93.058632	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	12:16 PM	Community	Columbia rd 36	33.263498	-93.058632	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	1:36 PM	Community	Hwy 82	33.251313	-93.145725	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	1:36 PM	Community	Hwy 82	33.251298	-93.145742	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	1:52 PM	Community	Hwy 82	33.251103	-93.137596	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	1:52 PM	Community	Hwy 82	33.251022	-93.137604	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	1:52 PM	Community	Hwy 82	33.250865	-93.129019	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	1:52 PM	Community	Hwy 82	33.250865	-93.129015	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	1:57 PM	Community	Hwy 82	33.250734	-93.119384	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/18/2013	1:57 PM	Community	Hwy 82	33.250734	-93.119384	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Workers not present; Slight breeze	Reagan Moore
3/18/2013	1:59 PM	Community	Hwy 82	33.250566	-93.111614	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	2:00 PM	Community	Hwy 82	33.250555	-93.111644	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/18/2013	2:02 PM	Community	Hwy 82	33.250331	-93.103129	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	2:03 PM	Community	Hwy 82	33.250377	-93.103098	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	2:04 PM	Community	Hwy 82	33.250216	-93.094096	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	2:05 PM	Community	Hwy 82	33.250216	-93.094098	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	2:06 PM	Community	Hwy 82	33.250056	-93.085706	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	2:07 PM	Community	Hwy 82	33.250056	-93.085707	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	2:08 PM	Community	Hwy 82	33.249882	-93.076599	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	2:09 PM	Community	Hwy 82	33.249882	-93.076596	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	2:11 PM	Community	Hwy 82	33.24961	-93.067682	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	2:12 PM	Community	Hwy 82	33.24961	-93.067682	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	2:12 PM	Community	Hwy 82	33.249282	-93.06032	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	2:12 PM	Community	Hwy 82	33.249282	-93.06032	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	2:44 PM	Community	Columbia rd 295 intersection of 408	33.243477	-93.124475	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/18/2013	2:45 PM	Community	Columbia rd 295	33.243398	-93.119927	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	2:45 PM	Community	Columbia rd 295	33.244175	-93.130077	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	2:45 PM	Community	Columbia rd 295 co rd 408	33.243449	-93.124381	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	2:45 PM	Community	Columbia rd 295	33.244238	-93.130024	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	2:45 PM	Community	Columbia rd 295	33.243398	-93.119927	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	2:54 PM	Community	Columbia rd 295	33.24333	-93.110181	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/18/2013	2:55 PM	Community	Columbia Rd 295	33.243209	-93.110144	MultiRAE	VOC	<0.1	ppm		Ashley Mason
3/18/2013	2:58 PM	Community	Columbia Rd 295	33.242868	-93.100275	MultiRAE	VOC	<0.1	ppm		Ashley Mason
3/18/2013	2:58 PM	Community	Columbia 295	33.242898	-93.100398	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	3:00 PM	Community	Columbia rd 295	33.239228	-93.097506	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	3:39 PM	Community	Columbia rd 296	33.238955	-93.10436	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/18/2013	3:39 PM	Community	Columbia rd 296	33.238955	-93.10436	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/18/2013	3:43 PM	Community	Columbia rd 295	33.23347	-93.107111	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/18/2013	3:43 PM	Community	Columbia rd 295	33.23347	-93.107111	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/18/2013	3:59 PM	Community	Columbia rd 44	33.225395	-93.134767	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	3:59 PM	Community	Columbia rd 44	33.215038	-93.140453	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	3:59 PM	Community	Columbia rd 44	33.226859	-93.128789	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/18/2013	3:59 PM	Community	Columbia rd 44	33.225395	-93.134767	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	3:59 PM	Community	Columbia rd 44	33.226859	-93.128789	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	3:59 PM	Community	Columbia rd 44	33.222487	-93.139849	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	3:59 PM	Community	Columbia rd 44	33.215038	-93.140453	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	3:59 PM	Community	Columbia rd 44	33.222487	-93.139849	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	5:20 PM	Community	Columbia rd 25	33.228925	-93.15153	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Church; No work activity; Slight breeze	Reagan Moore
3/18/2013	5:20 PM	Community	Columbia rd 25	33.228925	-93.15153	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Church; No work activity; Slight breeze	Reagan Moore
3/18/2013	5:20 PM	Community	Columbia rd 25	33.219405	-93.154714	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Church; No work activity; Slight breeze	Reagan Moore
3/18/2013	5:20 PM	Community	Columbia rd 25	33.219346	-93.154704	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Church; No work activity; Slight breeze	Reagan Moore
3/18/2013	5:24 PM	Community	Columbia rd 11 E	33.217853	-93.147163	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	5:25 PM	Community	Columbia rd 11 E	33.217853	-93.147163	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	5:27 PM	Community	Columbia rd 11 E	33.214792	-93.138608	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	5:27 PM	Community	Columbia rd 11 E	33.214792	-93.138608	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	5:29 PM	Community	Columbia rd 299	33.214874	-93.12883	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	5:30 PM	Community	Columbia rd 299	33.214873	-93.12886	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	5:32 PM	Community	Columbia rd 299	33.215474	-93.12204	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	5:32 PM	Community	Columbia rd 299	33.215474	-93.12204	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/18/2013	5:38 PM	Community	Columbia rd 299	33.218332	-93.115683	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	5:39 PM	Community	Columbia rd 299	33.218349	-93.115655	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	5:43 PM	Community	Columbia rd 299	33.221365	-93.107949	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	5:44 PM	Community	Columbia rd 299	33.221365	-93.107949	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	5:54 PM	Community	Columbia rd 299	33.221916	-93.101938	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	5:54 PM	Community	Columbia rd 299	33.221905	-93.10194	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	5:57 PM	Community	Columbia rd 299	33.224258	-93.094962	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	5:57 PM	Community	Columbia rd 299	33.224258	-93.094962	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	5:59 PM	Community	Columbia rd 299	33.229232	-93.090175	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/18/2013	5:59 PM	Community	Columbia rd 299	33.229232	-93.090175	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	9:35 AM	Community	Columbia rd 25	33.251611	-93.148328	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	9:35 AM	Community	Columbia rd 25	33.251611	-93.148328	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	9:39 AM	Community	Columbia rd 25	33.259635	-93.145781	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/19/2013	9:39 AM	Community	Columbia rd 25	33.259635	-93.145781	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/19/2013	9:41 AM	Community	Columbia rd 25 and Columbia rd 36 intersection	33.266309	-93.143112	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/19/2013	9:42 AM	Community	Columbia rd 25 and Columbia rd 36 intersection	33.266309	-93.143112	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/19/2013	9:44 AM	Community	Columbia rd 36	33.261675	-93.137175	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	9:44 AM	Community	Columbia rd 36	33.261651	-93.137147	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	9:46 AM	Community	Columbia rd 36	33.256646	-93.131113	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	9:47 AM	Community	Columbia rd 36	33.256652	-93.131051	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	9:49 AM	Community	Columbia rd 36	33.253838	-93.123293	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	9:49 AM	Community	Columbia rd 36	33.253798	-93.123317	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	9:52 AM	Community	Columbia rd 36	33.254542	-93.114636	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/19/2013	9:53 AM	Community	Columbia rd 36	33.254468	-93.114679	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/19/2013	9:55 AM	Community	Columbia rd 36	33.25803	-93.107554	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	9:56 AM	Community	Columbia rd 36	33.258019	-93.107493	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	9:58 AM	Community	Columbia rd 36	33.260815	-93.100312	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/19/2013	9:58 AM	Community	Columbia rd 36	33.26096	-93.100245	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/19/2013	10:01 AM	Community	Columbia rd 36	33.261522	-93.091623	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	10:01 AM	Community	Columbia rd 36	33.261458	-93.091638	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	10:04 AM	Community	Columbia rd 36	33.264421	-93.083713	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/19/2013	10:05 AM	Community	Columbia rd 36	33.264421	-93.083713	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	10:08 AM	Community	Columbia rd 36	33.264782	-93.076394	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/19/2013	10:10 AM	Community	Columbia rd 36	33.264782	-93.076394	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/19/2013	10:15 AM	Community	Columbia rd 36	33.263912	-93.066719	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/19/2013	10:15 AM	Community	Columbia rd 36	33.263818	-93.066717	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/19/2013	10:21 AM	Community	Columbia rd 36	33.263562	-93.058122	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/19/2013	10:21 AM	Community	Columbia rd 36	33.263336	-93.05824	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/19/2013	10:25 AM	Community	Columbia rd 96	33.257022	-93.053327	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/19/2013	10:25 AM	Community	Columbia rd 98	33.257022	-93.053327	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/19/2013	10:28 AM	Community	Columbia rd 98 and 82 intersection	33.249459	-93.051332	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Business; No work activity; Slight breeze	Reagan Moore
3/19/2013	10:28 AM	Community	Columbia rd 98 and 82 intersection	33.249525	-93.051286	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Business; No work activity; Slight breeze	Reagan Moore
3/19/2013	10:35 AM	Community	Columbia rd 98	33.243995	-93.049357	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	10:36 AM	Community	Columbia rd 98	33.243995	-93.049357	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	10:38 AM	Community	Columbia rd 98	33.236858	-93.049735	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	10:39 AM	Community	Columbia rd 98	33.236865	-93.049691	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	10:41 AM	Community	Columbia rd 98	33.229258	-93.050042	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/19/2013	10:41 AM	Community	Columbia rd 98	33.229232	-93.050003	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	10:43 AM	Community	Columbia rd 98	33.222428	-93.048974	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/19/2013	10:44 AM	Community	Columbia rd 98	33.222428	-93.048974	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/19/2013	10:46 AM	Community	Columbia rd 98	33.21526	-93.048196	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Sligh breeze	Reagan Moore
3/19/2013	10:47 AM	Community	Columbia rd 98	33.215263	-93.048188	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	10:49 AM	Community	Columbia rd 98	33.208006	-93.04908	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	10:49 AM	Community	Columbia rd 98	33.208006	-93.04908	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	10:51 AM	Community	Columbia rd 98	33.203154	-93.054709	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	10:52 AM	Community	Columbia rd 98	33.203012	-93.05449	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	10:54 AM	Community	Columbia rd 98	33.199366	-93.062639	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	10:54 AM	Community	Columbia rd 98	33.199458	-93.062638	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	10:57 AM	Community	Columbia rd 98	33.198035	-93.070242	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	10:58 AM	Community	Columbia rd 98	33.198035	-93.070242	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	11:01 AM	Community	Columbia rd 98	33.196367	-93.07891	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	11:01 AM	Community	Columbia rd 98	33.196145	-93.079033	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	11:29 AM	Community	Columbia rd 25	33.237514	-93.150161	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/19/2013	11:30 AM	Community	Columbia rd 25	33.237515	-93.150161	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/19/2013	11:33 AM	Community	Columbia rd 25	33.230193	-93.151465	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Church; No work activity; Slight breeze	Reagan Moore
3/19/2013	11:35 AM	Community	Columbia rd 25	33.230226	-93.151405	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Church; Workers not present; Slight breeze	Reagan Moore
3/19/2013	11:39 AM	Community	Columbia rd 25	33.222802	-93.153571	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/19/2013	11:40 AM	Community	Columbia rd 25	33.222802	-93.153571	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/19/2013	11:42 AM	Community	Columbia rd 11	33.219308	-93.150735	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/19/2013	11:43 AM	Community	Columbia rd 11	33.219337	-93.15074	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/19/2013	11:44 AM	Community	Columbia rd 11	33.215985	-93.143364	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/19/2013	11:45 AM	Community	Columbia rd 11	33.216014	-93.143367	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/19/2013	11:50 AM	Community	Columbia rd 11	33.214709	-93.134692	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/19/2013	11:51 AM	Community	Columbia rd 11	33.214733	-93.134699	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	11:53 AM	Community	Columbia rd 11	33.21172	-93.127491	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/19/2013	11:57 AM	Community	Columbia rd 11	33.211706	-93.12736	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/19/2013	11:58 AM	Community	Columbia rd 32	33.208404	-93.120698	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	11:59 AM	Community	Columbia rd 36	33.208396	-93.1206	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	12:07 PM	Community	Columbia rd 32	33.207045	-93.111832	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	12:07 PM	Community	Columbia rd 32	33.207005	-93.111641	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	12:11 PM	Community	Columbia rd 32	33.201888	-93.106273	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/19/2013	12:11 PM	Community	Columbia rd 32	33.201891	-93.106236	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:02 PM	Community	Columbia r 34	33.230467	-93.123083	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:02 PM	Community	Columbia r 34 299 intersection	33.230248	-93.09009	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:02 PM	Community	Columbia rd 299	33.214955	-93.125379	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:02 PM	Community	Columbia rd 299	33.217222	-93.117472	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:02 PM	Community	Columbia rd 299	33.217224	-93.117469	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:02 PM	Community	Columbia rd 299	33.219641	-93.10947	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:02 PM	Community	Columbia rd 299	33.219668	-93.109395	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:02 PM	Community	Columbia rd 299	33.221823	-93.101956	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:02 PM	Community	Columbia rd 299	33.221825	-93.101956	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:02 PM	Community	Columbia rd 299	33.224396	-93.09473	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:02 PM	Community	Columbia r 34 299 intersection	33.230248	-93.090089	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:02 PM	Community	Columbia r 34	33.229844	-93.098074	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:02 PM	Community	Columbia r 34	33.229845	-93.09807	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:02 PM	Community	Columbia r 34	33.23002	-93.107159	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:02 PM	Community	Columbia r 34	33.23002	-93.107159	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:02 PM	Community	Columbia r 34	33.230113	-93.115621	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/19/2013	5:02 PM	Community	Columbia rd 299	33.214955	-93.125377	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:02 PM	Community	Columbia r 34	33.230467	-93.123084	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:02 PM	Community	Columbia rd 299	33.224397	-93.094727	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:02 PM	Community	Columbia r 34	33.230113	-93.115619	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:22 PM	Community	Columbia rd 44	33.21876	-93.140206	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:22 PM	Community	Columbia rd 34	33.23532	-93.129524	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:22 PM	Community	Columbia rd 34	33.235328	-93.129496	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:22 PM	Community	Columbia rd 44	33.218852	-93.140201	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:22 PM	Community	Columbia rd 44	33.225524	-93.139824	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:22 PM	Community	Columbia rd 34	33.236662	-93.1448	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:22 PM	Community	Columbia rd 34	33.236662	-93.144798	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:22 PM	Community	Columbia rd 34	33.234559	-93.127547	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:22 PM	Community	Columbia rd 44	33.225344	-93.131234	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:22 PM	Community	Columbia rd 44	33.229296	-93.124575	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:22 PM	Community	Columbia rd 44	33.229278	-93.124598	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:22 PM	Community	Columbia rd 44	33.225344	-93.131234	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/19/2013	5:22 PM	Community	Columbia rd 44	33.225525	-93.139824	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/19/2013	5:22 PM	Community	Columbia rd 34	33.234558	-93.127545	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	9:05 AM	Community	Columbia rd 25	33.251869	-93.148203	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	9:05 AM	Community	Columbia rd 25	33.251789	-93.148273	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	9:08 AM	Community	Columbia rd 25	33.259163	-93.146147	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/20/2013	9:08 AM	Community	Columbia rd 25	33.259163	-93.146147	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/20/2013	9:08 AM	Community	Columbia rd 25	33.265655	-93.143298	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/20/2013	9:08 AM	Community	Columbia rd 25	33.265682	-93.143331	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/20/2013	9:13 AM	Community	Columbia rd 36	33.262039	-93.13758	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	9:13 AM	Community	Columbia rd 36	33.253839	-93.123217	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	9:13 AM	Community	Columbia rd 36	33.262039	-93.13758	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	9:13 AM	Community	Columbia rd 36	33.253823	-93.123506	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	9:15 AM	Community	Columbia rd 36	33.256878	-93.131621	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	9:16 AM	Community	Columbia rd 36	33.256883	-93.131539	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	9:20 AM	Community	Columbia rd 36	33.254484	-93.115088	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	9:20 AM	Community	Columbia rd 36	33.254336	-93.115144	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	9:31 AM	Community	Columbia rd 36	33.257891	-93.107704	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	9:31 AM	Community	Columbia rd 36	33.257838	-93.107681	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/20/2013	9:33 AM	Community	Columbia rd 36	33.261084	-93.100813	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	9:33 AM	Community	Columbia rd 36	33.261066	-93.100863	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	9:35 AM	Community	Columbia rd 36	33.26104	-93.092159	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	9:36 AM	Community	Columbia rd 36	33.261006	-93.092131	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	9:38 AM	Community	Columbia rd 36	33.264379	-93.083807	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	9:38 AM	Community	Columbia rd 36	33.264379	-93.083807	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	10:04 AM	Community	El Dorado Pipeline crossing next to creek.	33.241007	-93.139694	MultiRAE	VOC	<0.1	ppm	Vac Trucks Present; Visible Oil; Workers present; Slight breeze	Reagan Moore
3/20/2013	10:04 AM	Community	El Dorado Pipeline crossing next to creek.	33.241007	-93.139694	MultiRAE	H2S	<1	ppm	Vac Trucks Present; Visible Oil; Workers present; Slight breeze	Reagan Moore
3/20/2013	10:17 AM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248724	-93.135777	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	10:17 AM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248724	-93.135777	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	10:25 AM	Community	Co Rd 408 next to pumper on right side of road.	33.247937	-93.124043	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/20/2013	10:25 AM	Community	Co Rd 408 next to pumper on right side of road.	33.24794	-93.124059	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	10:52 AM	Community	Weir 2	33.238695	-93.12044	MultiRAE	VOC	<0.1	ppm	No Visible Oil; Vac Trucks Present; Workers present; Slight breeze	Reagan Moore
3/20/2013	10:52 AM	Community	Weir 2	33.238695	-93.12044	MultiRAE	H2S	<1	ppm	No Visible Oil; Vac Trucks Present; Workers present; Slight breeze	Reagan Moore
3/20/2013	11:03 AM	Community	Weir 1	33.238866	-93.12467	MultiRAE	H2S	<1	ppm	Vac Trucks Present; Workers present; Slight breeze	Reagan Moore
3/20/2013	11:03 AM	Community	Weir 1	33.238866	-93.12467	MultiRAE	VOC	<0.1	ppm	Vac Trucks Present; Workers present; Slight breeze	Reagan Moore
3/20/2013	11:16 AM	Community	Last boom on creek on Columbia Rd 34	33.229888	-93.111724	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; boom present; No work activity; Slight breeze	Reagan Moore
3/20/2013	11:16 AM	Community	Last boom on creek on Columbia Rd 34	33.229888	-93.111724	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; boom present; No work activity; Slight breeze	Reagan Moore
3/20/2013	11:33 AM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.236816	-93.149858	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/20/2013	11:33 AM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.236816	-93.149858	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/20/2013	11:45 AM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.261269	-93.144566	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/20/2013	11:45 AM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.261269	-93.144566	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/20/2013	11:52 AM	Community	Intersection of Columbia Rd 408 and HWY 82	33.250728	-93.118941	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/20/2013	11:52 AM	Community	Intersection of Columbia Rd 408 and HWY 82	33.250683	-93.118942	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	11:58 AM	Community	Intersection of HWY 82 and Columbia Rd 294	33.250064	-93.094042	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	11:58 AM	Community	Intersection of HWY 82 and Columbia Rd 294	33.250064	-93.094042	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	12:08 PM	Community	Intersection of HWY 82 and Columbia Rd 294	33.230202	-93.089982	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	12:08 PM	Community	Intersection of HWY 82 and Columbia Rd 294	33.23019	-93.090017	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	12:49 PM	Community	Intersection of Columbia Rd 25 and HWY 82	33.251188	-93.148377	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	12:49 PM	Community	Intersection of Columbia Rd 25 and HWY 82	33.251188	-93.148377	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	12:55 PM	Community	Turn off past main entrance gate.	33.241196	-93.145297	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Workers not present; Slight breeze	Reagan Moore
3/20/2013	12:55 PM	Community	Turn off past main entrance gate.	33.241196	-93.145297	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Workers not present; Slight breeze	Reagan Moore
3/20/2013	12:59 PM	Community	El Dorado Pipeline crossing next to creek.	33.240961	-93.139732	MultiRAE	VOC	<0.1	ppm	Vac Trucks Present; Visible Oil; boom present; Workers not present; Slight breeze	Reagan Moore
3/20/2013	12:59 PM	Community	El Dorado Pipeline crossing next to creek.	33.240961	-93.139732	MultiRAE	H2S	<1	ppm	Vac Trucks Present; Visible Oil; boom present; Workers not present; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/20/2013	1:06 PM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248703	-93.13583	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	1:07 PM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248703	-93.13583	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	1:12 PM	Community	Co Rd 408 next to pumper on right side of road.	33.247847	-93.124065	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	1:13 PM	Community	Co Rd 408 next to pumper on right side of road.	33.247914	-93.12408	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	1:19 PM	Community	Weir 1	33.23862	-93.124524	MultiRAE	VOC	<0.1	ppm	Vac Trucks Present; Workers present; Slight breeze	Reagan Moore
3/20/2013	1:19 PM	Community	Weir 1	33.23862	-93.124524	MultiRAE	H2S	<1	ppm	Vac Trucks Present; Workers present; Slight breeze	Reagan Moore
3/20/2013	1:31 PM	Community	Weir 2	33.238549	-93.120423	MultiRAE	VOC	<0.1	ppm	No Visible Oil; Workers present; Slight breeze	Reagan Moore
3/20/2013	1:31 PM	Community	Weir 2	33.238549	-93.120423	MultiRAE	H2S	<1	ppm	No Visible Oil; Workers present; Slight breeze	Reagan Moore
3/20/2013	1:42 PM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.23671	-93.149907	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/20/2013	1:42 PM	Community	Last boom on creek on Columbia Rd 34	33.229826	-93.111862	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; boom present; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/20/2013	1:42 PM	Community	Last boom on creek on Columbia Rd 34	33.229826	-93.111862	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; boom present; No work activity; Slight breeze	Reagan Moore
3/20/2013	1:42 PM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.23671	-93.149907	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/20/2013	1:55 PM	Community	Intersection of Columbia Rd 25 and HWY 82	33.251307	-93.148395	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	1:56 PM	Community	Intersection of Columbia Rd 25 and HWY 82	33.251307	-93.148395	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	1:58 PM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.261174	-93.144531	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/20/2013	1:58 PM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.261204	-93.144573	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/20/2013	2:03 PM	Community	Intersection of Columbia Rd 408 and HWY 82	33.250881	-93.118958	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	2:04 PM	Community	Intersection of Columbia Rd 408 and HWY 82	33.250895	-93.118906	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	2:07 PM	Community	Intersection of HWY 82 and Columbia Rd 294	33.250133	-93.094101	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	2:07 PM	Community	Intersection of HWY 82 and Columbia Rd 294	33.250133	-93.094101	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	3:36 PM	Community	Turn off past main entrance gate.	33.241193	-93.145315	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/20/2013	3:37 PM	Community	Turn off past main entrance gate.	33.241193	-93.145315	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	3:42 PM	Community	El Dorado Pipeline crossing next to creek.	33.241115	-93.139674	MultiRAE	VOC	<0.1	ppm	Vac Trucks Present; boom present; Workers present; Slight breeze	Reagan Moore
3/20/2013	3:43 PM	Community	El Dorado Pipeline crossing next to creek.	33.24108	-93.13963	MultiRAE	H2S	<1	ppm	Vac Trucks Present; boom present; Workers present; Slight breeze	Reagan Moore
3/20/2013	4:06 PM	Community	El Dorado Pipeline crossing next to creek.	33.248773	-93.135727	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	4:06 PM	Community	El Dorado Pipeline crossing next to creek.	33.248748	-93.135665	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	4:10 PM	Community	Co Rd 408 next to pumper on right side of road.	33.247864	-93.123961	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	4:10 PM	Community	Co Rd 408 next to pumper on right side of road.	33.247879	-93.124055	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	4:15 PM	Community	Weir 1	33.238593	-93.12467	MultiRAE	VOC	<0.1	ppm	Vac Trucks Present; boom present; Workers present; Slight breeze	Reagan Moore
3/20/2013	4:15 PM	Community	Weir 1	33.238593	-93.12467	MultiRAE	H2S	<1	ppm	Vac Trucks Present; boom present; Workers present; Slight breeze	Reagan Moore
3/20/2013	4:41 PM	Community	Weir 2	33.238575	-93.120376	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	4:42 PM	Community	Weir 2	33.238575	-93.120376	MultiRAE	H2S	<1	ppm	No Visible Oil; Vac Trucks Present; No work activity; Slight breeze	Reagan Moore
3/20/2013	4:59 PM	Community	Last boom on creek on Columbia Rd 34	33.22998	-93.11177	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; boom present; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/20/2013	4:59 PM	Community	Last boom on creek on Columbia Rd 34	33.22998	-93.11177	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; boom present; No work activity; Slight breeze	Reagan Moore
3/20/2013	5:29 PM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.236725	-93.149905	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/20/2013	5:29 PM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.236725	-93.149905	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/20/2013	5:33 PM	Community	Intersection of Columbia Rd 25 and HWY 82	33.251195	-93.148388	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/20/2013	5:33 PM	Community	Intersection of Columbia Rd 25 and HWY 82	33.251234	-93.148379	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/20/2013	5:36 PM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.261235	-93.144549	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/20/2013	5:36 PM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.261235	-93.144549	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/20/2013	5:42 PM	Community	Intersection of Columbia Rd 408 and HWY 82	33.250933	-93.119027	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	5:43 PM	Community	Intersection of Columbia Rd 408 and HWY 82	33.250933	-93.119027	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	5:45 PM	Community	Intersection of HWY 82 and Columbia Rd 294	33.250199	-93.093766	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	5:46 PM	Community	Intersection of HWY 82 and Columbia Rd 294	33.250205	-93.093834	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/20/2013	5:55 PM	Community	Intersection of Columbia Rd 34 and CO Rd 299	33.230159	-93.089973	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/20/2013	5:55 PM	Community	Intersection of Columbia Rd 34 and CO Rd 299	33.230159	-93.089973	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	8:10 AM	Community	Turn off past main entrance gate.	33.240974	-93.145215	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	8:10 AM	Community	Turn off past main entrance gate.	33.240974	-93.145215	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	8:18 AM	Community	El Dorado Pipeline crossing next to creek.	33.2410088	-93.1396942	MultiRAE	VOC	<0.1	ppm	Visible Oil; boom present; Workers present; Slight breeze	Reagan Moore
3/21/2013	8:20 AM	Community	El Dorado Pipeline crossing next to creek.	33.2410088	-93.1396942	MultiRAE	H2S	<1	ppm	Visible Oil; boom present; Workers present; Slight breeze	Reagan Moore
3/21/2013	8:29 AM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248682	-93.1366	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	8:29 AM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248818	-93.136033	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	8:40 AM	Community	Weir 1	33.238856	-93.124607	MultiRAE	VOC	<0.1	ppm	Vac Trucks Present; boom present; Workers present; Slight breeze	Reagan Moore
3/21/2013	8:40 AM	Community	Weir 1	33.238781	-93.124656	MultiRAE	H2S	<1	ppm	Vac Trucks Present; boom present; Workers present; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/21/2013	8:50 AM	Community	Weir 2	33.239179	-93.120456	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Vac Trucks Present; Workers not present; Slight breeze	Reagan Moore
3/21/2013	8:50 AM	Community	Weir 2	33.238683	-93.120585	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Vac Trucks Present; Workers not present; Slight breeze	Reagan Moore
3/21/2013	9:00 AM	Community	Last boom on creek on Columbia Rd 34	33.230028	-93.111877	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; boom present; No work activity; Slight breeze	Reagan Moore
3/21/2013	9:00 AM	Community	Last boom on creek on Columbia Rd 34	33.229892	-93.111898	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; boom present; No work activity; Slight breeze	Reagan Moore
3/21/2013	9:12 AM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.236746	-93.1499	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/21/2013	9:13 AM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.236781	-93.14988	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/21/2013	9:17 AM	Community	Intersection of Columbia Rd 25 and HWY 82	33.251221	-93.148417	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/21/2013	9:17 AM	Community	Intersection of Columbia Rd 25 and HWY 82	33.251161	-93.148385	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/21/2013	9:20 AM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.260937	-93.144405	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/21/2013	9:20 AM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.260937	-93.14453	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/21/2013	9:25 AM	Community	Intersection of Columbia Rd 408 and HWY 82	33.250851	-93.119145	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/21/2013	9:26 AM	Community	Intersection of Columbia Rd 408 and HWY 82	33.250843	-93.119106	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	9:28 AM	Community	Intersection of HWY 82 and Columbia Rd 294	33.250304	-93.09415	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	9:29 AM	Community	Intersection of HWY 82 and Columbia Rd 294	33.250258	-93.094093	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	9:38 AM	Community	Intersection of Columbia Rd 34 and CO Rd 299	33.230248	-93.090061	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	9:38 AM	Community	Intersection of Columbia Rd 34 and CO Rd 299	33.23021	-93.090027	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	10:56 AM	Community	FRT02	33.240911	-93.139774	MultiRAE	VOC	<0.1	ppm	Vac Trucks Present; Visible Oil; boom present; Workers present; Slight breeze	Reagan Moore
3/21/2013	10:57 AM	Community	FRT02	33.241049	-93.139755	MultiRAE	H2S	<1	ppm	Vac Trucks Present; Visible Oil; boom present; Workers present; Slight breeze	Reagan Moore
3/21/2013	11:05 AM	Community	FRT03	33.248689	-93.135685	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	11:06 AM	Community	FRT03	33.248725	-93.135818	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	11:29 AM	Community	FRT06	33.238664	-93.124528	MultiRAE	VOC	<0.1	ppm	Vac Trucks Present; boom present; Workers present; Slight breeze	Reagan Moore
3/21/2013	11:30 AM	Community	FRT06	33.238574	-93.12467	MultiRAE	H2S	<1	ppm	Vac Trucks Present; boom present; Workers present; Slight breeze	Reagan Moore
3/21/2013	11:36 AM	Community	FRT05	33.238612	-93.120462	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Vac Trucks Present; Workers present; Slight breeze	Reagan Moore
3/21/2013	11:36 AM	Community	FRT05	33.238575	-93.120409	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Vac Trucks Present; Workers present; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/21/2013	11:48 AM	Community	FRT12	33.230222	-93.089911	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	11:48 AM	Community	FRT12	33.230189	-93.08993	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	11:52 AM	Community	FRT07	33.229709	-93.112014	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; boom present; No work activity; Slight breeze	Reagan Moore
3/21/2013	11:53 AM	Community	FRT07	33.229725	-93.111948	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; boom present; No work activity; Slight breeze	Reagan Moore
3/21/2013	12:02 PM	Community	FRT 8	33.236623	-93.149817	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/21/2013	12:02 PM	Community	FRT 8	33.236722	-93.149794	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/21/2013	12:05 PM	Community	FRT13	33.251085	-93.148261	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/21/2013	12:05 PM	Community	FRT13	33.251188	-93.1483	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/21/2013	12:08 PM	Community	FRT09	33.2612	-93.144579	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/21/2013	12:08 PM	Community	FRT09	33.2612	-93.144579	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/21/2013	12:14 PM	Community	FRT10	33.250861	-93.119023	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	12:15 PM	Community	FRT10	33.250846	-93.118984	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	12:18 PM	Community	FRT11	33.250305	-93.094153	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	12:18 PM	Community	FRT11	33.250305	-93.094153	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	2:01 PM	Community	FRT01	33.241302	-93.145287	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	2:02 PM	Community	FRT01	33.241302	-93.145287	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/21/2013	2:05 PM	Community	FRT02	33.24096	-93.139773	MultiRAE	H2S	<1	ppm	Vac Trucks Present; Visible Oil; boom present; Workers present; Slight breeze	Reagan Moore
3/21/2013	2:06 PM	Community	FRT02	33.24096	-93.139773	MultiRAE	VOC	<0.1	ppm	Vac Trucks Present; Visible Oil; boom present; Workers present; Slight breeze	Reagan Moore
3/21/2013	2:14 PM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248711	-93.135917	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	2:14 PM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248711	-93.135917	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	2:21 PM	Community	Weir 1	33.238509	-93.124814	MultiRAE	H2S	<1	ppm	Vac Trucks Present; Visible Oil; boom present; Workers present; Slight breeze	Reagan Moore
3/21/2013	2:22 PM	Community	Weir 1	33.238697	-93.124713	MultiRAE	VOC	<0.1	ppm	Vac Trucks Present; boom present; Workers present; Slight breeze	Reagan Moore
3/21/2013	2:28 PM	Community	Weir 2	33.238648	-93.120603	MultiRAE	VOC	<0.1	ppm	Workers present;	Bryan Lamb
3/21/2013	2:29 PM	Community	Weir 2	33.238642	-93.120494	MultiRAE	H2S	<1	ppm	Workers present;	Bryan Lamb
3/21/2013	2:38 PM	Community	Last boom on creek on Columbia Rd 34	33.230056	-93.111699	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; boom present; No work activity; Slight breeze	Reagan Moore
3/21/2013	2:39 PM	Community	Last boom on creek on Columbia Rd 34	33.229804	-93.111876	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; boom present; No work activity; Slight breeze	Reagan Moore
3/21/2013	2:47 PM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.236831	-93.149808	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/21/2013	2:48 PM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.236897	-93.149776	MultiRAE	VOC	<0.1	ppm	Workers not present;	Bryan Lamb
3/21/2013	2:52 PM	Community	Intersection of Columbia Rd 25 and HWY 82	33.251189	-93.148449	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/21/2013	2:52 PM	Community	Intersection of Columbia Rd 25 and HWY 82	33.251235	-93.148292	MultiRAE	VOC	<0.1	ppm	Workers not present;	Bryan Lamb
3/21/2013	2:55 PM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.261153	-93.144821	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/21/2013	2:55 PM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.261248	-93.144575	MultiRAE	VOC	<0.1	ppm	Workers not present;	Bryan Lamb
3/21/2013	3:00 PM	Community	Intersection of Columbia Rd 408 and HWY 82	33.250956	-93.119036	MultiRAE	VOC	<0.1	ppm	Workers not present;	Bryan Lamb
3/21/2013	3:00 PM	Community	Intersection of Columbia Rd 408 and HWY 82	33.250955	-93.119055	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	3:03 PM	Community	Intersection of HWY 82 and Columbia Rd 294	33.250247	-93.09405	MultiRAE	VOC	<0.1	ppm	Workers not present;	Bryan Lamb
3/21/2013	3:03 PM	Community	Intersection of HWY 82 and Columbia Rd 294	33.2503	-93.094116	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	3:14 PM	Community	Intersection of Columbia Rd 34 and CO Rd 299	33.230268	-93.089775	MultiRAE	VOC	<0.1	ppm	Workers not present;	Bryan Lamb
3/21/2013	3:15 PM	Community	Intersection of Columbia Rd 34 and CO Rd 299	33.230234	-93.089928	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	4:14 PM	Community	Intersection of Columbia Rd 25 and HWY 82	33.251193	-93.148178	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/21/2013	4:14 PM	Community	Intersection of Columbia Rd 25 and HWY 82	33.251174	-93.148345	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/21/2013	4:18 PM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.261261	-93.144689	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/21/2013	4:18 PM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.26124	-93.144619	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/21/2013	4:23 PM	Community	Intersection of Columbia Rd 408 and HWY 82	33.250933	-93.11906	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	4:23 PM	Community	Intersection of Columbia Rd 408 and HWY 82	33.250848	-93.118948	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/21/2013	4:26 PM	Community	Intersection of HWY 82 and Columbia Rd 294	33.250107	-93.094035	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	4:26 PM	Community	Intersection of HWY 82 and Columbia Rd 294	33.249983	-93.093964	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/21/2013	4:34 PM	Community	Weir 2	33.238224	-93.120509	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/21/2013	4:42 PM	Community	Weir 2	33.238569	-93.124385	MultiRAE	H2S	<1	ppm	Vac Trucks Present; boom present; Workers present; Slight breeze	Reagan Moore
3/21/2013	4:42 PM	Community	Weir 1	33.238553	-93.124557	MultiRAE	VOC	<0.1	ppm		Bryan Lamb
3/21/2013	4:50 PM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248732	-93.135972	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/21/2013	4:50 PM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248777	-93.135874	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	4:55 PM	Community	El Dorado Pipeline crossing next to creek.	33.241024	-93.140017	MultiRAE	H2S	<1	ppm	Vac Trucks Present; boom present; Workers present; Slight breeze	Reagan Moore
3/21/2013	4:56 PM	Community	El Dorado Pipeline crossing next to creek.	33.241058	-93.139847	MultiRAE	VOC	<0.1	ppm	Workers present;	Bryan Lamb
3/21/2013	5:00 PM	Community	Turn off past main entrance gate.	33.241333	-93.145416	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	5:00 PM	Community	Turn off past main entrance gate.	33.241323	-93.145428	MultiRAE	VOC	<0.1	ppm		Bryan Lamb
3/21/2013	5:05 PM	Community	Intersection of Columbia Rd 25 and HWY 82	33.25115	-93.148287	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/21/2013	5:05 PM	Community	Intersection of Columbia Rd 25 and HWY 82	33.251177	-93.14843	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/21/2013	5:08 PM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.261351	-93.144551	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/21/2013	5:08 PM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.261348	-93.144645	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/21/2013	5:13 PM	Community	Intersection of Columbia Rd 408 and HWY 82	33.25097	-93.119142	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/21/2013	5:13 PM	Community	Intersection of Columbia Rd 408 and HWY 82	33.250949	-93.119004	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/21/2013	5:17 PM	Community	Intersection of HWY 82 and Columbia Rd 294	33.250124	-93.094134	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	5:17 PM	Community	Intersection of HWY 82 and Columbia Rd 294	33.2501	-93.094051	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/21/2013	5:27 PM	Community	Intersection of Columbia Rd 34 and CO Rd 299	33.230113	-93.090185	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	5:27 PM	Community	Intersection of Columbia Rd 34 and CO Rd 299	33.230099	-93.089878	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/21/2013	5:34 PM	Community	Last boom on creek on Columbia Rd 34	33.229803	-93.111989	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; boom present; No work activity; Slight breeze	Reagan Moore
3/21/2013	5:34 PM	Community	Last boom on creek on Columbia Rd 34	33.229967	-93.111868	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/21/2013	5:42 PM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.236817	-93.149843	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/21/2013	5:42 PM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.236785	-93.14999	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/21/2013	5:46 PM	Community	Turn off past main entrance gate.	33.241371	-93.145397	MultiRAE	VOC	<0.1	ppm	Workers not present;	Bryan Lamb
3/21/2013	5:46 PM	Community	Turn off past main entrance gate.	33.2412528	-93.1452865	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	5:51 PM	Community	El Dorado Pipeline crossing next to creek.	33.241064	-93.1399	MultiRAE	VOC	<0.1	ppm	Workers present;	Bryan Lamb

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/21/2013	5:51 PM	Community	El Dorado Pipeline crossing next to creek.	33.2410087	-93.1396942	MultiRAE	H2S	<1	ppm	Vac Trucks Present; boom present; Workers present; Slight breeze	Reagan Moore
3/21/2013	5:59 PM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248651	-93.135935	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/21/2013	5:59 PM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.2487373	-93.1356964	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/21/2013	6:05 PM	Community	Weir 1	33.238601	-93.124574	MultiRAE	VOC	<0.1	ppm	Workers present;	Bryan Lamb
3/21/2013	6:06 PM	Community	Weir 1	33.2389717	-93.1248397	MultiRAE	H2S	<1	ppm	Vac Trucks Present; Workers present; Slight breeze	Reagan Moore
3/21/2013	6:22 PM	Community	Weir 2	33.2383	-93.120541	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Workers present; Slight breeze	Reagan Moore
3/21/2013	6:22 PM	Community	Weir 2	33.238277	-93.120399	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/22/2013	8:49 AM	Community	Turn off past main entrance gate.	33.2412528	-93.1452865	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/22/2013	8:50 AM	Community	Turn off past main entrance gate.	33.241254	-93.145317	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/22/2013	8:54 AM	Community	El Dorado Pipeline crossing next to creek.	33.241128	-93.139785	MultiRAE	H2S	<1	ppm	Vac Trucks Present; boom present; Workers present; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/22/2013	8:55 AM	Community	El Dorado Pipeline crossing next to creek.	33.241002	-93.139728	MultiRAE	VOC	<0.1	ppm	Workers present;	Bryan Lamb
3/22/2013	9:05 AM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248615	-93.135981	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/22/2013	9:05 AM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248254	-93.136005	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/22/2013	9:13 AM	Community	Weir 1	33.23861	-93.124679	MultiRAE	H2S	<1	ppm	Vac Trucks Present; Workers present; Slight breeze	Reagan Moore
3/22/2013	9:13 AM	Community	Weir 1	33.238663	-93.124759	MultiRAE	VOC	<0.1	ppm	Workers present;	Bryan Lamb
3/22/2013	9:26 AM	Community	Weir 2	33.243333	-93.119991	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/22/2013	9:26 AM	Community	Weir 2	33.24336	-93.119939	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/22/2013	9:34 AM	Community	Intersection of Columbia Rd 34 and CO Rd 299	33.230136	-93.089907	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/22/2013	9:35 AM	Community	Intersection of Columbia Rd 34 and CO Rd 299	33.230176	-93.089867	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/22/2013	9:40 AM	Community	Last boom on creek on Columbia Rd 34	33.229695	-93.112456	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; boom present; No work activity; Slight breeze	Reagan Moore
3/22/2013	9:40 AM	Community	Last boom on creek on Columbia Rd 34	33.22994	-93.111904	MultiRAE	VOC	<0.1	ppm	Workers not present;	Bryan Lamb

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/22/2013	9:48 AM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.236765	-93.149854	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/22/2013	9:49 AM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.236763	-93.149935	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/22/2013	9:58 AM	Community	Intersection of Columbia Rd 25 and HWY 82	33.2513771	-93.1483612	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/22/2013	9:58 AM	Community	Intersection of Columbia Rd 25 and HWY 82	33.251067	-93.148393	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/22/2013	10:01 AM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.261178	-93.144545	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/22/2013	10:02 AM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.261236	-93.144592	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/22/2013	10:07 AM	Community	Intersection of Columbia Rd 408 and HWY 82	33.250916	-93.119048	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/22/2013	10:07 AM	Community	Intersection of Columbia Rd 408 and HWY 82	33.250917	-93.119047	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/22/2013	2:30 PM	Community	Turn off past main entrance gate.	33.2412528	-93.1452865	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; slight breeze	Reagan Moore
3/22/2013	2:31 PM	Community	Turn off past main entrance gate.	33.24127	-93.145198	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/22/2013	2:36 PM	Community	El Dorado Pipeline crossing next to creek.	33.2410087	-93.1396942	MultiRAE	H2S	<1	ppm	No odor; Vac Trucks Present; boom present; Workers present; slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/22/2013	2:36 PM	Community	El Dorado Pipeline crossing next to creek.	33.2414	-93.141502	MultiRAE	VOC	<0.1	ppm	Workers present;	Bryan Lamb
3/22/2013	2:44 PM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.2487373	-93.1356964	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; slight breeze	Reagan Moore
3/22/2013	2:44 PM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248769	-93.135807	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/22/2013	2:52 PM	Community	Weir 1	33.2389717	-93.1248397	MultiRAE	H2S	<1	ppm	Vac Trucks Present; boom present; Workers present; slight breeze	Reagan Moore
3/22/2013	2:52 PM	Community	Weir 1	33.238688	-93.124579	MultiRAE	VOC	<0.1	ppm	Workers present;	Bryan Lamb
3/22/2013	2:57 PM	Community	Weir 2	33.238861	-93.1204071	MultiRAE	H2S	<1	ppm	No Visible Oil; Vac Trucks Present; Workers present; slight breeze	Reagan Moore
3/22/2013	3:00 PM	Community	Weir 2	33.238385	-93.120373	MultiRAE	VOC	<0.1	ppm	No work activity;	Bryan Lamb
3/22/2013	3:10 PM	Community	Intersection of Columbia Rd 34 and CO Rd 299	33.2301559	-93.0900115	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; slight breeze	Reagan Moore
3/22/2013	3:11 PM	Community	Intersection of Columbia Rd 34 and CO Rd 299	33.230115	-93.090011	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/22/2013	3:30 PM	Community	Last boom on creek on Columbia Rd 34	33.2299232	-93.1119155	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; boom present; No work activity; slight breeze	Reagan Moore
3/22/2013	3:30 PM	Community	Last boom on creek on Columbia Rd 34	33.22978	-93.111925	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/22/2013	3:38 PM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.2368164	-93.1498565	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; slight breeze	Reagan Moore
3/22/2013	3:38 PM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.236803	-93.149826	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/22/2013	3:43 PM	Community	Intersection of Columbia Rd 25 and HWY 82	33.2513771	-93.1483612	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; slight breeze	Reagan Moore
3/22/2013	3:43 PM	Community	Intersection of Columbia Rd 25 and HWY 82	33.251251	-93.148456	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/22/2013	3:47 PM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.261284	-93.144573	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/22/2013	3:47 PM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.2612304	-93.1445159	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; sight breeze	Reagan Moore
3/22/2013	3:53 PM	Community	Intersection of Columbia Rd 408 and HWY 82	33.2508201	-93.1189651	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; slight breeze	Reagan Moore
3/22/2013	3:54 PM	Community	Intersection of Columbia Rd 408 and HWY 82	33.251005	-93.119036	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/22/2013	3:58 PM	Community	Intersection of HWY 82 and Columbia Rd 294	33.2500648	-93.0940399	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; slight breeze	Reagan Moore
3/22/2013	3:58 PM	Community	Intersection of HWY 82 and Columbia Rd 294	33.250312	-93.094173	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/22/2013	5:03 PM	Community	Turn off past main entrance gate.	33.2412528	-93.1452865	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; slight breeze	Reagan Moore
3/22/2013	5:03 PM	Community	Turn off past main entrance gate.	33.241362	-93.145266	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/22/2013	5:15 PM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248839	-93.135859	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/22/2013	5:15 PM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.2487373	-93.1356964	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; slight breeze	Reagan Moore
3/22/2013	5:23 PM	Community	Weir 1	33.2389717	-93.1248397	MultiRAE	H2S	<1	ppm	Vac Trucks Present; boom present; Workers present; slight breeze	Reagan Moore
3/22/2013	5:24 PM	Community	Weir 1	33.238719	-93.124592	MultiRAE	VOC	<0.1	ppm	Workers present;	Bryan Lamb
3/22/2013	5:28 PM	Community	Intersection of Columbia Rd 25 and HWY 82	33.2513771	-93.1483612	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; sLight breeze	Reagan Moore
3/22/2013	5:45 PM	Community	Intersection of Columbia Rd 25 and HWY 82	33.2513771	-93.1483612	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; slight breeze	Reagan Moore
3/22/2013	5:47 PM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.261174	-93.144634	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/22/2013	5:49 PM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.2612304	-93.1445159	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; slight breeze	Reagan Moore
3/22/2013	5:56 PM	Community	Intersection of Columbia Rd 408 and HWY 82	33.2508201	-93.1189651	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; slight breeze	Reagan Moore
3/22/2013	5:57 PM	Community	Intersection of Columbia Rd 408 and HWY 82	33.250977	-93.119074	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/22/2013	5:59 PM	Community	Intersection of HWY 82 and Columbia Rd 294	33.246462	-93.099052	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; slight breeze	Reagan Moore
3/22/2013	6:00 PM	Community	Intersection of HWY 82 and Columbia Rd 294	33.250053	-93.094023	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/22/2013	6:09 PM	Community	Last boom on creek on Columbia Rd 34	33.229908	-93.111891	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/22/2013	6:10 PM	Community	Last boom on creek on Columbia Rd 34	33.229908	-93.111891	MultiRAE	H2S	<1	ppm	No work activity; Workers not present;	Bryan Lamb
3/22/2013	6:17 PM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.23686	-93.149958	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/22/2013	6:18 PM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.2368164	-93.1498565	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; slight breeze	Reagan Moore
3/22/2013	6:20 PM	Community	Intersection of Columbia Rd 25 and HWY 82	33.2513771	-93.1483612	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; slight breeze	Reagan Moore
3/22/2013	6:21 PM	Community	Intersection of Columbia Rd 25 and HWY 82	33.251062	-93.148258	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/22/2013	6:24 PM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.2612304	-93.1445159	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; slight breeze	Reagan Moore
3/22/2013	6:24 PM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.261265	-93.144609	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/22/2013	6:26 PM	Community	Intersection of Columbia Rd 408 and HWY 82	33.2508201	-93.1189651	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; slight breeze	Reagan Moore
3/22/2013	6:29 PM	Community	Intersection of Columbia Rd 408 and HWY 82	33.250994	-93.11905	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/22/2013	6:32 PM	Community	Intersection of HWY 82 and Columbia Rd 294	33.2500648	-93.0940399	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; slight breeze	Reagan Moore
3/22/2013	6:32 PM	Community	Intersection of HWY 82 and Columbia Rd 294	33.250181	-93.093858	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present;	Bryan Lamb
3/23/2013	8:53 AM	Community	Turn off past main entrance gate.	33.240674	-93.145366	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/23/2013	8:53 AM	Community	Turn off past main entrance gate.	33.241155	-93.145419	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/23/2013	8:56 AM	Community	El Dorado Pipeline crossing next to creek.	33.241487	-93.142195	MultiRAE	VOC	<0.1	ppm	No Visible Oil; Vac Trucks Present; Workers present; Slight breeze	Reagan Moore
3/23/2013	8:56 AM	Community	El Dorado Pipeline crossing next to creek.	33.241574	-93.142248	MultiRAE	H2S	<1	ppm	No Visible Oil; Vac Trucks Present; Workers present; Slight breeze	Reagan Moore
3/23/2013	9:02 AM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248838	-93.135867	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/23/2013	9:02 AM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248838	-93.135867	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/23/2013	9:09 AM	Community	Weir 1	33.238638	-93.124328	MultiRAE	VOC	<0.1	ppm	Vac Trucks Present; boom present; Workers present; Slight breeze	Reagan Moore
3/23/2013	9:10 AM	Community	Weir 1	33.238751	-93.124517	MultiRAE	H2S	<1	ppm	Exhaust fumes odor; boom present; Workers present; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/23/2013	9:17 AM	Community	Weir 2	33.238273	-93.12042	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Workers present; Slight breeze	Reagan Moore
3/23/2013	9:17 AM	Community	Weir 2	33.238329	-93.120444	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Workers present; Slight breeze	Reagan Moore
3/23/2013	9:29 AM	Community	Intersection of Columbia Rd 34 and CO Rd 299	33.230179	-93.09009	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/23/2013	9:29 AM	Community	Intersection of Columbia Rd 34 and CO Rd 299	33.230091	-93.089934	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/23/2013	9:34 AM	Community	Last boom on creek on Columbia Rd 34	33.229918	-93.11178	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; boom present; No work activity; Slight breeze	Reagan Moore
3/23/2013	9:38 AM	Community	Last boom on creek on Columbia Rd 34	33.229918	-93.11178	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; boom present; No work activity; Slight breeze	Reagan Moore
3/23/2013	9:53 AM	Community	Intersection of Columbia Rd 25 and HWY 82	33.251338	-93.148323	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/23/2013	9:54 AM	Community	Intersection of Columbia Rd 25 and HWY 82	33.251293	-93.148306	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/23/2013	9:56 AM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.261299	-93.144626	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/23/2013	9:56 AM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.261242	-93.14464	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/23/2013	10:02 AM	Community	Intersection of Columbia Rd 408 and HWY 82	33.250889	-93.118967	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/23/2013	10:02 AM	Community	Intersection of Columbia Rd 408 and HWY 82	33.250843	-93.118951	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/23/2013	10:05 AM	Community	Intersection of HWY 82 and Columbia Rd 294	33.250234	-93.094068	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/23/2013	10:06 AM	Community	Intersection of HWY 82 and Columbia Rd 294	33.250187	-93.094061	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/23/2013	10:13 AM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.236796	-93.149898	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/23/2013	10:14 AM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.236796	-93.149898	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/23/2013	10:46 AM	Community	Turn off past main entrance gate.	33.24155	-93.145519	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/23/2013	10:47 AM	Community	Turn off past main entrance gate.	33.241468	-93.145374	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/23/2013	10:47 AM	Community	El Dorado Pipeline crossing next to creek.	33.241659	-93.141965	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Workers present; Slight breeze	Reagan Moore
3/23/2013	10:54 AM	Community	El Dorado Pipeline crossing next to creek.	33.241741	-93.141893	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Workers present; Slight breeze	Reagan Moore
3/23/2013	11:08 AM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248739	-93.135846	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/23/2013	11:09 AM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248835	-93.135843	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/23/2013	11:15 AM	Community	Weir 1	33.238496	-93.124533	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Workers present; Slight breeze	Reagan Moore
3/23/2013	11:16 AM	Community	Weir 1	33.238527	-93.124494	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/23/2013	11:23 AM	Community	Weir 2	33.238435	-93.12031	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Workers present; Slight breeze	Reagan Moore
3/23/2013	11:23 AM	Community	Weir 2	33.238427	-93.120304	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/23/2013	11:39 AM	Community	Intersection of Columbia Rd 34 and CO Rd 299	33.230175	-93.08985	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/23/2013	11:40 AM	Community	Intersection of Columbia Rd 34 and CO Rd 299	33.23022	-93.089861	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/23/2013	11:52 AM	Community	Last boom on creek on Columbia Rd 34	33.229817	-93.111711	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; boom present; No work activity; Slight breeze	Reagan Moore
3/23/2013	11:53 AM	Community	Last boom on creek on Columbia Rd 34	33.229808	-93.111881	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/23/2013	2:06 PM	Community	Turn off past main entrance gate.	33.241133	-93.145407	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/23/2013	2:07 PM	Community	Turn off past main entrance gate.	33.24125	-93.145284	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/23/2013	2:10 PM	Community	El Dorado Pipeline crossing next to creek.	33.241533	-93.142174	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Workers present; Slight breeze	Reagan Moore
3/23/2013	2:10 PM	Community	El Dorado Pipeline crossing next to creek.	33.241533	-93.142174	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Workers present; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/23/2013	2:20 PM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248749	-93.135741	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/23/2013	2:21 PM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248812	-93.13573	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/23/2013	2:28 PM	Community	Weir 1	33.238659	-93.124503	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Workers present; Slight breeze	Reagan Moore
3/23/2013	2:28 PM	Community	Weir 1	33.238674	-93.124291	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Workers present; Slight breeze	Reagan Moore
3/23/2013	2:35 PM	Community	Weir 2	33.238455	-93.120337	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Workers not present; Slight breeze	Reagan Moore
3/23/2013	2:36 PM	Community	Weir 2	33.238453	-93.12046	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Workers not present; Slight breeze	Reagan Moore
3/23/2013	2:47 PM	Community	Intersection of Columbia Rd 34 and CO Rd 299	33.23013	-93.089901	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/23/2013	2:48 PM	Community	Intersection of Columbia Rd 34 and CO Rd 299	33.23013	-93.089901	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/23/2013	3:03 PM	Community	Last boom on creek on Columbia Rd 34	33.229995	-93.111801	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; boom present; No work activity; Slight breeze	Reagan Moore
3/23/2013	3:03 PM	Community	Last boom on creek on Columbia Rd 34	33.229995	-93.111801	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; boom present; No work activity; Slight breeze	Reagan Moore
3/23/2013	3:14 PM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.236834	-93.149859	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/23/2013	3:15 PM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.236834	-93.149859	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/23/2013	3:18 PM	Community	Intersection of Columbia Rd 25 and HWY 82	33.251336	-93.148129	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/23/2013	3:19 PM	Community	Intersection of Columbia Rd 25 and HWY 82	33.251227	-93.148423	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/23/2013	3:21 PM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.261311	-93.144664	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/23/2013	3:21 PM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.261311	-93.144664	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/23/2013	3:29 PM	Community	Intersection of Columbia Rd 408 and HWY 82	33.250957	-93.11922	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/23/2013	3:30 PM	Community	Intersection of Columbia Rd 408 and HWY 82	33.25092	-93.119097	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/23/2013	3:33 PM	Community	Intersection of HWY 82 and Columbia Rd 294	33.250236	-93.094079	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/23/2013	3:33 PM	Community	Intersection of HWY 82 and Columbia Rd 294	33.250236	-93.094079	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	9:06 AM	Community	Turn off past main entrance gate.	33.24125	-93.14534	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	9:07 AM	Community	Turn off past main entrance gate.	33.241349	-93.145207	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	9:09 AM	Community	El Dorado Pipeline crossing next to creek.	33.241589	-93.141893	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Workers present; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/24/2013	9:09 AM	Community	El Dorado Pipeline crossing next to creek.	33.241589	-93.141893	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Workers present; Slight breeze	Reagan Moore
3/24/2013	9:15 AM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248758	-93.135802	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	9:15 AM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248758	-93.135802	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	9:22 AM	Community	Weir 1	33.238794	-93.124516	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Workers present; Slight breeze	Reagan Moore
3/24/2013	9:22 AM	Community	Weir 1	33.238794	-93.124516	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Workers present; Slight breeze	Reagan Moore
3/24/2013	9:28 AM	Community	Weir 2	33.238676	-93.120439	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Workers not present; Slight breeze	Reagan Moore
3/24/2013	9:29 AM	Community	Weir 2	33.23866	-93.12065	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Workers not present; Slight breeze	Reagan Moore
3/24/2013	9:40 AM	Community	Intersection of Columbia Rd 34 and CO Rd 299	33.230201	-93.089935	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	9:40 AM	Community	Intersection of Columbia Rd 34 and CO Rd 299	33.230195	-93.089974	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	9:44 AM	Community	Last boom on creek on Columbia Rd 34	33.230034	-93.11169	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; boom present; No work activity; Slight breeze	Reagan Moore
3/24/2013	9:45 AM	Community	Last boom on creek on Columbia Rd 34	33.229905	-93.111806	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; boom present; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/24/2013	9:51 AM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.236734	-93.149908	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/24/2013	9:52 AM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.236781	-93.149864	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/24/2013	9:55 AM	Community	Intersection of Columbia Rd 25 and HWY 82	33.251146	-93.148462	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/24/2013	9:55 AM	Community	Intersection of Columbia Rd 25 and HWY 82	33.251205	-93.148416	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/24/2013	9:57 AM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.261382	-93.144647	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/24/2013	9:58 AM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.261225	-93.144609	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/24/2013	10:03 AM	Community	Intersection of Columbia Rd 408 and HWY 82	33.250619	-93.118905	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	10:03 AM	Community	Intersection of Columbia Rd 408 and HWY 82	33.250865	-93.119073	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	10:07 AM	Community	Intersection of HWY 82 and Columbia Rd 294	33.250223	-93.094061	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	10:07 AM	Community	Intersection of HWY 82 and Columbia Rd 294	33.250223	-93.094061	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	10:38 AM	Community	Turn off past main entrance gate.	33.241489	-93.145178	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	10:38 AM	Community	Turn off past main entrance gate.	33.241489	-93.145178	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/24/2013	10:42 AM	Community	El Dorado Pipeline crossing next to creek.	33.241597	-93.14197	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Workers present; Slight breeze	Reagan Moore
3/24/2013	10:43 AM	Community	El Dorado Pipeline crossing next to creek.	33.241597	-93.14197	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Workers present; Slight breeze	Reagan Moore
3/24/2013	10:48 AM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248785	-93.13585	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	10:49 AM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248668	-93.135771	MultiRAE	H2S	<1	ppm	No odor; Exhaust fumes odor; No work activity; Slight breeze	Reagan Moore
3/24/2013	11:01 AM	Community	Weir 1	33.238552	-93.124599	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Workers not present; Slight breeze	Reagan Moore
3/24/2013	11:02 AM	Community	Weir 1	33.238552	-93.124599	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Workers not present; Slight breeze	Reagan Moore
3/24/2013	11:08 AM	Community	Weir 2	33.238551	-93.12038	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Workers present; Slight breeze	Reagan Moore
3/24/2013	11:08 AM	Community	Weir 2	33.238567	-93.120401	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Workers present; Slight breeze	Reagan Moore
3/24/2013	11:17 AM	Community	Intersection of Columbia Rd 34 and CO Rd 299	33.230162	-93.089951	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	11:18 AM	Community	Intersection of Columbia Rd 34 and CO Rd 299	33.230169	-93.089968	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; School; No work activity; Slight breeze	Reagan Moore
3/24/2013	11:22 AM	Community	Last boom on creek on Columbia Rd 34	33.229831	-93.111906	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; boom present; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/24/2013	11:23 AM	Community	Last boom on creek on Columbia Rd 34	33.229831	-93.111906	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; boom present; No work activity; Slight breeze	Reagan Moore
3/24/2013	11:31 AM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.236801	-93.149778	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/24/2013	11:31 AM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.236768	-93.149815	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/24/2013	11:44 AM	Community	Intersection of Columbia Rd 25 and HWY 82	33.251181	-93.148416	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/24/2013	11:44 AM	Community	Intersection of Columbia Rd 25 and HWY 82	33.251213	-93.148357	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/24/2013	1:18 PM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.261422	-93.144529	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/24/2013	1:18 PM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.261115	-93.144573	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/24/2013	1:23 PM	Community	Intersection of Columbia Rd 408 and HWY 82	33.250919	-93.118996	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	1:24 PM	Community	Intersection of Columbia Rd 408 and HWY 82	33.250896	-93.119037	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	1:26 PM	Community	Intersection of HWY 82 and Columbia Rd 294	33.250278	-93.094071	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	1:27 PM	Community	Intersection of HWY 82 and Columbia Rd 294	33.250253	-93.094092	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	1:40 PM	Community	Intersection of Columbia Rd 34 and CO Rd 299	33.230087	-93.090105	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/24/2013	1:40 PM	Community	Intersection of Columbia Rd 34 and CO Rd 299	33.230087	-93.090105	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	1:46 PM	Community	Last boom on creek on Columbia Rd 34	33.229817	-93.111928	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; boom present; No work activity; Slight breeze	Reagan Moore
3/24/2013	1:47 PM	Community	Last boom on creek on Columbia Rd 34	33.229817	-93.111928	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; boom present; No work activity; Slight breeze	Reagan Moore
3/24/2013	1:53 PM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.236787	-93.149894	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/24/2013	1:54 PM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.236787	-93.149894	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/24/2013	1:57 PM	Community	Turn off past main entrance gate.	33.24124	-93.145281	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	1:58 PM	Community	Turn off past main entrance gate.	33.241217	-93.145296	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	2:00 PM	Community	El Dorado Pipeline crossing next to creek.	33.241631	-93.141967	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Workers present; Slight breeze	Reagan Moore
3/24/2013	2:00 PM	Community	El Dorado Pipeline crossing next to creek.	33.241631	-93.141967	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Workers present; Slight breeze	Reagan Moore
3/24/2013	2:05 PM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248884	-93.13573	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/24/2013	2:06 PM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248816	-93.135737	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	2:14 PM	Community	Weir 1	33.238778	-93.124677	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Workers not present; Slight breeze	Reagan Moore
3/24/2013	2:15 PM	Community	Weir 1	33.238778	-93.124677	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Workers not present; Slight breeze	Reagan Moore
3/24/2013	2:21 PM	Community	Weir 2	33.238417	-93.120414	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Workers present; Slight breeze	Reagan Moore
3/24/2013	2:22 PM	Community	Weir 2	33.238417	-93.120414	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Workers present; Slight breeze	Reagan Moore
3/24/2013	4:27 PM	Community	Turn off past main entrance gate.	33.24109	-93.1454	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	4:27 PM	Community	Turn off past main entrance gate.	33.241266	-93.145269	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	4:29 PM	Community	El Dorado Pipeline crossing next to creek.	33.241659	-93.142016	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Workers present; Slight breeze	Reagan Moore
3/24/2013	4:30 PM	Community	El Dorado Pipeline crossing next to creek.	33.241659	-93.142016	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Workers present; Slight breeze	Reagan Moore
3/24/2013	4:35 PM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248651	-93.135716	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/24/2013	4:35 PM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248856	-93.135822	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	4:42 PM	Community	Weir 1	33.238631	-93.12467	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Workers not present; Slight breeze	Reagan Moore
3/24/2013	4:42 PM	Community	Weir 1	33.238558	-93.124663	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Workers not present; Slight breeze	Reagan Moore
3/24/2013	4:50 PM	Community	Weir 2	33.238511	-93.120669	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Workers not present; Slight breeze	Reagan Moore
3/24/2013	4:50 PM	Community	Weir 2	33.238443	-93.120322	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Workers not present; Slight breeze	Reagan Moore
3/24/2013	5:01 PM	Community	Last boom on creek on Columbia Rd 34	33.2298	-93.111809	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; boom present; No work activity; Slight breeze	Reagan Moore
3/24/2013	5:02 PM	Community	Last boom on creek on Columbia Rd 34	33.2298	-93.111809	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; boom present; No work activity; Slight breeze	Reagan Moore
3/24/2013	5:09 PM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.236824	-93.149679	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/24/2013	5:09 PM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.236824	-93.149679	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/24/2013	5:15 PM	Community	Intersection of Columbia Rd 25 and HWY 82	33.251099	-93.148278	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/24/2013	5:16 PM	Community	Intersection of Columbia Rd 25 and HWY 82	33.251099	-93.148278	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/24/2013	5:19 PM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.261274	-93.144405	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/24/2013	5:20 PM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.261158	-93.144487	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/24/2013	5:25 PM	Community	Intersection of Columbia Rd 408 and HWY 82	33.250867	-93.118745	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	5:25 PM	Community	Intersection of Columbia Rd 408 and HWY 82	33.250867	-93.118745	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	5:28 PM	Community	Intersection of HWY 82 and Columbia Rd 294	33.2502	-93.094047	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	5:29 PM	Community	Intersection of HWY 82 and Columbia Rd 294	33.2502	-93.094047	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	5:37 PM	Community	Intersection of Columbia Rd 34 and CO Rd 299	33.23006	-93.089919	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	5:37 PM	Community	Intersection of Columbia Rd 34 and CO Rd 299	33.23006	-93.089919	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	5:53 PM	Community	Last boom on creek on Columbia Rd 34	33.229799	-93.111844	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; boom present; No work activity; Slight breeze	Reagan Moore
3/24/2013	5:55 PM	Community	Last boom on creek on Columbia Rd 34	33.229837	-93.111804	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; boom present; No work activity; Slight breeze	Reagan Moore
3/24/2013	6:04 PM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.236691	-93.149915	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/24/2013	6:04 PM	Community	Intersection of Columbia Rd 34 and Columbia Rd 25	33.236691	-93.149915	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/24/2013	6:07 PM	Community	Intersection of Columbia Rd 25 and HWY 82	33.25114	-93.148265	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/24/2013	6:08 PM	Community	Intersection of Columbia Rd 25 and HWY 82	33.251102	-93.148281	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/24/2013	6:10 PM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.261194	-93.144724	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/24/2013	6:10 PM	Community	Columbia Rd 25 and Columbia Rd 537 intersection	33.261193	-93.144724	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Residence; No work activity; Slight breeze	Reagan Moore
3/24/2013	6:16 PM	Community	Intersection of Columbia Rd 408 and HWY 82	33.250795	-93.118995	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	6:16 PM	Community	Intersection of Columbia Rd 408 and HWY 82	33.250829	-93.118957	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	6:19 PM	Community	Intersection of HWY 82 and Columbia Rd 294	33.250193	-93.094166	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	6:19 PM	Community	Intersection of HWY 82 and Columbia Rd 294	33.250184	-93.094162	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore
3/24/2013	6:26 PM	Community	Weir 2	33.238428	-93.120359	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Workers not present; Slight breeze	Reagan Moore
3/24/2013	6:26 PM	Community	Weir 2	33.238442	-93.120415	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Workers not present; Slight breeze	Reagan Moore
3/24/2013	6:32 PM	Community	Weir 1	33.238429	-93.124608	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; Workers not present; Slight breeze	Reagan Moore
3/24/2013	6:32 PM	Community	Weir 1	33.238463	-93.124569	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; Workers not present; Slight breeze	Reagan Moore
3/24/2013	6:44 PM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248686	-93.13585	MultiRAE	VOC	<0.1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/24/2013	6:44 PM	Community	Intersection of 408 and road(with no name) to main entrance. Next to Dangerous Intersection sign.	33.248686	-93.13585	MultiRAE	H2S	<1	ppm	No odor; No Visible Oil; No work activity; Slight breeze	Reagan Moore

Work Area Manually-Logged Real-Time Data Summary

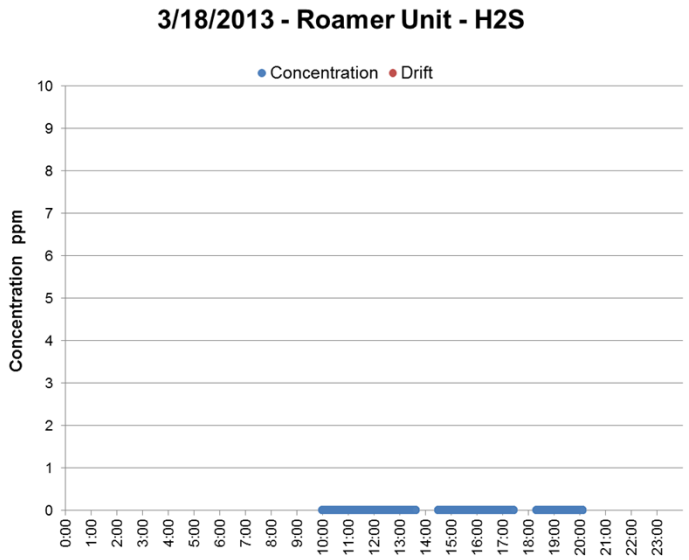
Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/16/2013	2:44 PM	Work Area	by the last boom before the wetlands	33.229869	-93.111876	MultiRAE	H2S	<1	ppm	No work activity; Workers not present; Down wind; there no visible oil or any odor	Rich Shaver
3/16/2013	2:46 PM	Work Area	by the last boom before the wet lands	33.229885	-93.111898	MultiRAE	VOC	<0.1	ppm	there is no odor and no visible oil	Rich Shaver
3/16/2013	4:17 PM	Work Area	by the pipeline that goes to eldrado	33.240892	-93.139447	MultiRAE	H2S	<1	ppm	Visible Oil; boom present; Workers present; Slight Odor; there is a skimmer also at this location	Rich Shaver
3/16/2013	4:19 PM	Work Area	at the pipeline that goes to eldrado	33.240884	-93.13945	MultiRAE	VOC	<0.1	ppm	Visible Oil; boom present; Workers present; Slight Odor; there is a skimmer at this location as well	Rich Shaver
3/16/2013	4:37 PM	Work Area	in the work area			MultiRAE	H2S	<1	ppm	Visible Oil; boom present; Workers present; Slight Odor; the workers are using a blower to push the oil towards a skimmer	Rich Shaver
3/16/2013	4:40 PM	Work Area	in the work area	33.245751	-93.132619	MultiRAE	VOC	<0.1	ppm	Visible Oil; boom present; Workers present; Slight Odor; the workers are using a blower to push the oil towards a skimmer	Rich Shaver
3/17/2013	3:34 PM	Work Area	on one of the dirt roads within the work area	33.242208	-93.120071	MultiRAE	H2S	<1	ppm	No odor;	Rich Shaver
3/17/2013	3:36 PM	Work Area	on one of the dirt roads within the work area	33.242208	-93.120073	MultiRAE	VOC	<0.1	ppm	No odor;	Rich Shaver
3/17/2013	3:36 PM	Work Area	on one of the dirt roads within the work area	33.242204	-93.120082	MultiRAE	LEL	<1	%	No odor;	Rich Shaver
3/17/2013	3:39 PM	Work Area	near weir2 in the work area	33.242204	-93.120082	MultiRAE	H2S	<1	ppm	Down wind; Slight Odor; it smells slightly like carbon	Rich Shaver

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/17/2013	3:41 PM	Work Area	near weir 2 within the work area	33.238662	-93.12049	MultiRAE	VOC	<0.1	ppm	Down wind; Slight Odor; smells a little like carbon	Rich Shaver
3/17/2013	3:53 PM	Work Area	at a four way intersection on the roads in the work area	33.238662	-93.12049	MultiRAE	H2S	<1	ppm	No odor;	Rich Shaver
3/17/2013	3:55 PM	Work Area	at a four way intersection that is down from weir 2	33.238662	-93.12049	MultiRAE	VOC	<0.1	ppm	No odor;	Rich Shaver
3/17/2013	4:48 PM	Work Area	near wire 1	33.238772	-93.124638	MultiRAE	H2S	<1	ppm	No odor;	Rich Shaver
3/17/2013	4:49 PM	Work Area	at weir 1	33.238804	-93.124683	MultiRAE	VOC	<0.1	ppm	No odor;	Rich Shaver
3/17/2013	4:50 PM	Work Area	at weir 1	33.238777	-93.124659	MultiRAE	LEL	<1	%	No odor;	Rich Shaver
3/17/2013	4:54 PM	Work Area	on a dirt road in the work area near weir1 and 2	33.238777	-93.124659	MultiRAE	H2S	<1	ppm	No odor;	Rich Shaver
3/17/2013	4:55 PM	Work Area	on a dirt road in the worn area near weir 1 and 2	33.243376	-93.126324	MultiRAE	VOC	<0.1	ppm	No odor;	Rich Shaver
3/17/2013	4:57 PM	Work Area	by a well in the work area	33.243395	-93.126311	MultiRAE	H2S	<1	ppm	Workers present; Slight Odor; it smells a little like carbon. there are workers at this location and a vac truck	Rich Shaver
3/17/2013	5:00 PM	Work Area	near a well in the work area	33.244346	-93.130366	MultiRAE	VOC	<0.1	ppm	No odor; Vac Trucks Present; Workers present; Slight Odor; smells a little like carbon. there are two workers at this location	Rich Shaver
3/17/2013	5:16 PM	Work Area	on a dirt road in the work area	33.247656	-93.128756	MultiRAE	H2S	<1	ppm	No odor;	Rich Shaver
3/17/2013	5:17 PM	Work Area	on a dirt road in the work area	33.247626	-93.128753	MultiRAE	VOC	<0.1	ppm	No odor;	Rich Shaver
3/17/2013	5:17 PM	Work Area	on a dirt road in the work area	33.247621	-93.128753	MultiRAE	LEL	<1	%	No odor;	Rich Shaver

Date	Time	Location Category	Location Description	Latitude	Longitude	Instrument	Analyte	Concentration	Units	Comments	Initials
3/17/2013	5:21 PM	Work Area	on a dirt road in the work area	33.244753	-93.138367	MultiRAE	H2S	<1	ppm	No odor;	Rich Shaver
3/17/2013	5:22 PM	Work Area	on a dirt road in the work area	33.244733	-93.138472	MultiRAE	VOC	<0.1	ppm	No odor;	Rich Shaver
3/17/2013	5:29 PM	Work Area	at the spill site	33.240731	-93.146173	MultiRAE	H2S	<1	ppm	No work activity; Workers not present; Down wind; Slight Odor; smells like carbon	Rich Shaver
3/17/2013	5:32 PM	Work Area	at the spill site	33.240734	-93.146261	MultiRAE	VOC	<0.1	ppm	No work activity; Workers not present; Down wind; Slight Odor; smells like carbon	Rich Shaver
3/18/2013	9:34 AM	Work Area	Columbia road 408	33.248284	-93.125034	MultiRAE	VOC	<0.1	ppm	No work activity;	Bryan Lamb
3/18/2013	9:43 AM	Work Area	Columbia road 408	33.248321	-93.134214	MultiRAE	VOC	<0.1	ppm	No work activity;	Bryan Lamb

ATTACHMENT I - AREARAE GRAPHS

a.)



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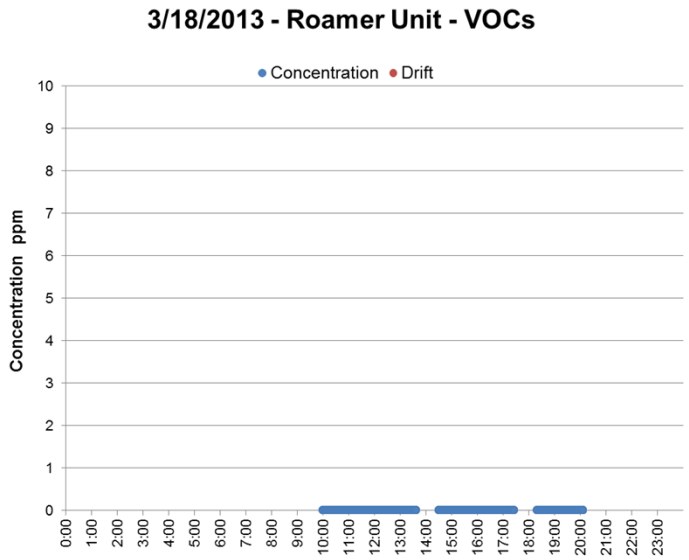

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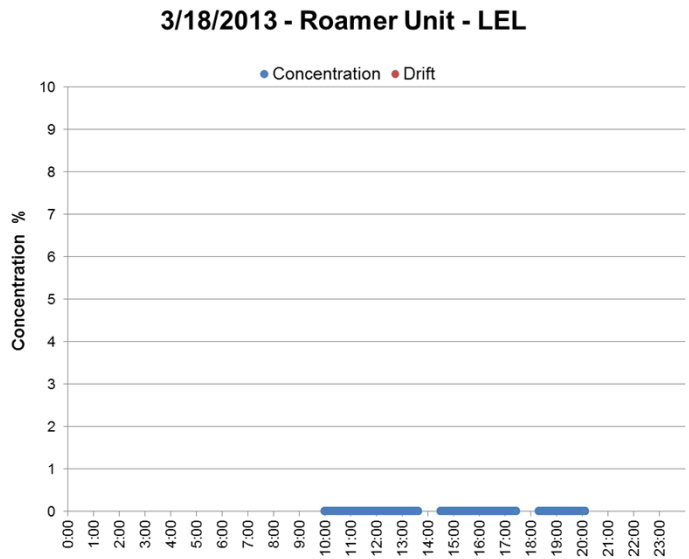

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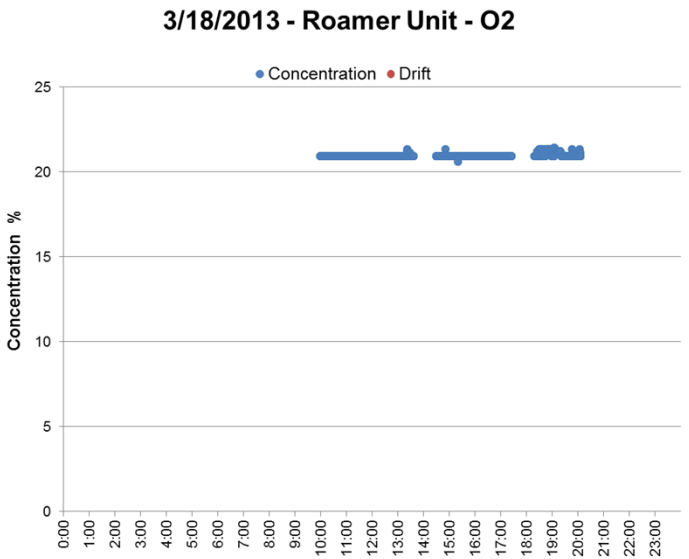
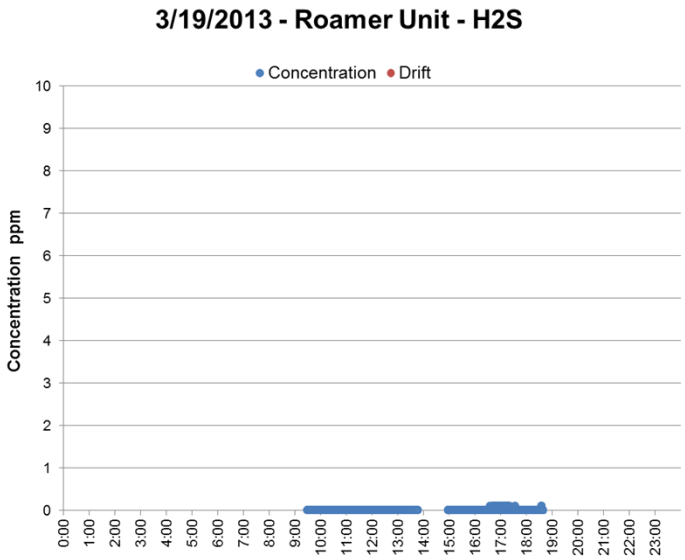


Graphs displaying concentrations recorded on March 18, 2013 for a) H_2S, b) LEL, c) VOCs, and d) O_2.

a.)



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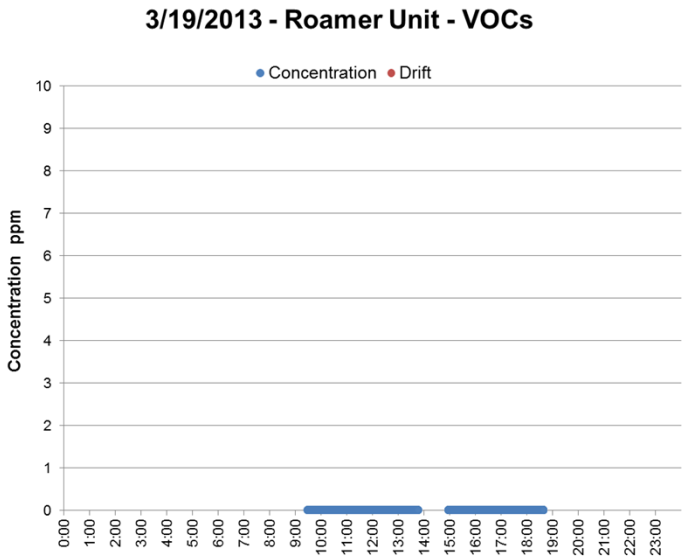
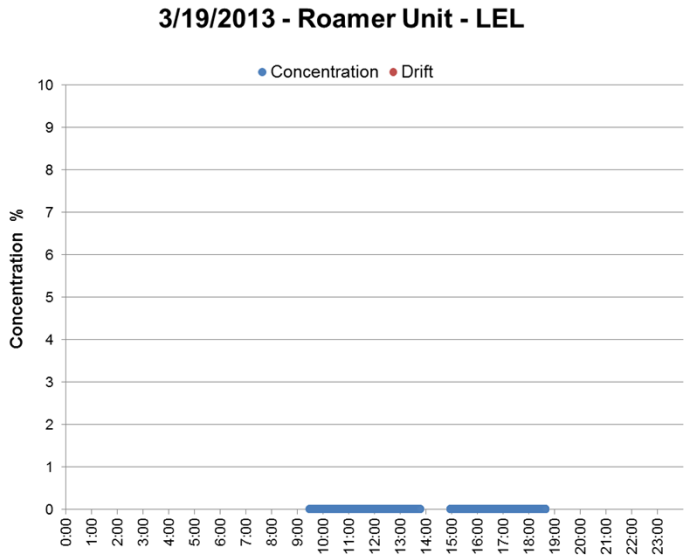
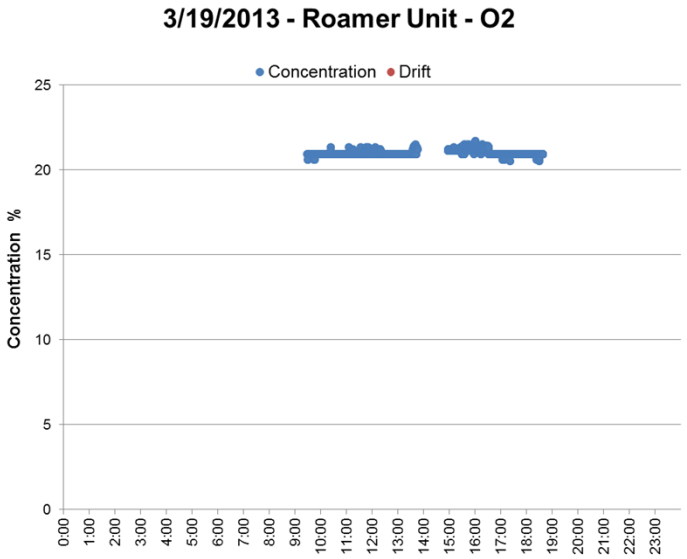


b.)

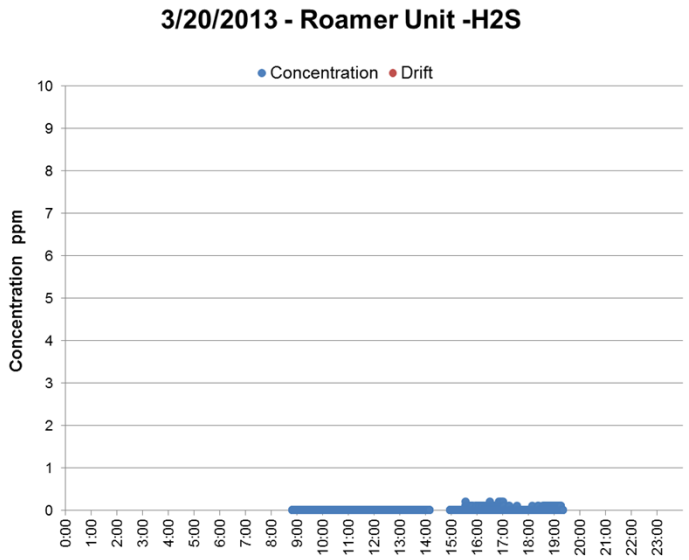


d.)



Graphs displaying concentrations recorded on March 19, 2013 for a) H_2S, b) LEL, c) VOCs, and d) O_2.

a.)



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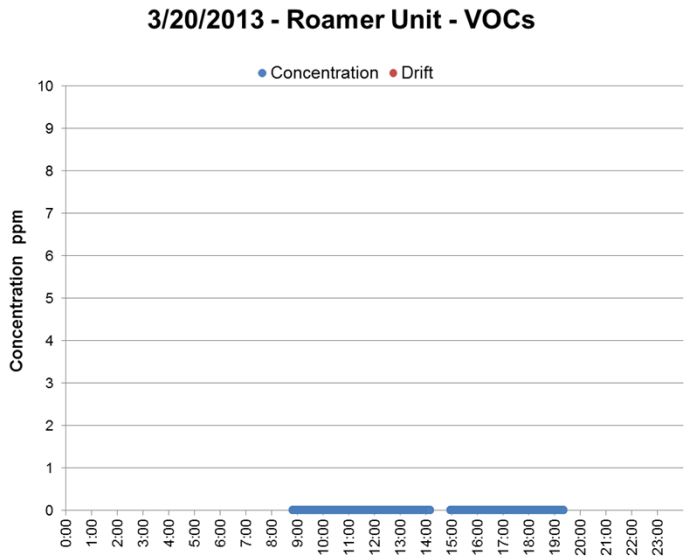

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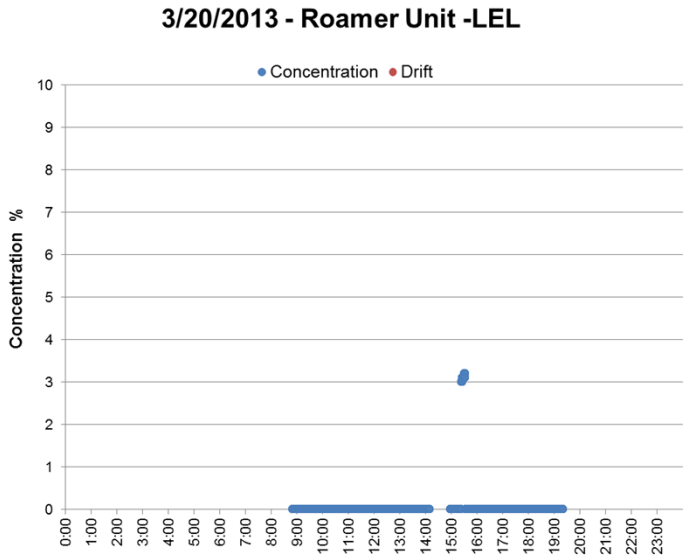
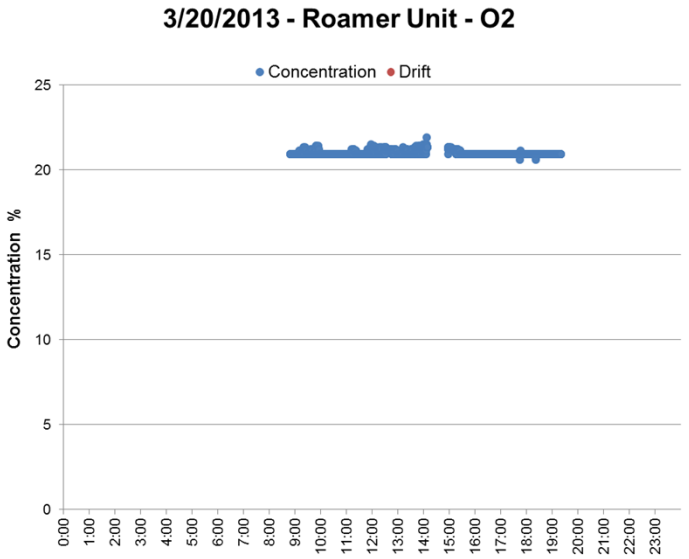
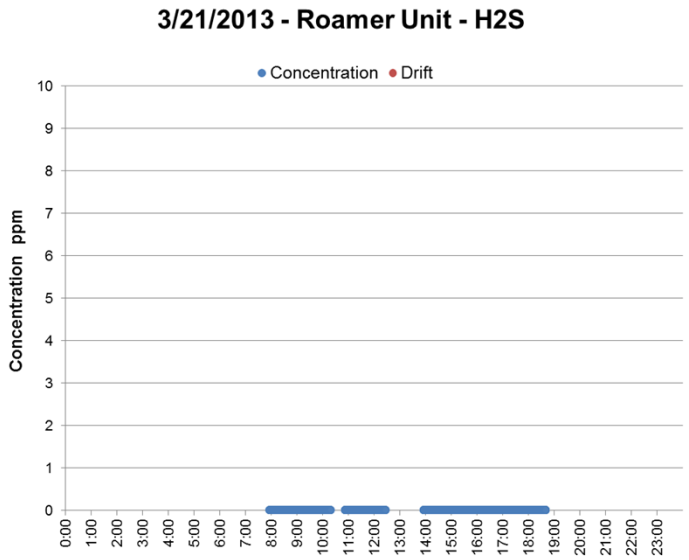


d.)



Graphs displaying concentrations recorded on March 20, 2013 for a) H_2S, b) LEL, c) VOCs, and d) O_2.

a.)



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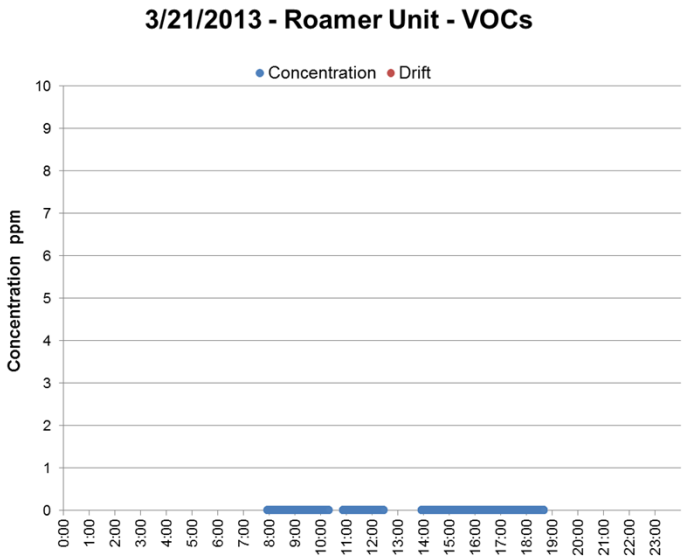

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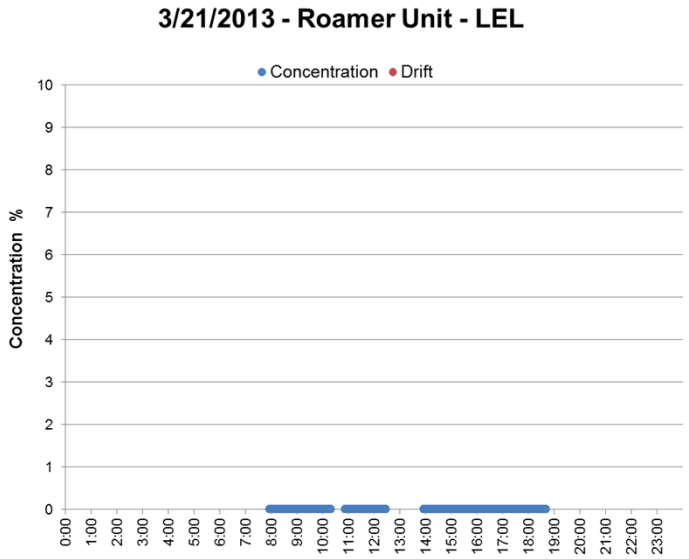

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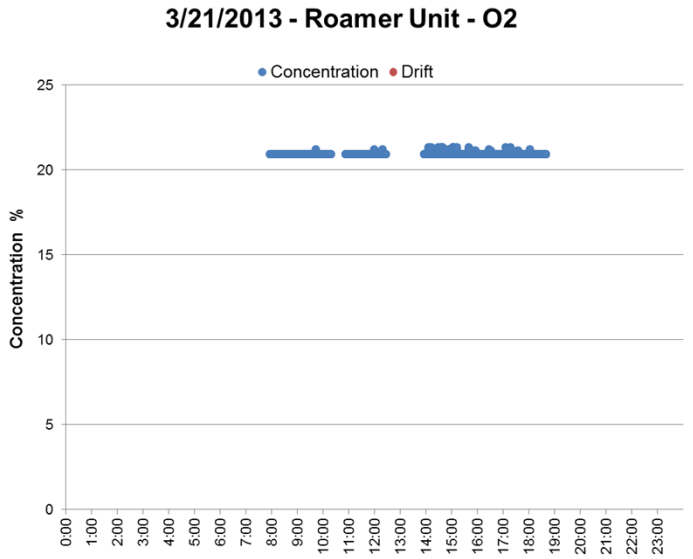
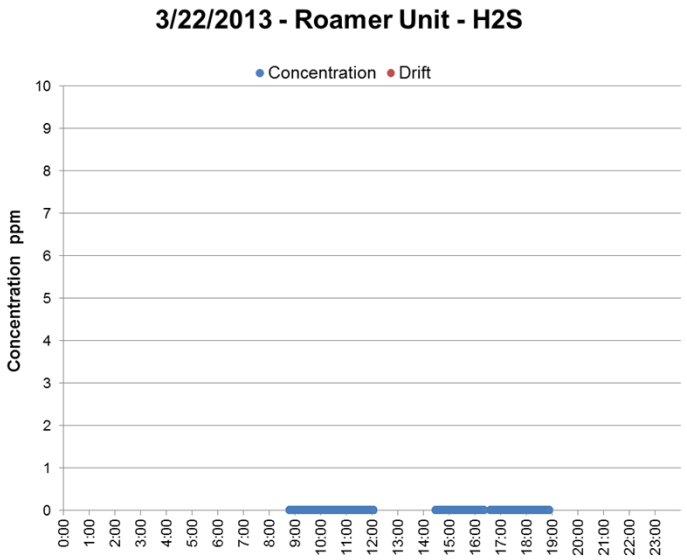


Graphs displaying concentrations recorded on March 21, 2013 for a) H_2S, b) LEL, c) VOCs, and d) O_2.

a.)



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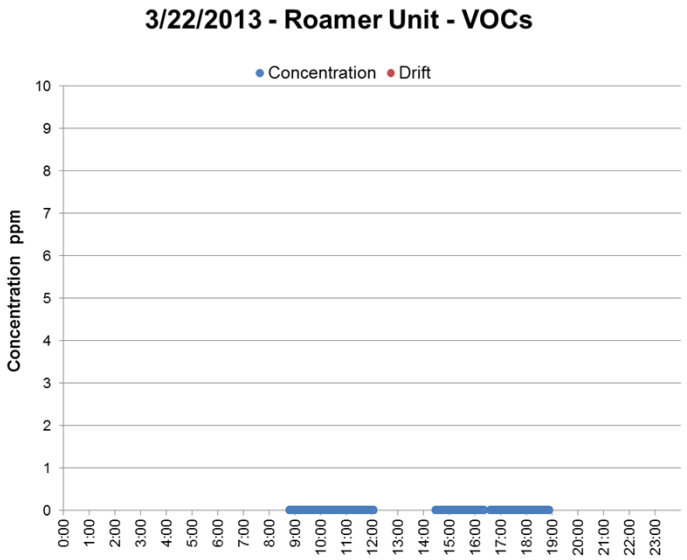

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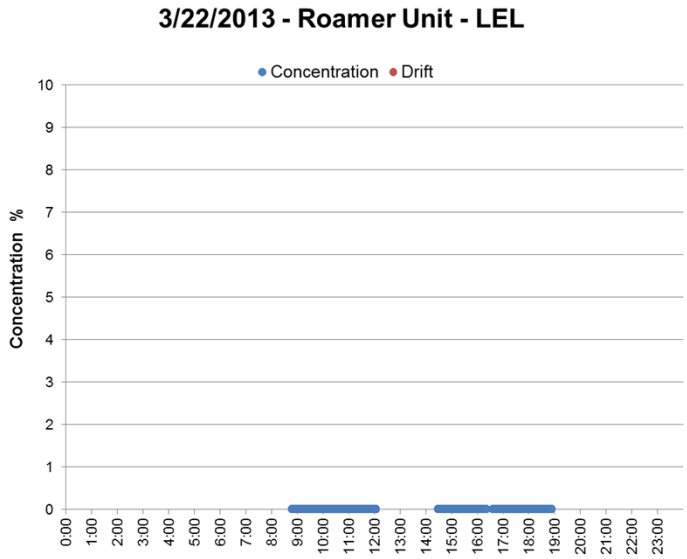
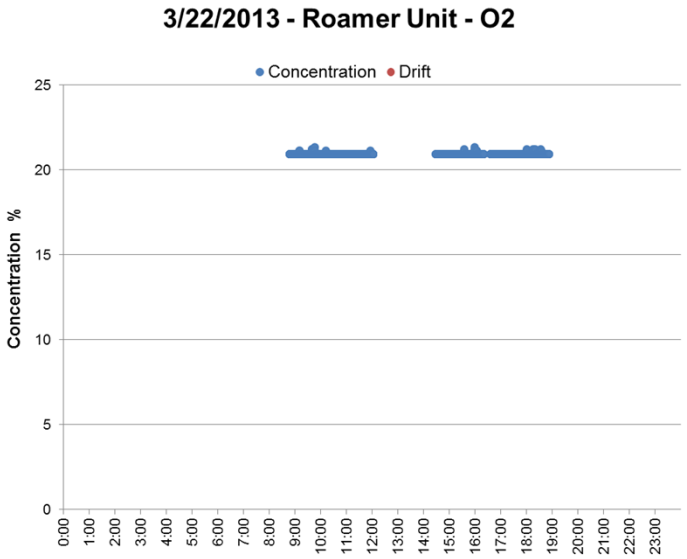
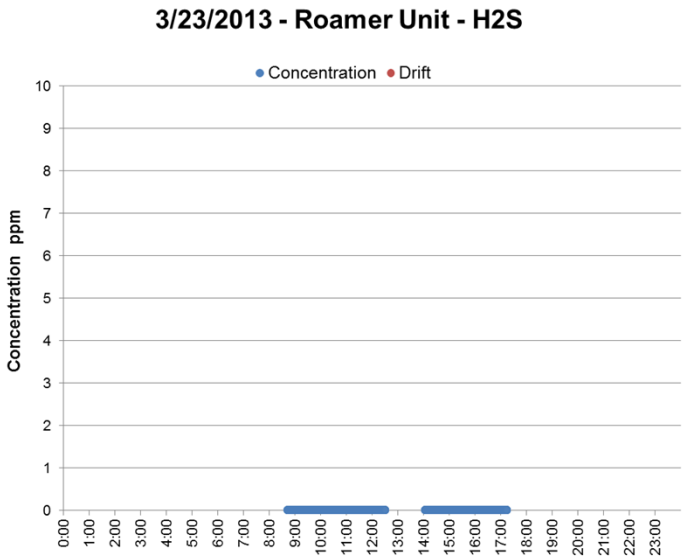


d.)



Graphs displaying concentrations recorded on March 22, 2013 for a) H_2S, b) LEL, c) VOCs, and d) O_2.

a.)



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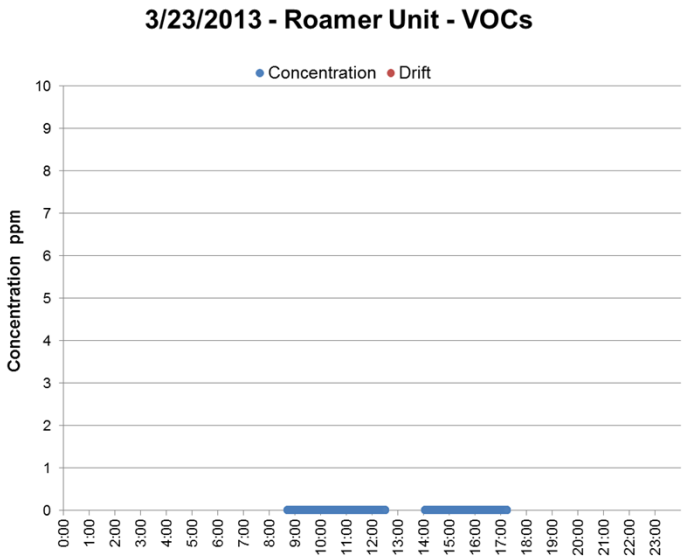

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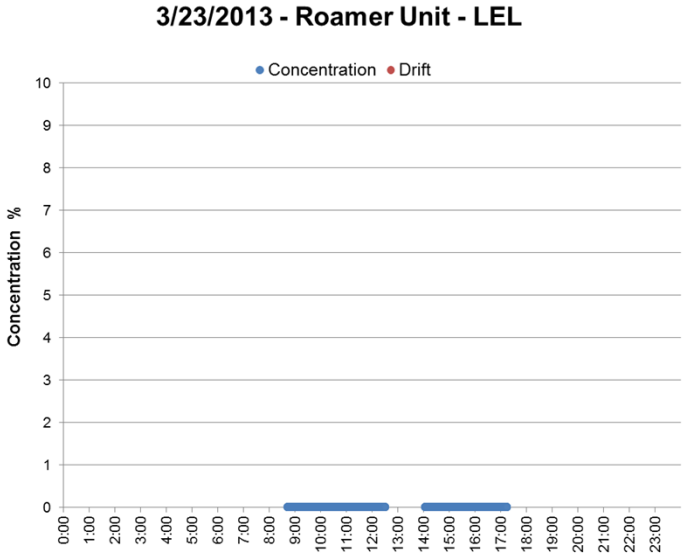
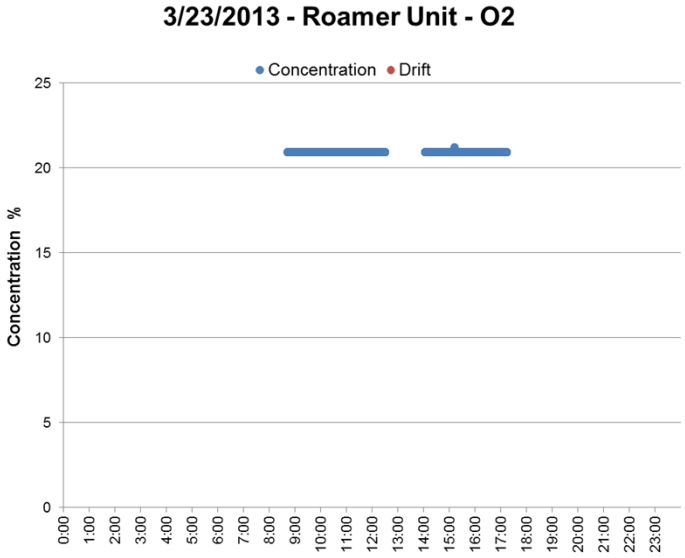
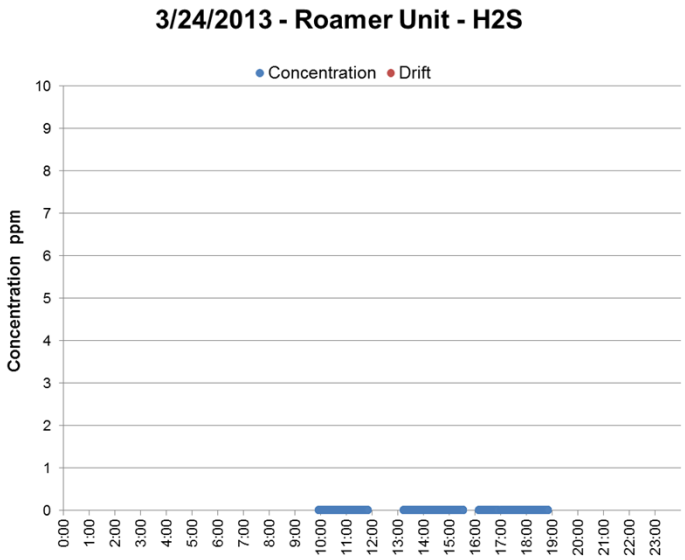


d.)



Graphs displaying concentrations recorded on March 23, 2013 for a) H_2S, b) LEL, c) VOCs, and d) O_2.

a.)



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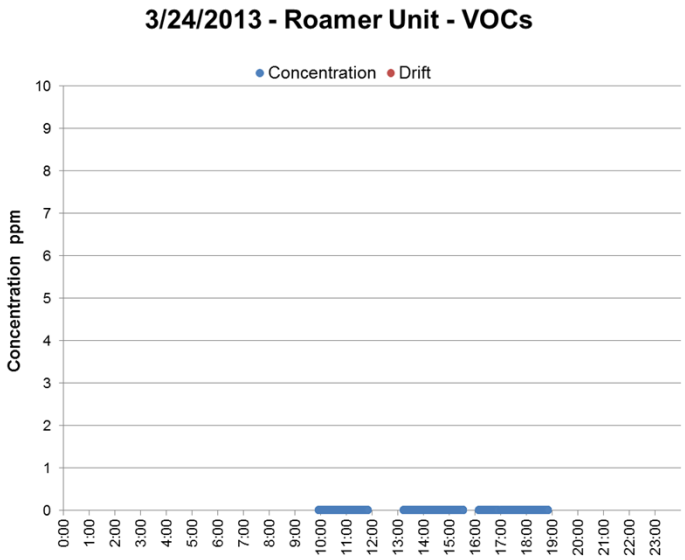

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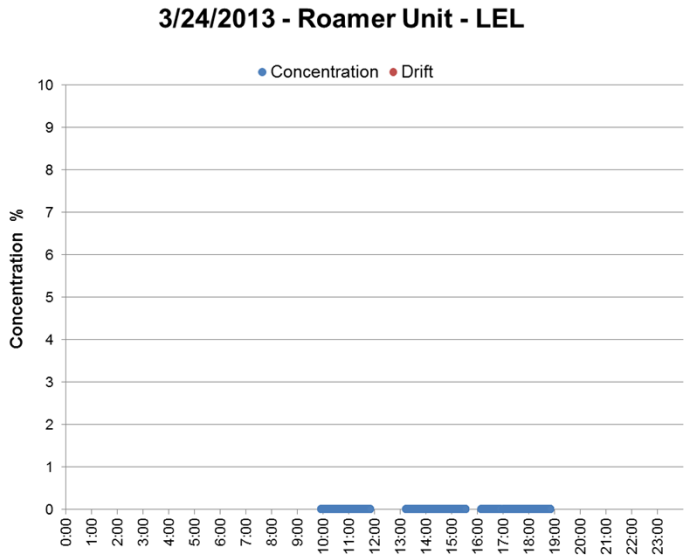

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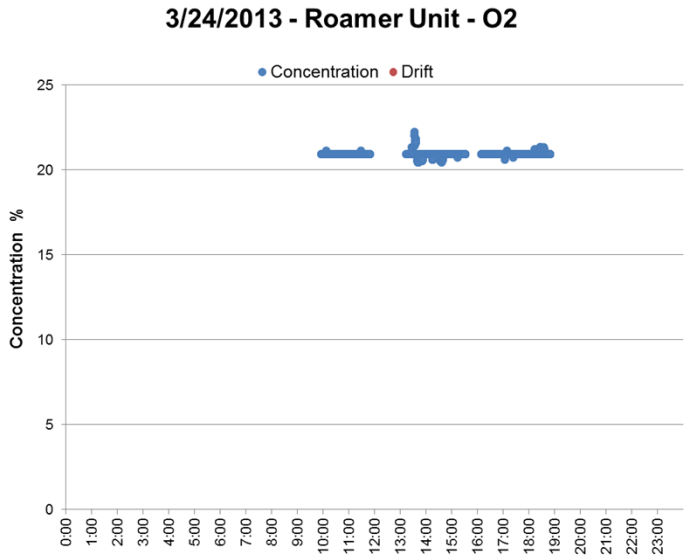

Graphs displaying concentrations recorded on March 24, 2013 for a) H_2S, b) LEL, c) VOCs, and d) O_2.

ATTACHMENT J - WASTE MANIFESTS

WCA Waste Corporation of Arkansas

UC # [illegible]

NON-HAZARDOUS MANIFEST

T13X831
Tax # 2023

GENERATOR

Generator Lion Oil LOTT

Address 1001 School St.
El Dorado, AR 71730

Phone 870-[illegible] 4550

EPA

I.D.# [illegible]

Shipping Location Magnolia [illegible]

Address 600 Columbia Rd Magnolia AR

Phone

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
Leaves + debris impacted w/crude		ML-326	15	yd	RL

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

[signature] LOTT — George [illegible]

Generator Authorized Agent Name (Print) — Signature — Delivery Date

TRANSPORTER

Transporter Name TAS Environmental

Address 6407 West 7th Street
Texarkana, TX 75501

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

[signature] 3-26-13

Driver Signature — Shipment Date

Driver Name (Print) John Pack

Truck Number 46

Truck Type [illegible]

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

[signature] 3-26-13

Driver Signature — Delivery Date

DESTINATION

Site Name Union County RDF

Address 3083 Smackover Highway
El Dorado, AR 71730

Phone Number 870-725-3821

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

[signature] 3-26-13

Name of Authorized Agent (Print) — Signature — Receipt Date

White - Original — Canary - Disposer Retain — Pink - Transporter Retain — Goldenrod - Generator Retain

Union County Landfill
3083 Smackover Hwy
El Dorado, AR 71730
8707253821

400694
TAS Environmental
3929 California Parkway East
Forth Worth, TX 76119

SITE	TICKET	SCALE OPERATOR	ORIGIN
01	272223	kfogle	COLUMBIA COUNT

DATE IN	DATE OUT	TIME IN	TIME OU
3/26/13	3/26/13	1:24 pm	1:54 pm

REFERENCE	VEHICLE	ROLL OFF
ML-386 LEAVES LIMBS I	TAS-46	

GROSS WEIGHT 41,640.00
TARE WEIGHT 34,220.00
NET WEIGHT 7,420.00

INVOICE
INBOUND

23643

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTA
3.71	TN	SP WASTE--TONS				
1.00		State Fee				
1.00		Fuel Surcharge				
		UC# 116193				

NET AMC
TENDER
CHANG
$0.0
CHECK

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions.

SIGNATURE X TAS 2023

Load #1

Form# 1035 WCA-Laser Re-order from BEI Print & PromotionSolutions 1.888.254.8784

WCA Waste Corporation of Arkansas

UC # [illegible]

NON-HAZARDOUS MANIFEST

T13-X031
Box # 19412

GENERATOR

Generator LOTT

Address 1001 School St
El Dorado, AR 71730

Phone 210-814-4750

EPA

I.D.#

Shipping Location Magnolia [illegible]

Address 600 [illegible] AR

Phone

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
Lead + debris [illegible]		ML-546	15	yd	RB

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

[illegible] (LOTT) [illegible]

Generator Authorized Agent Name (Print) Signature Delivery Date

TRANSPORTER

Transporter Name TAS Environmental

Address 6401 West 7th Street
Texarkana, TX 75501

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

[illegible] 3-26-13

Driver Signature Shipment Date

Driver Name (Print) JOHN PACK

Truck Number 46

Truck Type BOB TAIL

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

[illegible] 3-26-13

Driver Signature Delivery Date

DESTINATION

Site Name Union County RDF

Address 3083 Smackover Highway
El Dorado, AR 71730

Phone Number 870-725-3821

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

Kathleen [illegible] Kathleen [illegible] 3-26-13

Name of Authorized Agent (Print) Signature Receipt Date

White - Original Canary - Disposer Retain Pink - Transporter Retain Goldenrod - Generator Retain

Union County Landfill
3083 Smackover Hwy
El Dorado, AR 71730
8707253821

400694
TAS Environmental
3929 California Parkway East
Forth Worth, TX 76119

SITE	TICKET	SCALE OPERATOR	ORIGIN
01	272248	kfogle	

DATE IN	DATE OUT	TIME IN	TIME OUT
3/26/13	3/26/13	4:31 pm	4:44 pm

REFERENCE	VEHICLE	ROLL OFF
ML-386 LEAVES W CRUD	TAS-46	

GROSS WEIGHT 43,560.00
TARE WEIGHT 33,800.00
NET WEIGHT 9,760.00

INVOICE
INBOUND 236427E

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
4.88	TN	SP WASTE--TONS				
1.00		State Fee				
1.00		Fuel Surcharge				

UC# 116194

NET AMOUNT
$ TENDERED
$0.00 CHANGE
$0.00 CHECK NO.

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions.

SIGNATURE X TX 19412

load # 2

WCA Waste Corporation of Arkansas

UC # 118191

NON-HAZARDOUS MANIFEST

T13-X031
Box # 19544

GENERATOR

Generator LoTT

Address [illegible] El Dorado, AR 71730

Phone 870-[illegible]

EPA I.D.# [illegible]

Shipping Location [illegible]

Address [illegible]

Phone [illegible]

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
[illegible]		ML-3216	15	YI	RL
Load # 3					

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

[illegible] Generator Authorized Agent Name (Print) | [illegible] Signature | Delivery Date

TRANSPORTER

Transporter Name TAS Environmental

Address [illegible]

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

Driver Signature | 3-27-13 Shipment Date

Driver Name (Print) John Doe

Truck Number 96

Truck Type Dump Truck

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

Driver Signature | 3-27-13 Delivery Date

DESTINATION

Site Name Union County RDF

Address 3083 Smackover Highway

El Dorado, AR 71730 Phone Number 870-725-3821

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

Name of Authorized Agent (Print) | Signature | Receipt Date

White - Original | Canary - Disposer Retain | Pink - Transporter Retain | Goldenrod - Generator Retain

WCA Waste Corporation of Arkansas

UC# 116195

NON-HAZARDOUS MANIFEST

T13-X031
Box # 19544

GENERATOR

Generator LoTT

Address 1001 School St
El Dorado, AR 71730

Phone 870-814-4350

EPA I.D.#

Shipping Location Magnolia Station

Address 600 Columbia 25

Phone

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
Leaves & Debris impacted w/crude oil		ML-386	15	Yd	Rb

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

(AS Agent LOTT) George Garton

Generator Authorized Agent Name (Print) Signature Delivery Date

TRANSPORTER

Transporter Name TAS Environmental

Address 6409 West 7th Street
Texarkana, TX 75501

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

3-27-13

Driver Signature Shipment Date

Driver Name (Print) John Pack

Truck Number 96

Truck Type Bob Tail

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

3-27-13

Driver Signature Delivery Date

DESTINATION

Site Name Union County RDF

Address 3083 Smackover Highway
El Dorado, AR 71730

Phone Number 870-725-3821

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

Amanda Schibler Amanda Schibler 3-27-13

Union County Landfill
3083 Smackover Hwy
El Dorado, AR 71730
8707253821

400694
TAS Environmental
3929 California Parkway East
Forth Worth, TX 76119

SITE	TICKET	SCALE OPERATOR	ORIGIN
01	272250	ASCHIBLER	

DATE IN	DATE OUT	TIME IN	TIME OUT
3/27/13	3/27/13	7:01 am	7:19 am

REFERENCE	VEHICLE	ROLL OFF
ML-386 LEAVES	TAS-46	

GROSS WEIGHT	47,000.00
TARE WEIGHT	33,840.00
NET WEIGHT	13,160.00

QTY.	UNIT	DESCRIPTION
6.58	TN	SP WASTE--TONS
1.00		State Fee
1.00		Fuel Surcharge

Load # 3

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions.

SIGNATURE X UC #116195 TAS # 9544

$0.00 CHANGE

$0.00 CHECK NO.

Form # 1035 WCA-Laser Re-order from BFI Print & Promotion Solutions 1.888.254.8784

WCA Waste Corporation of Arkansas

UC # 116196

NON-HAZARDOUS MANIFEST

T13-X031
TAS BOX 4346

GENERATOR

Generator LOTT

Address 1001 SCHOOL ST
EL DORADO AR 71730

Phone 870-814-4350

EPA

I.D.#

Shipping Location MAGNOLIA STATION

Address 600 COLUMBIA 25

Phone

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
LEAVES + DEBRIS INDUCTED W/CRUDE OIL	~~ML 386~~	~~[illegible]~~ ML 386	45	YD	RB
[illegible]					

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

[signature] (LOTT) — Generator Authorized Agent Name (Print)

[signature] — Signature

Delivery Date

TRANSPORTER

Transporter Name TAS ENVIRONMENTAL 226246

Address 6409 WEST 7TH ST
TEXARKANA, TX 75501

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

[signature] — Driver Signature

3-27-13 — Shipment Date

Driver Name (Print) JOHN PALK

Truck Number 46

Truck Type BOB TAIL

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

[signature] — Driver Signature

3-27-13 — Delivery Date

DESTINATION

Site Name Union County RDF

Address 3083 Smackover Highway
El Dorado, AR 71730

Phone Number 870-725-3821

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

[signature] — Name of Authorized Agent (Print)

[signature] — Signature

3-27-13 — Receipt Date

White - Original Canary - Disposer Retain Pink - Transporter Retain Goldenrod - Generator Retain

WCA Waste Corporation of Arkansas

UC# 116196

NON-HAZARDOUS MANIFEST

T13-X031
TAS BOX 4346

GENERATOR

erator LOTT
ess 1001 SCHOOL ST
L DORADO AR 71730
ne 870-814-4350

EPA
I.D.#
Shipping Location MAGNOLIA STATION
Address 600 COLUMBIA 25
Phone

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
ES + DEBRIS INFLATED W/CRUDE OIL	~~ML 386~~	~~15~~ ML 386	45	YD	RB

by certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transtion according to applicable law and regulations.

(AS AGENT LOTT) George Garten

Generator Authorized Agent Name (Print) Signature Delivery Date

TRANSPORTER

sporter Name TAS ENVIRONMENTAL
ess 6409 WEST 7TH ST
ARKANA, TX 75501

by acknowledge receipt of the above-described materials nsport from the generator shipping location listed above.

3-27-13

Signature Shipment Date

Driver Name (Print) JOHN PACK
Truck Number 46
Truck Type BUB TAIL

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

3-27-13

Driver Signature Delivery Date

DESTINATION

Name Union County RDF
ess 3083 Smackover Highway
El Dorado, AR 71730 Phone Number 870-725-3821

osal Location: North East Level

by acknowledge receipt of the above-described materials.

Katherine Johnson 3-27-13

e of Authorized Agent (Print) Signature Receipt Date

Union County Landfill
[illegible] Smackover Hwy
El Dorado, AR 71730
[illegible]

[illegible]
TAS Environmental
3929 California Parkway East
Forth North, TX 76119

SITE	TICKET	SCALE OPERATOR	ORIGIN
01	272271	kfogle	UNION COUNTY

DATE IN	DATE OUT	TIME IN	TIME OUT
3/27/13	3/27/13	10:37 am	11:02 am

REFERENCE	VEHICLE	ROLL OFF
ML-386 CRUDE OIL W/LI	TAS-46	

GROSS WEIGHT 44,400.00
TARE WEIGHT 35,040.00
NET WEIGHT 9,360.00

QTY.	UNIT	DESCRIPTION
4.65	TN	SP WASTE--TONS
1.00		State Fee
1.00		Fuel Surcharge
		Manifest # 116196

Load#4

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions.

SIGNATURE X [signature] UC# 116196 TAS# 21346

$0.00 CHANGE

$0.00 CHECK NO.

Form # 1035 WCA Lasm Re order from BIJ Print & Promotion Solutions 1 800 754 8/04

WCA
Waste Corporation of Arkansas

UC # [illegible]

NON-HAZARDOUS MANIFEST

GENERATOR

Generator [illegible]

Address [illegible]

[illegible]

Phone [illegible]

EPA I.D.# [illegible]

Shipping Location [illegible]

Address [illegible]

Phone [illegible]

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

[illegible] | [illegible]

Generator Authorized Agent Name (Print) | Signature | Delivery Date

TRANSPORTER

Transporter Name [illegible]

Address [illegible]

[illegible]

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

[illegible]

Driver Signature | Shipment Date

Driver Name (Print) [illegible]

Truck Number [illegible]

Truck Type [illegible]

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

[illegible]

Driver Signature | Delivery Date

DESTINATION

Site Name Union County RDF

Address 3083 Smackover Highway

El Dorado, AR 71730 Phone Number 870-725-3821

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

[illegible]

Name of Authorized Agent (Print) | Signature | Receipt Date

White - Original | Canary - Disposer Retain | Pink - Transporter Retain | Goldenrod - Generator Retain

WCA Waste Corporation of Arkansas

UC# 116197

NON-HAZARDOUS MANIFEST

Box# 19661

GENERATOR

enerator LOTT

ddress 1001 School St

El Dorado AR 71730

hone 870-814-4350

EPA I.D.#

Shipping Location Magnolia Station

Address 600 Columbia 25 Magnolia, AR

Phone

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
...s + debris impacted w/crude oil		ML-3886	15	yd	RB

ereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable ...te law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

(As Agent The LOTT) George Carter

Generator Authorized Agent Name (Print) Signature Delivery Date

TRANSPORTER

...nsporter Name TAS Environmental

...dress 6409 West 7th Street

Texarkana, TX 75501

...reby acknowledge receipt of the above-described materials transport from the generator shipping location listed above.

Allen Cantrell 3-27-13

...er Signature Shipment Date

Driver Name (Print) Allen Campbell

Truck Number 83

Truck Type Roll off

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

Allen Cantrell 3-27-13

Driver Signature Delivery Date

DESTINATION

...e Name Union County RDF

...dress 3083 Smackover Highway

El Dorado, AR 71730 Phone Number 870-725-3821

posal Location: North East Level

...reby acknowledge receipt of the above-described materials. 3-27-13

Union County Landfill
3083 Smackover Hwy
El Dorado, AR 71730
8707253821

400694
TAS Environmental
3929 California Parkway East
Forth Worth, TX 76119

SITE	TICKET	SCALE OPERATOR	ORIGIN
01	272273	kfogle	COLUMBIA COUNTY

DATE IN	DATE OUT	TIME IN	TIME OUT
3/27/13	3/27/13	10:42 am	11:09 am

REFERENCE	VEHICLE	ROLL OFF
ML-386CRUDE OIL W LE	TAS-83	

GROSS WEIGHT 44,740.00
TARE WEIGHT 39,440.00
NET WEIGHT 5,300.00

QTY.	UNIT	DESCRIPTION
2.65	TN	SP WASTE--TONS
1.00		State Fee
1.00		Fuel Surcharge
Load #5		Manifest # 116197

Form # 4035 WEA Laser Reorder from BLI Print & Promotion Solutions 1.888.254.8784

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions

SIGNATURE X [signature]

$0.00
CHECK NO.

WCA Waste Corporation of Arkansas

UC # [illegible]

NON-HAZARDOUS MANIFEST

Pos # 17408

GENERATOR

Generator [illegible] (LOTT)

Address [illegible]

El Dorado, AR 71730

Phone 870-814-4250

EPA

I.D.#

Shipping Location [illegible]

Address [illegible]

Phone

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
[illegible]		ML-396	15	yd	RC

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

[illegible] (LOTT) — Generator Authorized Agent Name (Print)

[illegible] — Signature

Delivery Date

TRANSPORTER

Transporter Name [illegible]

Address [illegible]

[illegible] 73001

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

[illegible] — Driver Signature

3-27-13 — Shipment Date

Driver Name (Print) [illegible]

Truck Number 46

Truck Type [illegible]

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

[illegible] — Driver Signature

3-27-13 — Delivery Date

DESTINATION

Site Name Union County RDF

Address 3083 Smackover Highway

El Dorado, AR 71730

Phone Number 870-725-3821

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

[illegible] — Name of Authorized Agent (Print)

[illegible] — Signature

3-27-13 — Receipt Date

White - Original Canary - Disposer Retain Pink - Transporter Retain Goldenrod - Generator Retain

WCA Waste Corporation of Arkansas

UC# 116198

NON-HAZARDOUS MANIFEST

Box # 19408

GENERATOR

Generator Lion Oil (LOTT) EPA

Address 1001 School St. I.D.# _____

El Dorado, AR 71730 Shipping Location Magnolia Station

Address 600 Columbia 25 Magnolia, AR

Phone 870-814-4350 Phone _____

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
Debris impacted w/Crude oil		ML-386	15	yd	RB

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

(As agent for LOTT) George Garten

Generator Authorized Agent Name (Print) Signature Delivery Date

TRANSPORTER

Transporter Name TAS Environmental Driver Name (Print) John Page

Truck Number 46

Address 6409 West 7th Street Truck Type Box Truck

Texarkana, TX 75501

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

3-27-13

Driver Signature Shipment Date

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

3-27-13

Driver Signature Delivery Date

DESTINATION

Site Name Union County RDF

Address 3083 Smackover Highway

El Dorado, AR 71730 Phone Number 870-725-3821

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

Katherine Johnson Katherine Johnson 3-27-13

Name of Authorized Agent (Print) Signature Receipt Date

Union County Landfill
3083 Smackover Hwy
El Dorado, AR 71730
8707253821

400694
TAS Environmental
3929 California Parkway East
Forth Worth, TX 76119

SITE	TICKET	SCALE OPERATOR	ORIGIN
01	**272297**	KFOGLE	COLUMBIA COUNTY

DATE IN	DATE OUT	TIME IN	TIME OUT
3/27/13	3/27/13	1:58 pm	2:17 pm

REFERENCE	VEHICLE	ROLL OFF
ML-386	TAS-46	

GROSS WEIGHT 47,460.00
TARE WEIGHT 33,920.00
NET WEIGHT 13,540.00

QTY.	UNIT	DESCRIPTION
6.77	TN	SP WASTE--TONS
1.00		State Fee
1.00		Fuel Surcharge

Load # 7

Re-order from BFI Print & Promotion Solutions 1.888.254.8784

Form # 1935 WCA-Loser

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions.

SIGNATURE X LL # 116198 TAS # 19408

CHANGE
$0.00
CHECK NO.

WCA
Waste Corporation of Arkansas

NON-HAZARDOUS MANIFEST

UC

GENERATOR

Generator _____ EPA

Address _____ I.D.# _____

_____ Shipping Location _____

_____ Address _____

Phone _____ Phone _____

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

Generator Authorized Agent Name (Print) Signature Delivery Date

TRANSPORTER

Transporter Name _____ Driver Name (Print) _____

_____ Truck Number _____

Address _____ Truck Type _____

_____

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

Driver Signature Shipment Date

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

Driver Signature Delivery Date

DESTINATION

Site Name Union County RDF

Address 3083 Smackover Highway

El Dorado, AR 71730 Phone Number 870-725-3821

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

Name of Authorized Agent (Print) Signature Receipt Date

White - Original Canary - Disposer Retain Pink - Transporter Retain Goldenrod - Generator Retain

WCA
Waste Corporation of Arkansas

UC 111290

NON-HAZARDOUS MANIFEST

Box # 2948

GENERATOR

nerator Lion Oil (LOTT)

dress 1001 School St

El Dorado, AR 71730

one 870 814 4350

EPA I.D.#

Shipping Location Magnolia Station

Address 600 Columbia 25 Magnolia, AR

Phone

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
es & debris impacted w/crude oil		ML-386	15	yd	RB

reby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable e law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transtation according to applicable law and regulations.

(As Agent for LOTT) George Grafton

Generator Authorized Agent Name (Print) Signature Delivery Date

TRANSPORTER

nsporter Name TKS Environmental

iress 6409 West 7th Street

Texarkana, TX 75501

eby acknowledge receipt of the above-described materials ansport from the generator shipping location listed above.

Driver Name (Print) ALAN CAMPBELL

Truck Number 83

Truck Type Roll off

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

Alan Campbell 3-27-13

r Signature Shipment Date Driver Signature Delivery Date

DESTINATION

Name Union County RDF

ress 3083 Smackover Highway

El Dorado, AR 71730 Phone Number 870-725-3821

osal Location: North East Level

3-27-13

eby acknowledge receipt of the above-described materials.

Katherine Johnson Katherine Johnson

e of Authorized Agent (Print) Signature Receipt Date

- Original Canary - Disposer Retain Pink - Transporter Retain Goldenrod - Generator Retain

Union County Landfill 111290
3083 Smackover Hwy
El Dorado, AR 71730
8707253821

400694
TAS Environmental
3929 California Parkway East
Forth Worth, TX 76119

SITE	TICKET	SCALE OPERATOR	ORIGIN
01	272300	KFOGLE	COLUMBIA COUNTY

DATE IN	DATE OUT	TIME IN	TIME OUT
3/27/13	3/27/13	1:54 pm	2:32 pm

REFERENCE	VEHICLE	ROLL OFF
ML-386	TAS-83	

INVOICE

GROSS WEIGHT 48,980.00
TARE WEIGHT 39,780.00
NET WEIGHT 9,200.00

QTY.	UNIT	DESCRIPTION
4.60	TN	SP WASTE--TONS
1.00		State Fee
1.00		Fuel Surcharge

Load #6

$0.00
CHECK NO.

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions.

SIGNATURE X Alan Cashell

Form # 1035 WCA-Laser Re-order from BFI Print & Promotion Solutions 1.888.254.8784

WCA
Waste Corporation of Arkansas

UC

NON-HAZARDOUS MANIFEST

GENERATOR

Generator

Address

Phone

EPA I.D.#

Shipping Location

Address

Phone

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

Generator Authorized Agent Name (Print) | Signature | Delivery Date

TRANSPORTER

Transporter Name

Address

Driver Name (Print)

Truck Number

Truck Type

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

Driver Signature | Shipment Date

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

Driver Signature | Delivery Date

DESTINATION

Site Name Union County RDF

Address 3083 Smackover Highway

El Dorado, AR 71730

Phone Number 870-725-3821

Disposal Location: North | East | Level

I hereby acknowledge receipt of the above-described materials.

Name of Authorized Agent (Print) | Signature | Receipt Date

White - Original | Canary - Disposer Retain | Pink - Transporter Retain | Goldenrod - Generator Retain

Union County Landfill 111291
3083 Smackover Hwy
El Dorado, AR 71730
8707253821

400694
TAS Environmental
3929 California Parkway East
Forth Worth, TX 76119

SITE	TICKET	SCALE OPERATOR	ORIGIN
01	272321	KFOGLE	COLUMBIA COUNTY

DATE IN	DATE OUT	TIME IN	TIME OUT
3/27/13	3/27/13	5:08 pm	5:40 pm

REFERENCE	VEHICLE	ROLL OFF
ML-386	TAS-83	

GROSS WEIGHT 51,340.00
TARE WEIGHT 40,560.00
NET WEIGHT 10,780.00

INVOICE

QTY.	UNIT	DESCRIPTION
5.39	TN	SP WASTE--TONS
1.00		State Fee
1.00		Fuel Surcharge

Load # 8 Manifest # 111291

Form # 1035 WCA-Laser Re-order from BFI Print & Promotion Solutions 1.888.254.8784

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions.

SIGNATURE X Alan Cantrell

$0.00
CHECK NO.

WCA
Waste Corporation of Arkansas

UC [illegible]

NON-HAZARDOUS MANIFEST

T13-X031

GENERATOR

Generator [illegible]

Address [illegible]

Phone [illegible]

EPA I.D.# [illegible]

Shipping Location [illegible]

Address [illegible]

Phone [illegible]

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

[illegible] [illegible] Delivery Date

Generator Authorized Agent Name (Print) Signature

TRANSPORTER

Transporter Name [illegible]

Address [illegible]

Driver Name (Print) [illegible]

Truck Number [illegible]

Truck Type [illegible]

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

[illegible] 3-27-13

Driver Signature Shipment Date

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

[illegible] 3-27-13

Driver Signature Delivery Date

DESTINATION

Site Name Union County RDF

Address 3083 Smackover Highway

El Dorado, AR 71730 Phone Number 870-725-3821

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

[illegible] [illegible]

Name of Authorized Agent (Print) Signature Receipt Date

White - Original Canary - Disposer Retain Pink - Transporter Retain Goldenrod - Generator Retain

Union County Landfill
3083 Smackover Hwy
El Dorado, AR 71730
8707253821

400694
TAS Environmental
3929 California Parkway East
Forth Worth, TX 76119

SITE	TICKET	SCALE OPERATOR	ORIGIN
01	272322	KFOGLE	

DATE IN	DATE OUT	TIME IN	TIME OUT
3/27/13	3/27/13	5:10 pm	5:44 pm

REFERENCE	VEHICLE	ROLL OFF
ML-386	TAS-46	

INVOICE

GROSS WEIGHT 39,580.00
TARE WEIGHT 35,500.00
NET WEIGHT 4,080.00

QTY.	UNIT	DESCRIPTION
2.04	TN	SP WASTE--TONS
1.00		State Fee
1.00		Fuel Surcharge

Load # 9 Manifest # 111292

Form # 1035 WCA-Laser Re-order from BFI Print & Promotion Solutions 1.888.254.8784

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions.

SIGNATURE X UC# 111292 TAS# B2120

$0.00
CHECK NO.

WCA
Waste Corporation of Arkansas

Job # T13X031 Box # 2503

UC [illegible]

NON-HAZARDOUS MANIFEST

GENERATOR

Generator [illegible]

Address [illegible]

Phone [illegible]

EPA I.D.#

Shipping Location [illegible]

Address [illegible]

Phone

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
[illegible]		[illegible]	15	Y/T	[illegible]

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

[illegible] [illegible]

Generator/Authorized Agent Name (Print) Signature Delivery Date

TRANSPORTER

Transporter Name TAS Environmental / Andy Hurst

Address [illegible]

Driver Name (Print) ANDY HURST

Truck Number 83-857

Truck Type [illegible]

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

Andy Hurst 4/12/13

Driver Signature Shipment Date

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

[illegible] 4/12/13

Driver Signature Delivery Date

DESTINATION

Site Name Union County RDF

Address 3083 Smackover Highway

El Dorado, AR 71730

Phone Number 870-725-3821

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

[illegible] [illegible]

Name of Authorized Agent (Print) Signature Receipt Date

White - Original Canary - Disposer Retain Pink - Transporter Retain Goldenrod - Generator Retain

Union County Landfill
3083 Smackover Hwy
El Dorado, AR 71730
8707253821

400694
TAS Environmental
3929 California Parkway East
Forth Worth, TX 76119

SITE	TICKET	SCALE OPERATOR	ORIGIN
01	**272500**	KFOGLE	COLUMBIA COUNTY

DATE IN	DATE OUT	TIME IN	TIME OUT
4/1/13	4/1/13	1:44 pm	2:27 pm

REFERENCE	VEHICLE	ROLL OFF
ML-386	TAS-83	

GROSS WEIGHT 57,140.00
TARE WEIGHT 40,960.00
NET WEIGHT 16,180.00

INVOICE
INBOUND 2363753

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
8.09	TN	SP WASTE--TONS				
1.00		State Fee				
1.00		Fuel Surcharge				

manifest #
111293

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions.

SIGNATURE X

CHECK NO.

Form # 1035 WCA-Laser Re-order from: BFI Print & Promotion Solutions 1.888.254.8784

Box 250130

UC [illegible]

WCA Waste Corporation of Arkansas

NON-HAZARDOUS MANIFEST

GENERATOR

Generator Lion Oil

Address 1001 School Street

El Dorado AR 71730

Phone 870-814-4350

EPA

I.D.#

Shipping Location Magnolia Station

Address 600 Columbia St Magnolia, AR

Phone

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
Crude oil impacted debris		ML-386	15	yd	RB

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

[signature] [signature]

Generator Authorized Agent Name (Print) Signature Delivery Date

TRANSPORTER

Transporter Name TRC Environmental

Address 6409 West 7th Street

Texarkana, TX 75501

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

[signature]

Driver Signature Shipment Date

Driver Name (Print) [illegible]

Truck Number

Truck Type

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

[signature]

Driver Signature Delivery Date

DESTINATION

Site Name Union County RDF

Address 3083 Smackover Highway

El Dorado, AR 71730

Phone Number 870-725-3821

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

[signature] [signature]

Name of Authorized Agent (Print) Signature Receipt Date

White - Original Canary - Disposer Retain Pink - Transporter Retain Goldenrod - Generator Retain

Union County Landfill
3083 Smackover Hwy
El Dorado, AR 71730
8707253821

400694
TAS Environmental
3929 California Parkway East
Forth Worth, TX 76119

SITE	TICKET	SCALE OPERATOR	ORIGIN
01	272496	KFOGLE	COLUMBIA COUNTY

DATE IN	DATE OUT	TIME IN	TIME OUT
4/1/13	4/1/13	1:41 pm	2:06 pm

REFERENCE	VEHICLE	ROLL OFF
ML-386	TAS-46	

GROSS WEIGHT	49,160.00
TARE WEIGHT	35,380.00
NET WEIGHT	13,780.00

INVOICE
INBOUND 236375

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
6.89	TN	SP WASTE--TONS				
1.00		State Fee				
1.00		Fuel Surcharge				

manifest # 111295

Form # 1035 WCA-Laser Re-order from BFI Print & Promotion Solutions 1.888.254.8784

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions.

SIGNATURE X Brad Dodd

$0.00
CHECK NO.

Waste Corporation of Arkansas

NON-HAZARDOUS MANIFEST

111294
Box # 19538

GENERATOR

Generator Lion Oil (LOTT)
Address 1001 School St.
El Dorado, AR 71730
Phone 870-814-4350

EPA
I.D.#
Shipping Location Magnolia Station
Address 600 Columbia 25 Magnolia, AR
Phone

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
Debris Impacted w/ crude oil		ML-386	15	YD	RB

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

[signature] TAS
Generator Authorized Agent Name (Print)

George Gaston
Signature

Delivery Date

TRANSPORTER

Transporter Name TAS Environmental
Address 6409 West 7th Street
Texarkana, TX 75501

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

[signature] 3-28-13
Driver Signature Shipment Date

Driver Name (Print) Alan Campbell
Truck Number 46
Truck Type Roll off

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

[signature] 3-28-13
Driver Signature Delivery Date

DESTINATION

Site Name Union County RDF
Address 3083 Smackover Highway
El Dorado, AR 71730
Phone Number 870-725-3821

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

Katherine Johnson
Name of Authorized Agent (Print)

[signature] 3-28
Signature Receipt Date

White - Original Canary - Disposer Retain Pink - Transporter Retain Goldenrod - Generator Retain

400694
TAS Environmental
3929 California Parkway East
Forth Worth, TX 76119

REFERENCE	VEHICLE	ROLL OFF
ML-386	TAS-46	

GROSS WEIGHT 37,220.00
TARE WEIGHT 33,840.00
NET WEIGHT 3,380.00

INVOICE
INBOUND 2363647

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
1.69	TN	SP WASTE--TONS	[redacted]			
1.00		State Fee				
1.00		Fuel Surcharge				

#10

Form # 1035 WCA-Laser Re-order from BFI Print & Promotion Solutions 1.888.254.8784

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions.

SIGNATURE X Alan Cantrell

WCA
Waste Corporation of Arkansas

UC

NON-HAZARDOUS MANIFEST

GENERATOR

Generator

Address

Phone

EPA I.D.#

Shipping Location

Address

Phone

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

Generator Authorized Agent Name (Print) | Signature | Delivery Date

TRANSPORTER

Transporter Name

Address

Driver Name (Print)

Truck Number

Truck Type

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

Driver Signature | Shipment Date

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

Driver Signature | Delivery Date

DESTINATION

Site Name Union County RDF

Address 3083 Smackover Highway

El Dorado, AR 71730

Phone Number 870-725-3821

Disposal Location: North | East | Level

I hereby acknowledge receipt of the above-described materials.

Name of Authorized Agent (Print) | Signature | Receipt Date

White - Original | Canary - Disposer Retain | Pink - Transporter Retain | Goldenrod - Generator Retain

Union County Landfill
3083 Smackover Hwy
El Dorado, AR 71730
8707253821

400694
TAS Environmental
3929 California Parkway East
Forth Worth, TX 76119

SITE	TICKET	SCALE OPERATOR	ORIGIN
01	272528	KFOGLE	COLUMBIA COUNTY

DATE IN	DATE OUT	TIME IN	TIME OUT
4/2/13	4/2/13	9:09 am	9:30 am

REFERENCE	VEHICLE	ROLL OFF
ML-386	TAS-46	

GROSS WEIGHT 45,360.00
TARE WEIGHT 35,580.00
NET WEIGHT

INVOICE
INBOUND 2363725

QTY.	UNIT
4.89	TN
1.00	
1.00	

manifest # 111296

CHANGE
$0.00
CHECK NO.

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions.

SIGNATURE X Brad Dudley

Box 250252

UC # 116190

WCA Waste Corporation of Arkansas

NON-HAZARDOUS MANIFEST

GENERATOR

Generator [illegible] (LOT [illegible]) EPA

Address [illegible] I.D.# [illegible]

[illegible] Shipping Location [illegible]

Address [illegible]

Phone [illegible] Phone [illegible]

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

[illegible]

Generator Authorized Agent Name (Print) Signature Delivery Date

TRANSPORTER

Transporter Name [illegible]

Address [illegible]

[illegible]

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

[illegible] [illegible]

Driver Signature Shipment Date

Driver Name (Print) [illegible]

Truck Number [illegible]

Truck Type [illegible]

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

[illegible] [illegible]

Driver Signature Delivery Date

DESTINATION

Site Name Union County RDF

Address 3083 Smackover Highway

El Dorado, AR 71730 Phone Number 870-725-3821

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

[illegible]

Name of Authorized Agent (Print) Signature Receipt Date

White - Original Canary - Disposer Retain Pink - Transporter Retain Goldenrod - Generator Retain

Union County Landfill
3083 Smackover Hwy
El Dorado, AR 71730
8707253821

400694
TAS Environmental
3929 California Parkway East
Forth Worth, TX 76119

SITE	TICKET	SCALE OPERATOR	ORIGIN
01	**272551**	KFOGLE	COLUMBIA COUNTY

DATE IN	DATE OUT	TIME IN	TIME OUT
4/2/13	4/2/13	11:40 am	12:27 pm

REFERENCE	VEHICLE	ROLL OFF
ML-386	TAS-46	

GROSS WEIGHT 46,180.00
TARE WEIGHT 35,760.00
NET WEIGHT 10,420.00

INVOICE
INBOUND 236391

QTY.	UNIT	DESCRIPTION	RATE
5.21	TN		
1.00			
1.00			

Manifest # 116190

CHANGE $0.00
CHECK NO.

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions.

SIGNATURE X Brad Dudley

Form # 1035 WCA-Laser Re-order from BFI Print & Promotion Solutions 1.888.254.8784

Job# [illegible] Box # RB 26126

UC [illegible]

WCA Waste Corporation of Arkansas

NON-HAZARDOUS MANIFEST

GENERATOR

Generator: Lion oil (LOTT)

Address: 1001 School St.
El Dorado, AR. 71730

Phone: 870-914-4350

EPA I.D.#:

Shipping Location: Magnolia Station

Address: [illegible] Columbia 15 Magnolia, AR

Phone:

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
Debris Impacted w/crude oil	[illegible]	ML-386	15	YD	RB
				[illegible]	[illegible]

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

[signature] — Generator Authorized Agent Name (Print)

X [signature] — Signature

4-2-13 — Delivery Date

TRANSPORTER

Transporter Name: TAS Environmental

Address: 1409 W. 7th St.
Texarkana, Tx. 75501

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

[signature] — Driver Signature

4-2-13 — Shipment Date

Driver Name (Print): Amy Hurst

Truck Number: 83-859

Truck Type: Roll off

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

[signature] — Driver Signature

4-2-13 — Delivery Date

DESTINATION

Site Name: Union County RDF

Address: 3083 Smackover Highway
El Dorado, AR 71730

Phone Number: 870-725-3821

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

[signature] — Name of Authorized Agent (Print)

[signature] — Signature

4-2-13 — Receipt Date

White - Original Canary - Disposer Retain Pink - Transporter Retain Goldenrod - Generator Retain

Union County Landfill
3083 Smackover Hwy
El Dorado, AR 71730
8707253821

T13X031

400694
TAS Environmental
3929 California Parkway East
Forth Worth, TX 76119

SITE	TICKET	SCALE OPERATOR	ORIGIN
01	272536	KFOGLE	COLUMBIA COUNTY

DATE IN	DATE OUT	TIME IN	TIME OUT
4/2/13	4/2/13	9:32 am	10:14 am

REFERENCE	VEHICLE	ROLL OFF
ML-386	TAS-83	

GROSS WEIGHT 46,840.00
TARE WEIGHT 40,480.00
NET WEIGHT 6,360.00

INVOICE
INBOUND

2363717

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
3.18						
1.00						
1.00						

Manifest # 111297

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions.

SIGNATURE X A. Knight

$0.00
CHECK NO.

Form # 1035 WCA-Laser Re-order from BFI Print & Promotion Solutions 1.888.234.8784

WCA Waste Corporation of Arkansas

UC# 116187

NON-HAZARDOUS MANIFEST

250423

GENERATOR

Generator Lion Oil (Lott)

Address 1001 School ST

El Dorado AR 71730

Phone

EPA

I.D.#

Shipping Location Magnolia Station

Address 600 Columbia 25 Magnolia AR

Phone

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
Debris impacted w/crude oil		ML-386	15	YD	RB

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

George Garton
Generator Authorized Agent Name (Print)

[signature] (As agent for Lion Oil Tending & Transported)
Signature Delivery Date

TRANSPORTER

Transporter Name TAS

Address 6409 West 7th ST

Texarkana TX 75501

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

Brock Dudley 4-3-13
Driver Signature Shipment Date

Driver Name (Print) Brock Dudley

Truck Number 46

Truck Type Kenworth

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

Brock Dudley 4-3-13
Driver Signature Delivery Date

DESTINATION

Site Name Union County RDF

Address 3083 Smackover Highway

El Dorado, AR 71730

Phone Number 870-725-3821

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

Katherine Johnson
Name of Authorized Agent (Print)

Katherine Johnson 4-3-13
Signature Receipt Date

White - Original Canary - Disposer Retain Pink - Transporter Retain Goldenrod - Generator Retain

Union County Landfill
3083 Smackover Hwy
El Dorado, AR 71730
8707253821

400694
TAS Environmental
3929 California Parkway East
Forth Worth, TX 76119

SITE	TICKET	SCALE OPERATOR	ORIGIN
01	272613	kfogle	COLUMBIA COUNTY

DATE IN	DATE OUT	TIME IN	TIME OUT
4/3/13	4/3/13	10:15 am	10:38 am

REFERENCE	VEHICLE	ROLL OFF
ML-386	TAS-46	

GROSS WEIGHT 52,080.00
TARE WEIGHT 35,580.00
NET WEIGHT 16,500.00

INVOICE
INBOUND 2363850

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
8.25	TN	SP WASTE--TONS				
1.00		State Fee				
1.00		Fuel Surcharge				

WCA

NET AMOUNT	
TENDERED	$0.00
CHANGE	$0.00
CHECK NO.	

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions.

SIGNATURE X Brad Dudley

Form # 1935 WCA-Loser Re-order from BFI Print & Promotion Solutions 1.888.234.8784

WCA Waste Corporation of Arkansas

NON-HAZARDOUS MANIFEST

UC 111302

T13-X031
PMI 1119

GENERATOR

Generator LION OIL

Address 1001 SCHOOL ST
EL DORADO AR 71730

Phone 870-814-4350

EPA

I.D.#

Shipping Location MAGNOLIA STATION

Address 600 COLUMBIA 25 MAGNOLIA AR

Phone

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
DEBRIS IMPACTED W/CRUDE OIL		ML-386	15	YD	RB

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

George Garten
Generator Authorized Agent Name (Print)

Signature (As agent for Teady & Transportation) Lion Oil
Delivery Date

TRANSPORTER

Transporter Name TAS ENVIRONMENTAL

Address 6409 W 7th ST
TEXARKANA TX 75501

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

Alan Campbell 4-5-13
Driver Signature Shipment Date

Driver Name (Print) ALAN CAMPBELL

Truck Number 46

Truck Type ROLL OFF

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

Alan Campbell 4-5-13
Driver Signature Delivery Date

DESTINATION

Site Name Union County RDF

Address 3083 Smackover Highway
El Dorado, AR 71730

Phone Number 870-725-3821

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

Katherine Johnson
Name of Authorized Agent (Print)

Katherine Johnson 4-5-13
Signature Receipt Date

White - Original Canary - Disposer Retain Pink - Transporter Retain Goldenrod - Generator Retain

Union County Landfill
3083 Smackover Hwy
El Dorado, AR 71730
8707253821

400694
TAS Environmental
3929 California Parkway East
Forth Worth, TX 76119

SITE	TICKET	SCALE OPERATOR	ORIGIN
01	272762	kfogle	COLUMBIA COUNTY

DATE IN	DATE OUT	TIME IN	TIME OUT
4/5/13	4/5/13	3:05 pm	3:22 pm

REFERENCE	VEHICLE	ROLL OFF
ML-386	TAS-46	

GROSS WEIGHT 50,320.00
TARE WEIGHT 34,780.00
NET WEIGHT 15,540.00

INVOICE
INBOUND

2363927

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
7.77	TN	SP WASTE--TONS				
1.00		State Fee				
1.00		Fuel Surcharge				

NET AMOUNT
$352.84
TENDERED
$0.00
CHANGE
$0.00
CHECK NO.

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions.

SIGNATURE X

Form # 1035 WCA-Laser Reorder from BFI Print & Promotion Solutions 1.888.254.8784

WCA Waste Corporation of Arkansas

UC# 116187

NON-HAZARDOUS MANIFEST

250423

GENERATOR

Generator Lion Oil (Lott)

Address 1001 School ST

El Dorado AR 71730

Phone

EPA

I.D.#

Shipping Location Magnolia Station

Address 600 Columbia 25 Magnolia AR

Phone

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
Debris impacted w/crude oil		ML-386	15	YD	RB

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

George Garton
Generator Authorized Agent Name (Print)

[signature] (as agent for Lion Oil Tending & Transported)
Signature Delivery Date

TRANSPORTER

Transporter Name TAS

Address 6409 West 7th ST

Texarkana TX 75501

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

Brock Dudley 4-3-13
Driver Signature Shipment Date

Driver Name (Print) Brock Dudley

Truck Number 46

Truck Type Kenworth

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

Brock Dudley 4-3-13
Driver Signature Delivery Date

DESTINATION

Site Name Union County RDF

Address 3083 Smackover Highway

El Dorado, AR 71730

Phone Number 870-725-3821

Disposal Location: North East Level

I hereby acknowledge receipt of the above-described materials.

Katherine Johnson
Name of Authorized Agent (Print)

Katherine Johnson 4-3-13
Signature Receipt Date

White - Original Canary - Disposer Retain Pink - Transporter Retain Goldenrod - Generator Retain

Union County Landfill
3083 Smackover Hwy
El Dorado, AR 71730
8707253821

400694
TAS Environmental
3929 California Parkway East
Forth Worth, TX 76119

SITE	TICKET	SCALE OPERATOR	ORIGIN
01	272613	kfogle	COLUMBIA COUNTY

DATE IN	DATE OUT	TIME IN	TIME OUT
4/3/13	4/3/13	10:15 am	10:38 am

REFERENCE	VEHICLE	ROLL OFF
ML-386	TAS-46	

GROSS WEIGHT 52,080.00
TARE WEIGHT 35,580.00
NET WEIGHT 16,500.00

INVOICE
INBOUND 2363850

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
8.25	TN	SP WASTE--TONS				
1.00		State Fee				
1.00		Fuel Surcharge				

WCA

NET AMOUNT
$374.63
TENDERED
$0.00
CHANGE
$0.00
CHECK NO.

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions.

SIGNATURE X Brad Dodd

Form # 1035 WCA-Loser Re-order from BFI Print & Promotion Solutions 1.888.254.8784

UC 111301

T13-X031
19538

WCA Waste Corporation of Arkansas

NON-HAZARDOUS MANIFEST

GENERATOR

Generator LION OIL

Address 1001 SCHOOL ST
EL DORADO AR 71730

Phone 870 814 4350

EPA I.D.#

Shipping Location MAGNOLIA STATION

Address 600 COLUMBIA 25 MAGNOLIA, AR

Phone

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
DEBRIS IMPACTED W/CRUDE OIL		ML-386	15	YD	RB

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

George Garten
Generator Authorized Agent Name (Print)

[signature] (AS Agent for Trading & Transport) Lion oil
Signature Delivery Date

TRANSPORTER

Transporter Name TAS ENVIRONMENTAL

Address 6409 W 7th ST
TEXARKANA TX 75501

Driver Name (Print) ALAN CAMPBELL

Truck Number 64

Truck Type ROLL OFF

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

[signature] 4-5-13
Driver Signature Shipment Date

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

[signature] 4-5-13
Driver Signature Delivery Date

DESTINATION

Site Name Union County RDF

Address 3083 Smackover Highway
El Dorado, AR 71730

Phone Number 870-725-3821

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

Rhonda Givens
Name of Authorized Agent (Print)

[signature] 4/5/13
Signature Receipt Date

White - Original Canary - Disposer Retain Pink - Transporter Retain Goldenrod - Generator Retain

Union County Landfill
3083 Smackover Hwy
El Dorado, AR 71730
8707253821

400694
TAS Environmental
3929 California Parkway East
Forth Worth, TX 76119

SITE	TICKET	SCALE OPERATOR	ORIGIN
01	272739	rgivens	COLUMBIA COUNTY

DATE IN	DATE OUT	TIME IN	TIME OUT
4/5/13	4/5/13	12:54 pm	1:10 pm

REFERENCE	VEHICLE	ROLL OFF
ML386	TAS-46	

GROSS WEIGHT 43,640.00
TARE WEIGHT 34,180.00
NET WEIGHT 9,460.00

INVOICE
INBOUND 2363950

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
4.73	TN	SP WASTE--TONS				
1.00		State Fee				
1.00		Fuel Surcharge				6

WCA

NET AMOUNT
$214.80
TENDERED
$0.00
CHANGE
$0.00
CHECK NO.

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions.

SIGNATURE X Alan Cockrell

Form # 1035 WCA-Laser Re-order from BFI Print & Promotion Solutions 1.888.234.8784

WCA (2)
Waste Corporation of Arkansas

JOB# T13-X031
ETS Ref# RBR250221

UC # 135329

NON-HAZARDOUS MANIFEST

GENERATOR

Generator Lion Oil
Address 1001 School St.
El Dorado, AR. 71730
Phone 870-814-4350

EPA I.D.#
Shipping Location Magnolia Station
Address 600 Columbia 25
Phone Magnolia, AR.

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
Debris impacted w/crude oil.		ML 386	15	cu/yds.	R/T

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

George Carter
Generator Authorized Agent Name (Print)

As Agent for Lion Oil Trading & Transportation
Signature

Delivery Date 4-10-13

TRANSPORTER

Transporter Name TAS Environmental
TXR000061783 (EPA-ID)
Address 6409 W. 7th St.
Texarkana, TX. 75501

Driver Name (Print) Kirk M. Mendenhall
Truck Number #52
Truck Type Roll off - Bob Truck.

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

Kirk M. Mendenhall 4-11-13
Driver Signature Shipment Date

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

Kirk Mendenhall 4-11-13
Driver Signature Delivery Date

DESTINATION

Site Name Union County RDF
Address 3083 Smackover Highway
El Dorado, AR 71730
Phone Number 870-725-3821

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

Kathleen Johnson 4-11-13
Name of Authorized Agent (Print) Signature Receipt Date

White - Original | Canary - Disposer Retain | Pink - Transporter Retain | Goldenrod - Generator Retain

Union County Landfill
3083 Smackover Hwy
El Dorado, AR 71730
8707253821

400694
TAS Environmental
3929 California Parkway East
Forth Worth, TX 76119

01	273078	kfogle	COLUMBIA COUNTY

DATE IN	DATE OUT	TIME IN	TIME OUT
4/11/13	4/11/13	4:41 pm	5:09 pm

REFERENCE	VEHICLE	ROLL OFF
ML-386 CRUDEOIL & DE	TAS-52	

GROSS WEIGHT 44,600.00
TARE WEIGHT 37,040.00
NET WEIGHT 7,560.00

INVOICE
INBOUND

2363311

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
3.78	TN	SP WASTE--TONS	$33.60	$127.01	$14.24	$141.25
1.00		State Fee	$2.50	$9.45	$0.76	$10.21
1.00		Fuel Surcharge	$14.72	$18.70	$1.49	$20.19

disposal Receipt 4-11-13 Thursday
JOB# T13-X031
Manifest# UC 135329
ETS Box# RBR 250221

TRK#52

NET AMOUNT
$171.65
TENDERED
$0.00
CHANGE
$0.00
CHECK NO.

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions.

SIGNATURE X Rick Mundenhall

Form # 1035 WCA-Laser Re-order from BFI Print & Promotion Solutions 1.888.254.8784

Pat Conditions @ WCA

JOB # T13-X031
TAS Boy # 19661

(1)

UC # 135330

WCA Waste Corporation of Arkansas

NON-HAZARDOUS MANIFEST

GENERATOR

Generator Lion Oil
Address 1001 School St.
El Dorado, AR. 71730
Phone 870-814-4350

EPA I.D.#
Shipping Location Magnolia Station
Address 600 Columbia 25
Phone Magnolia, Ar.

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
Debris impacted w/ crude oil		ML386	15	cu.yds.	R/T

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

George Garten
Generator Authorized Agent Name (Print)

As Agent for Lion Oil Trading & Transportation
Signature

Delivery Date 4-10-13

TRANSPORTER

Transporter Name TAS ENVIRONMENTAL
Address 6409 W. 7th St.
TEXARKANA, TX. 75501

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

Rick Mendenhall 4-10-13
Driver Signature Shipment Date

Driver Name (Print) Rick Mendenhall
Truck Number #52
Truck Type Roll off - Bob Truck.

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

Rick Mendenhall 4-11-13
Driver Signature Delivery Date

DESTINATION

Site Name Union County RDF
Address 3083 Smackover Highway
El Dorado, AR 71730
Phone Number 870-725-3821

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

Rhonda Givens
Name of Authorized Agent (Print)

Signature

4/11/13
Receipt Date

White - Original | Canary - Disposer Retain | Pink - Transporter Retain | Goldenrod - Generator Retain

Union County Landfill
3083 Smackover Hwy
El Dorado, AR 71730
8707253821

(1)

400694
TAS Environmental
3929 California Parkway East
Forth Worth, TX 76119

01	273058	rgivens	COLUMBIA COUNTY

DATE IN	DATE OUT	TIME IN	TIME OUT
4/11/13	4/11/13	1:11 pm	1:40 pm

REFERENCE	VEHICLE	ROLL OFF
ML386	TAS-52	

GROSS WEIGHT 43,960.00
TARE WEIGHT 35,500.00
NET WEIGHT 8,460.00

INVOICE
INBOUND

2363331

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
4.23	TN	$P WASTE--TONS	$33.60	$142.13	$15.94	$158.07
1.00		State Fee	$2.50	$10.58	$0.84	$11.42
1.00		Fuel Surcharge	$14.72	$20.92	$1.68	$22.60

Disposal Receipt 4/11/13 THUR.
JOB # T13-X031
MANIFEST # UC 135330
TAS BOL # 19661

NET AMOUNT
~~$192.09~~ TENDERED
~~$0.00~~ CHANGE
~~$0.00~~ CHECK NO.

TRK #52

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions.

SIGNATURE X

Form # 1035 WCA-Laser Re-order from BFI Print & Promotion Solutions 1.888.234.8784

WCA
Waste Corporation of Arkansas

JOB # T13-X031
TAS Box # 4346

UC # 135331

NON-HAZARDOUS MANIFEST

GENERATOR

Generator Lion Oil
Address 1001 School St.
El Dorado, AR. 71730
Phone 870-814-4350

EPA I.D.#
Shipping Location Magnolia Station
Address Loc Columbia 35 Magnolia, AR,
Phone

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
NON HAZARDOUS - Solid WASTE DEBRIS impacted w/ Crude oil	~~ML38~~ (PM)	ML38	15	cy yds.	R/T Box

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

George Garten
Generator Authorized Agent Name (Print)

As Agent for Lion Oil Trading & Transportation
Signature

Delivery Date 4-10-13

TRANSPORTER

Transporter Name TAS Environmental
Address 6409 W. 7th St.
Texarkana, TX ~~75501~~ 75501

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

Kirk Mendenhall
Driver Signature

4-10-13
Shipment Date

Driver Name (Print) Kirk Mendenhall
Truck Number #52
Truck Type Roll off - Box Truck

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

Kirk Mendenhall
Driver Signature

4-10-13
Delivery Date

DESTINATION

Site Name Union County RDF
Address 3083 Smackover Highway
El Dorado, AR 71730
Phone Number 870-725-3821

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

Katherine Johnson
Name of Authorized Agent (Print)

Katherine Johnson
Signature

4-10-13
Receipt Date

White - Original | Canary - Disposer Retain | Pink - Transporter Retain | Goldenrod - Generator Retain

Union County Landfill
3083 Smackover Hwy
El Dorado, AR 71730
8707253821

01	272988	kfogle	COLUMBIA COUNTY

DATE IN	DATE OUT	TIME IN	TIME OUT
4/10/13	4/10/13	12:29 pm	1:04 pm

REFERENCE	VEHICLE	ROLL OFF
ML-386	TAS-52	

400694
TAS Environmental
3929 California Parkway East
Forth Worth, TX 76119

GROSS WEIGHT 47,420.00
TARE WEIGHT 36,460.00
NET WEIGHT 10,960.00

INVOICE
INBOUND

2363038

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
5.48	TN	SP WASTE--TONS	$33.60	$184.13	$20.65	$204.78
1.00		State Fee	$2.50	$13.70	$1.09	$14.79
1.00		Fuel Surcharge	$14.72	$27.10	$2.17	$29.27

Disposal Receipt 4/10/13
JOB # T13-X031
Manifest # 135331
TAS Box # 4346

NET AMOUNT
~~$248.84~~ TENDERED
~~$0.00~~ CHANGE
~~$0.00~~ CHECK NO.

TRK #52

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions.

SIGNATURE X Richard Underwood

Form # 1035 WCA-Laser Re-order from BFI Print & Promotion Solutions 1.888.254.8784

JOB # T13-X031
TAS Box # 19413

UC # 135333

WCA Waste Corporation of Arkansas

NON-HAZARDOUS MANIFEST

GENERATOR

Generator Lion Oil
Address 1001 School St.
El Dorado, AR.
Phone 870-814-4350

EPA
I.D.#
Shipping Location Magnolia Station
Address 600 Columbia 25
Phone Magnolia, AR.

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
NON HAZARDOUS Solid waste		ML386	15	cu yds.	Roll off
Deris impacted w/ crude oil					

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

George Garten
Generator Authorized Agent Name (Print)

[signature] (As Agent for Lion Oil Trading & Transportation)
Signature Delivery Date 4-10-13

TRANSPORTER

Transporter Name TAS ENVIRONMENTAL
Address 6409 W. 7th St.
TEXARKANA, TX. 75501

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

Rick Mendenhall 4-12-13
Driver Signature Shipment Date

Driver Name (Print) Rick Mendenhall
Truck Number 52
Truck Type Roll off Box Truck,

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

Rick Mendenhall
Driver Signature Delivery Date

DESTINATION

Site Name Union County RDF
Address 3083 Smackover Highway
El Dorado, AR 71730
Phone Number 870-725-3821

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

Katherine Johnson
Name of Authorized Agent (Print)

Katherine Johnson 4-12-13
Signature Receipt Date

White - Original Canary - Disposer Retain Pink - Transporter Retain Goldenrod - Generator Retain

Union County Landfill
3083 Smackover Hwy
El Dorado, AR 71730
8707253821

400694
TAS Environmental
3929 California Parkway East
Forth Worth, TX 76119

01	273142	KFOGLE	COLUMBIA COUNTY

DATE IN	DATE OUT	TIME IN	TIME OUT
4/12/13	4/12/13	4:35 pm	4:57 pm

REFERENCE	VEHICLE	ROLL OFF
ML-386	TAS-52	

GROSS WEIGHT 39,540.00
TARE WEIGHT 35,300.00
NET WEIGHT 4,240.00

INVOICE
INBOUND

2363389

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
2.12	TN	SP WASTE--TONS	$33.60	$71.23	$7.98	$79.21
1.00		State Fee	$2.50	$5.30	$0.43	$5.73
1.00		Fuel Surcharge	$14.72	$10.49	$0.84	$11.33

Disposal receipt 4-12-13 Fri
JOB # T13-X031
Manifest # UC 135333
TAS Box # 19413

NET AMOUNT
$96.27
TENDERED
$0.00
CHANGE
$0.00
CHECK NO.

TRK #52

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions.

SIGNATURE X [signature]

Form # 1035 WCA-Laser Re-order from BFI Print & Promotion Solutions 1.888.254.8784

JOB # 113-X031
TAS Box # 19544

UC # 135328

WCA Waste Corporation of Arkansas

NON-HAZARDOUS MANIFEST

(1)

GENERATOR

Generator Lion Oil
Address 1001 School St.
El Dorado, AR. 71730
Phone 870-814-4350

EPA
I.D.#
Shipping Location Magnolia Station
Address 600 Columbia 25
Phone Magnolia, AR.

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
NON HAZARDOUS - Solid waste DEBRIS impacted w/ crude oil		ML386	12	12 cu yds.	Roll off

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

George Garten
Generator Authorized Agent Name (Print)

[signature] As agent for Lion Oil Trading & Transportation
Signature Delivery Date 4-10-13

TRANSPORTER

Transporter Name TAS Environmental
EPA # TXR 000061283
Address 6409 W. 7th St.
Texarkana, TX. 75501

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

Rick Mendenhall 4-12-13
Driver Signature Shipment Date

Driver Name (Print) Rick Mendenhall
Truck Number #52
Truck Type Roll off - Bob Truck.

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

Rick Mendenhall 4-12-13
Driver Signature Delivery Date

DESTINATION

Site Name Union County RDF
Address 3083 Smackover Highway
El Dorado, AR 71730
Phone Number 870-725-3821

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

Katherine Johnson
Name of Authorized Agent (Print)

Katherine Johnson 4-12-13
Signature Receipt Date

White - Original Canary - Disposer Retain Pink - Transporter Retain Goldenrod - Generator Retain

Union County Landfill
3083 Smackover Hwy
El Dorado, AR 71730
8707253821

D

400694
TAS Environmental
3929 California Parkway East
Forth Worth, TX 76119

01	273110	kfogle	COLUMBIA COUNTY

DATE IN	DATE OUT	TIME IN	TIME OUT
4/12/13	4/12/13	11:15 am	11:45 am

REFERENCE	VEHICLE	ROLL OFF
ML-386	TAS-52	

GROSS WEIGHT 36,360.00
TARE WEIGHT 35,220.00
NET WEIGHT 1,140.00

INVOICE
INBOUND

2363419

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
0.57	TN	SP WASTE--TONS	$33.60	$33.60	$3.31	$36.91
1.00		State Fee	$2.50	$1.43	$0.12	$1.55
1.00		Fuel Surcharge	$14.72	$4.95	$0.40	$5.35

Disposal Receipt 4-12-13 Fri.
JOB# T13-X031
Manifest# UC135328
TAS Boy# 19544

NET AMOUNT
$43.81 TENDERED
$0.00 CHANGE
$0.00 CHECK NO.

TRK#52

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions.

SIGNATURE X

WCA Waste Corporation of Arkansas

NON-HAZARDOUS MANIFEST

UC 111301

T13-X031
19538

GENERATOR

Generator LION OIL

Address 1001 SCHOOL ST
EL DORADO AR 71730

Phone 870 864 4350

EPA I.D.#

Shipping Location MAGNOLIA STATION

Address 600 COLUMBIA 25 MAGNOLIA, AR

Phone

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
DEBRIS IMPACTED W/CRUDE OIL		ML-386	15	YD	RB

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

George Garten
Generator Authorized Agent Name (Print)

Lion Oil
TAS Agent for Treating & Transport
Signature / Delivery Date

TRANSPORTER

Transporter Name TAS ENVIRONMENTAL

Address 6409 W 7th ST
TEXARKANA TX 75501

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

Driver Signature 4-5-13
Shipment Date

Driver Name (Print) ALAN CAMPBELL

Truck Number 64

Truck Type ROLL OFF

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

Driver Signature 4-5-13
Delivery Date

DESTINATION

Site Name Union County RDF

Address 3083 Smackover Highway
El Dorado, AR 71730

Phone Number 870-725-3821

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

Rhonda Givens
Name of Authorized Agent (Print)

Signature 4/5/13
Receipt Date

White - Original | Canary - Disposer Retain | Pink - Transporter Retain | Goldenrod - Generator Retain

Union County Landfill
3083 Smackover Hwy
El Dorado, AR 71730
8707253821

400694
TAS Environmental
3929 California Parkway East
Forth Worth, TX 76119

SITE	TICKET	SCALE OPERATOR	ORIGIN
01	272739	rgivens	COLUMBIA COUNTY

DATE IN	DATE OUT	TIME IN	TIME OUT
4/5/13	4/5/13	12:54 pm	1:10 pm

REFERENCE	VEHICLE	ROLL OFF
ML386	TAS-46	

GROSS WEIGHT 43,640.00
TARE WEIGHT 34,180.00
NET WEIGHT 9,460.00

INVOICE
INBOUND 2363950

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
4.73	TN	SP WASTE--TONS				
1.00		State Fee				
1.00		Fuel Surcharge				

WCA

NET AMOUNT
$214.80
TENDERED
$0.00
CHANGE
$0.00
CHECK NO.

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions.

SIGNATURE X

Form # 1035 WCA-Laser Re-order from BFI Print & Promotion Solutions 1.888.254.8784

WCA Waste Corporation of Arkansas

UC# 116187

NON-HAZARDOUS MANIFEST

250423

GENERATOR

Generator Lion Oil (Lott)

Address 1001 School ST

El Dorado AR 71730

Phone

EPA

I.D.#

Shipping Location Magnolia Station

Address 600 Columbia 25 Magnolia AR

Phone

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
Debris impacted w/crude oil		ML-386	15	YD	RB

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

George Garton
Generator Authorized Agent Name (Print)

[signature] (As agent for Lion Oil Tending & Transported)
Signature Delivery Date

TRANSPORTER

Transporter Name TAS

Address 6409 West 7th ST

Texarkana TX 75501

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

Brock Dudley 4-3-13
Driver Signature Shipment Date

Driver Name (Print) Brock Dudley

Truck Number 46

Truck Type Kenworth

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

Brock Dudley 4-3-13
Driver Signature Delivery Date

DESTINATION

Site Name Union County RDF

Address 3083 Smackover Highway

El Dorado, AR 71730

Phone Number 870-725-3821

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

Katherine Johnson
Name of Authorized Agent (Print)

Katherine Johnson 4-3-13
Signature Receipt Date

White - Original Canary - Disposer Retain Pink - Transporter Retain Goldenrod - Generator Retain

Union County Landfill
3083 Smackover Hwy
El Dorado, AR 71730
8707253821

400694
TAS Environmental
3929 California Parkway East
Forth Worth, TX 76119

SITE	TICKET	SCALE OPERATOR	ORIGIN
01	272613	kfogle	COLUMBIA COUNTY

DATE IN	DATE OUT	TIME IN	TIME OUT
4/3/13	4/3/13	10:15 am	10:38 am

REFERENCE	VEHICLE	ROLL OFF
ML-386	TAS-46	

GROSS WEIGHT 52,080.00
TARE WEIGHT 35,580.00
NET WEIGHT 16,500.00

INVOICE
INBOUND 2363850

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
8.25	TN	SP WASTE--TONS				
1.00		State Fee				
1.00		Fuel Surcharge				

WCA

NET AMOUNT
$374.63
TENDERED
$0.00
CHANGE
$0.00
CHECK NO.

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions.

SIGNATURE X Brad Wood

Form # 1035 WCA Laser Re-order from BFI Print & Promotion Solutions 1.888.254.8784

WCA Waste Corporation of Arkansas

NON-HAZARDOUS MANIFEST

UC 111302

T13-X031
PMI 1119

GENERATOR

Generator LION OIL

Address 1001 SCHOOL ST
EL DORADO AR 71730

Phone 870-814-4350

EPA I.D.#

Shipping Location MAGNOLIA STATION

Address 600 COLUMBIA 25 MAGNOLIA AR

Phone

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
DEBRIS IMPACTED W/CRUDE OIL		ML-386	15	YD	RB

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

George Garten
Generator Authorized Agent Name (Print)

[signature] (As agent for Trading & Transportation) Lion Oil
Signature Delivery Date

TRANSPORTER

Transporter Name TAS ENVIRONMENTAL

Address 6409 W 7th ST
TEXARKANA TX 75501

Driver Name (Print) ALAN CAMPBELL

Truck Number 46

Truck Type ROLL OFF

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

[signature] 4-5-13
Driver Signature Shipment Date

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

[signature] 4-5-13
Driver Signature Delivery Date

DESTINATION

Site Name Union County RDF

Address 3083 Smackover Highway
El Dorado, AR 71730

Phone Number 870-725-3821

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

Katherine Johnson
Name of Authorized Agent (Print)

[signature] 4-5-13
Signature Receipt Date

White - Original Canary - Disposer Retain Pink - Transporter Retain Goldenrod - Generator Retain

Union County Landfill
3083 Smackover Hwy
El Dorado, AR 71730
8707253821

400694
TAS Environmental
3929 California Parkway East
Forth Worth, TX 76119

SITE	TICKET	SCALE OPERATOR	ORIGIN
01	272762	kfogle	COLUMBIA COUNTY

DATE IN	DATE OUT	TIME IN	TIME OUT
4/5/13	4/5/13	3:05 pm	3:22 pm

REFERENCE	VEHICLE	ROLL OFF
ML-386	TAS-46	

GROSS WEIGHT 50,320.00
TARE WEIGHT 34,780.00
NET WEIGHT 15,540.00

INVOICE
INBOUND 2363927

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
7.77	TN	SP WASTE--TONS				
1.00		State Fee				
1.00		Fuel Surcharge				

WCA

NET AMOUNT
$352.84
TENDERED
$0.00
CHANGE
$0.00
CHECK NO.

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions.

SIGNATURE X

Form # 1035 WCA-Laser Re-order from SFI Print & Promotion Solutions 1.888.254.8784

38162

UC # 135327

WCA Waste Corporation of Arkansas

NON-HAZARDOUS MANIFEST

GENERATOR

Generator lion oil

Address 1001 school st

El Dorado AR 71730

Phone

EPA

I.D.#

Shipping Location magnolia AR Station

Address 600 Columbia 25 magnolia AR

Phone

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
Oily DerBis		~~4126135~~ 229	12	yards	
		ML386			

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

George Garten
Generator Authorized Agent Name (Print)

[signature] (As agent for Lion Oil Trading & Transportation)
Signature

Delivery Date 4-10-13

TRANSPORTER

Transporter Name Tas Environmental

Address 6404 w 7th street texarkana TX 75501

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

Driver Signature [signature] Shipment Date

Driver Name (Print) Shane E Drawdy

Truck Number 50

Truck Type Peter Built

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

Driver Signature [signature] Delivery Date

DESTINATION

Site Name Union County RDF

Address 3083 Smackover Highway

El Dorado, AR 71730

Phone Number 870-725-3821

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

Katherine Johnson
Name of Authorized Agent (Print)

[signature] 4-16-13
Signature

Receipt Date

White - Original Canary - Disposer Retain Pink - Transporter Retain Goldenrod - Generator Retain

Union County Landfill
3083 Smackover Hwy
El Dorado, AR 71730
8707253821

400694
TAS Environmental
3929 California Parkway East
Forth Worth, TX 76119

01	273303	rgivens	COLUMBIA COUNTY

DATE IN	DATE OUT	TIME IN	TIME OUT
4/16/13	4/16/13	2:37 pm	3:11 pm

REFERENCE	VEHICLE	ROLL OFF
ML-386	TAS-50	

GROSS WEIGHT 58,580.00
TARE WEIGHT 45,500.00
NET WEIGHT 13,080.00

INVOICE
INBOUND

2362531

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
6.54	TN	SP WASTE--TONS	$33.60	$219.74	$24.63	$244.37
1.00		State Fee	$2.50	$16.35	$1.31	$17.66
1.00		Fuel Surcharge	$14.72	$32.35	$2.59	$34.94

NET AMOUNT $296.97
TENDERED $0.00
CHANGE $0.00
CHECK NO.

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions.

SIGNATURE X

Form # 1035 WCA-Laser Re-order from BFI Print & Promotion Solutions 1.888.254.8784

2023 !

UC # 135326

WCA Waste Corporation of Arkansas

NON-HAZARDOUS MANIFEST

GENERATOR

Generator Lion oil

Address 100 School St

El Dorado AR 71730

Phone

EPA I.D.#

Shipping Location Magnolia AR Station

Address 600 Columbia 25 Magnolia AR.

Phone

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
oily DerBis		~~#~~ ML356	12	yards	

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

X George Garten
Generator Authorized Agent Name (Print)

X As Agent for Lion Oil Trading & Transportation
Signature

Delivery Date 4-10-13

TRANSPORTER

Transporter Name Tas Environmental

Address 6404 W 7th Street Texarkana TX 75501

Driver Name (Print) Shane E Downey

Truck Number 83

Truck Type Peterbilt

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

Shane E Downey
Driver Signature

4-16-13
Shipment Date

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

Shane E Downey
Driver Signature

4-16-13
Delivery Date

DESTINATION

Site Name Union County RDF

Address 3083 Smackover Highway

El Dorado, AR 71730

Phone Number 870-725-3821

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

Katherine Johnson
Name of Authorized Agent (Print)

Katherine Johnson
Signature

4-16-13
Receipt Date

White - Original | Canary - Disposer Retain | Pink - Transporter Retain | Goldenrod - Generator Retain

Union County Landfill
3083 Smackover Hwy
El Dorado, AR 71730
8707253821

400694
TAS Environmental
3929 California Parkway East
Forth Worth, TX 76119

01	273304	rgivens	COLUMBIA COUNTY

DATE IN	DATE OUT	TIME IN	TIME OUT
4/16/13	4/16/13	2:35 pm	3:14 pm

REFERENCE	VEHICLE	ROLL OFF
ML-386	TAS-83	

GROSS WEIGHT 47,720.00
TARE WEIGHT 40,660.00
NET WEIGHT 7,060.00

INVOICE
INBOUND 38165 2362530

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
3.53	TN	SP WASTE--TONS	$33.60	$118.61	$13.30	$131.91
1.00		State Fee	$2.50	$8.83	$0.71	$9.54
1.00		Fuel Surcharge	$14.72	$17.46	$1.40	$18.86

NET AMOUNT
~~$160.31~~
TENDERED
~~$0.00~~
CHANGE
~~$0.00~~
CHECK NO.

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions.

SIGNATURE X

Form # 1035 WCA-Laser Re-order from BFI Print & Promotion Solutions 1.888.254.8784

(1)

WCA Waste Corporation of Arkansas

JOA# 115-X031
TAS Box# 19412

UC # 135336

NON-HAZARDOUS MANIFEST

GENERATOR

Generator Lion Oil
Address 1001 School St.
El Dorado, AR. 71730
Phone 870-814-4350

EPA I.D.#
Shipping Location Magnolia Station
Address 600 Columbia 25 - Magnolia, AR.
Phone

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
DEBRIS IMPACTED W/ Crude oil		ML 386	15	cu yds.	Roll TARP 20 yard Box

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

X George Garten
Generator Authorized Agent Name (Print)

X (As Agent for Lion Oil Trading & Transportation)
Signature

Delivery Date

TRANSPORTER

Transporter Name TAS Environmental
TXR 000612583 (EPA #)
Address 6409 W. 7th St.
Texarkana, TX 75501

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

Kirk Mendenhall 4-16-13
Driver Signature Shipment Date

Driver Name (Print) Kirk Mendenhall
Truck Number #52
Truck Type Roll off Box Truck.

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

Kirk Mendenhall 4-16-13
Driver Signature Delivery Date

DESTINATION

Site Name Union County RDF
Address 3083 Smackover Highway
El Dorado, AR 71730
Phone Number 870-725-3821

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

Katherine Johnston
Name of Authorized Agent (Print)

Katherine Johnson 4-17-13
Signature Receipt Date

White - Original Canary - Disposer Retain Pink - Transporter Retain Goldenrod - Generator Retain

(1) Union County Landfill
3083 Smackover Hwy
El Dorado, AR 71730
8707253821

400694
TAS Environmental
3929 California Parkway East
Forth Worth, TX 76119

GROSS WEIGHT	43,360.00
TARE WEIGHT	34,920.00
NET WEIGHT	8,440.00

SITE	TICKET	SCALE OPERATOR	ORIGIN
01	273337	KFOGLE	COLUMBIA COUNTY

DATE IN	DATE OUT	TIME IN	TIME OUT
4/17/13	4/17/13	9:58 am	10:36 am

REFERENCE	VEHICLE	ROLL OFF
ML-386	TAS-52	

INVOICE
INBOUND 2362795

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
4.22	TN	SP WASTE--TONS				
1.00		State Fee				
1.00		Fuel Surcharge				

WCA

Disposal Receipt- 4-17-13 Wed.
JOB# T13-X031
Manifest# UC 135336
TAS Boy # 19412
TRK#52

NET AMOUNT
TENDERED
$0.00
CHANGE
$0.00
CHECK NO.

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions

SIGNATURE X

Form # 1035 WCA-Laser Reorder from BFI Print & Promotion Solutions 1.888.254.8784

WCA
Waste Corporation of Arkansas

UC 111549

NON-HAZARDOUS MANIFEST

GENERATOR

Generator Lion Oil

Address 1001 School St

El Dorado AR. 71730

Phone (870) 814 4350

EPA I.D.# Magnolia Station

Shipping Location Columbia County Rd. 425

Address Magnolia AR.

Phone

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
Decon wash water		ML-388	~~1500~~ 500	G	TK

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

Noel Lowery / NOEL Lowery — Generator Authorized Agent Name (Print)

Signature

5-2-13 — Delivery Date

TRANSPORTER

Transporter Name TAS Env.

Address 6409 west 7th Street

Texarkana, TX 75501

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

Leslie Patterson 5-2-13

Driver Signature — Shipment Date

Driver Name (Print) Leslie Patterson

Truck Number # 44

Truck Type 70 bbl TK

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

Leslie Patterson 5-2-13

Driver Signature — Delivery Date

DESTINATION

Site Name Union County RDF

Address 3083 Smackover Highway

El Dorado, AR 71730

Phone Number 870-725-3821

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

Rhonda C. Vines

Name of Authorized Agent (Print)

Signature

5/2/13

Receipt Date

White - Original | Canary - Disposer Retain | Pink - Transporter Retain | Goldenrod - Generator Retain

Union County Landfill
3083 Smackover Hwy
El Dorado, AR 71730
8707253821

400694
TAS Environmental
3929 California Parkway East
Forth Worth, TX 76119

SITE	TICKET	SCALE OPERATOR	ORIGIN
01	**274174**	rgivens	COLUMBIA COUNTY

DATE IN	DATE OUT	TIME IN	TIME OUT
5/2/13	5/2/13	12:44 pm	1:16 pm

REFERENCE	VEHICLE	ROLL OFF
ML-388 CRUDE	TAS-44	

GROSS WEIGHT 37,000.00
TARE WEIGHT 34,100.00
NET WEIGHT 2,900.00

INVOICE
INBOUND

2362400

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
1.45	TN	SOLIDIFY--TONS				
1.00		State Fee				
1.00		Fuel Surcharge				

WCA

NET AMOUNT
TENDERED
$0.00
CHANGE
$0.00
CHECK NO.

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions.

SIGNATURE X

Form # 1035 WCA-Laser Re-order from BFI Print & Promotion Solutions 1.888.254.8784

JOB# T13-X031 T13 REPUBLIC SERVICES TAS Day # D2120

NON-HAZARDOUS WASTE MANIFEST

1065247

1. Generator's US EPA ID Number	Manifest Document Number	2. Page 1 of
	1065247	1

GENERATOR

3. Generator's Name and Mailing Address	5. Generating Location (if different)
Lion Oil 1001 School St. 71730 4. Phone 870 814-4350 El Dorado, AR	Magnolia Station 600 Columbia 25 6. Phone ( ) Magnolia, AR.

7. Transporter #1 Company Name	8. US EPA ID Number	9. Transporter #1's Phone
TAS ENVIROMENTAL	TXR000061283	318-747-2662
10. Transporter #2 Company Name	**11. US EPA ID Number**	**12. Transporter #2's Phone**
13. Designated T/S/D Facility Name and Site Address	**14. US EPA ID Number**	**15. Facility's Phone**
Webster Parish 493 Landfill Road Minden, LA 71058	#P-0165	(318) 377-9193

16. Waste Shipping Name and Description	17. Allied Waste Approval # and Exp. Date	18. Containers No.	18. Containers Type	19. Total Quantity	20. Unit Wt/Vol
a. Non Hazardous - Solid Waste Soil impacted w/ Crude	4126135229	1	CM	20	cu yds
b.					
c.					
d.					

21. Additional Descriptions for Materials Listed Above

22. Special Handling Instructions and Additional Information In case of emergency call 1-888-654-0111; TAS Environmental

23. **GENERATOR'S CERTIFICATION:** I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
George Garten	[signature] (As agent for Lion Oil [illegible])	4	9	13

TRANSPORTER

24. **Transporter #1:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
X [signature] (TRK#52)	X [signature]	4	9	13

25. **Transporter #2:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

T/S/D FACILITY

26. Discrepancy Indication Space

27. **Facility Owner or Operator:** Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)

Printed/Typed Name	Signature	Month	Day	Year
	[signature]	4	9	13

TRANSPORTER #2

REV 01/12 RS-F15

WEBSTER PARISH
493 Landfill Rd
Minden, LA 71055 318-377-9193

SITE	TICKET #	CELL
01	913978	5127

WEIGHMASTER: Aundrea H.

CUSTOMER:
210206
TAS ENVIRONMENTAL
3929 CALIFORNIA PKWY E
FORT WORTH, TX 76119
4126135229

DATE/TIME IN	DATE/TIME OUT
04-09-2013 4:28 pm	04-9-2013 4:28 pm

VEHICLE: 5284
CONTAINER:
REFERENCE: LION OIL INVOICE
BILL OF LADING: 1065247

SCALE IN GROSS WEIGHT 82,780 NET TONS 23.39
TARE OUT TARE WEIGHT 36,000 NET WEIGHT 46,780 INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.00	YD	SW-E&P SOLIDS INDUSTRIAL SOLID WASTI	$24.00	$480.00	$0.00	$480.00
1.00		ENVIRONMENTAL FEE 1	$11.50	$11.50	$0.00	$11.50

Disposal Receipt 4-9-13 Tues.
JOB# T13-X031
MANifest # 1065247
TAS Box# B2120

Webster Parish Landfill
493 Landfill Road
Minden, La 71055
Phone-318-377-9193

TRK#57

NET AMOUNT: $491.50
TENDERED: $0.00
CHANGE: $0.00
CHECK#

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

RS-F042UPR (07/12) 2/21

SIGNATURE [signature]

JOB# T13-X031

REPUBLIC SERVICES

TAS Box # 4346

NON-HAZARDOUS WASTE MANIFEST

1065246

1. Generator's US EPA ID Number	Manifest Document Number 1065246	2. Page 1 of 1	
3. Generator's Name and Mailing Address: Lion Oil, 1001 School St, El Dorado, AR 71730		5. Generating Location (if different): Magnolia Station, 600 Columbia 25, Magnolia, AR.	
4. Phone 870-814-4350		6. Phone ( )	
7. Transporter #1 Company Name: TAS ENVIROMENTAL	8. US EPA ID Number: TXR000031283	9. Transporter #1's Phone: 318-747-2362	
10. Transporter #2 Company Name	11. US EPA ID Number	12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address: Webster Parish, 493 Landfill Road, Minden, LA 71058	14. US EPA ID Number: IP-0106	15. Facility's Phone: (318) 377-9193	

16. Waste Shipping Name and Description	17. Allied Waste Approval # and Exp. Date	18. Containers No.	18. Containers Type	19. Total Quantity	20. Unit Wt/Vol
a. NON HAZARDOUS - Solid WASTE Soil impacted w/ crude oil	3/31/14 Exp. 4126135229	1	CM	20	cu. yds
b.					
c.					
d.					

21. Additional Descriptions for Materials Listed Above

22. Special Handling Instructions and Additional Information: IN CASE OF EMERGENCY CALL TAS ENVIRONMENTAL AT 1-888-654-0111.

23. **GENERATOR'S CERTIFICATION:** I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
George Garten	[signature] (As Agent for Lion Oil Trading & Transportation)	4	9	13

24. **Transporter #1:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
X [signature]	X [signature]	4	12	13

25. **Transporter #2:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

26. Discrepancy Indication Space

27. **Facility Owner or Operator:** Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)

Printed/Typed Name	Signature	Month	Day	Year
[illegible]	[illegible]	4	2	13

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

REV 01/12

RS-F15

SITE 4126

CUSTOMER 210206 Lion Oil

SITE	TICKET # 21	CELL
WEIGHMASTER DC		11:15
DATE/TIME IN 4-12-13 10:05		DATE/TIME OUT 4-12-13
VEHICLE		CONTAINER 1#
REFERENCE		
BILL OF LADING 1065246		

85660 In weight
39780 Out Weight
45880 Mud Weight
22.94 TN.

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20		4126135229				

NET AMOUNT
TENDERED
CHANGE
CHECK#

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

RS-F042UPR (07/12)

SIGNATURE [signature]

JOB# T13-X031 Box # 19661

REPUBLIC SERVICES

NON-HAZARDOUS WASTE MANIFEST

1277897

1. Generator's US EPA ID Number	Manifest Document Number 1277897	2. Page 1 of	
3. Generator's Name and Mailing Address LION OIL 1001 SCHOOL ST EL DORADO AR 71730 4. Phone (870-81) 4350		5. Generating Location (if different) MAGNOLIA STATION 600 COLUMBIA 25 MAGNOLIA, AR. 6. Phone ( )	
7. Transporter #1 Company Name TAS ENVIRONMENTAL	8. US EPA ID Number TXR000061283	9. Transporter #1's Phone 903-930-7637	
10. Transporter #2 Company Name	11. US EPA ID Number	12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Webster Parish 493 Landfill Road Minden, LA 71058	14. US EPA ID Number #P-0165	15. Facility's Phone (318) 377-0193	

16. Waste Shipping Name and Description	17. Allied Waste Approval # and Exp. Date	18. Containers No.	18. Containers Type	19. Total Quantity	20. Unit Wt/Vol
a. NON-HAZARDOUS Soil Impacted with crude oil	4120135229 03/31/2014	1	CM	20	Cu. Yd
b.					
c.					
d.					

21. Additional Descriptions for Materials Listed Above

22. Special Handling Instructions and Additional Information
IN CASE OF EMERGENCY CALL TAS ENVIRONMENTAL AT 1-888-654-0111

23. **GENERATOR'S CERTIFICATION:** I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
George Garten	M. Jeton (AS Agent FOR Lion Oil Trading & Transportation)	4	11	13

24. **Transporter #1:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
X ALAN CAMPBELL TAS	X Alan Campbell	X 4	12	13

25. **Transporter #2:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

26. Discrepancy Indication Space

27. **Facility Owner or Operator:** Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)

Printed/Typed Name	Signature	Month	Day	Year
[illegible]	[illegible]	4	12	13

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

WEBSTER PARISH
493 Landfill Rd
Minden, LA 71055 318-377-9193

CUSTOMER

210206
TAS ENVIRONMENTAL
3929 CALIFORNIA PKWY E
FORT WORTH, TX 76119
4126135229

WEIGHMASTER: 01 914219 5127

DATE/TIME IN: IN - DEBORA C. OUT - KAREN H.

DATE/TIME OUT: 04-12-2013 3:08 pm

VEHICLE: 3668

CONTAINER: 04-12-2013 4:11 pm

REFERENCE: 1277897

BILL OF LADING: INVOICE

SCALE IN	GROSS WEIGHT	82,360	NET TONS	21.49	
SCALE OUT	TARE WEIGHT	39,380	NET WEIGHT	42,980	INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.00	YD	SW-E&P SOLIDS INDUSTRIAL SOLID WASTI	$24.00	$480.00	$0.00	$480.00
1.00		ENVIRONMENTAL FEE 1	$11.50	$11.50	$0.00	$11.50

Webster Parish Landfill
493 Landfill Road
Minden, La 71055
Phone-318-377-9193

NET AMOUNT
$491.50
TENDERED
$0.00
CHANGE
$0.00
CHECK#

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

RS-F042UPR (07/12) 2/21

SIGNATURE [signature]

JOB # T13-X031

REPUBLIC SERVICES TAS Box # 19540

NON-HAZARDOUS WASTE MANIFEST

1277901

1. Generator's US EPA ID Number	Manifest Document Number 1277901	2. Page 1 of	

GENERATOR

3. Generator's Name and Mailing Address [illegible] 1301 SCHOOL ST EL DORADO AR 71730 4. Phone (0-[illegible]) 4050	5. Generating Location (if different) Magnolia Station 600 Columbia 25 Magnolia, AR. 6. Phone ( )

7. Transporter #1 Company Name TAS ENVIRONMENTAL	8. US EPA ID Number TXR000061283	9. Transporter #1's Phone 903-930-7637
10. Transporter #2 Company Name	11. US EPA ID Number	12. Transporter #2's Phone
13. Designated T/S/D Facility Name and Site Address Webster Parish 493 Landfill Road Minden, LA 71058	14. US EPA ID Number SP-0165	15. Facility's Phone (318) 377-9193

16. Waste Shipping Name and Description	17. Allied Waste Approval # and Exp. Date	18. Containers No.	18. Containers Type	19. Total Quantity	20. Unit Wt/Vol
a. NON-HAZARDOUS Soil impacted with crude oil	4126135226 03/31/2014	1	CM	20	cu. Yd
b.					
c.					
d.					

21. Additional Descriptions for Materials Listed Above

22. Special Handling Instructions and Additional Information In case of emergency call TAS Environmental At 1-888-654-0111.

23. **GENERATOR'S CERTIFICATION:** I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
George Garten	[signature] As Agent for Lion Oil Trading & Transportation	4	10	13

TRANSPORTER

24. **Transporter #1:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
X Alan Campbell TRK # 5	X [signature] X	4	12	13

25. **Transporter #2:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

T/S/D FACILITY

26. Discrepancy Indication Space

27. **Facility Owner or Operator:** Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)

Printed/Typed Name	Signature	Month	Day	Year
[illegible]	[signature]	4	12	13

TRANSPORTER #2

4126

CUSTOMER 210206 Lion 0-1

20

WEIGHMASTER DC

DATE/TIME IN 11-12-13 10:0 | DATE/TIME OUT 11-12-13 11:20

VEHICLE | CONTAINER

REFERENCE

BILL OF LADING

76 560 in weight 14.64 TM.

47280 Out weight 29280 Net Wt.

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20		4126135229				

NET AMOUNT

TENDERED

CHANGE

CHECK#

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

SIGNATURE Brad Dudley

RS-F042UPR (07/12)

JOB# T13-X031 TAS Bay# 200221 4/14

REPUBLIC SERVICES

NON-HAZARDOUS WASTE MANIFEST

1277903

1. Generator's US EPA ID Number	Manifest Document Number 1277903	2. Page 1 of
3. Generator's Name and Mailing Address		5. Generating Location (if different) Magnolia Station 600 Columbia 25 Magnolia, AR.
4. Phone ( )		6. Phone ( )
7. Transporter #1 Company Name TAS Environmental	8. US EPA ID Number TXR000061283	9. Transporter #1's Phone 903-930-7637
10. Transporter #2 Company Name	11. US EPA ID Number	12. Transporter #2's Phone
13. Designated T/S/D Facility Name and Site Address	14. US EPA ID Number	15. Facility's Phone

16. Waste Shipping Name and Description	17. Allied Waste Approval # and Exp. Date	18. Containers No.	18. Containers Type	19. Total Quantity	20. Unit Wt/Vol
a.				20	
b.					
c.					
d.					

21. Additional Descriptions for Materials Listed Above

22. Special Handling Instructions and Additional Information In case of emergency call TAS Environmental at 1-888-654-0111.

23. **GENERATOR'S CERTIFICATION:** I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
George [illegible]	[illegible]	4	12	13

24. **Transporter #1:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
X Brock Dudley	X [illegible]	X 4	12	13

25. **Transporter #2:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

26. Discrepancy Indication Space

27. **Facility Owner or Operator:** Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)

Printed/Typed Name	Signature	Month	Day	Year
		4	12	13

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

WEBSTER PARISH
493 Landfill Rd
Minden, LA 71055 318-377-9193

CUSTOMER

210206
TAS ENVIRONMENTAL
3929 CALIFORNIA PKWY E
FORT WORTH, TX 76119
4126135229

01	914220	5127

WEIGHMASTER

IN - DEBORA C. OUT - KAREN H.

DATE/TIME IN	DATE/TIME OUT
04-12-2013 3:11 pm	04-12-2013 4:13 p

VEHICLE 3668

CONTAINER

REFERENCE
LION OIL /TAS INVOICE

BILL OF LADING
1277903

SCALE IN	GROSS WEIGHT	87,760	NET TONS	20.32
SCALE OUT	TARE WEIGHT	47,120	NET WEIGHT	40,640

INBOUND

QTY.	UNIT	DESCRIPTION		RATE	EXTENSION	TAX	TOTAL
20.00	YD	SW-E&P SOLIDS	INDUSTRIAL SOLID WASTI	$24.00	$480.00	$0.00	$480.0
1.00		ENVIRONMENTAL FEE 1		$11.50	$11.50	$0.00	$11.5

Webster Parish Landfill
493 Landfill Road
Minden, La 71055
Phone-318-377-9193

NET AMOUNT $491.50
TENDERED $0.00
CHANGE $0.00
CHECK#

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

RS-F042UPR (07/12) 2/21

SIGNATURE Brock Ducklo

TAS # TT3-X031

TAS Bol # 1193494

REPUBLIC SERVICES

NON-HAZARDOUS WASTE MANIFEST

1277195

Please print or type.

1. Generator's US EPA ID Number	Manifest Document Number	2. Page 1 of
	1277195	

GENERATOR

3. Generator's Name and Mailing Address	5. Generating Location (if different)
[illegible]	Magnolia Station Inco Columbia 25 Magnolia, AR.
4. Phone ([illegible])	6. Phone ( )

7. Transporter #1 Company Name	8. US EPA ID Number	9. Transporter #1's Phone
TAS Environmental	TXR000061283	903-930-7637
10. Transporter #2 Company Name	11. US EPA ID Number	12. Transporter #2's Phone

13. Designated T/S/D Facility Name and Site Address	14. US EPA ID Number	15. Facility's Phone
Waste Parish 446 Landfill Road Minden, LA 71055	LAD [illegible]	(318) 377-0123

	16. Waste Shipping Name and Description	17. Allied Waste Approval # and Exp. Date	18. Containers No.	18. Containers Type	19. Total Quantity	20. Unit Wt/Vol
a.	[illegible] Soil Impacted with crude oil	412[illegible] 08/31/2014	1	CM	20	CU YD
b.						
c.						
d.						

21. Additional Descriptions for Materials Listed Above

22. Special Handling Instructions and Additional Information: In case of emergency call TAS Environmental at 1-888-654-0111

23. **GENERATOR'S CERTIFICATION:** I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Travis Carter	Agent for Client Trucking & Transportation	4	11	13

TRANSPORTER

24. **Transporter #1:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
[illegible]	[illegible]	4	15	13

25. **Transporter #2:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

T/S/D FACILITY

26. Discrepancy Indication Space

27. **Facility Owner or Operator:** Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)

Printed/Typed Name	Signature	Month	Day	Year

TRANSPORTER #2

Continued

WEBSTER PARISH
493 Landfill Rd
Minden, LA 71055 318-377-9193

CUSTOMER

210206
TAS ENVIRONMENTAL
3929 CALIFORNIA PKWY E
FORT WORTH, TX 76119
4126135229

01 | 914336 | 5127

WEIGHMASTER
DEBORA C.

DATE/TIME IN
04-16-2013 10:56 am

DATE/TIME OUT
04-16-2013 10:56 am

VEHICLE
5285

CONTAINER

REFERENCE
LION OIL/TAS INVOICE

BILL OF LADING
1277895

SCALE IN	GROSS WEIGHT	82,800	NET TONS	18.35	
TARE OUT	TARE WEIGHT	46,100	NET WEIGHT	36,700	INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.00	YD	SW-E&P SOLIDS INDUSTRIAL SOLID WASTI	$24.00	$480.00	$0.00	$480.00
1.00		ENVIRONMENTAL FEE 1	$11.50	$11.50	$0.00	$11.50

Webster Parish Landfill
493 Landfill Road
Minden, La 71055
Phone-318-377-9193

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

RS-F042UPR (07/12)

SIGNATURE Brock Ouellet

NET AMOUNT
$491.50
TENDERED
$0.00
CHANGE
$0.00
CHECK#

JOB # T13-X031

REPUBLIC SERVICES

TAS Bay # 18.39

NON-HAZARDOUS WASTE MANIFEST

1277696

1. Generator's US EPA ID Number	Manifest Document Number	2. Page 1 of
	1277696	

GENERATOR

3. Generator's Name and Mailing Address	5. Generating Location (if different)
[redacted] 1201 DORADO ST EL DORADO AR 71730 4. Phone (870) 881-4350	MAGNOLIA STATION 600 Columbia St 25 MAGNOLIA, AR. 6. Phone ( )

7. Transporter #1 Company Name	8. US EPA ID Number	9. Transporter #1's Phone
TAS ENVIRONMENTAL	TXR000061283	903-930-7637
10. Transporter #2 Company Name	**11. US EPA ID Number**	**12. Transporter #2's Phone**

13. Designated T/S/D Facility Name and Site Address	14. US EPA ID Number	15. Facility's Phone
Webster Parish 493 Landfill Road Minden, LA 71055	LAD 0165	(318) 377-8183

16. Waste Shipping Name and Description	17. Allied Waste Approval # and Exp. Date	18. Containers No.	18. Containers Type	19. Total Quantity	20. Unit Wt/Vol
a. NON-HAZARDOUS Soil Impacted with crude oil	4128135229 03/31/2014	1	CM	20	cu. Y
b.					
c.					
d.					

21. Additional Descriptions for Materials Listed Above

22. Special Handling Instructions and Additional Information: IN CASE of EMERGENCY CALL TAS ENVIRONMENTAL At 1-888-654-0111

23. **GENERATOR'S CERTIFICATION:** I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
George Carter	As Agent for Lion Oil Trading & Transportation	4	11	13

TRANSPORTER

24. **Transporter #1:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Shane E Drumb		4	16	13

25. **Transporter #2:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

T/S/D FACILITY

26. Discrepancy Indication Space

27. **Facility Owner or Operator:** Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)

Printed/Typed Name	Signature	Month	Day	Year
		4	16	13

TRANSPORTER #2

WEBSTER PARISH
493 Landfill Rd
Minden, LA 71055 318-377-9193

CUSTOMER

210206
TAS ENVIRONMENTAL
3929 CALIFORNIA PKWY E
FORT WORTH, TX 76119
4126135229

01	914335	5127

WEIGHMASTER: DEBORA C.

DATE/TIME IN: 04-16-2013 10:54 am
DATE/TIME OUT: 04-16-2013 10:54 am
VEHICLE: 5845
CONTAINER:
REFERENCE: LION OIL/ TAS INVOICE
BILL OF LADING: 1277896

SCALE IN	GROSS WEIGHT	77,760	NET TONS	18.39	
TARE OUT	TARE WEIGHT	40,980	NET WEIGHT	36,780	INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.00	YD	SW-E&P SOLIDS INDUSTRIAL SOLID WASTI	$24.00	$480.00	$0.00	$480.00
1.00		ENVIRONMENTAL FEE 1	$11.50	$11.50	$0.00	$11.50

Webster Parish Landfill
493 Landfill Road
Minden, La 71055
Phone-318-377-9193

NET AMOUNT: $491.50
TENDERED: $0.00
CHANGE: $0.00
CHECK#:

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

RS-F042UPR (07/12) 2/21

SIGNATURE:

JOB# T13-X031

REPUBLIC SERVICES

TAS Box # 1167

NON-HAZARDOUS WASTE MANIFEST

1065243

1. Generator's US EPA ID Number	Manifest Document Number	2. Page 1 of
	1065243	1

GENERATOR

3. Generator's Name and Mailing Address	5. Generating Location (if different)
Lion Oil 1001 School St. - El Dorado, AR 71730	Magnolia Station 600 Columbia 25 Magnolia, AR.
4. Phone (870-814-4350	6. Phone ( )

7. Transporter #1 Company Name	8. US EPA ID Number	9. Transporter #1's Phone
TAS ENVIROMENTAL	TXR000061283	318-747-2652
10. Transporter #2 Company Name	**11. US EPA ID Number**	**12. Transporter #2's Phone**

13. Designated T/S/D Facility Name and Site Address	14. US EPA ID Number	15. Facility's Phone
Webster Parish 493 Landfill Road Minden, LA 71058	#P-0165	(318) 377-9193

16. Waste Shipping Name and Description	17. Allied Waste Approval # and Exp. Date	18. Containers No.	18. Containers Type	19. Total Quantity	20. Unit Wt/Vol
a. NON HAZARDOUS - Solid WASTE, Soil Impacted W/Crude	4126135229	1	CM	20	CU. Yds
b.					
c.					
d.					

21. Additional Descriptions for Materials Listed Above

22. Special Handling Instructions and Additional Information IN CASE OF EMERGENCY CALL 1-888-654-0111, TAS ENVIRONMENTAL

23. **GENERATOR'S CERTIFICATION:** I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
George Gratton	As Agent for Lion Oil Trading & Transportation	4	9	13

TRANSPORTER

24. **Transporter #1:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
X Chris Moran	X	4	9	13

25. **Transporter #2:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

T/S/D FACILITY

26. Discrepancy Indication Space

27. **Facility Owner or Operator:** Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)

Printed/Typed Name	Signature	Month	Day	Year
	A. HARGRAVE	4	9	13

ORIGINAL - RETURN TO GENERATOR

REV 01/12

RS-F15

SITE

WEBSTER PARISH
493 Landfill Rd
Minden, LA 71055 318-377-9193

CUSTOMER

210206
TAS ENVIRONMENTAL
3929 CALIFORNIA PKWY E
FORT WORTH, TX 76119

OUT OF PARISH

SITE	TICKET #	CELL
01	913986	5127

WEIGHMASTER: Aundrea H.

DATE/TIME IN	DATE/TIME OUT
04-09-2013 4:32 pm	04-9-2013 5:49 pm

VEHICLE: 5276
CONTAINER:
REFERENCE: LION OIL INVOICE
BILL OF LADING: 1065243

SCALE IN	GROSS WEIGHT	94,820	NET TONS	24.64	
SCALE OUT	TARE WEIGHT	45,540	NET WEIGHT	49,280	INBOUND

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.00	YD	TRACKING QTY				
24.64	TN	MSW OUT OF PARISH IN STATI			$0.00	
1.00		ENVIRONMENTAL FEE 1			$0.00	$11.50

1167

It's the Right Thing!

Webster Parish Landfill
493 Landfill Road
Minden, La 71055
Phone-318-377-9193

NET AMOUNT

TENDERED $0.00

CHANGE $0.00

CHECK#

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

SIGNATURE

RS-F042UPR (07/12) 2/21

913150
23.05 #19540
T13-X031

REPUBLIC SERVICES

NON-HAZARDOUS WASTE MANIFEST

1065242

Please print or type

1. Generator's US EPA ID Number	Manifest Document Number	2. Page 1 of 1

GENERATOR

3. Generator's Name and Mailing Address	5. Generating Location (if different)
LOIN OIL 1001 SCHOOL ST EL DORADO AR 71730	MAGNOLIA STATION 600 COLUMBIA 25 MAGNOLIA AR
4. Phone (870 814 4350	6. Phone ( )

7. Transporter #1 Company Name	8. US EPA ID Number	9. Transporter #1's Phone
TAS ENVIROMENTAL	TXR000061283	318-747-2662
10. Transporter #2 Company Name	**11. US EPA ID Number**	**12. Transporter #2's Phone**
13. Designated T/S/D Facility Name and Site Address	**14. US EPA ID Number**	**15. Facility's Phone**
Webster Parish 493 Landfill Road Minden, LA 71058	#P-0165	(318) 377-9183

16. Waste Shipping Name and Description	17. Allied Waste Approval # and Exp. Date	18. Containers No.	18. Containers Type	19. Total Quantity	20. Unit Wt/Vol
a. NON HAZARDOUS - Solid WASTE Soil impacted w/ crude	4126135229	1	CM	20	cu. yds
b.					
c.					
d.					

21. Additional Descriptions for Materials Listed Above

22. Special Handling Instructions and Additional Information

Approval # 4126135229 -

23. **GENERATOR'S CERTIFICATION:** I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
George Garten	[signature] (As Agent For Loin Oil Trading & Transport)	4	9	13

TRANSPORTER

24. **Transporter #1:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
X Alan Campbell TAX# 53	X [signature]	4	9	13

25. **Transporter #2:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

T/S/D FACILITY

26. Discrepancy Indication Space

27. **Facility Owner or Operator:** Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)

Printed/Typed Name	Signature	Month	Day	Year
	A. Hargrave	4	9	13

TRANSPORTER #2

REV 01/12

RS-F15

SITE
WEBSTER PARISH
493 Landfill Rd
Minden, LA 71055 318-377-9193

CUSTOMER
210206
TAS ENVIRONMENTAL
3929 CALIFORNIA PKWY E
FORT WORTH, TX 76119
4126135229

SITE	TICKET #	CELL
01	913953	5127

WEIGHMASTER
Andrea H.

DATE/TIME IN	DATE/TIME OUT
04 09 2013 12:40 pm	04 9 2013 1:56 pm

VEHICLE
3668

CONTAINER

REFERENCE
LION OIL INVOICE

BILL OF LADING
1065242

SCALE IN	GROSS WEIGHT	85,580	NET TONS	23.05
SCALE OUT	TARE WEIGHT	39,480	NET WEIGHT	46,100

INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.00	YD	SW-E&P SOLIDS INDUSTRIAL SOLID WAST	.	)	$0.00	
1.00		ENVIRONMENTAL FEE 1	)		$0.00	

19590

Webster Parish Landfill
493 Landfill Road
Minden, La 71055
Phone-318-377-9193

NET AMOUNT

TENDERED $0.00

CHANGE $0.00

CHECK#

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

SIGNATURE Alan Cantrell

RS-F042UPR (07/12) 2/21

JOB# T13-X031 9/16/13 25.80 REPUBLIC SERVICES TAS Bay # 2948

NON-HAZARDOUS WASTE MANIFEST

1065244

1. Generator's US EPA ID Number	Manifest Document Number 1065244	2. Page 1 of 1	

GENERATOR

3. Generator's Name and Mailing Address	5. Generating Location (if different)
Lion Oil 1001 School St. El Dorado, AR. 4. Phone 870-814-4350 71730	Magnolia Station 600 Columbia 25 6. Phone ( ) Magnolia, AR.

7. Transporter #1 Company Name	8. US EPA ID Number	9. Transporter #1's Phone
TAS ENVIRONMENTAL	TXN000031203	318-247-2662
10. Transporter #2 Company Name	11. US EPA ID Number	12. Transporter #2's Phone

13. Designated T/S/D Facility Name and Site Address	14. US EPA ID Number	15. Facility's Phone
Webster Parish 433 Landfill Road Minden, LA 71055	LAD-0165	(318) 377-0103

16. Waste Shipping Name and Description	17. Allied Waste Approval # and Exp Date	18 Containers No.	18 Containers Type	19. Total Quantity	20. Unit Wt/Vol
a. NON HAZARDOUS - Solid Waste Soil impacted w/ Crude	4126135229	1	CM	20	CU. YDS
b.					
c.					
d.					

21. Additional Descriptions for Materials Listed Above

22. Special Handling Instructions and Additional Information IN CASE OF EMERGENCY CALL- 1-888-654-0111, TAS ENVIRONMENTAL

23. **GENERATOR'S CERTIFICATION:** I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
George Garton	As Agent for Lion Oil Trading & Transportation	4	9	13

TRANSPORTER

24. **Transporter #1:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
X Brock Dudley	X Brock Dudley	4	10	13

25. **Transporter #2:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

T/S/D FACILITY

26. Discrepancy Indication Space

27. **Facility Owner or Operator:** Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)

Printed/Typed Name	Signature	Month	Day	Year
		4	16	13

TRANSPORTER #2

REV 01/12

RS-F15

SITE
WEBSTER PARISH
493 Landfill Rd
Minden, LA 71055 318-377-9193

CUSTOMER
210206
TAS ENVIRONMENTAL
3929 CALIFORNIA PKWY E
FORT WORTH, TX 76119
4126135229

SITE	TICKET #	CELL
01	914040	5127

WEIGHMASTER: DEBORA C.

DATE/TIME IN	DATE/TIME OUT
04-10-2013 12:07 pm	04-10-2013 12:55 pm

VEHICLE: 5285
CONTAINER:
REFERENCE: LION OIL /TAS INVOICE
BILL OF LADING: 1065244

SCALE IN	GROSS WEIGHT	93,700	NET TONS	23.80
SCALE OUT	TARE WEIGHT	46,100	NET WEIGHT	47,600

INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.00	YD	SW-E&P SOLIDS INDUSTRIAL SOLID WASTI			$0.00	
1.00		ENVIRONMENTAL FEE 1			$0.00	

2948

Webster Parish Landfill
493 Landfill Road
Minden, La 71055
Phone-318-377-9193

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

SIGNATURE Brad Dodd

NET AMOUNT
TENDERED $0.00
CHANGE $0.00
CHECK#

RS-F042UPR (07/12)

JOB# T13-X031

REPUBLIC SERVICES

32120 914041
Box # 2362

NON-HAZARDOUS WASTE MANIFEST

1065245

Please print or type

1. Generator's US EPA ID Number	Manifest Document Number	2. Page 1 of
	1065245	1

3. Generator's Name and Mailing Address	5. Generating Location (if different)
Lion Oil Co. 1001 School St.	Magnolia Station 600 Columbia 25
4. Phone (870) 814-4350 El Dorado, Ar. 71730	6. Phone ( ) Magnolia, Ar.

7. Transporter #1 Company Name	8. US EPA ID Number	9. Transporter #1's Phone
TAS ENVIROMENTAL	TXR000061263	310-747-9602
10. Transporter #2 Company Name	11. US EPA ID Number	12. Transporter #2's Phone
13. Designated T/S/D Facility Name and Site Address	14. US EPA ID Number	15. Facility's Phone
Webster Parish 490 Landfill Road Minden, LA 71058	0P-0165	(318) 377-9193

16. Waste Shipping Name and Description	17. Allied Waste Approval # and Exp. Date	18. Containers No.	Type	19. Total Quantity	20. Unit Wt/Vol
a. NON HAZARDOUS - Soil WASTE Soil impacted w/ crude oil	3/31/14 exp. 4126135229	1	CM	20	cu. yds
b.					
c.					
d.					

21. Additional Descriptions for Materials Listed Above

22. Special Handling Instructions and Additional Information: IN CASE OF EMERGENCY CALL TAS ENVIRONMENTAL AT 1-888-654-0111

23. **GENERATOR'S CERTIFICATION:** I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
George Garten	[signature] As Agent for Lion Oil Trading & Transportation	4	9	13

24. **Transporter #1:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
X Shane E. Drawd	X [signature]	4	10	13

25. **Transporter #2:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

26. Discrepancy Indication Space

27. **Facility Owner or Operator:** Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)

Printed/Typed Name	Signature	Month	Day	Year
[signature]	[signature]	4	10	13

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

REV 01/12

RS-F15

SITE

WEBSTER PARISH
493 Landfill Rd
Minden, LA 71055 318-377-9193

CUSTOMER

210206
TAS ENVIRONMENTAL
3929 CALIFORNIA PKWY E
FORT WORTH, TX 76119
4126135229

SITE	TICKET #	CELL
01	914041	5127

WEIGHMASTER: DEBORA C.

DATE/TIME IN	DATE/TIME OUT
04-10-2013 12:02 pm	04-10-2013 12:57 pm

VEHICLE: 3668
CONTAINER:
REFERENCE: LION OIL CO/TAS INVOICE
BILL OF LADING: 1065245

SCALE IN	GROSS WEIGHT	88,220	NET TONS	23.62	
SCALE OUT	TARE WEIGHT	40,980	NET WEIGHT	47,240	INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.00	YD	SW-E&P SOLIDS INDUSTRIAL SOLID WASTI			$0.00	
1.00		ENVIRONMENTAL FEE 1			$0.00	

2362

Webster Parish Landfill
493 Landfill Road
Minden, La 71055
Phone-318-377-9193

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

SIGNATURE

RS-F042UPR (07/12)

NET AMOUNT

TENDERED

CHANGE $0.00

CHECK# $0.00

JOB # T13-X031

REPUBLIC SERVICES

TAS Buy # B0120

NON-HAZARDOUS WASTE MANIFEST

1277902

Please print or type.

1. Generator's US EPA ID Number	Manifest Document Number	2. Page 1 of
	1277902	

GENERATOR

3. Generator's Name and Mailing Address	5. Generating Location (If different)
[illegible] 1051 SCHOOL ST EL DORADO AR 71730 4. Phone 870-862-4950	Magnolia Station 600 Columbia 25 Magnolia, AR. 6. Phone ( )

7. Transporter #1 Company Name	8. US EPA ID Number	9. Transporter #1's Phone
TAS Environmental	TXR 000061283	903-930-7637
10. Transporter #2 Company Name	11. US EPA ID Number	12. Transporter #2's Phone

13. Designated T/S/D Facility Name and Site Address	14. US EPA ID Number	15. Facility's Phone
Webster Parish 493 Landfill Road Minden, LA 71058	LAD-0165	(318) 377-0193

16. Waste Shipping Name and Description	17. Allied Waste Approval # and Exp. Date	18. Containers No.	18. Containers Type	19 Total Quantity	20. Unit Wt/Vol
a. NON-HAZARDOUS Soil Impacted with crude oil	4126135228 03/31/2014	1	CM	20	CU. YD.
b					
c.					
d.					

21. Additional Descriptions for Materials Listed Above

22. Special Handling Instructions and Additional Information: IN CASE OF EMERGENCY CALL TAS ENVIRONMENTAL AT 1-888-654-0111.

23. **GENERATOR'S CERTIFICATION:** I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Preston Barker	TAS Agent for Clean Oil Testing & Transportation	4	10	15

TRANSPORTER

24. **Transporter #1:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
X Brandon Campbell	X [signature]	4	10	15

25. **Transporter #2:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

T/S/D FACILITY

26. Discrepancy Indication Space

27. **Facility Owner or Operator:** Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)

Printed/Typed Name	Signature	Month	Day	Year

TRANSPORTER #2

REV 01/12

RS-F15

SITE

4126

CUSTOMER

Linn 0:1

210206

SITE	TICKET # 29	CELL
WEIGHMASTER DC		
DATE/TIME IN 4-11-13 12:16		DATE/TIME OUT 4-11-13 1:30 pm
VEHICLE 3668		CONTAINER
REFERENCE TAS		
BILL OF LADING 1277902		

8/980 inweight

40600 Outweight

20.69 TM.

41,380 Netweight

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20	TD	4126135229				
		2120				

318-377-9193

NET AMOUNT
TENDERED
CHANGE
CHECK#

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

SIGNATURE Aaron Gabbert

RS-F042UPR (07/12)

JOB # T13-X031 REPUBLIC SERVICES TAS Box # 2040

NON-HAZARDOUS WASTE MANIFEST

1277900

1. Generator's US EPA ID Number	Manifest Document Number	2. Page 1 of
	1277900	

GENERATOR

3. Generator's Name and Mailing Address	5. Generating Location (if different)
[illegible]	Magnolia Station 600 Columbia 25 Magnolia, AR.
4. Phone [illegible]	6. Phone ( )

7. Transporter #1 Company Name	8. US EPA ID Number	9. Transporter #1's Phone
TAS Environmental	TXR000061783	903-930-7637
10. Transporter #2 Company Name	**11. US EPA ID Number**	**12. Transporter #2's Phone**

13. Designated T/S/D Facility Name and Site Address	14. US EPA ID Number	15. Facility's Phone
Webster Parish 49[illegible] Landfill Road Minden, LA 71055	[illegible]P 0165	(318) 377-9193

16. Waste Shipping Name and Description	17. Allied Waste Approval # and Exp. Date	18. Containers No	18. Containers Type	19. Total Quantity	20. Unit Wt/Vol
a. NON-HAZARDOUS Soil impacted with crude oil	4128135225 03/31/2014	1	CM	20	CM Yd
b.					
c.					
d.					

21. Additional Descriptions for Materials Listed Above

22. Special Handling Instructions and Additional Information
In case of emergency call TAS Environmental at 1-888-654-0111

23. **GENERATOR'S CERTIFICATION:** I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
[illegible]	[illegible]	4	10	13

TRANSPORTER

24. **Transporter #1:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
[illegible]	[illegible]	4	10	13

25. **Transporter #2:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

T/S/D FACILITY

26. Discrepancy Indication Space

27. **Facility Owner or Operator:** Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)

Printed/Typed Name	Signature	Month	Day	Year
[illegible]				

COM030033

TRANSPORTER #1

REV 01/12

RS-F15

SITE

4126 Webster Parish Landfill

CUSTOMER

210206

Tas Environmental

3929 California Tk.

SITE	TICKET # 1	CELL
WEIGHMASTER	DC	
DATE/TIME IN 4-10-13 4:25 pm		DATE/TIME OUT
VEHICLE 5845		CONTAINER
REFERENCE Lion 0:1		
BILL OF LADING 127900		

Scale in 86,820 Tare 22.92

Scale out 40,980 netw 45,840

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
		Lion 0:1 1954D				
		4126135329 204D.	24—			1 —

318-377-9193

NET AMOUNT
TENDERED
CHANGE
CHECK#

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

SIGNATURE

RS-F042UPR (07/12)

REPUBLIC SERVICES

NON-HAZARDOUS WASTE MANIFEST

1277391

1. Generator's US EPA ID Number	Manifest Document Number	2. Page 1 of
	1277391	

GENERATOR

3. Generator's Name and Mailing Address	5. Generating Location (if different)
1001 SCHOOL ST EL DORADO AR 71730 4. Phone (870) 881 4950	6. Phone ( )

7. Transporter #1 Company Name	8. US EPA ID Number	9. Transporter #1's Phone

10. Transporter #2 Company Name	11. US EPA ID Number	12. Transporter #2's Phone

13. Designated T/S/D Facility Name and Site Address	14. US EPA ID Number	15. Facility's Phone
Webster Parish 493 Landfill Road Minden, LA 71058	LAP 0165	(318) 377-9133

16. Waste Shipping Name and Description	17. Allied Waste Approval # and Exp. Date	18. Containers No.	18. Containers Type	19. Total Quantity	20. Unit Wt/Vol
a. NON-HAZARDOUS Soil Impacted with crude oil	4126135229 03/31/2014	1	CM	20	Y
b.					
c.					
d.					

21. Additional Descriptions for Materials Listed Above

22. Special Handling Instructions and Additional Information

23. **GENERATOR'S CERTIFICATION:** I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
X George Harden	X As Agent for Lion Oil Trading & Transportation	11	1	13

TRANSPORTER

24. **Transporter #1:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Brent Perry				

25. **Transporter #2:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

T/S/D FACILITY

26. Discrepancy Indication Space

27. **Facility Owner or Operator:** Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)

Printed/Typed Name	Signature	Month	Day	Year
		11	1	13

TRANSPORTER #2

SITE
WEBSTER PARISH
493 Landfill Rd
Minden, LA 71055 318-377-9193

CUSTOMER
210206
TAS ENVIRONMENTAL
3929 CALIFORNIA PKWY E
FORT WORTH, TX 76119
4126135229

SITE	TICKET #	CELL
01	914390	5127

WEIGHMASTER: DEBORA C.

DATE/TIME IN	DATE/TIME OUT
04-17-2013 8:44 am	04-17-2013 8:44 am

VEHICLE: 5285
CONTAINER:
REFERENCE: LION OIL/ TAS
BILL OF LADING: INVOICE
1277891

SCALE IN	GROSS WEIGHT	85,560	NET TONS	19.73	
TARE OUT	TARE WEIGHT	46,100	NET WEIGHT	39,460	INBOUND

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.00	YD	SW-E&P SOLIDS INDUSTRIAL SOLID WAST				
1.00		ENVIRONMENTAL FEE 1				

Box 19540

Webster Parish Landfill
493 Landfill Road
Minden, La 71055
Phone-318-377-9193

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

RS-F042UPR (07/12)

SIGNATURE Brock Duck

NET AMOUNT
TENDERED $0.00
CHANGE $0.00
CHECK#

JOB # T13-X031

REPUBLIC SERVICES

Box #32120

Please print or type

NON-HAZARDOUS WASTE MANIFEST

1277899

1. Generator's US EPA ID Number	Manifest Document Number 1277[illegible]	2. Page 1 of	
3. Generator's Name and Mailing Address [illegible] 1001 SCHOOL ST EL DORADO AR 71730		5. Generating Location (if different) MAGNOLIA STATION 600 COLUMBIA 25 MAGNOLIA, AR	
4. Phone ( ) [illegible]		6. Phone ( )	
7. Transporter #1 Company Name TAS ENVIRONMENTAL	8. US EPA ID Number TXR 0000612-83	9. Transporter #1's Phone 903-930-763[illegible]	
10. Transporter #2 Company Name	11. US EPA ID Number	12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Webster Parish 493 Landfill Road Minden, LA 71058	14. US EPA ID Number #P-0166	15. Facility's Phone (318) 377-9183	

16. Waste Shipping Name and Description	17. Allied Waste Approval # and Exp. Date	18. Containers No.	Type	19. Total Quantity	20. Unit Wt/Vol
a. NON-HAZARDOUS Soil Impacted with crude oil	4128135229 03/31/2014	1	CM	20	cu YD
b.					
c.					
d.					

21. Additional Descriptions for Materials Listed Above

22. Special Handling Instructions and Additional Information

23. **GENERATOR'S CERTIFICATION:** I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
George Gaffen[illegible]	[signature] (As Agent for Lion Oil Trading & Transport)	4	11	13

24. **Transporter #1:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
X Shane E Drum	X [signature]	X 4	17	13

25. **Transporter #2:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

26. Discrepancy Indication Space

27. **Facility Owner or Operator:** Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)

Printed/Typed Name	Signature	Month	Day	Year
[illegible]	[signature]	4	17	13

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

SITE

WEBSTER PARISH
493 Landfill Rd
Minden, LA 71055 318-377-9193

CUSTOMER

210206
TAS ENVIRONMENTAL
3929 CALIFORNIA PKWY E
FORT WORTH, TX 76119
4126135229

SITE	TICKET #	CELL
01	914389	5127

WEIGHMASTER: DEBORA C.

DATE/TIME IN	DATE/TIME OUT
04-17-2013 8:42 am	04-17-2013 8:42 am

VEHICLE: 5945
CONTAINER:
REFERENCE: LION OIL /TAS INVOICE
BILL OF LADING: 1277899

SCALE IN	GROSS WEIGHT	79,540	NET TONS	19.28	
TARE OUT	TARE WEIGHT	40,980	NET WEIGHT	38,560	INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.00	YD	SW-E&P SOLIDS INDUSTRIAL SOLID WASTI				
1.00		ENVIRONMENTAL FEE 1				

Bol 32120

Webster Parish Landfill
493 Landfill Road
Minden, La 71055
Phone-318-377-9193

NET AMOUNT

TENDERED $0.00

CHANGE $0.00

CHECK#

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

SIGNATURE

RS-F042UPR (07/12) 2/21

105-113-X031 Job # 2448

REPUBLIC SERVICES

Please print or type

NON-HAZARDOUS WASTE MANIFEST

1277398

1. Generator's US EPA ID Number	Manifest Document Number	2. Page 1 of
	1277398	

GENERATOR

3. Generator's Name and Mailing Address	5. Generating Location (if different)
[redacted]	Magnolia Station 600 Jackson 25 Magnolia, AR.
4. Phone ( ) [redacted]	6. Phone ( )

7. Transporter #1 Company Name	8. US EPA ID Number	9. Transporter #1's Phone
TAS Environmental	TXR000061283	903-930-7637
10. Transporter #2 Company Name	11. US EPA ID Number	12. Transporter #2's Phone

13. Designated T/S/D Facility Name and Site Address	14. US EPA ID Number	15. Facility's Phone
Waste Connections of Louisiana, LLC Waste Connections of Louisiana, LLC Minden, LA 71055	LAD981056228	(318) 377-0103

16. Waste Shipping Name and Description	17. Allied Waste Approval # and Exp. Date	18. Containers No.	18. Containers Type	19. Total Quantity	20. Unit Wt/Vol
a. Non-HAZARDOUS Soil handled with crude oil	412013023B 03/31/2014	1	CM	20	CY
b.					
c.					
d.					

21. Additional Descriptions for Materials Listed Above

22. Special Handling Instructions and Additional Information — In case of emergency call TAS Environmental at 1-888-654-0111

23. **GENERATOR'S CERTIFICATION:** I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
George Carter	[signature] (Agent for Transporter)	4	11	13

TRANSPORTER

24. **Transporter #1:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
X Brock Dyer	X [signature]	4	11	13

25 **Transporter #2:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

T/S/D FACILITY

26. Discrepancy Indication Space

27. **Facility Owner or Operator:** Certification of receipt of waste materials covered by this manifest (except as noted in item 19)

Printed/Typed Name	Signature	Month	Day	Year
	[signature]	4	17	13

TRANSPORTER #2

SITE
WEBSTER PARISH
493 Landfill Rd
Minden, LA 71055 318-377-9193

CUSTOMER
210206
TAS ENVIRONMENTAL
3929 CALIFORNIA PKWY E
FORT WORTH, TX 76119
4126135229

SITE	TICKET #	CELL
01	914409	5127

WEIGHMASTER: Aundrea H.

DATE/TIME IN	DATE/TIME OUT
04-17-2013 12:41 pm	04-17-2013 12:41 pm

VEHICLE: 5285
CONTAINER:
REFERENCE: liq oil
BILL OF LADING: INVOICE
1277898

SCALE IN	GROSS WEIGHT	87,560	NET TONS	20.73	
TARE OUT	TARE WEIGHT	46,100	NET WEIGHT	41,460	INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.00	YD	SW-E&P SOLIDS INDUSTRIAL SOLID WASTI				
1.00		ENVIRONMENTAL FEE 1				

Box 2948

Webster Parish Landfill
493 Landfill Road
Minden, La 71055
Phone-318-377-9193

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

SIGNATURE Brock Dudley

NET AMOUNT
TENDERED
CHANGE $0.00
CHECK# $0.00

RS-F042UPR (07/12)

REPUBLIC SERVICES

DOBT13X031

NON-HAZARDOUS WASTE MANIFEST

1277892

1. Generator's US EPA ID Number	Manifest Document Number	2. Page 1 of

3. Generator's Name and Mailing Address	5. Generating Location (if different)
[illegible] 1201 SCHOOL ST EL DORADO AR 71730	magnolia station 600 Columbia St magnolia AR
4. Phone (501) 1550	6. Phone ( )

7. Transporter #1 Company Name	8. US EPA ID Number	9. Transporter #1's Phone
Tos Environmental	TXR 000061283	903-930-7637
10. Transporter #2 Company Name	11 US EPA ID Number	12. Transporter #2's Phone
13. Designated T/S/D Facility Name and Site Address	14. US EPA ID Number	15. Facility's Phone
Webster Parish 493 Landfill Road Minden, LA 71058	[illegible]-0165	(318) 377-0193

16. Waste Shipping Name and Description	17. Allied Waste Approval # and Exp. Date	18. Containers No.	18. Containers Type	19. Total Quantity	20. Unit Wt/Vol
a. NON-HAZARDOUS Soil impacted with crude oil	4126135229 03/31/2014	1	CM	20	Y
b.					
c.					
d.					

21. Additional Descriptions for Materials Listed Above

22. Special Handling Instructions and Additional Information

23. **GENERATOR'S CERTIFICATION:** I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
George Garten	[signature] (As Agent for Lion Oil Trading & Transportation)	4	17	13

24. **Transporter #1:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Shane F Drawdy	[signature]	4	17	13

25. **Transporter #2:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

26. Discrepancy Indication Space

27. **Facility Owner or Operator:** Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)

Printed/Typed Name	Signature	Month	Day	Year
	[signature]	4	17	13

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

SITE

WEBSTER PARISH
493 Landfill Rd
Minden, LA 71055 318 377 9193

CUSTOMER

210206
TAS ENVIRONMENTAL
3929 CALIFORNIA PKWY E
FORT WORTH, TX 76119
4126135229

SITE	TICKET #	CELL
01	914439	5127

WEIGHMASTER
Aundrea H.

DATE/TIME IN	DATE/TIME OUT
04-17-2013 4:27 pm	04-17-2013 4:27 pm

VEHICLE
5285

CONTAINER

REFERENCE
lion oil

BILL OF LADING
1277892

INVOICE

SCALE IN	GROSS WEIGHT	76,940	NET TONS	15.42	
TARE OUT	TARE WEIGHT	46,100	NET WEIGHT	30,840	INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.00	YD	SW-E&P SOLIDS INDUSTRIAL SOLID WASTI				
1.00		ENVIRONMENTAL FEE 1				50

Box # 19544

Webster Parish Landfill
493 Landfill Road
Minden, La 71055
Phone-318-377-9193

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

RS-F042UPR (07/12)

SIGNATURE Brock Duel

NET AMOUNT

TENDERED

CHANGE $0.00

CHECK# $0.00

JOB # T13-X031 TAS Box # B2021

REPUBLIC SERVICES

NON-HAZARDOUS WASTE MANIFEST

1277884

1. Generator's US EPA ID Number	Manifest Document Number	2. Page 1 of
	1277884	

GENERATOR

3. Generator's Name and Mailing Address	5. Generating Location (if different)
[illegible] 1001 SCHOOL ST EL DORADO AR 71730	MAGNOLIA Station Columbia Cty Rd #25 Magnolia, AR
4. Phone (010-01) 4350	6. Phone ( )

7. Transporter #1 Company Name	8. US EPA ID Number	9. Transporter #1's Phone
TAS ENVIRONMENTAL	TXR000061283	903-838-2183
10. Transporter #2 Company Name	11. US EPA ID Number	12. Transporter #2's Phone
13. Designated T/S/D Facility Name and Site Address	14. US EPA ID Number	15. Facility's Phone
Webster Parish 493 Landfill Road Minden, LA 71055	#P-0165	(318) 377-9193

16. Waste Shipping Name and Description	17. Allied Waste Approval # and Exp. Date	18. Containers No.	18. Containers Type	19. Total Quantity	20. Unit Wt/Vol
a. NON-HAZARDOUS Soil Impacted with crude oil	4126135228 03/31/2014	1	CM	16	cu. Y
b.					
c.					
d.					

21. Additional Descriptions for Materials Listed Above

22. Special Handling Instructions and Additional Information

IN CASE OF EMERGENCY CALL TAS ENVIRONMENTAL at 1-888-654-0111

23. **GENERATOR'S CERTIFICATION:** I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
George Garten	[signature] (As Agent for Lion Oil Treaty & Transport)	5	1	13

TRANSPORTER

24. **Transporter #1:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Rick Mendenhall (TXR #52)	Rick Mendenhall	5	1	13

25. **Transporter #2:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

T/S/D FACILITY

26. Discrepancy Indication Space

27. **Facility Owner or Operator:** Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)

Printed/Typed Name	Signature	Month	Day	Year
	[signature]			

TRANSPORTER #2

SITE
WEBSTER PARISH
493 Landfill Rd
Minden, LA 71055 318-377-9193

CUSTOMER
210206
TAS ENVIRONMENTAL
3929 CALIFORNIA PKWY E
FORT WORTH, TX 76119
4126135229

SITE	TICKET #	CELL
01	915212	51275127

WEIGHMASTER: Aundrea H.

DATE/TIME IN	DATE/TIME OUT
05-01-2013 2:27 pm	05-1-2013 2:27 pm

VEHICLE	CONTAINER
5284	

REFERENCE: LION OIL INVOICE

BILL OF LADING: 1277884

SCALE IN	GROSS WEIGHT	76,220	NET TONS	20.11
TARE OUT	TARE WEIGHT	36,000	NET WEIGHT	40,220

INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
16.00	YD	SW-E&P SOLIDS INDUSTRIAL SOLID WASTI	0		$0.00	
1.00		ENVIRONMENTAL FEE 1			$0.00	

Disposal Receipt 5-1-13
JOB # T13-X031
Manifest # 1277884
TAS Bay # B2120 -

Webster Parish Landfill
493 Landfill Road
Minden, La 71055
Phone-318-377-9193

NET AMOUNT
TENDERED $0.00
CHANGE $0.00
CHECK#

TRK #52

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

SIGNATURE Nick Mendenhall

RS-F042UPR (07/12)

① JOB # T13-X031 TM 5.30 ETS VAC Box # N40455

REPUBLIC SERVICES

NON-HAZARDOUS WASTE MANIFEST

1277893

1. Generator's US EPA ID Number	Manifest Document Number	2. Page 1 of

3. Generator's Name and Mailing Address	5. Generating Location (if different)
[illegible] OIL 1001 SCHOOL ST EL DORADO AR 71730	Magnolia Station 600 Columbia 25
4. Phone (870) 014-4350	6. Phone ( ) Magnolia, Ar.

7. Transporter #1 Company Name	8. US EPA ID Number	9. Transporter #1's Phone
TAS Environmental	TXR000061283	903-838-2183
10. Transporter #2 Company Name	**11. US EPA ID Number**	**12. Transporter #2's Phone**
13. Designated T/S/D Facility Name and Site Address	**14. US EPA ID Number**	**15. Facility's Phone**
Webster Parish 493 Landfill Road Minden, LA 71058	#P-0165	(318) 377-9193

16. Waste Shipping Name and Description	17. Allied Waste Approval # and Exp. Date	18. Containers No.	18. Containers Type	19. Total Quantity	20. Unit Wt/Vol
a. ~~NON-HAZARDOUS~~ ~~Soil Impacted with crude oil~~ WATER AND Crude oil sludge	~~4126135226 03/31/2014~~ 4126136024	1	CM	1500 ~~1500~~	Y
b.					
c.					
d.					

21. Additional Descriptions for Materials Listed Above

22. Special Handling Instructions and Additional Information In case of emergency call TAS Environmental at 1-888-654-0111.

23. **GENERATOR'S CERTIFICATION:** I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
George Garten	X [signature] As Agent for (Lim Oil Trading & Transportation)	4	19	13

24. **Transporter #1:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Vick Mendenhall (TRK #52)	Rick Mendenhall	4	19	13

25. **Transporter #2:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

26. Discrepancy Indication Space

27. **Facility Owner or Operator:** Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)

Printed/Typed Name	Signature	Month	Day	Year
[illegible]	[signature]	4	19	13

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

SITE (1)

WEBSTER PARISH
493 Landfill Rd
Minden, LA 71055 318-377-9193

CUSTOMER

210238
TAS ENVIRONMENTAL SERVICE L.P.
3929 E. CALIFORNIA PKWY
SOLIDIFICATION ACCOUNT
4126136024

SITE	TICKET #	CELL
01	914563	51275127

WEIGHMASTER
DEBORA C.

DATE/TIME IN	DATE/TIME OUT
04-19-2013 12:37 pm	04-19-2013 1:21 pm

VEHICLE
5284

CONTAINER

REFERENCE
LION OIL/TAS INVOICE

BILL OF LADING
1277893

SCALE IN	GROSS WEIGHT	52,920	NET TONS	5.70	
SCALE OUT	TARE WEIGHT	41,520	NET WEIGHT	11,400	INBOUND

QTY.	UNIT	DESCRIPTION		RATE	EXTENSION	TAX	TOTAL
1.00	EA	SW-E&P WASHOUT	SPECIAL WASTE LIQUID			$0.00	
1500.00	GL	SW-E&P LIQUIDS	SPECIAL WASTE LIQUID			$0.00	
1.00		ENVIRONMENTAL FEE 1				$0.00	

Disposal Receipt 4/19/13 Friday
JOB # T13-X031
Manifest # 1277893
ETS Vac Box # N40455

Webster Parish Landfill
493 Landfill Road
Minden, La 71055
Phone-318-377-9193

NET AMOUNT

TENDERED $0.00

CHANGE $0.00

CHECK#

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

TRK # 52

SIGNATURE

RS-F042UPR (07/12) 2/21

REPUBLIC SERVICES

NON-HAZARDOUS WASTE MANIFEST

1277889

1. Generator's US EPA ID Number	Manifest Document Number	2. Page 1 of

3. Generator's Name and Mailing Address	5. Generating Location (if different)
1001 SCHOOL ST EL DORADO AR 71730 4. Phone (870-811-4000)	Magnolia ARK STATION Columbia 25 6. Phone ( )

7. Transporter #1 Company Name	8. US EPA ID Number	9. Transporter #1's Phone
TAS Enviromental	TXR000061283	903 838 2193
10. Transporter #2 Company Name	11. US EPA ID Number	12. Transporter #2's Phone

13. Designated T/S/D Facility Name and Site Address	14. US EPA ID Number	15. Facility's Phone
Webster Parish 493 Landfill Road Minden, LA 71058	#P-0165	(318) 377-9193

16. Waste Shipping Name and Description	17. Allied Waste Approval # and Exp. Date	18. Containers No.	18. Containers Type	19. Total Quantity	20. Unit Wt/Vol
a. NON-HAZARDOUS ~~Soil Impacted with crude oil~~ oily Water	~~4126136228~~ 03/31/2014 4126136024	1	~~CM~~ ~~VB~~	1500 gallon	gallon
b.					
c.					
d.					

21. Additional Descriptions for Materials Listed Above

22. Special Handling Instructions and Additional Information

23. **GENERATOR'S CERTIFICATION:** I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
George Garten	Brock Dudley (Sign as agent LION OIL)	4	22	13

24. **Transporter #1:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Brock Dudley	Brock Dudley	4	22	13

25. **Transporter #2:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

26. Discrepancy Indication Space

27. **Facility Owner or Operator:** Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)

Printed/Typed Name	Signature	Month	Day	Year
[illegible]	[illegible]	4	22	13

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

REV 01/12

RS-F15

REPUBLIC SERVICES

NON-HAZARDOUS WASTE MANIFEST

1277883

1. Generator's US EPA ID Number	Manifest Document Number	2. Page 1 of

GENERATOR

3. Generator's Name and Mailing Address	5. Generating Location (if different)
1001 SCHOOL ST EL DORADO AR 71730 4. Phone (870) 863-4350	6. Phone ( )

7. Transporter #1 Company Name	8. US EPA ID Number	9. Transporter #1's Phone
TFI Environmental	TXR 000061283	903 939 2187
10. Transporter #2 Company Name	11. US EPA ID Number	12. Transporter #2's Phone

13. Designated T/S/D Facility Name and Site Address	14. US EPA ID Number	15. Facility's Phone
Webster Parish 403 Landfill Road Minden, LA 71058	#P-0165	(318) 377-9193

	16. Waste Shipping Name and Description	17. Allied Waste Approval # and Exp. Date	18. Containers No.	18. Containers Type	19. Total Quantity	20. Unit Wt/Vol
a.	NON-HAZARDOUS ~~Solid Petroleum Hydrocarbon~~ Oily Water	~~1-R001159560~~ 03/31/2014 IL6139536	1	CM	150	Y
b.						
c.						
d.						

21. Additional Descriptions for Materials Listed Above

22. Special Handling Instructions and Additional Information

23. **GENERATOR'S CERTIFICATION:** I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
George Gordon		4	22	13

TRANSPORTER

24. **Transporter #1:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Ben Dudley		4	22	13

25. **Transporter #2:** Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

T/S/D FACILITY

26. Discrepancy Indication Space

27. **Facility Owner or Operator:** Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)

Printed/Typed Name	Signature	Month	Day	Year
		4	22	13

TRANSPORTER #2

REV 01/12

RS-F15

SITE

WEBSTER PARISH
493 Landfill Rd
Minden, LA 71055 318-377-9193

CUSTOMER

210238
TAS ENVIRONMENTAL SERVICE L.P.
3929 E. CALIFORNIA PKWY
SOLIDIFICATION ACCOUNT
4126136024

SITE	TICKET #	CELL
01	914672	51275127

WEIGHMASTER: DEBORA C.

DATE/TIME IN	DATE/TIME OUT
04-22-2013 3:40 pm	04-22-2013 3:40 pm

VEHICLE: 3668
CONTAINER:
REFERENCE: LION OIL/TAS INVOICE
BILL OF LADING: 914671

SCALE IN	GROSS WEIGHT	60,860	NET TONS	4.82	
SCALE OUT	TARE WEIGHT	51,220	NET WEIGHT	9,640	INBOUND

QTY	UNIT	DESCRIPTION		RATE	EXTENSION	TAX	TOTAL
1.00	EA	SW-E&P WASHOUT	SPECIAL WASTE LIQUID			$0.00	
1500.00	GL	SW-E&P LIQUIDS	SPECIAL WASTE LIQUID			$0.00	
1.00		ENVIRONMENTAL FEE 1				$0.00	$11.50

Webster Parish Landfill
493 Landfill Road
Minden, La 71055
Phone-318-377-9193

Manifest # 277883

NET AMOUNT
TENDERED $0.00
CHANGE $0.00
CHECK#

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

RS-F042UPR (07/12)

SIGNATURE

ATTACHMENT K - WASTE ANALYTICAL DATA REPORTS

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

April 11, 2013

James McCormack
CTEH
5120 North Shore Drive
North Little Rock, AR 72118

RE: Project 20152445
Project ID: Magnolia, AR-DELEK/40432

Dear James McCormack:

Enclosed are the analytical results for sample(s) received by the laboratory on April 04, 2013. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Karen Brown
karen.brown@pacelabs.com

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

Laboratory Certifications

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152445

Client: CTEH

Project ID: Magnolia, AR-DELEK/40432

Washington Department of Ecology C2078
Oregon Environmental Laboratory Accreditation - LA200001
U.S. Dept. of Agriculture Foreign Soil Import P330-10-00119
Pennsylvania Dept. of Env Protection (NELAC) 68-04202
Texas Commission on Env. Quality (NELAC) T104704405-09-TX
Kansas Department of Health and Environment (NELAC) E-10266
Florida Department of Health (NELAC) E87595
Oklahoma Department of Environmental Quality - 2010-139
Illinois Environmental Protection Agency - 0025721
California Env. Lab Accreditation Program Branch - 11277CA
Louisiana Dept. of Environmental Quality (NELAC/LELAP) 02006

4/11/2013 19:07:51

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Cross Reference

Project: 20152445

Client: CTEH

Project ID: Magnolia, AR-DELEK/40432

Client Sample ID	Lab ID	Matrix	Collection Date/Time	Received Date/Time
MAAR0402WC009	201078816	Other	03-Apr-13 14:45	04-Apr-13 10:30

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152445

Narrative detail for project management:

At the request of the client, sample volume received on 4/3/13 was composited with sample volume received on 4/4/13. This composite sample was then distributed to the laboratory for analysis.

The collection date of 4/3/13 was used for the composite sample.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152445

Sample Receipt Condition:

All samples were received in accordance with EPA protocol.

Holding Times:

All holding times were met.

Blanks:

All blank results were below reporting limits.

Laboratory Control Samples:

All LCS recoveries were within QC limits.

Matrix Spikes and Duplicates:

MS or MSD recoveries outside of QC limits are qualified in the Report of Quality Control section.

Surrogates:

All surrogate recoveries were within QC limits.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152445

Analytical Method	Batch	Sample used for QC
EPA 6010	205971	Batch sample from another client
EPA 7470	205972	Batch sample from another client
EPA 8270	205942	Batch sample from another client
EPA 8260	205973	Project sample MAAR0402WC009
EPA 1010	205894	Batch sample from another client
SW-846 7.3.4.2	205914	Batch sample from another client
EPA 9045	205915	Batch sample from another client
SM 2540G	205980	Project sample MAAR0402WC009
SW-846 7.3.3.2	205913	Batch sample from another client

Narrative1 4/11/2013 19:08:40

For the sample used as the original for the DUP or MS/MSD for the batch:

Project sample means a sample from this project was used.
Client sample means a sample from the same client but in a different project was used.
Batch sample means a sample from a different client was used.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0402WC009
Project: 20152445
Project ID: Magnolia, AR-DELEK/40432
Site: None
Lab ID: 201078816 (TCLP)
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: TCLP
Batch: 205942
Method: EPA 8270 (TCLP)
GCMS SVOAs TCLP
Collected: 03-Apr-13
Received: 04-Apr-13
Prepared: 05-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		0.100	0.0000400	7.50	08-Apr-13 12:49 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		0.100	0.0000600	0.130	08-Apr-13 12:49 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		0.100	0.0000800	0.500	08-Apr-13 12:49 JAM
118-74-1	Hexachlorobenzene	1	ND		0.100	0.0000700	0.130	08-Apr-13 12:49 JAM
67-72-1	Hexachloroethane	1	ND		0.100	0.0000600	3.00	08-Apr-13 12:49 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		0.100	0.000100	200.	08-Apr-13 12:49 JAM
	3&4-Methylphenol	1	ND		0.100	0.000100	200.	08-Apr-13 12:49 JAM
98-95-3	Nitrobenzene	1	ND		0.100	0.0000800	2.00	08-Apr-13 12:49 JAM
87-86-5	Pentachlorophenol	1	ND		0.250	0.0000500	100.	08-Apr-13 12:49 JAM
110-86-1	Pyridine	1	ND		0.100	0.000110	5.00	08-Apr-13 12:49 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		0.250	0.000090	400.	08-Apr-13 12:49 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		0.100	0.0000500	2.00	08-Apr-13 12:49 JAM

12 compound(s) reported

Protocol 4/11/2013 19:08:41

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0402WC009
Project: 20152445
Project ID: Magnolia, AR-DELEK/40432
Site: None
Lab ID: 201078816 (TCLP)
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: TCLP
Batch: 205973
Method: EPA 8260 (TCLP)
GCMS VOAs TCLP
Collected: 03-Apr-13
Received: 04-Apr-13
Prepared: 05-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
71-43-2	Benzene	1	ND		0.100	0.0104	0.500	05-Apr-13 18:47 MHM
78-93-3	2-Butanone (MEK)	1	ND		0.200	0.0533	200.	05-Apr-13 18:47 MHM
56-23-5	Carbon tetrachloride	1	ND		0.100	0.0106	0.500	05-Apr-13 18:47 MHM
108-90-7	Chlorobenzene	1	ND		0.100	0.0132	100.	05-Apr-13 18:47 MHM
67-66-3	Chloroform	1	ND		0.100	0.0171	6.00	05-Apr-13 18:47 MHM
107-06-2	1,2-Dichloroethane	1	ND		0.100	0.0148	0.500	05-Apr-13 18:47 MHM
75-35-4	1,1-Dichloroethene	1	0.0172	J	0.100	0.0111	0.700	05-Apr-13 18:47 MHM
127-18-4	Tetrachloroethene	1	ND		0.100	0.0136	0.700	05-Apr-13 18:47 MHM
79-01-6	Trichloroethene	1	ND		0.100	0.0131	0.500	05-Apr-13 18:47 MHM
75-01-4	Vinyl chloride	1	ND		0.100	0.0113	0.200	05-Apr-13 18:47 MHM

10 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

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Pace Analytical™

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0402WC009
Project: 20152445
Project ID: Magnolia, AR-DELEK/40432
Site: None
Lab ID: 201078816 (TCLP)
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: TCLP
Batch: 205971
Method: EPA 6010 (TCLP)
Metals, ICP, TCLP Leachate
Collected: 03-Apr-13
Received: 04-Apr-13
Prepared: 05-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
7440-38-2	Arsenic	1	0.0111	J	0.200	0.00209	5.00	08-Apr-13 10:20	EJH
7440-39-3	Barium	1	0.659	J	2.00	0.00239	100.	08-Apr-13 10:20	EJH
7440-43-9	Cadmium	1	ND		0.100	0.000722	1.00	08-Apr-13 10:20	EJH
7440-47-3	Chromium	1	0.00415	J	0.200	0.00400	5.00	08-Apr-13 10:20	EJH
7439-92-1	Lead	1	0.00358	J	0.200	0.00230	5.00	08-Apr-13 10:20	EJH
7782-49-2	Selenium	1	ND		0.200	0.0286	1.00	08-Apr-13 10:20	EJH
7440-22-4	Silver	1	ND		0.200	0.00116	5.00	08-Apr-13 10:20	EJH

7 compound(s) reported

Protocol 4/11/2013 19:08:42

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0402WC009
Project: 20152445
Project ID: Magnolia, AR-DELEK/40432
Site: None
Lab ID: 201078816 (TCLP)
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: TCLP
Batch: 205972
Method: EPA 7470 (TCLP)
Mercury TCLP
Collected: 03-Apr-13
Received: 04-Apr-13
Prepared: 05-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.000200	0.0000340	0.200	08-Apr-13 09:24 MHB1

1 compound(s) reported

Protocol 4/11/2013 19:08:42

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0402WC009
Project: 20152445
Project ID: Magnolia, AR-DELEK/40432
Site: None
Lab ID: 201078816
Matrix: Other
%Moisture: n/a
Description: None

Collected: 03-Apr-13
Received: 04-Apr-13

Analyte	Method	Batch	DF	Result	Qu	Units	Reporting Limit	MDL	Analysis			Limit
Cyanide, Reactive	SW-846 7.3.3.2	205913	1	ND		mg/kg	83.3	83.3	05-Apr-13	10:30	LJL	
Flash Point	EPA 1010	205894	1	>140		deg F			04-Apr-13	14:30	LJL	
Percent Solids	SM 2540G	205980	1	40.7		%	0.100	0.100	05-Apr-13	15:32	JMA	
pH	EPA 9045	205915	1	5.33		Std. Units			05-Apr-13	11:35	LJL	
Sulfide, Reactive	SW-846 7.3.4.2	205914	1	ND		mg/kg	167.	167.	04-Apr-13	14:15	LJL	

5 parameter(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Surrogate Recovery

Batch: 205942 **Project:** 20152445

Method: TCLP GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201079062	205942 BLANK 1		78	62	48	79	35	75		
201079063	205942 LCS 1		75	66	42	77	30	79		
201079064	DRUM SAMPLE, WH #2 TCLP		80	59	42	79	32	73		
201079065	DRUM SAMPLE, WH #2 TCLP		66	46	40	64	30	64		
201078816	MAAR0402WC009		76	62	49	75	36	72		
	QC limits:		25-145	34-117	10-118	33-120	15-134	24-133		

Sur 1: 2,4,6-Tribromophenol (S)
Sur 2: 2-Fluorobiphenyl (S)
Sur 3: 2-Fluorophenol (S)
Sur 4: Nitrobenzene-d5 (S)
Sur 5: Phenol-d5 (S)
Sur 6: Terphenyl-d14 (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Surrogate Recovery

Batch: 205973 **Project:** 20152445

Method: TCLP GC/MS Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201079236	205973 BLANK 1		86	89	92					
201079237	205973 LCS 1		93	85	93					
201078816	MAAR0402WC009		89	89	92					
201079238	MAAR0402WC009 MS 1		87	89	94					
201079239	MAAR0402WC009 MSD 1		85	91	93					
	QC limits:		68-124	72-126	79-119					

Sur 1: 4-Bromofluorobenzene (S)
Sur 2: Dibromofluoromethane (S)
Sur 3: Toluene-d8 (S)

*** denotes surrogate recovery outside of QC limits.**
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Batch: 205942 **Project:** 20152445 **LCS:** 201079063 08-Apr-13 10:40

Method: TCLP GC/MS Semivolatile Organics **MS:** 201079064 08-Apr-13 14:05

Units: mg/L **MSD:** 201079065 08-Apr-13 14:31

Original for MS: Batch Sample 201077569

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
1,4-Dichlorobenzene	0.500	0.307	61	0.500		0.341	0.270	68	54	23 *	45-110	35-110	20	
2,4-Dinitrotoluene	0.500	0.334	67	0.500		0.349	0.291	70	58	18	49-124	33-128	20	
Hexachloro-1,3-butadiene	0.500	0.319	64	0.500		0.348	0.254	70	51	31 *	34-110	27-110	20	
Hexachlorobenzene	0.500	0.325	65	0.500		0.330	0.280	66	56	16	52-115	40-111	20	
Hexachloroethane	0.500	0.291	58	0.500		0.319	0.257	64	51	22 *	43-110	35-110	20	
2-Methylphenol (o-Cresol)	0.500	0.321	64	0.500		0.375	0.356	75	71	5	46-110	10-126	20	
3&4-Methylphenol	1.00	0.640	64	1.00		0.711	0.673	71	67	5	45-117	38-128	20	
Nitrobenzene	0.500	0.375	75	0.500		0.427	0.339	85	68	23 *	41-112	29-118	20	
Pentachlorophenol	0.500	0.330	66	0.500		0.341	0.285	68	57	18	38-135	24-168	20	
Pyridine	0.500	0.290	58	0.500		0.303	0.215	61	43	34 *	24-118	40-112	20	
2,4,5-Trichlorophenol	0.500	0.387	77	0.500		0.418	0.354	84	71	17	44-110	35-144	20	
2,4,6-Trichlorophenol	0.500	0.381	76	0.500		0.415	0.346	83	69	18	43-110	33-140	20	

12 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

QC Protocol 4/11/2013 19:08:47

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Batch: 205973 **Project:** 20152445 **LCS:** 201079237 05-Apr-13 18:27

Method: TCLP GC/MS Volatile Organics **MS:** 201079238 05-Apr-13 19:08

Units: mg/L **MSD:** 201079239 05-Apr-13 19:29

Original for MS: Client Sample 201078816

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Benzene	0.400	0.419	105	0.400		0.423	0.405	106	101	4	68-129	60-138	20	
2-Butanone (MEK)	0.400	0.246	62	0.400		0.357	0.345	89	86	3	18-173	14-184	20	
Carbon tetrachloride	0.400	0.419	105	0.400		0.393	0.385	98	96	2	56-146	51-151	20	
Chlorobenzene	0.400	0.401	100	0.400		0.386	0.388	96	97	1	74-131	71-135	20	
Chloroform	0.400	0.399	100	0.400		0.413	0.403	103	101	3	71-132	67-138	20	
1,2-Dichloroethane	0.400	0.370	93	0.400		0.395	0.384	99	96	3	58-150	57-155	20	
1,1-Dichloroethene	0.400	0.398	99	0.400	0.0172	0.410	0.406	98	97	1	50-151	40-163	20	
Tetrachloroethene	0.400	0.394	98	0.400		0.390	0.373	98	93	5	57-151	48-160	20	
Trichloroethene	0.400	0.390	98	0.400		0.407	0.391	102	98	4	71-131	62-142	20	
Vinyl chloride	0.400	0.476	119	0.400		0.443	0.446	111	112	1	42-148	35-153	20	

10 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Batch: 205971 **Project:** 20152445 **LCS:** 201079222 08-Apr-13 10:02

Method: TCLP ICP Metals **MS:** 201079553 08-Apr-13 10:09

Units: mg/L **MSD:** 201079554 08-Apr-13 10:12

Original for MS: Batch Sample 201078878

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Arsenic	2.00	2.06	103	2.00	0.0143	1.93	1.92	96	95	0	84-117	80-120	20	
Barium	2.00	1.94	97	2.00	0.236	2.09	2.09	93	93	0	85-118	80-120	20	
Cadmium	2.00	2.07	103	2.00		1.57	1.56	79 *	78 *	1	85-115	80-120	20	Q1
Chromium	2.00	1.95	98	2.00	0.00808	1.77	1.75	88	87	1	83-117	80-120	20	
Lead	2.00	2.09	104	2.00		1.50	1.48	75 *	74 *	1	84-118	80-120	20	Q1
Selenium	2.00	2.05	103	2.00		1.99	1.97	99	99	1	85-116	80-120	20	
Silver	1.00	0.999	100	1.00		1.00	1.00	100	100	0	80-120	80-120	20	

7 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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(504) 469-0333

Quality Control

Batch: 205972 **Project:** 20152445 **LCS:** 201079226 08-Apr-13 9:17

Method: TCLP Mercury **MS:** 201079227 08-Apr-13 9:21

Units: mg/L **MSD:** 201079228 08-Apr-13 9:23

Original for MS: Batch Sample 201078001

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Mercury	0.00100	0.00102	102	0.00100		0.00102	0.00101	100	100	0	80-120	75-125	20	

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205942 BLANK 1 **Project:** 20152445

Lab ID: 201079062

Prep Level: TCLP **Batch:** 205942

Method: TCLP GC/MS Semivolatile Organics

Prepared: 05-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		0.100	0.0000400	08-Apr-13 10:15 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		0.100	0.0000600	08-Apr-13 10:15 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		0.100	0.0000800	08-Apr-13 10:15 JAM
118-74-1	Hexachlorobenzene	1	ND		0.100	0.0000700	08-Apr-13 10:15 JAM
67-72-1	Hexachloroethane	1	ND		0.100	0.0000600	08-Apr-13 10:15 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		0.100	0.000100	08-Apr-13 10:15 JAM
	3&4-Methylphenol	1	ND		0.100	0.000100	08-Apr-13 10:15 JAM
98-95-3	Nitrobenzene	1	ND		0.100	0.0000800	08-Apr-13 10:15 JAM
87-86-5	Pentachlorophenol	1	ND		0.250	0.0000500	08-Apr-13 10:15 JAM
110-86-1	Pyridine	1	ND		0.100	0.000110	08-Apr-13 10:15 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		0.250	0.000090	08-Apr-13 10:15 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		0.100	0.0000500	08-Apr-13 10:15 JAM

12 compound(s) reported

Protocol Blank 4/11/2013 19:08:5

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205973 BLANK 1 **Project:** 20152445

Lab ID: 201079236

Prep Level: TCLP **Batch:** 205973

Method: TCLP GC/MS Volatile Organics

Prepared: 05-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
71-43-2	Benzene	1	0.0124	J	0.100	0.0104	05-Apr-13 18:06 MHM
78-93-3	2-Butanone (MEK)	1	ND		0.200	0.0533	05-Apr-13 18:06 MHM
56-23-5	Carbon tetrachloride	1	ND		0.100	0.0106	05-Apr-13 18:06 MHM
108-90-7	Chlorobenzene	1	ND		0.100	0.0132	05-Apr-13 18:06 MHM
67-66-3	Chloroform	1	ND		0.100	0.0171	05-Apr-13 18:06 MHM
107-06-2	1,2-Dichloroethane	1	ND		0.100	0.0148	05-Apr-13 18:06 MHM
75-35-4	1,1-Dichloroethene	1	ND		0.100	0.0111	05-Apr-13 18:06 MHM
127-18-4	Tetrachloroethene	1	ND		0.100	0.0136	05-Apr-13 18:06 MHM
79-01-6	Trichloroethene	1	ND		0.100	0.0131	05-Apr-13 18:06 MHM
75-01-4	Vinyl chloride	1	ND		0.100	0.0113	05-Apr-13 18:06 MHM

10 compound(s) reported

Protocol Blank 4/11/2013 19:08:5

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205971 BLANK 1 **Project:** 20152445

Lab ID: 201079221

Prep Level: TCLP **Batch:** 205971

Method: TCLP ICP Metals

Prepared: 05-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis	
7440-38-2	Arsenic	1	ND		0.200	0.00209	08-Apr-13 09:58	EJH
7440-39-3	Barium	1	ND		2.00	0.00239	08-Apr-13 09:58	EJH
7440-43-9	Cadmium	1	ND		0.100	0.000722	08-Apr-13 09:58	EJH
7440-47-3	Chromium	1	0.00484	J	0.200	0.00400	08-Apr-13 09:58	EJH
7439-92-1	Lead	1	ND		0.200	0.00230	08-Apr-13 09:58	EJH
7782-49-2	Selenium	1	ND		0.200	0.0286	08-Apr-13 09:58	EJH
7440-22-4	Silver	1	ND		0.200	0.00116	08-Apr-13 09:58	EJH

7 compound(s) reported

Protocol Blank 4/11/2013 19:08:5

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
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St. Rose, LA 70087
(504) 469-0333

Blank ID: 205972 BLANK 1 **Project:** 20152445

Lab ID: 201079225

Prep Level: TCLP **Batch:** 205972

Method: TCLP Mercury

Prepared: 05-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
7439-97-6	Mercury	1	ND		0.000200	0.0000340	08-Apr-13 09:16 MHB1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152445

Parameter	Batch	Blank	Units	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Flash Point	205894		deg F	80.6	82.4	102							0				
Cyanide, Reactive	205913	<25.0	mg/kg	100.	5.78	6	100.	0.0500	2.88		3		0	1-110	1-110	20	
Sulfide, Reactive	205914	<50.0	mg/kg	500.	440.	88	500.		440.		88		0	1-110	1-110	20	
pH	205915		Std. Units	6.00	6.00	100							0	97-103		20	
Percent Solids	205980	<0.100	%										13			20	

*** denotes recovery outside of QC limits.**

MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Pace Analytical Services, Inc.
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Project: 20152445

Value	Description
Q1	The matrix spike recoveries are poor. Acceptable method performance for this analyte has been demonstrated by the laboratory control sample recovery.
J	This estimated value for the analyte is below the adjusted reporting limit but above the instrument reporting limit.
U	The analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
B	This analyte was detected in the method blank.
E	The sample concentration is above the linear calibrated range of the analysis.
LCS	Laboratory Control Sample.
MS(D)	Matrix Spike (Duplicate).
DUP	Sample Duplicate.
RPD	Relative Percent Difference.

Pace Analytical Services, In
1000 Riverbend Blvd. Suite F
St. Rose, LA 7008
(504) 469-033

Chains of Custody

20152445 20-CTEH

p5831 20152445

5120 North Shore Dr
North Little Rock, AR
Phone: (501) 801-85
Fax: (501) 801-8501
Website: www.cteh.com

ology and Environmental Health L.L.C.
CUSTODY AND ANALYSIS REQUEST FORM

Page 2 of 2

	Send Report To:	Send Invoice To:
Name	Chase Ertzberger	~~Trey Chandler~~ Accounts Payable
Company	CTEH	CTEH
Address	5120 North Shore Drive North Little Rock, AR 72118	5120 North Shore Drive North Little Rock, AR 72118
Phone	(501)801-8500	(501)801-8500
Fax	(501)801-8501	(501)801-8501
e-mail	certzberger@cteh.com dmccormack@cteh.com	~~tchandler@cteh.com~~ laccounting@cteh.com

CTEH Project #: 40432 - Delek

Turnaround Requested:
Same Day X Next Day (24 hour) ___ Normal
___ Other (Specify) 72 hour

Complete Data Packet Requested ☑ Yes ☐ No

Lab Contact Information:
~~Galson Laboratories~~
~~6601 Kirkville Road~~
~~E. Syracuse, NY 13057~~

1000 Riverbend Rd
St. Rose, LA 70087

Client Sample Identification	Other Sample Identification	Sample Size	Units (Check one) X L ___ cm^2 ___	Sample Date	Sample Time (for non-air samples)	Initials	TCLP SVOCs	TCLP VOCs	TCLP Metals	Corrosivity	Reactive Cyanide	Reactive Sulfide	Flashpoint			Matrix A = air B = bulk S = soil SW = wipe T = tape W = water
MAAR040200WC0009	Roll off	1	L	04.03.13	1445	ACE	X	X	X	X	X	X	X			

04.03.13

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME	COMMENTS
CTEH	04.03.13/1715	UPS	04.03.13/1715	
UPS	4-4-13 1030	J Mills	4-4-13 1030	1.3°

20152445

5120 North Shore Drive
North Little Rock, AR 72118
Phone: (501) 801-8500
Fax: (501) 801-8501
Website: www.cteh.com

Center for Toxicology and Environmental Health L.L.C.
SAMPLE CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

Page 1 of 2

	Send Report To:	Send Invoice To:
Name	Chase Ertzberger	~~Trey Chandler~~ an Accounts Payable
Company	CTEH	CTEH
Address	5120 North Shore Drive North Little Rock, AR 72118	5120 North Shore Drive North Little Rock, AR 72118
Phone	(501)801-8500	(501)801-8500
Fax	(501)801-8501	(501)801-8501
e-mail	certzberger@cteh.com jmccormack@cteh.com	an ~~tchandler@cteh.com~~ lraccounting@cteh.com

CTEH Project #: 40432 - Delek

Turnaround Requested:
Same Day X Next Day (24 hour) __ Normal
__ Other (Specify) or 72 hour

Complete Data Packet Requested ☑ Yes ☐ No

Lab Contact Information:
an ~~Galson Laboratories~~
an ~~6601 Kirkville Road~~
an ~~E. Syracuse, NY 13057~~
1000 Riverbend Blvd
Ste Rose, LA 70087

Client Sample Identification	Other Sample Identification	Sample Size	Units (Check one) X L __ cm²	Sample Date	Sample Time (for non-air samples)	Initials	TCLP SVOCs	TCLP VOCs	TCLP Metals	Corrosivity	Reactive Cyanide	Reactive Sulfide	Ignitability			Matrix A = air B = bulk S = soil SW = wipe T = tape W = water
MAAR0402WC009	Roll Offs	2L	L	04.02.13	1445	ACE	X	X	X	X	X	X	X			

20107881 6

04.02-13

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME	COMMENTS
[signature]	04.02.13 / 1715	UPS	04.02.13 / 1715	
UPS	4-3-13 1040	[signature]	4-3-13 1040	2.2

To: Karen Brown <Karen.Brown@pacelabs.com>
CC: Scott Kluska <skluska@cteh.com>
Date: 4/3/2013 7:52 AM
Subject: 40432 - Holding Waste Characterization Sample

Karen,

Yesterday, we shipped a composite WC sample (#MAAR0402WC009) that should be reaching your lab today. I was wondering if it would be possible to have that sample held and not processed until we sent in another 1L amber of material, and have all the material for the sample (3 total 1L ambers) homogenized at the lab?

3rd L. arriving Thurs to composite

Thanks,

Chase Ertzberger
Environmental Scientist I
Center for Toxicology and Environmental Health
(501) 366-0394

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Karen Brown - RE: 40432 - Holding Waste Characterization Sample

From: Scott Kluska <skluska@cteh.com>
To: Karen Brown <Karen.Brown@pacelabs.com>, Chase Ertzberger <certzberger@ct...
Date: 4/3/2013 8:35 AM
Subject: RE: 40432 - Holding Waste Characterization Sample

As soon as you receive it, go ahead and composite and begin the analyses.

Scott Kluska
Sr. Consultant
Center for Toxicology and Environmental Health, LLC (CTEH)
5120 North Shore Drive
North Little Rock, AR 72118
Office: 501-801-8500
Cell: 908-399-8875
1-866-869-2834 [24–HOUR ER Help Desk]
www.cteh.com

From: Karen Brown [mailto:Karen.Brown@pacelabs.com]
Sent: Wednesday, April 03, 2013 9:13 AM
To: Chase Ertzberger
Cc: Scott Kluska
Subject: Re: 40432 - Holding Waste Characterization Sample

Yes, this will be fine....I can hold in our holding refrigerator until I receive the additional liter. When you say so, we can composite the sample and use that as the "collection date"

Karen H. Brown
Customer Service Manager
Pace Analytical Services, Inc.
New Orleans Laboratory
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087

Direct Line 504-305-3615

>>>

From: Chase Ertzberger <certzberger@cteh.com>

Pace Analytical
1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

20152445 20-CTEH

Sample Cond Project #: 20

Courier: ☐ Pace Courier ☐ Hired Courier ☐ Fed X ☑ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC] **Custody Seals Intact:** ☑Yes ☐No

Therometer Used:	☐ Therm Fisher IR 5 ☑ Therm Fisher IR 6 ☐ Therm Fisher IR 7

Type of Ice: (Wet) Blue None Samples on ice: [see COC]

Cooler Temperature: [see COC] Temp should be above freezing to 6°C

Date and Initials of person examining contents: 4-4-13

Temp must be measured from Temperature blank when present

				Comments:
Temperature Blank Present"?	☑Yes	☐No	☐N/A	1
Chain of Custody Present:	☑Yes	☐No	☐N/A	2
Chain of Custody Complete:	☑Yes	☐No	☐N/A	3
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	4
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	5
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	6
Sufficient Volume:	☑Yes	☐No	☐N/A	7
Correct Containers Used:	☑Yes	☐No	☐N/A	8
Filtered vol. Rec. for Diss. tests	☐Yes	☑No	☐N/A	9
Sample Labels match COC:	☑Yes	☐No	☐N/A	10
All containers received within manafacture's precautionary and/or expiration dates.	☑Yes	☐No	☐N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐Yes	☐No	☑N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A	13 If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A	14
Trip Blank Present:	☐Yes	☑No		15

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

3 liters composited

ALLC003rev.08, 15Feb2013 SCUR Form - mod

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

April 04, 2013

James McCormack
CTEH
5120 North Shore Drive
North Little Rock, AR 72118

RE: Project 20152273
Project ID: Magnolia, AR

Dear James McCormack:

Enclosed are the analytical results for sample(s) received by the laboratory on March 30, 2013. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Karen Brown
karen.brown@pacelabs.com

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

Laboratory Certifications

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152273

Client: CTEH

Project ID: Magnolia, AR

Washington Department of Ecology C2078
Oregon Environmental Laboratory Accreditation - LA200001
U.S. Dept. of Agriculture Foreign Soil Import P330-10-00119
Pennsylvania Dept. of Env Protection (NELAC) 68-04202
Texas Commission on Env. Quality (NELAC) T104704405-09-TX
Kansas Department of Health and Environment (NELAC) E-10266
Florida Department of Health (NELAC) E87595
Oklahoma Department of Environmental Quality - 2010-139
Illinois Environmental Protection Agency - 0025721
California Env. Lab Accreditation Program Branch - 11277CA
Louisiana Dept. of Environmental Quality (NELAC/LELAP) 02006

4/4/2013 14:40:27

Sample Cross Reference

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152273

Client: CTEH

Project ID: Magnolia, AR

Client Sample ID	Lab ID	Matrix	Collection Date/Time	Received Date/Time
MAAR0329SO011	201077660	Soil	29-Mar-13 00:00	30-Mar-13 08:30
MAAR0329WC007	201077661	Other	29-Mar-13 00:00	30-Mar-13 08:30
TB012	201077662	Water	29-Mar-13 00:00	30-Mar-13 08:30

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152273

Sample Receipt Condition:

All samples were received in accordance with EPA protocol.

Holding Times:

All holding times were met.

Blanks:

All blank results were below reporting limits.

Laboratory Control Samples:

All LCS recoveries were within QC limits.

Matrix Spikes and Duplicates:

MS or MSD recoveries outside of QC limits are qualified in the Report of Quality Control section.

Surrogates:

Surrogate recoveries outside of QC limits are qualified in the surrogate results section.

Regulatory, Permit or Client Specified Limits:

Results were found that exceeded regulatory, permit or client specified limits:

Method EPA 8260 sample 201077661 Benzene result 2.44mg/L is greater than .5mg/L limit

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

QC Cross Reference

Project: 20152273

Analytical Method	Batch	Sample used for QC
EPA 8015 Mod Ext	205555	Project sample MAAR0329SO011
EPA 8015/8021	205442	Batch sample from another client
EPA 6010	205582	Project sample MAAR0329SO011
EPA 6010	205734	Project sample MAAR0329WC007
EPA 7470	205583	Project sample MAAR0329SO011
EPA 7470	205735	Batch sample from another client
EPA 8270	205580	Client sample MAAR0328SO001 from project 20152232
EPA 8270	205742	Batch sample from another client
EPA 8260	205553	Client sample MAAR0328SW014A from project 20152235
EPA 8260	205577	Client sample MAAR0328SO001 from project 20152232
EPA 8260	205698	Batch sample from another client
Dry Weight Moisture	205574	Project sample MAAR0329SO011
SW-846 7.3.4.2	205560	Project sample MAAR0329SO011
EPA 1010	205562	Project sample MAAR0329SO011
EPA 9045	205573	Project sample MAAR0329SO011
SW-846 7.3.3.2	205559	Project sample MAAR0329SO011

Narrative1 4/4/2013 14:41:41

For the sample used as the original for the DUP or MS/MSD for the batch:

Project sample means a sample from this project was used.
Client sample means a sample from the same client but in a different project was used.
Batch sample means a sample from a different client was used.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0329SO011
Project: 20152273
Project ID: Magnolia, AR
Site: None
Lab ID: 201077660
Matrix: Soil
% Moisture: 52.3 Corrected
Description: None
Prep Level: Soil
Batch: 205555
Method: EPA 8015 Mod Ext
8015 TPH Extractables Soil
Collected: 29-Mar-13
Received: 30-Mar-13
Prepared: 01-Apr-13

Units: mg/kg

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
none	Diesel Range Organics (C10-28)	20	11100	D1	412.	206.		03-Apr-13 16:34	SNP1
none	Oil Range Organics (>C28-40)	20	19300	D1	2060	1030		03-Apr-13 16:34	SNP1

2 compound(s) reported

Protocol 4/4/2013 14:41:42

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0329SO011
Project ID: Magnolia, AR
Lab ID: 201077660
Description: None
Method: EPA 8015/8021
8015/8021 Med Soil

Project: 20152273
Site: None
Matrix: Soil
Prep Level: Soil
% Moisture: 52.3 Corrected
Batch: 205442
Collected: 29-Mar-13
Received: 30-Mar-13
Prepared: 01-Apr-13

Units: mg/kg

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Gasoline Range Organics(C6-10)	1	ND		5.24	2.22		02-Apr-13 06:07 DHR1

1 compound(s) reported

Protocol 4/4/2013 14:41:42

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Client: CTEH

Client ID: MAAR0329SO011
Project: 20152273
Project ID: Magnolia, AR
Site: None
Lab ID: 201077660 (TCLP)
Matrix: Soil
% Moisture: 52.3 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205580
Method: EPA 8270 (TCLP)
GCMS SVOAs TCLP
Collected: 29-Mar-13
Received: 30-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		0.100	0.0000400	7.50	01-Apr-13 22:10 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		0.100	0.0000600	0.130	01-Apr-13 22:10 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		0.100	0.0000800	0.500	01-Apr-13 22:10 JAM
118-74-1	Hexachlorobenzene	1	ND		0.100	0.0000700	0.130	01-Apr-13 22:10 JAM
67-72-1	Hexachloroethane	1	ND		0.100	0.0000600	3.00	01-Apr-13 22:10 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		0.100	0.000100	200.	01-Apr-13 22:10 JAM
	3&4-Methylphenol	1	ND		0.100	0.000100	200.	01-Apr-13 22:10 JAM
98-95-3	Nitrobenzene	1	ND		0.100	0.0000800	2.00	01-Apr-13 22:10 JAM
87-86-5	Pentachlorophenol	1	ND		0.250	0.0000500	100.	01-Apr-13 22:10 JAM
110-86-1	Pyridine	1	ND		0.100	0.000110	5.00	01-Apr-13 22:10 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		0.250	0.000090	400.	01-Apr-13 22:10 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		0.100	0.0000500	2.00	01-Apr-13 22:10 JAM

12 compound(s) reported

Protocol 4/4/2013 14:41:42

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Client: CTEH

Client ID: MAAR0329SO011
Project: 20152273
Project ID: Magnolia, AR
Site: None
Lab ID: 201077660 (TCLP)
Matrix: Soil
% Moisture: 52.3 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205577
Method: EPA 8260 (TCLP)
GCMS VOAs TCLP
Collected: 29-Mar-13
Received: 30-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
71-43-2	Benzene	1	ND		0.100	0.0104	0.500	01-Apr-13 13:19 MHM
78-93-3	2-Butanone (MEK)	1	ND		0.200	0.0533	200.	01-Apr-13 13:19 MHM
56-23-5	Carbon tetrachloride	1	ND		0.100	0.0106	0.500	01-Apr-13 13:19 MHM
108-90-7	Chlorobenzene	1	ND		0.100	0.0132	100.	01-Apr-13 13:19 MHM
67-66-3	Chloroform	1	ND		0.100	0.0171	6.00	01-Apr-13 13:19 MHM
107-06-2	1,2-Dichloroethane	1	ND		0.100	0.0148	0.500	01-Apr-13 13:19 MHM
75-35-4	1,1-Dichloroethene	1	ND		0.100	0.0111	0.700	01-Apr-13 13:19 MHM
127-18-4	Tetrachloroethene	1	ND		0.100	0.0136	0.700	01-Apr-13 13:19 MHM
79-01-6	Trichloroethene	1	ND		0.100	0.0131	0.500	01-Apr-13 13:19 MHM
75-01-4	Vinyl chloride	1	ND		0.100	0.0113	0.200	01-Apr-13 13:19 MHM

10 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

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Pace Analytical Services, Inc.
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St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0329SO011
Project: 20152273
Project ID: Magnolia, AR
Site: None
Lab ID: 201077660 (TCLP)
Matrix: Soil
% Moisture: 52.3 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205582
Method: EPA 6010 (TCLP)
Metals, ICP, TCLP Leachate
Collected: 29-Mar-13
Received: 30-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
7440-38-2	Arsenic	1	0.00700	J	0.200	0.00209	5.00	01-Apr-13 19:13	EJH
7440-39-3	Barium	1	0.576	J	2.00	0.00239	100.	01-Apr-13 19:13	EJH
7440-43-9	Cadmium	1	0.00118	J	0.100	0.000722	1.00	01-Apr-13 19:13	EJH
7440-47-3	Chromium	1	ND		0.200	0.00400	5.00	01-Apr-13 19:13	EJH
7439-92-1	Lead	1	0.0148	J	0.200	0.00230	5.00	01-Apr-13 19:13	EJH
7782-49-2	Selenium	1	ND		0.200	0.0286	1.00	01-Apr-13 19:13	EJH
7440-22-4	Silver	1	ND		0.200	0.00116	5.00	01-Apr-13 19:13	EJH

7 compound(s) reported

Pace Analytical Services, Inc.
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(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0329SO011
Project: 20152273
Project ID: Magnolia, AR
Site: None
Lab ID: 201077660 (TCLP)
Matrix: Soil
% Moisture: 52.3 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205583
Method: EPA 7470 (TCLP)
Mercury TCLP
Collected: 29-Mar-13
Received: 30-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.000200	0.0000340	0.200	01-Apr-13 13:46 MHB1

1 compound(s) reported

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Pace Analytical Services, Inc.
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Client: CTEH

Client ID: MAAR0329WC007
Project: 20152273
Project ID: Magnolia, AR
Site: None
Lab ID: 201077661 (TCLP)
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: TCLP
Batch: 205742
Method: EPA 8270 (TCLP)
GCMS SVOAs TCLP
Collected: 29-Mar-13
Received: 30-Mar-13
Prepared: 03-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		0.100	0.0000400	7.50	03-Apr-13 15:25 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		0.100	0.0000600	0.130	03-Apr-13 15:25 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		0.100	0.0000800	0.500	03-Apr-13 15:25 JAM
118-74-1	Hexachlorobenzene	1	ND		0.100	0.0000700	0.130	03-Apr-13 15:25 JAM
67-72-1	Hexachloroethane	1	ND		0.100	0.0000600	3.00	03-Apr-13 15:25 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	0.0410	J	0.100	0.000100	200.	03-Apr-13 15:25 JAM
	3&4-Methylphenol	1	0.0239	J	0.100	0.000100	200.	03-Apr-13 15:25 JAM
98-95-3	Nitrobenzene	1	ND		0.100	0.0000800	2.00	03-Apr-13 15:25 JAM
87-86-5	Pentachlorophenol	1	ND		0.250	0.0000500	100.	03-Apr-13 15:25 JAM
110-86-1	Pyridine	1	ND		0.100	0.000110	5.00	03-Apr-13 15:25 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		0.250	0.000090	400.	03-Apr-13 15:25 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		0.100	0.0000500	2.00	03-Apr-13 15:25 JAM

12 compound(s) reported

Protocol 4/4/2013 14:41:42

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0329WC007
Project: 20152273
Project ID: Magnolia, AR
Site: None
Lab ID: 201077661 (TCLP)
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: TCLP
Batch: 205698
Method: EPA 8260 (TCLP)
GCMS VOAs TCLP
Collected: 29-Mar-13
Received: 30-Mar-13
Prepared: 02-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
71-43-2	Benzene	1	2.44	E	0.100	0.0104	0.500	02-Apr-13 15:51 MHM
78-93-3	2-Butanone (MEK)	1	ND		0.200	0.0533	200.	02-Apr-13 15:51 MHM
56-23-5	Carbon tetrachloride	1	ND		0.100	0.0106	0.500	02-Apr-13 15:51 MHM
108-90-7	Chlorobenzene	1	ND		0.100	0.0132	100.	02-Apr-13 15:51 MHM
67-66-3	Chloroform	1	ND		0.100	0.0171	6.00	02-Apr-13 15:51 MHM
107-06-2	1,2-Dichloroethane	1	ND		0.100	0.0148	0.500	02-Apr-13 15:51 MHM
75-35-4	1,1-Dichloroethene	1	ND		0.100	0.0111	0.700	02-Apr-13 15:51 MHM
127-18-4	Tetrachloroethene	1	ND		0.100	0.0136	0.700	02-Apr-13 15:51 MHM
79-01-6	Trichloroethene	1	ND		0.100	0.0131	0.500	02-Apr-13 15:51 MHM
75-01-4	Vinyl chloride	1	ND		0.100	0.0113	0.200	02-Apr-13 15:51 MHM

10 compound(s) reported

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0329WC007
Project: 20152273
Project ID: Magnolia, AR
Site: None
Lab ID: 201077661 (TCLP)
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: TCLP
Batch: 205734
Method: EPA 6010 (TCLP)
Metals, ICP, TCLP Leachate
Collected: 29-Mar-13
Received: 30-Mar-13
Prepared: 03-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7440-38-2	Arsenic	1	0.00536	J	0.200	0.00209	5.00	03-Apr-13 11:41 MHB1
7440-39-3	Barium	1	0.697	J	2.00	0.00239	100.	03-Apr-13 11:41 MHB1
7440-43-9	Cadmium	1	ND		0.100	0.000722	1.00	03-Apr-13 11:41 MHB1
7440-47-3	Chromium	1	ND		0.200	0.00400	5.00	03-Apr-13 11:41 MHB1
7439-92-1	Lead	1	0.0113	J	0.200	0.00230	5.00	03-Apr-13 11:41 MHB1
7782-49-2	Selenium	1	ND		0.200	0.0286	1.00	03-Apr-13 11:41 MHB1
7440-22-4	Silver	1	ND		0.200	0.00116	5.00	03-Apr-13 11:41 MHB1

7 compound(s) reported

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St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0329WC007
Project: 20152273
Project ID: Magnolia, AR
Site: None
Lab ID: 201077661 (TCLP)
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: TCLP
Batch: 205735
Method: EPA 7470 (TCLP)
Mercury TCLP
Collected: 29-Mar-13
Received: 30-Mar-13
Prepared: 03-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
7439-97-6	Mercury	1	0.000179	J	0.000200	0.0000340	0.200	03-Apr-13 09:58	EJH

1 compound(s) reported

Protocol 4/4/2013 14:41:42

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: TB012
Project: 20152273
Project ID: Magnolia, AR
Site: None
Lab ID: 201077662
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205553
Method: EPA 8260
GCMS VOAs Water
Collected: 29-Mar-13
Received: 30-Mar-13
Prepared: 01-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	8.88		01-Apr-13 14:29 MHM
71-43-2	Benzene	1	ND		5.00	0.518		01-Apr-13 14:29 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		01-Apr-13 14:29 MHM
75-25-2	Bromoform	1	ND		5.00	0.920		01-Apr-13 14:29 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855		01-Apr-13 14:29 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		01-Apr-13 14:29 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530		01-Apr-13 14:29 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		01-Apr-13 14:29 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662		01-Apr-13 14:29 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12		01-Apr-13 14:29 MHM
67-66-3	Chloroform	1	ND		5.00	0.853		01-Apr-13 14:29 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636		01-Apr-13 14:29 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		01-Apr-13 14:29 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		01-Apr-13 14:29 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		01-Apr-13 14:29 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		01-Apr-13 14:29 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565		01-Apr-13 14:29 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		01-Apr-13 14:29 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		01-Apr-13 14:29 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		01-Apr-13 14:29 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		01-Apr-13 14:29 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		01-Apr-13 14:29 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		01-Apr-13 14:29 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		01-Apr-13 14:29 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292		01-Apr-13 14:29 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28		01-Apr-13 14:29 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405		01-Apr-13 14:29 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36		01-Apr-13 14:29 MHM
75-09-2	Methylene chloride	1	4.78	J	5.00	1.44		01-Apr-13 14:29 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		01-Apr-13 14:29 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		01-Apr-13 14:29 MHM
100-42-5	Styrene	1	ND		5.00	0.571		01-Apr-13 14:29 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		01-Apr-13 14:29 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		01-Apr-13 14:29 MHM

Protocol 4/4/2013 14:41:42

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: TB012
Project ID: Magnolia, AR
Lab ID: 201077662
Description: None
Method: EPA 8260
GCMS VOAs Water

Project: 20152273
Site: None
Matrix: Water **% Moisture:** n/a
Prep Level: Water **Batch:** 205553
Collected: 29-Mar-13 **Received:** 30-Mar-13
Prepared: 01-Apr-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	ND		5.00	0.536		01-Apr-13 14:29 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		01-Apr-13 14:29 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915		01-Apr-13 14:29 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654		01-Apr-13 14:29 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575		01-Apr-13 14:29 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564		01-Apr-13 14:29 MHM
	m&p-Xylene	1	ND		5.00	0.937		01-Apr-13 14:29 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649		01-Apr-13 14:29 MHM

42 compound(s) reported

Protocol 4/4/2013 14:41:42

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Pace Analytical™

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0329SO011
Project: 20152273
Project ID: Magnolia, AR
Site: None
Lab ID: 201077660
Matrix: Soil
%Moisture: 52.3 Not Corrected
Description: None

Collected: 29-Mar-13
Received: 30-Mar-13

Analyte	Method	Batch	DF	Result	Qu	Units	Reporting Limit	MDL	Analysis	Limit
Cyanide, Reactive	SW-846 7.3.3.2	205559	1	ND		mg/kg	25.0	25.0	01-Apr-13 08:30 LJL	
Flash Point	EPA 1010	205562	1	>140		deg F			01-Apr-13 14:25 LJL	
pH	EPA 9045	205573	1	4.57		Std. Units			01-Apr-13 10:05 JMA	
Sulfide, Reactive	SW-846 7.3.4.2	205560	1	ND		mg/kg	50.0	50.0	01-Apr-13 14:15 LJL	

4 parameter(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Sample Results

Client: CTEH

Client ID: MAAR0329WC007
Project: 20152273
Project ID: Magnolia, AR
Site: None
Lab ID: 201077661
Matrix: Other
%Moisture: n/a
Description: None

Collected: 29-Mar-13
Received: 30-Mar-13

Analyte	Method	Batch	DF	Result	Qu	Units	Reporting Limit	MDL	Analysis	Limit
Cyanide, Reactive	SW-846 7.3.3.2	205559	1	ND		mg/kg	25.0	25.0	01-Apr-13 08:30 LJL	
Flash Point	EPA 1010	205562	1	86		deg F			01-Apr-13 14:25 LJL	
pH	EPA 9045	205573	1	5.68		Std. Units			01-Apr-13 10:05 JMA	
Sulfide, Reactive	SW-846 7.3.4.2	205560	1	ND		mg/kg	50.0	50.0	01-Apr-13 14:15 LJL	

4 parameter(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Surrogate Recovery

Batch: 205580 **Project:** 20152273

Method: TCLP GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201077789	205580 BLANK 1		76	60	46	72	35	86		
201077805	205580 BLANK 2		59	49	35	59	28	79		
201077790	205580 LCS 1		94	64	42	79	32	91		
201077791	MAAR0328SO001 MS 1		87	60	46	77	34	96		
201077792	MAAR0328SO001 MSD 1		82	57	40	74	30	90		
201077660	MAAR0329SO011		79	63	51	76	38	91		
	QC limits:		25-145	34-117	10-118	33-120	15-134	24-133		

Sur 1: 2,4,6-Tribromophenol (S)
Sur 2: 2-Fluorobiphenyl (S)
Sur 3: 2-Fluorophenol (S)
Sur 4: Nitrobenzene-d5 (S)
Sur 5: Phenol-d5 (S)
Sur 6: Terphenyl-d14 (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205742 **Project:** 20152273

Method: TCLP GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201078368	205742 BLANK 1		83	67	59	90	38	78		
201078369	205742 LCS 1		87	63	44	77	30	90		
201077661	MAAR0329WC007		91	70	55	87	39	95		
QC limits:			25-145	34-117	10-118	33-120	15-134	24-133		

Sur 1: 2,4,6-Tribromophenol (S)
Sur 2: 2-Fluorobiphenyl (S)
Sur 3: 2-Fluorophenol (S)
Sur 4: Nitrobenzene-d5 (S)
Sur 5: Phenol-d5 (S)
Sur 6: Terphenyl-d14 (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205553 **Project:** 20152273

Method: Water GC/MS Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201077705	205553 BLANK 1		90	96	93					
201078146	205553 BLANK 2		85	98	85					
201078418	205553 BLANK 3		85	99	88					
201077706	205553 LCS 1		98	95	98					
201078147	205553 LCS 2		91	100	92					
201078419	205553 LCS 3		92	98	92					
201077707	MAAR0328SW014A MS 1		94	94	97					
201077708	MAAR0328SW014A MSD 1		97	99	102					
201077662	TB012		88	91	91					
	QC limits:		68-124	72-126	79-119					

Sur 1: 4-Bromofluorobenzene (S)
Sur 2: Dibromofluoromethane (S)
Sur 3: Toluene-d8 (S)

*** denotes surrogate recovery outside of QC limits.**
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205577 **Project:** 20152273

Method: TCLP GC/MS Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201077785	205577 BLANK 1		78	86	82					
201077876	205577 BLANK 2		80	83	84					
201077786	205577 LCS 1		97	96	99					
201077787	MAAR0328SO001 MS 1		82	82	88					
201077788	MAAR0328SO001 MSD 1		82	80	85					
201077660	MAAR0329SO011		78	81	84					
	QC limits:		68-124	72-126	79-119					

Sur 1: 4-Bromofluorobenzene (S)
Sur 2: Dibromofluoromethane (S)
Sur 3: Toluene-d8 (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

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Batch: 205698 **Project:** 20152273

Method: TCLP GC/MS Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201078205	13030691-01INTERNATIONAL		88	96	92					
201078204	13030691-01INTERNATIONAL		90	99	92					
201078202	205698 BLANK 1		83	92	87					
201078203	205698 LCS 1		89	97	92					
201077661	MAAR0329WC007		86	94	89					
	QC limits:		68-124	72-126	79-119					

Sur 1: 4-Bromofluorobenzene (S)
Sur 2: Dibromofluoromethane (S)
Sur 3: Toluene-d8 (S)

*** denotes surrogate recovery outside of QC limits.**
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

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Batch: 205555 **Project:** 20152273

Method: Soil GC Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201077713	205555 BLANK 1		88	81						
201077714	205555 LCS 1		83	81						
201077660	MAAR0329SO011		0 D	0 D						
201077715	MAAR0329SO011 MS 1		259 D	196 D						
201077716	MAAR0329SO011 MSD 1		183 D	153 D						
	QC limits:		16-147	16-127						

Sur 1: n-Pentacosane (S)
Sur 2: o-Terphenyl (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205442 **Project:** 20152273

Method: Soil GC Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201077157	205442 BLANK 1		107							
201077158	205442 LCS 1		109							
201077660	MAAR0329SO011		64							
201077159	PF3 MS 1		106							
201077160	PF3 MSD 1		108							
	QC limits:		60-129							

Sur 1: 4-Bromofluorobenzene (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Batch: 205580 **Project:** 20152273 **LCS:** 201077790 01-Apr-13 15:07

Method: TCLP GC/MS Semivolatile Organics **MS:** 201077791 01-Apr-13 16:31

Units: mg/L **MSD:** 201077792 01-Apr-13 17:00

Original for MS: Batch Sample 201077313

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
1,4-Dichlorobenzene	0.500	0.331	66	0.500		0.319	0.315	64	63	1	45-110	35-110	20	
2,4-Dinitrotoluene	0.500	0.333	67	0.500		0.308	0.286	62	57	7	49-124	33-128	20	
Hexachloro-1,3-butadiene	0.500	0.285	57	0.500		0.279	0.274	56	55	2	34-110	27-110	20	
Hexachlorobenzene	0.500	0.329	66	0.500		0.342	0.333	68	67	3	52-115	40-111	20	
Hexachloroethane	0.500	0.316	63	0.500		0.313	0.309	63	62	1	43-110	35-110	20	
2-Methylphenol (o-Cresol)	0.500	0.383	77	0.500		0.373	0.371	75	74	0	46-110	10-126	20	
3&4-Methylphenol	1.00	0.830	83	1.00		0.787	0.795	79	80	1	45-117	38-128	20	
Nitrobenzene	0.500	0.382	76	0.500		0.390	0.382	78	77	2	41-112	29-118	20	
Pentachlorophenol	0.500	0.344	69	0.500		0.228	0.207	46	42	9	38-135	24-168	20	
Pyridine	0.500	0.282	56	0.500		0.179	0.169	36 *	34 *	5	24-118	40-112	20	Q1
2,4,5-Trichlorophenol	0.500	0.405	81	0.500		0.354	0.336	71	67	5	44-110	35-144	20	
2,4,6-Trichlorophenol	0.500	0.387	77	0.500		0.369	0.346	74	69	6	43-110	33-140	20	

12 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

QC Protocol 4/4/2013 14:41:46

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Batch: 205742 **Project:** 20152273 **LCS:** 201078369 03-Apr-13 14:57

Method: TCLP GC/MS Semivolatile Organics **MS:**

Units: mg/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
1,4-Dichlorobenzene	0.500	0.318	64								45-110			
2,4-Dinitrotoluene	0.500	0.324	65								49-124			
Hexachloro-1,3-butadiene	0.500	0.284	57								34-110			
Hexachlorobenzene	0.500	0.326	65								52-115			
Hexachloroethane	0.500	0.306	61								43-110			
2-Methylphenol (o-Cresol)	0.500	0.347	69								46-110			
3&4-Methylphenol	1.00	0.745	75								45-117			
Nitrobenzene	0.500	0.369	74								41-112			
Pentachlorophenol	0.500	0.346	69								38-135			
Pyridine	0.500	0.281	56								24-118			
2,4,5-Trichlorophenol	0.500	0.357	72								44-110			
2,4,6-Trichlorophenol	0.500	0.368	74								43-110			

12 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205553 **Project:** 20152273 **LCS:** 201077706 01-Apr-13 12:07

Method: Water GC/MS Volatile Organics **MS:** 201077707 01-Apr-13 12:48

Units: ug/L **MSD:** 201077708 01-Apr-13 13:08

Original for MS: Batch Sample 201077363

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acetone	50.0	61.0	122	50.0		56.2	60.1	113	120	7	10-198	10-202	20	
Benzene	50.0	48.8	98	50.0	0.710	47.9	49.0	94	97	2	68-129	60-138	20	
Bromodichloromethane	50.0	50.1	100	50.0		47.5	48.9	95	98	3	68-132	66-137	20	
Bromoform	50.0	56.2	112	50.0		50.9	51.8	101	103	2	56-153	53-156	20	
Bromomethane	50.0	55.8	112	50.0		55.5	53.2	111	107	4	47-149	43-151	20	
2-Butanone (MEK)	50.0	58.1	116	50.0		49.9	54.5	100	109	9	18-173	14-184	20	
Carbon disulfide	50.0	53.6	107	50.0		52.4	55.9	105	112	6	25-166	17-176	20	
Carbon tetrachloride	50.0	50.9	102	50.0		50.1	51.8	100	104	3	56-146	51-151	20	
Chlorobenzene	50.0	52.0	104	50.0		51.1	52.0	102	104	2	74-131	71-135	20	
Chloroethane	50.0	53.5	107	50.0		40.8	49.9	82	100	20	28-190	21-191	20	
Chloroform	50.0	48.5	97	50.0		47.6	49.8	95	100	4	71-132	67-138	20	
Chloromethane	50.0	56.4	113	50.0		57.2	60.8	115	122	6	27-154	24-158	20	
1,2-Dibromo-3-chloropropane	50.0	52.5	105	50.0		49.6	49.3	99	99	1	40-155	38-162	20	
Dibromochloromethane	50.0	53.3	107	50.0		50.0	51.9	100	104	4	64-138	62-142	20	
1,2-Dibromoethane (EDB)	50.0	53.1	106	50.0		48.1	51.3	96	103	6	62-146	61-149	20	
Dichlorodifluoromethane	50.0	64.7	129	50.0		64.9	67.0	130	134	3	18-173	16-176	20	
1,1-Dichloroethane	50.0	47.2	94	50.0		46.6	49.9	93	100	7	63-135	61-141	20	
1,2-Dichloroethane	50.0	51.2	102	50.0		48.7	51.2	98	103	5	58-150	57-155	20	
1,1-Dichloroethene	50.0	53.1	106	50.0		51.3	55.2	103	110	7	50-151	40-163	20	
cis-1,2-Dichloroethene	50.0	52.3	105	50.0		49.7	53.1	99	106	7	65-132	61-138	20	
trans-1,2-Dichloroethene	50.0	52.8	106	50.0		51.9	53.5	104	107	3	56-137	52-144	20	
1,2-Dichloropropane	50.0	48.9	98	50.0		49.4	51.0	99	102	3	66-131	64-137	20	
cis-1,3-Dichloropropene	50.0	46.1	92	50.0		46.3	47.8	93	96	3	66-135	62-137	20	
trans-1,3-Dichloropropene	50.0	52.9	106	50.0		49.4	51.6	99	103	4	62-146	59-151	20	
Ethylbenzene	50.0	48.0	96	50.0	0.540	48.6	48.4	96	96	0	73-129	66-136	20	
2-Hexanone	50.0	52.6	105	50.0		46.5	49.6	93	99	7	29-158	27-165	20	
Isopropylbenzene (Cumene)	50.0	47.9	96	50.0		47.1	48.1	94	96	2	61-139	58-144	20	
Methylene chloride	50.0	62.2	124	50.0	4.52	59.0	63.6	109	118	7	41-171	35-165	20	
4-Methyl-2-pentanone (MIBK	50.0	56.5	113	50.0		51.8	52.2	104	105	1	46-159	43-165	20	
Methyl-tert-butyl ether	50.0	54.6	109	50.0		50.4	53.6	101	107	6	51-155	48-164	20	
Styrene	50.0	50.0	100	50.0		48.0	49.1	96	98	2	74-132	63-141	20	
1,1,2,2-Tetrachloroethane	50.0	49.7	99	50.0		45.6	47.0	91	94	3	46-153	41-160	20	
Tetrachloroethene	50.0	50.2	100	50.0		49.2	50.2	98	100	2	57-151	48-160	20	
Toluene	50.0	48.5	97	50.0	0.830	47.3	49.8	93	98	5	70-130	62-137	20	
1,1,1-Trichloroethane	50.0	51.3	103	50.0		50.6	51.8	101	104	2	65-132	61-138	20	
1,1,2-Trichloroethane	50.0	54.6	109	50.0		48.9	51.4	98	103	5	64-140	63-145	20	
Trichloroethene	50.0	48.4	97	50.0		46.6	48.5	93	97	4	71-131	62-142	20	
Trichlorofluoromethane	50.0	60.6	121	50.0		57.5	58.2	115	116	1	37-188	19-196	20	
Vinyl chloride	50.0	43.3	87	50.0		43.9	46.9	88	94	6	42-148	35-153	20	
m&p-Xylene	100.	99.1	99	100.		98.4	99.4	98	99	1	71-132	64-138	20	
o-Xylene	50.0	48.1	96	50.0	0.690	48.4	49.0	96	97	1	69-129	63-136	20	

QC Protocol 4/4/2013 14:41:47

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Quality Control

Batch: 205553 **Project:** 20152273 **LCS:** 201077706 01-Apr-13 12:07

Method: Water GC/MS Volatile Organics **MS:** 201077707 01-Apr-13 12:48

Units: ug/L **MSD:** 201077708 01-Apr-13 13:08

Original for MS: Batch Sample 201077363

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu

41 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205577 **Project:** 20152273 **LCS:** 201077786 01-Apr-13 11:19

Method: TCLP GC/MS Volatile Organics **MS:** 201077787 01-Apr-13 11:59

Units: mg/L **MSD:** 201077788 01-Apr-13 12:19

Original for MS: Batch Sample 201077313

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Benzene	0.400	0.360	90	0.400		0.415	0.390	104	98	6	68-129	60-138	20	
2-Butanone (MEK)	0.400	0.404	101	0.400		0.237	0.185	59	46	24 *	18-173	14-184	20	
Carbon tetrachloride	0.400	0.392	98	0.400		0.418	0.393	105	98	6	56-146	51-151	20	
Chlorobenzene	0.400	0.400	100	0.400		0.402	0.396	101	99	2	74-131	71-135	20	
Chloroform	0.400	0.376	94	0.400		0.385	0.364	96	91	6	71-132	67-138	20	
1,2-Dichloroethane	0.400	0.409	102	0.400		0.396	0.352	99	88	12	58-150	57-155	20	
1,1-Dichloroethene	0.400	0.422	105	0.400		0.446	0.418	112	105	6	50-151	40-163	20	
Tetrachloroethene	0.400	0.352	88	0.400		0.388	0.372	97	93	4	57-151	48-160	20	
Trichloroethene	0.400	0.363	91	0.400		0.392	0.375	98	94	4	71-131	62-142	20	
Vinyl chloride	0.400	0.439	110	0.400		0.456	0.432	114	108	5	42-148	35-153	20	

10 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

QC Protocol 4/4/2013 14:41:47

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Batch: 205698 **Project:** 20152273 **LCS:** 201078203 02-Apr-13 15:31

Method: TCLP GC/MS Volatile Organics **MS:** 201078204 02-Apr-13 17:12

Units: mg/L **MSD:** 201078205 02-Apr-13 17:32

Original for MS: Batch Sample 201076142

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Benzene	0.400	0.389	97	0.400		0.388	0.390	97	98	1	68-129	60-138	20	
2-Butanone (MEK)	0.400	0.402	101	0.400		0.366	0.410	91	103	12	18-173	14-184	20	
Carbon tetrachloride	0.400	0.373	93	0.400		0.387	0.371	97	93	4	56-146	51-151	20	
Chlorobenzene	0.400	0.431	108	0.400	0.0228	0.418	0.427	99	101	2	74-131	71-135	20	
Chloroform	0.400	0.403	101	0.400		0.410	0.398	103	100	3	71-132	67-138	20	
1,2-Dichloroethane	0.400	0.366	92	0.400		0.363	0.372	91	93	2	58-150	57-155	20	
1,1-Dichloroethene	0.400	0.451	113	0.400		0.439	0.439	110	110	0	50-151	40-163	20	
Tetrachloroethene	0.400	0.407	102	0.400		0.384	0.400	96	100	4	57-151	48-160	20	
Trichloroethene	0.400	0.382	96	0.400		0.385	0.385	96	96	0	71-131	62-142	20	
Vinyl chloride	0.400	0.407	102	0.400		0.413	0.398	103	100	4	42-148	35-153	20	

10 compound(s) reported

QC Protocol 4/4/2013 14:41:47

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205555 **Project:** 20152273 **LCS:** 201077714 03-Apr-13 14:39

Method: Soil GC Semivolatile Organics **MS:** 201077715 03-Apr-13 17:01

Units: mg/kg **MSD:** 201077716 03-Apr-13 17:29

Original for MS: Client Sample 201077660

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Diesel Range Organics (C10-2	40.0	23.7	59	82.8	11100	15300	11400	5099 *	354 *	29 *	34-125	10-163	20	D1,Q3

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Quality Control

Batch: 205442 **Project:** 20152273 **LCS:** 201077158 02-Apr-13 5:10

Method: Soil GC Volatile Organics **MS:** 201077159 02-Apr-13 14:09

Units: mg/kg **MSD:** 201077160 02-Apr-13 14:37

Original for MS: Batch Sample 201077071

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Gasoline Range Organics(C6-	25.0	22.8	91	25.0	1.32	21.6	21.6	81	81	0	61-136	15-147	20	
1 compound(s) reported														

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205582 **Project:** 20152273 **LCS:** 201077812 01-Apr-13 19:10

Method: TCLP ICP Metals **MS:** 201077813 01-Apr-13 19:17

Units: mg/L **MSD:** 201077814 01-Apr-13 19:21

Original for MS: Client Sample 201077660

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Arsenic	2.00	2.02	101	2.00	0.00700	1.97	1.90	98	95	4	84-117	80-120	20	
Barium	2.00	1.96	98	2.00	0.576	2.45	2.34	94	88	5	85-118	80-120	20	
Cadmium	2.00	2.09	105	2.00	0.00118	1.79	1.74	90	87	3	85-115	80-120	20	
Chromium	2.00	2.00	100	2.00		1.92	1.85	96	92	4	83-117	80-120	20	
Lead	2.00	2.11	105	2.00	0.0148	1.69	1.64	84	81	3	84-118	80-120	20	
Selenium	2.00	2.05	103	2.00		1.97	1.94	98	97	1	85-116	80-120	20	
Silver	1.00	1.02	102	1.00		0.957	0.929	96	93	3	80-120	80-120	20	

7 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205734 **Project:** 20152273 **LCS:** 201078335 03-Apr-13 11:38

Method: TCLP ICP Metals **MS:** 201078336 03-Apr-13 11:45

Units: mg/L **MSD:** 201078337 03-Apr-13 11:49

Original for MS: Client Sample 201077661

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Arsenic	2.00	1.87	94	2.00	0.00536	1.89	1.89	94	94	0	84-117	80-120	20	
Barium	2.00	1.91	96	2.00	0.697	2.64	2.66	97	98	1	85-118	80-120	20	
Cadmium	2.00	1.89	94	2.00		1.72	1.73	86	86	0	85-115	80-120	20	
Chromium	2.00	1.87	94	2.00		1.86	1.85	93	93	0	83-117	80-120	20	
Lead	2.00	1.93	96	2.00	0.0113	1.68	1.68	83	83	0	84-118	80-120	20	
Selenium	2.00	1.89	94	2.00		1.92	1.92	96	96	0	85-116	80-120	20	
Silver	1.00	0.947	95	1.00		0.928	0.918	93	92	1	80-120	80-120	20	

7 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205583 **Project:** 20152273 **LCS:** 201077816 01-Apr-13 13:44

Method: TCLP Mercury **MS:** 201077817 01-Apr-13 13:48

Units: mg/L **MSD:** 201077818 01-Apr-13 13:49

Original for MS: Client Sample 201077660

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Mercury	0.00100	0.00101	101	0.00100		0.00100	0.00100	100	100	0	80-120	75-125	20	

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Quality Control

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Batch: 205735 **Project:** 20152273 **LCS:** 201078339 03-Apr-13 9:50

Method: TCLP Mercury **MS:** 201078340 03-Apr-13 9:53

Units: mg/L **MSD:** 201078341 03-Apr-13 9:55

Original for MS: Batch Sample 201077793

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Mercury	0.00100	0.00118	118	0.00100	0.0315	0.0316	0.0320	17 *	51 *	1	80-120	75-125	20	Q3

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Blank Results

Blank ID: 205580 BLANK 1 **Project:** 20152273

Lab ID: 201077789

Prep Level: TCLP **Batch:** 205580

Method: TCLP GC/MS Semivolatile Organics

Prepared: 01-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		0.100	0.0000400	01-Apr-13 14:10 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		0.100	0.0000600	01-Apr-13 14:10 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		0.100	0.0000800	01-Apr-13 14:10 JAM
118-74-1	Hexachlorobenzene	1	ND		0.100	0.0000700	01-Apr-13 14:10 JAM
67-72-1	Hexachloroethane	1	ND		0.100	0.0000600	01-Apr-13 14:10 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		0.100	0.000100	01-Apr-13 14:10 JAM
	3&4-Methylphenol	1	ND		0.100	0.000100	01-Apr-13 14:10 JAM
98-95-3	Nitrobenzene	1	ND		0.100	0.0000800	01-Apr-13 14:10 JAM
87-86-5	Pentachlorophenol	1	ND		0.250	0.0000500	01-Apr-13 14:10 JAM
110-86-1	Pyridine	1	ND		0.100	0.000110	01-Apr-13 14:10 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		0.250	0.000090	01-Apr-13 14:10 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		0.100	0.0000500	01-Apr-13 14:10 JAM

12 compound(s) reported

Protocol Blank 4/4/2013 14:41:48

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

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Blank ID: 205580 BLANK 2 **Project:** 20152273

Lab ID: 201077805

Prep Level: TCLP **Batch:** 205580

Method: TCLP GC/MS Semivolatile Organics

Prepared: 01-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		0.100	0.0000400	01-Apr-13 14:39 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		0.100	0.0000600	01-Apr-13 14:39 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		0.100	0.0000800	01-Apr-13 14:39 JAM
118-74-1	Hexachlorobenzene	1	ND		0.100	0.0000700	01-Apr-13 14:39 JAM
67-72-1	Hexachloroethane	1	ND		0.100	0.0000600	01-Apr-13 14:39 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		0.100	0.000100	01-Apr-13 14:39 JAM
	3&4-Methylphenol	1	ND		0.100	0.000100	01-Apr-13 14:39 JAM
98-95-3	Nitrobenzene	1	ND		0.100	0.0000800	01-Apr-13 14:39 JAM
87-86-5	Pentachlorophenol	1	ND		0.250	0.0000500	01-Apr-13 14:39 JAM
110-86-1	Pyridine	1	ND		0.100	0.000110	01-Apr-13 14:39 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		0.250	0.000090	01-Apr-13 14:39 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		0.100	0.0000500	01-Apr-13 14:39 JAM

12 compound(s) reported

Protocol Blank 4/4/2013 14:41:48

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Blank Results

Blank ID: 205742 BLANK 1 **Project:** 20152273

Lab ID: 201078368

Prep Level: TCLP **Batch:** 205742

Method: TCLP GC/MS Semivolatile Organics

Prepared: 03-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		0.100	0.0000400	03-Apr-13 14:28 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		0.100	0.0000600	03-Apr-13 14:28 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		0.100	0.0000800	03-Apr-13 14:28 JAM
118-74-1	Hexachlorobenzene	1	ND		0.100	0.0000700	03-Apr-13 14:28 JAM
67-72-1	Hexachloroethane	1	ND		0.100	0.0000600	03-Apr-13 14:28 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		0.100	0.000100	03-Apr-13 14:28 JAM
	3&4-Methylphenol	1	ND		0.100	0.000100	03-Apr-13 14:28 JAM
98-95-3	Nitrobenzene	1	ND		0.100	0.0000800	03-Apr-13 14:28 JAM
87-86-5	Pentachlorophenol	1	ND		0.250	0.0000500	03-Apr-13 14:28 JAM
110-86-1	Pyridine	1	ND		0.100	0.000110	03-Apr-13 14:28 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		0.250	0.000090	03-Apr-13 14:28 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		0.100	0.0000500	03-Apr-13 14:28 JAM

12 compound(s) reported

Protocol Blank 4/4/2013 14:41:48

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

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Blank ID: 205577 BLANK 1 **Project:** 20152273

Lab ID: 201077785

Prep Level: TCLP **Batch:** 205577

Method: TCLP GC/MS Volatile Organics

Prepared: 01-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
71-43-2	Benzene	1	ND		0.100	0.0104	01-Apr-13 10:59 MHM
78-93-3	2-Butanone (MEK)	1	ND		0.200	0.0533	01-Apr-13 10:59 MHM
56-23-5	Carbon tetrachloride	1	ND		0.100	0.0106	01-Apr-13 10:59 MHM
108-90-7	Chlorobenzene	1	ND		0.100	0.0132	01-Apr-13 10:59 MHM
67-66-3	Chloroform	1	ND		0.100	0.0171	01-Apr-13 10:59 MHM
107-06-2	1,2-Dichloroethane	1	ND		0.100	0.0148	01-Apr-13 10:59 MHM
75-35-4	1,1-Dichloroethene	1	ND		0.100	0.0111	01-Apr-13 10:59 MHM
127-18-4	Tetrachloroethene	1	ND		0.100	0.0136	01-Apr-13 10:59 MHM
79-01-6	Trichloroethene	1	ND		0.100	0.0131	01-Apr-13 10:59 MHM
75-01-4	Vinyl chloride	1	ND		0.100	0.0113	01-Apr-13 10:59 MHM

10 compound(s) reported

Protocol Blank 4/4/2013 14:41:48

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Blank Results

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Blank ID: 205698 BLANK 1 **Project:** 20152273

Lab ID: 201078202

Prep Level: TCLP **Batch:** 205698

Method: TCLP GC/MS Volatile Organics

Prepared: 02-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
71-43-2	Benzene	1	ND		0.100	0.0104	02-Apr-13 15:11 MHM
78-93-3	2-Butanone (MEK)	1	ND		0.200	0.0533	02-Apr-13 15:11 MHM
56-23-5	Carbon tetrachloride	1	ND		0.100	0.0106	02-Apr-13 15:11 MHM
108-90-7	Chlorobenzene	1	0.0328	J	0.100	0.0132	02-Apr-13 15:11 MHM
67-66-3	Chloroform	1	ND		0.100	0.0171	02-Apr-13 15:11 MHM
107-06-2	1,2-Dichloroethane	1	ND		0.100	0.0148	02-Apr-13 15:11 MHM
75-35-4	1,1-Dichloroethene	1	ND		0.100	0.0111	02-Apr-13 15:11 MHM
127-18-4	Tetrachloroethene	1	ND		0.100	0.0136	02-Apr-13 15:11 MHM
79-01-6	Trichloroethene	1	ND		0.100	0.0131	02-Apr-13 15:11 MHM
75-01-4	Vinyl chloride	1	ND		0.100	0.0113	02-Apr-13 15:11 MHM

10 compound(s) reported

Protocol Blank 4/4/2013 14:41:48

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Blank Results

Blank ID: 205553 BLANK 1 **Project:** 20152273

Lab ID: 201077705

Prep Level: Water **Batch:** 205553

Method: Water GC/MS Volatile Organics

Prepared: 01-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
67-64-1	Acetone	1	ND		10.0	8.88	01-Apr-13 11:47 MHM
71-43-2	Benzene	1	ND		5.00	0.518	01-Apr-13 11:47 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469	01-Apr-13 11:47 MHM
75-25-2	Bromoform	1	ND		5.00	0.920	01-Apr-13 11:47 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855	01-Apr-13 11:47 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66	01-Apr-13 11:47 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530	01-Apr-13 11:47 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528	01-Apr-13 11:47 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662	01-Apr-13 11:47 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12	01-Apr-13 11:47 MHM
67-66-3	Chloroform	1	ND		5.00	0.853	01-Apr-13 11:47 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636	01-Apr-13 11:47 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34	01-Apr-13 11:47 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630	01-Apr-13 11:47 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477	01-Apr-13 11:47 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553	01-Apr-13 11:47 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565	01-Apr-13 11:47 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738	01-Apr-13 11:47 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557	01-Apr-13 11:47 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578	01-Apr-13 11:47 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738	01-Apr-13 11:47 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579	01-Apr-13 11:47 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454	01-Apr-13 11:47 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526	01-Apr-13 11:47 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292	01-Apr-13 11:47 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28	01-Apr-13 11:47 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405	01-Apr-13 11:47 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36	01-Apr-13 11:47 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44	01-Apr-13 11:47 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10	01-Apr-13 11:47 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687	01-Apr-13 11:47 MHM
100-42-5	Styrene	1	ND		5.00	0.571	01-Apr-13 11:47 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12	01-Apr-13 11:47 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679	01-Apr-13 11:47 MHM

Protocol Blank 4/4/2013 14:41:48

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MDL denotes method detection limit

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Blank Results

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Blank ID: 205553 BLANK 1 **Project:** 20152273

Lab ID: 201077705

Prep Level: Water **Batch:** 205553

Method: Water GC/MS Volatile Organics

Prepared: 01-Apr-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
108-88-3	Toluene	1	ND		5.00	0.536	01-Apr-13 11:47 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554	01-Apr-13 11:47 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915	01-Apr-13 11:47 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654	01-Apr-13 11:47 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575	01-Apr-13 11:47 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564	01-Apr-13 11:47 MHM
	m&p-Xylene	1	ND		5.00	0.937	01-Apr-13 11:47 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649	01-Apr-13 11:47 MHM

42 compound(s) reported

Protocol Blank 4/4/2013 14:41:48

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205555 BLANK 1 **Project:** 20152273

Lab ID: 201077713

Prep Level: Soil **Batch:** 205555

Method: Soil GC Semivolatile Organics

Prepared: 01-Apr-13

Units: mg/kg

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Diesel Range Organics (C10-28)	1	ND		10.0	5.00	03-Apr-13 16:06 SNP1
none	Oil Range Organics (>C28-40)	1	ND		50.0	25.0	03-Apr-13 16:06 SNP1

2 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205442 BLANK 1 **Project:** 20152273

Lab ID: 201077157

Prep Level: Soil **Batch:** 205442

Method: Soil GC Volatile Organics

Prepared: 29-Mar-13

Units: mg/kg

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Gasoline Range Organics(C6-10)	1	2.09	J	2.50	1.06	02-Apr-13 04:42 DHR1

1 compound(s) reported

Protocol Blank 4/4/2013 14:41:48

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205582 BLANK 1 **Project:** 20152273

Lab ID: 201077811

Prep Level: TCLP **Batch:** 205582

Method: TCLP ICP Metals

Prepared: 01-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis	
7440-38-2	Arsenic	1	ND		0.200	0.00209	01-Apr-13 19:06	EJH
7440-39-3	Barium	1	ND		2.00	0.00239	01-Apr-13 19:06	EJH
7440-43-9	Cadmium	1	ND		0.100	0.000722	01-Apr-13 19:06	EJH
7440-47-3	Chromium	1	0.0107	J	0.200	0.00400	01-Apr-13 19:06	EJH
7439-92-1	Lead	1	ND		0.200	0.00230	01-Apr-13 19:06	EJH
7782-49-2	Selenium	1	ND		0.200	0.0286	01-Apr-13 19:06	EJH
7440-22-4	Silver	1	ND		0.200	0.00116	01-Apr-13 19:06	EJH

7 compound(s) reported

Protocol Blank 4/4/2013 14:41:48

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205734 BLANK 1 **Project:** 20152273

Lab ID: 201078334

Prep Level: TCLP **Batch:** 205734

Method: TCLP ICP Metals

Prepared: 03-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
7440-38-2	Arsenic	1	ND		0.200	0.00209	03-Apr-13 11:34 MHB1
7440-39-3	Barium	1	ND		2.00	0.00239	03-Apr-13 11:34 MHB1
7440-43-9	Cadmium	1	ND		0.100	0.000722	03-Apr-13 11:34 MHB1
7440-47-3	Chromium	1	ND		0.200	0.00400	03-Apr-13 11:34 MHB1
7439-92-1	Lead	1	ND		0.200	0.00230	03-Apr-13 11:34 MHB1
7782-49-2	Selenium	1	ND		0.200	0.0286	03-Apr-13 11:34 MHB1
7440-22-4	Silver	1	ND		0.200	0.00116	03-Apr-13 11:34 MHB1

7 compound(s) reported

Protocol Blank 4/4/2013 14:41:48

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205583 BLANK 1 **Project:** 20152273

Lab ID: 201077815

Prep Level: TCLP **Batch:** 205583

Method: TCLP Mercury

Prepared: 01-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
7439-97-6	Mercury	1	ND		0.000200	0.0000340	01-Apr-13 13:42 MHB1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205735 BLANK 1 **Project:** 20152273

Lab ID: 201078338

Prep Level: TCLP **Batch:** 205735

Method: TCLP Mercury

Prepared: 03-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis	
7439-97-6	Mercury	1	ND		0.000200	0.0000340	03-Apr-13 09:45	EJH

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Project: 20152273

Parameter	Batch	Blank	Units	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Cyanide, Reactive	205559	<25.0	mg/kg	100.	4.33	4	100.	0.125	7.20		7		0	1-110	1-110	20	
Sulfide, Reactive	205560	<50.0	mg/kg	500.	440.	88	500.		440.		88		0	1-110	1-110	20	
Flash Point	205562		deg F	80.6	82.4	102							0				
pH	205573		Std. Units	6.00	6.05	101							2	97-103		20	

*** denotes recovery outside of QC limits.**

MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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(504) 469-0333

Project: 20152273

Value	Description
D1	The analysis was performed at a dilution due to the high analyte concentration.
Q1	The matrix spike recoveries are poor. Acceptable method performance for this analyte has been demonstrated by the laboratory control sample recovery.
Q3	The matrix spike recoveries are poor due to the presence of this analyte in the sample at a concentration greater than 4 times the spiked amount. Acceptable method performance for this analyte has been demonstrated by the laboratory control sample.
J	This estimated value for the analyte is below the adjusted reporting limit but above the instrument reporting limit.
U	The analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
B	This analyte was detected in the method blank.
E	The sample concentration is above the linear calibrated range of the analysis.
LCS	Laboratory Control Sample.
MS(D)	Matrix Spike (Duplicate).
DUP	Sample Duplicate.
RPD	Relative Percent Difference.

Pace Analytical Services, In
1000 Riverbend Blvd. Suite F
St. Rose, LA 7008
(504) 469-033

Chains of Custody

20152273 20-CTEH

5120 North Shore Drive
North Little Rock, AR 72118
Phone: (501) 801-8500
Fax: (501) 801-8501
Website: www.cteh.com

Center for Toxicol
SAMPLE CHAIN OF C

	Send Report To:	Send Invoice To:
Name	Chase Ertzberger	~~Trey Chandler~~ Accounts Payable
Company	CTEH	CTEH
Address	5120 North Shore Drive North Little Rock, AR 72118	5120 North Shore Drive North Little Rock, AR 72118
Phone	(501)801-8500	(501)801-8500
Fax	(501)801-8501	(501)801-8501
e-mail	certzberger@cteh.com lmccormach@cteh.com	~~tchandler@cteh.com~~ lraccounting@cteh.com

CTEH Project #: 40432 - Delek

Turnaround Requested:
Same Day X Next Day (24 hour) ___ Normal
___ Other (Specify) _____

Complete Data Packet Requested ☑ Yes ☐ No

Lab Contact Information:
~~Galson Laboratories~~
~~6601 Kirkville Road~~
~~E. Syracuse, NY 13057~~
1000 Riverbend Blvd
St. Rose, LA 70087

Client Sample Identification	Other Sample Identification	Sample Size	Units (Check one) ☑ L ☐ cm²	Sample Date	Sample Time (for non-air samples)	Initials	TCLP VOC	TCLP SVOC	TCLP Metals	Ignitability	Reactive Sulfide	Reactive Cyanide	Corrosivity	TPH	8260 VOC	Matrix A = air B = bulk S = soil SW = wipe T = tape W = water
MAAR03950011	Pile 8	2	4oz	03.29.13		RS	X	X	X	X	X	X	X	X		
MAAR0329WC0007	Tank 1003	5	L	03.29.13		RS	X	X	X	X	X	X	X			
TB012	Trip Blnk	2	—	—		—									X	

03.29.13

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME	COMMENTS
	03.29.13 1300	VPS	03.29.13 1300	Temp 4.6
UPS	3/30/13		3/30/13 08:30	

Pace Analytical

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Sample Con

20152273 20-CTEH

Courier: ☐ Pace Courier ☐ Hired Courier ☐ Fed X ☒ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC] **Custody Seals intact:** ☒ Yes ☐ No

Therometer Used: ☐ Therm Fisher IR 5 ☒ Therm Fisher IR 6 ☐ Therm Fisher IR 7

Type of Ice: (Wet) Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 03-30-13

Temp must be measured from Temperature blank when present

			Comments:
Temperature Blank Present"?	☒ Yes ☐ No ☐ N/A	1	
Chain of Custody Present:	☒ Yes ☐ No ☐ N/A	2	
Chain of Custody Complete:	☒ Yes ☐ No ☐ N/A	3	
Chain of Custody Relinquished:	☒ Yes ☐ No ☐ N/A	4	
Sampler Name & Signature on COC:	☐ Yes ☒ No ☐ N/A	5	
Samples Arrived within Hold Time:	☒ Yes ☐ No ☐ N/A	6	
Sufficient Volume:	☒ Yes ☐ No ☐ N/A	7	5 L-Ambers - Waters w/ Hydrocarbons
Correct Containers Used:	☒ Yes ☐ No ☐ N/A	8	
Filtered vol. Rec. for Diss. tests	☐ Yes ☐ No ☒ N/A	9	
Sample Labels match COC:	☒ Yes ☐ No ☐ N/A	10	
All containers received within manafacture's precautionary and/or expiration dates.	☒ Yes ☐ No ☐ N/A	11	
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐ Yes ☐ No ☒ N/A	12	
All containers preservation checked found to be in compliance with EPA recommendation.	☐ Yes ☐ No ☒ N/A	13	If No, was preserative added? ☐ Yes ☐ No If added record lot no.: HNO_3 _____ H_2SO_4 _____
Headspace in VOA Vials (>6mm):	☐ Yes ☒ No ☐ N/A	14	
Trip Blank Present:	☒ Yes ☐ No	15	(TB-Amber VOA w HCl not provided by Pace)

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution:

Collection date of 3/29/13 was used to log TB#2

ALLC003rev.08, 15Feb2013 SCUR Form - mod

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

April 12, 2013

James McCormack
CTEH
5120 North Shore Drive
North Little Rock, AR 72118

RE: Project 20152232
Project ID: Magnolia, AR

Dear James McCormack:

Enclosed are the analytical results for sample(s) received by the laboratory on March 29, 2013. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Karen Brown
karen.brown@pacelabs.com

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

Laboratory Certifications

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152232

Client: CTEH

Project ID: Magnolia, AR

Washington Department of Ecology C2078
Oregon Environmental Laboratory Accreditation - LA200001
U.S. Dept. of Agriculture Foreign Soil Import P330-10-00119
Pennsylvania Dept. of Env Protection (NELAC) 68-04202
Texas Commission on Env. Quality (NELAC) T104704405-09-TX
Kansas Department of Health and Environment (NELAC) E-10266
Florida Department of Health (NELAC) E87595
Oklahoma Department of Environmental Quality - 2010-139
Illinois Environmental Protection Agency - 0025721
California Env. Lab Accreditation Program Branch - 11277CA
Louisiana Dept. of Environmental Quality (NELAC/LELAP) 02006

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1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Cross Reference

Project: 20152232

Client: CTEH

Project ID: Magnolia, AR

Client Sample ID	Lab ID	Matrix	Collection Date/Time	Received Date/Time
MAAR0328SO001	201077313	Soil	28-Mar-13 11:00	29-Mar-13 08:00
MAAR0328SO002	201077314	Soil	28-Mar-13 11:30	29-Mar-13 08:00
MAAR0328SO003	201077315	Soil	28-Mar-13 14:40	29-Mar-13 08:00
MAAR0328SO004	201077316	Soil	28-Mar-13 14:50	29-Mar-13 08:00
MAAR0328SO005	201077317	Soil	28-Mar-13 15:05	29-Mar-13 08:00
MAAR0328SO006	201077318	Soil	28-Mar-13 15:20	29-Mar-13 08:00
MAAR0328SO007	201077319	Soil	28-Mar-13 15:35	29-Mar-13 08:00
MAAR0328SO008	201077320	Soil	28-Mar-13 15:45	29-Mar-13 08:00
MAAR0328SO009	201077321	Soil	28-Mar-13 15:50	29-Mar-13 08:00
MAAR0328SO010	201077322	Soil	28-Mar-13 16:10	29-Mar-13 08:00
TB009	201077323	Water	28-Mar-13 00:00	29-Mar-13 08:00
MAAR0328SCO001	201079474	Soil	28-Mar-13 11:00	29-Mar-13 08:00
MAAR0328SCO001 (SPLP)	201079475	Soil	28-Mar-13 11:00	29-Mar-13 08:00

Project Narrative

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152232

Narrative detail for project management:

At the client's request, sample MAAR0328SO001 will be analyzed additionally for total BTEX, Chloride and SPLP TPH-GRO and TPH-DRO/ORO.

Pace Analytical Services, Inc.
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(504) 469-0333

Project: 20152232

Sample Receipt Condition:

All samples were received in accordance with EPA protocol.

Holding Times:

All holding times were met.

Blanks:

The following blank results were above reporting limits:

Batch 206115 sample 201080722 Ethylbenzene

Batch 206115 sample 201080722 m&p-Xylene

Batch 206115 sample 201080722 o-Xylene

Batch 206115 sample 201080722 Toluene

Laboratory Control Samples:

LCS recoveries outside of QC limits are qualified in the Report of Quality Control section.

Matrix Spikes and Duplicates:

MS or MSD recoveries outside of QC limits are qualified in the Report of Quality Control section.

Surrogates:

Surrogate recoveries outside of QC limits are qualified in the surrogate results section.

Pace Analytical Services, Inc.
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(504) 469-0333

Project: 20152232

Analytical Method	Batch	Sample used for QC
EPA 8015 Mod Ext	205499	Project sample MAAR0328SO001
EPA 8015/8021	205492	Project sample MAAR0328SO001
EPA 8015/8021	206115	Batch sample from another client
EPA 6010	205582	Client sample MAAR0329SO011 from project 20152273
EPA 7470	205583	Client sample MAAR0329SO011 from project 20152273
EPA 8270	205580	Project sample MAAR0328SO001
EPA 8260	205430	Batch sample from another client
EPA 8260	205577	Project sample MAAR0328SO001
Dry Weight Moisture	205530	Project sample MAAR0328SO001
Dry Weight Moisture	206102	Batch sample from another client
EPA 9045	205485	Batch sample from another client
SW-846 7.3.4.2	205560	Client sample MAAR0329SO011 from project 20152273
EPA 1010	205562	Client sample MAAR0329SO011 from project 20152273
EPA 9095	206266	Project sample MAAR0328SCO001
SW-846 7.3.3.2	205559	Client sample MAAR0329SO011 from project 20152273
EPA 9251	206042	Project sample MAAR0328SCO001

For the sample used as the original for the DUP or MS/MSD for the batch:

Project sample means a sample from this project was used.
Client sample means a sample from the same client but in a different project was used.
Batch sample means a sample from a different client was used.

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St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0328SO001
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077313
Matrix: Soil
% Moisture: 12.1 Corrected
Description: None
Prep Level: Soil
Batch: 205499
Method: EPA 8015 Mod Ext
8015 TPH Extractables Soil
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 29-Mar-13

Units: mg/kg

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
none	Diesel Range Organics (C10-28)	20	10800	D1	223.	112.		02-Apr-13 21:25	SNP1
none	Oil Range Organics (>C28-40)	20	5610	D1	1120	559.		02-Apr-13 21:25	SNP1

2 compound(s) reported

Protocol 4/12/2013 17:15:22

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328SO001
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077313
Matrix: Soil
% Moisture: 12.1 Corrected
Description: None
Prep Level: Soil
Batch: 205492
Method: EPA 8015/8021
8015/8021 Med Soil
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 29-Mar-13

Units: mg/kg

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
none	Gasoline Range Organics(C6-10)	10	607.	D6	28.4	12.0		01-Apr-13 20:21	DHR1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
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St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328SO001
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077313 (TCLP)
Matrix: Soil
% Moisture: 12.1 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205580
Method: EPA 8270 (TCLP)
GCMS SVOAs TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		0.100	0.0000400	7.50	01-Apr-13 17:28 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		0.100	0.0000600	0.130	01-Apr-13 17:28 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		0.100	0.0000800	0.500	01-Apr-13 17:28 JAM
118-74-1	Hexachlorobenzene	1	ND		0.100	0.0000700	0.130	01-Apr-13 17:28 JAM
67-72-1	Hexachloroethane	1	ND		0.100	0.0000600	3.00	01-Apr-13 17:28 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		0.100	0.000100	200.	01-Apr-13 17:28 JAM
	3&4-Methylphenol	1	ND		0.100	0.000100	200.	01-Apr-13 17:28 JAM
98-95-3	Nitrobenzene	1	ND		0.100	0.0000800	2.00	01-Apr-13 17:28 JAM
87-86-5	Pentachlorophenol	1	ND		0.250	0.0000500	100.	01-Apr-13 17:28 JAM
110-86-1	Pyridine	1	ND		0.100	0.000110	5.00	01-Apr-13 17:28 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		0.250	0.000090	400.	01-Apr-13 17:28 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		0.100	0.0000500	2.00	01-Apr-13 17:28 JAM

12 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328SO001
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077313 (TCLP)
Matrix: Soil
% Moisture: 12.1 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205577
Method: EPA 8260 (TCLP)
GCMS VOAs TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
71-43-2	Benzene	1	ND		0.100	0.0104	0.500	01-Apr-13 11:39 MHM
78-93-3	2-Butanone (MEK)	1	ND		0.200	0.0533	200.	01-Apr-13 11:39 MHM
56-23-5	Carbon tetrachloride	1	ND		0.100	0.0106	0.500	01-Apr-13 11:39 MHM
108-90-7	Chlorobenzene	1	ND		0.100	0.0132	100.	01-Apr-13 11:39 MHM
67-66-3	Chloroform	1	ND		0.100	0.0171	6.00	01-Apr-13 11:39 MHM
107-06-2	1,2-Dichloroethane	1	ND		0.100	0.0148	0.500	01-Apr-13 11:39 MHM
75-35-4	1,1-Dichloroethene	1	ND		0.100	0.0111	0.700	01-Apr-13 11:39 MHM
127-18-4	Tetrachloroethene	1	ND		0.100	0.0136	0.700	01-Apr-13 11:39 MHM
79-01-6	Trichloroethene	1	ND		0.100	0.0131	0.500	01-Apr-13 11:39 MHM
75-01-4	Vinyl chloride	1	ND		0.100	0.0113	0.200	01-Apr-13 11:39 MHM

10 compound(s) reported

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328SO001
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077313 (TCLP)
Matrix: Soil
% Moisture: 12.1 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205582
Method: EPA 6010 (TCLP)
Metals, ICP, TCLP Leachate
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
7440-38-2	Arsenic	1	0.00455	J	0.200	0.00209	5.00	01-Apr-13 19:35	EJH
7440-39-3	Barium	1	0.321	J	2.00	0.00239	100.	01-Apr-13 19:35	EJH
7440-43-9	Cadmium	1	0.00125	J	0.100	0.000722	1.00	01-Apr-13 19:35	EJH
7440-47-3	Chromium	1	ND		0.200	0.00400	5.00	01-Apr-13 19:35	EJH
7439-92-1	Lead	1	0.00821	J	0.200	0.00230	5.00	01-Apr-13 19:35	EJH
7782-49-2	Selenium	1	ND		0.200	0.0286	1.00	01-Apr-13 19:35	EJH
7440-22-4	Silver	1	ND		0.200	0.00116	5.00	01-Apr-13 19:35	EJH

7 compound(s) reported

Pace Analytical™

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(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0328SO001
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077313 (TCLP)
Matrix: Soil
% Moisture: 12.1 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205583
Method: EPA 7470 (TCLP)
Mercury TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.000200	0.0000340	0.200	01-Apr-13 13:54 MHB1

1 compound(s) reported

Protocol 4/12/2013 17:15:22

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
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(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0328SO002
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077314
Matrix: Soil
% Moisture: 12 Corrected
Description: None
Prep Level: Soil
Batch: 205499
Method: EPA 8015 Mod Ext
8015 TPH Extractables Soil
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 29-Mar-13

Units: mg/kg

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
none	Diesel Range Organics (C10-28)	20	12700	D1	222.	111.		02-Apr-13 22:48	SNP1
none	Oil Range Organics (>C28-40)	20	5870	D1	1110	556.		02-Apr-13 22:48	SNP1

2 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Sample Results

Client: CTEH

Client ID: MAAR0328SO002
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077314
Matrix: Soil
% Moisture: 12 Corrected
Description: None
Prep Level: Soil
Batch: 205492
Method: EPA 8015/8021
8015/8021 Med Soil
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 29-Mar-13

Units: mg/kg

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
none	Gasoline Range Organics(C6-10)	10	907.	D6	28.4	12.0		01-Apr-13 20:49	DHR1

1 compound(s) reported

Protocol 4/12/2013 17:15:22

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
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St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328SO002
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077314 (TCLP)
Matrix: Soil
% Moisture: 12 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205580
Method: EPA 8270 (TCLP)
GCMS SVOAs TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		0.100	0.0000400	7.50	01-Apr-13 17:56 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		0.100	0.0000600	0.130	01-Apr-13 17:56 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		0.100	0.0000800	0.500	01-Apr-13 17:56 JAM
118-74-1	Hexachlorobenzene	1	ND		0.100	0.0000700	0.130	01-Apr-13 17:56 JAM
67-72-1	Hexachloroethane	1	ND		0.100	0.0000600	3.00	01-Apr-13 17:56 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		0.100	0.000100	200.	01-Apr-13 17:56 JAM
	3&4-Methylphenol	1	ND		0.100	0.000100	200.	01-Apr-13 17:56 JAM
98-95-3	Nitrobenzene	1	ND		0.100	0.0000800	2.00	01-Apr-13 17:56 JAM
87-86-5	Pentachlorophenol	1	ND		0.250	0.0000500	100.	01-Apr-13 17:56 JAM
110-86-1	Pyridine	1	ND		0.100	0.000110	5.00	01-Apr-13 17:56 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		0.250	0.000090	400.	01-Apr-13 17:56 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		0.100	0.0000500	2.00	01-Apr-13 17:56 JAM

12 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
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St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328SO002
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077314 (TCLP)
Matrix: Soil
% Moisture: 12 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205577
Method: EPA 8260 (TCLP)
GCMS VOAs TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
71-43-2	Benzene	1	ND		0.100	0.0104	0.500	01-Apr-13 12:39 MHM
78-93-3	2-Butanone (MEK)	1	ND		0.200	0.0533	200.	01-Apr-13 12:39 MHM
56-23-5	Carbon tetrachloride	1	ND		0.100	0.0106	0.500	01-Apr-13 12:39 MHM
108-90-7	Chlorobenzene	1	ND		0.100	0.0132	100.	01-Apr-13 12:39 MHM
67-66-3	Chloroform	1	ND		0.100	0.0171	6.00	01-Apr-13 12:39 MHM
107-06-2	1,2-Dichloroethane	1	ND		0.100	0.0148	0.500	01-Apr-13 12:39 MHM
75-35-4	1,1-Dichloroethene	1	ND		0.100	0.0111	0.700	01-Apr-13 12:39 MHM
127-18-4	Tetrachloroethene	1	ND		0.100	0.0136	0.700	01-Apr-13 12:39 MHM
79-01-6	Trichloroethene	1	ND		0.100	0.0131	0.500	01-Apr-13 12:39 MHM
75-01-4	Vinyl chloride	1	ND		0.100	0.0113	0.200	01-Apr-13 12:39 MHM

10 compound(s) reported

Protocol 4/12/2013 17:15:22

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0328SO002
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077314 (TCLP)
Matrix: Soil
% Moisture: 12 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205582
Method: EPA 6010 (TCLP)
Metals, ICP, TCLP Leachate
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
7440-38-2	Arsenic	1	0.00816	J	0.200	0.00209	5.00	01-Apr-13 19:39	EJH
7440-39-3	Barium	1	0.440	J	2.00	0.00239	100.	01-Apr-13 19:39	EJH
7440-43-9	Cadmium	1	0.000980	J	0.100	0.000722	1.00	01-Apr-13 19:39	EJH
7440-47-3	Chromium	1	ND		0.200	0.00400	5.00	01-Apr-13 19:39	EJH
7439-92-1	Lead	1	0.00461	J	0.200	0.00230	5.00	01-Apr-13 19:39	EJH
7782-49-2	Selenium	1	ND		0.200	0.0286	1.00	01-Apr-13 19:39	EJH
7440-22-4	Silver	1	ND		0.200	0.00116	5.00	01-Apr-13 19:39	EJH

7 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0328SO002
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077314 (TCLP)
Matrix: Soil
% Moisture: 12 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205583
Method: EPA 7470 (TCLP)
Mercury TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.000200	0.0000340	0.200	01-Apr-13 13:56 MHB1

1 compound(s) reported

Protocol 4/12/2013 17:15:22

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
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(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0328SO003
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077315
Matrix: Soil
% Moisture: 9.5 Corrected
Description: None
Prep Level: Soil
Batch: 205499
Method: EPA 8015 Mod Ext
8015 TPH Extractables Soil
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 29-Mar-13

Units: mg/kg

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
none	Diesel Range Organics (C10-28)	20	10700	D1	213.	107.		02-Apr-13 23:16	SNP1
none	Oil Range Organics (>C28-40)	20	5480	D1	1070	533.		02-Apr-13 23:16	SNP1

2 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical™

Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328SO003
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077315
Matrix: Soil
% Moisture: 9.5 Corrected
Description: None
Prep Level: Soil
Batch: 205492
Method: EPA 8015/8021
8015/8021 Med Soil
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 29-Mar-13

Units: mg/kg

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
none	Gasoline Range Organics(C6-10)	10	607.	D6	27.6	11.7		01-Apr-13 21:17	DHR1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328SO003
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077315 (TCLP)
Matrix: Soil
% Moisture: 9.5 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205580
Method: EPA 8270 (TCLP)
GCMS SVOAs TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		0.100	0.0000400	7.50	01-Apr-13 18:25 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		0.100	0.0000600	0.130	01-Apr-13 18:25 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		0.100	0.0000800	0.500	01-Apr-13 18:25 JAM
118-74-1	Hexachlorobenzene	1	ND		0.100	0.0000700	0.130	01-Apr-13 18:25 JAM
67-72-1	Hexachloroethane	1	ND		0.100	0.0000600	3.00	01-Apr-13 18:25 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		0.100	0.000100	200.	01-Apr-13 18:25 JAM
	3&4-Methylphenol	1	ND		0.100	0.000100	200.	01-Apr-13 18:25 JAM
98-95-3	Nitrobenzene	1	ND		0.100	0.0000800	2.00	01-Apr-13 18:25 JAM
87-86-5	Pentachlorophenol	1	ND		0.250	0.0000500	100.	01-Apr-13 18:25 JAM
110-86-1	Pyridine	1	ND		0.100	0.000110	5.00	01-Apr-13 18:25 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		0.250	0.000090	400.	01-Apr-13 18:25 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		0.100	0.0000500	2.00	01-Apr-13 18:25 JAM

12 compound(s) reported

Protocol 4/12/2013 17:15:23

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit
Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
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St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328SO003
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077315 (TCLP)
Matrix: Soil
% Moisture: 9.5 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205577
Method: EPA 8260 (TCLP)
GCMS VOAs TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
71-43-2	Benzene	1	ND		0.100	0.0104	0.500	01-Apr-13 12:59 MHM
78-93-3	2-Butanone (MEK)	1	ND		0.200	0.0533	200.	01-Apr-13 12:59 MHM
56-23-5	Carbon tetrachloride	1	ND		0.100	0.0106	0.500	01-Apr-13 12:59 MHM
108-90-7	Chlorobenzene	1	ND		0.100	0.0132	100.	01-Apr-13 12:59 MHM
67-66-3	Chloroform	1	ND		0.100	0.0171	6.00	01-Apr-13 12:59 MHM
107-06-2	1,2-Dichloroethane	1	ND		0.100	0.0148	0.500	01-Apr-13 12:59 MHM
75-35-4	1,1-Dichloroethene	1	ND		0.100	0.0111	0.700	01-Apr-13 12:59 MHM
127-18-4	Tetrachloroethene	1	ND		0.100	0.0136	0.700	01-Apr-13 12:59 MHM
79-01-6	Trichloroethene	1	ND		0.100	0.0131	0.500	01-Apr-13 12:59 MHM
75-01-4	Vinyl chloride	1	ND		0.100	0.0113	0.200	01-Apr-13 12:59 MHM

10 compound(s) reported

Pace Analytical Services, Inc.
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St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328SO003
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077315 (TCLP)
Matrix: Soil
% Moisture: 9.5 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205582
Method: EPA 6010 (TCLP)
Metals, ICP, TCLP Leachate
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
7440-38-2	Arsenic	1	0.00736	J	0.200	0.00209	5.00	01-Apr-13 19:43	EJH
7440-39-3	Barium	1	0.496	J	2.00	0.00239	100.	01-Apr-13 19:43	EJH
7440-43-9	Cadmium	1	0.00174	J	0.100	0.000722	1.00	01-Apr-13 19:43	EJH
7440-47-3	Chromium	1	ND		0.200	0.00400	5.00	01-Apr-13 19:43	EJH
7439-92-1	Lead	1	0.0132	J	0.200	0.00230	5.00	01-Apr-13 19:43	EJH
7782-49-2	Selenium	1	ND		0.200	0.0286	1.00	01-Apr-13 19:43	EJH
7440-22-4	Silver	1	ND		0.200	0.00116	5.00	01-Apr-13 19:43	EJH

7 compound(s) reported

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0328SO003
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077315 (TCLP)
Matrix: Soil
% Moisture: 9.5 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205583
Method: EPA 7470 (TCLP)
Mercury TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.000200	0.0000340	0.200	01-Apr-13 13:58 MHB1

1 compound(s) reported

Protocol 4/12/2013 17:15:23

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Sample Results

Client: CTEH

Client ID: MAAR0328SO004
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077316
Matrix: Soil
% Moisture: 19.6 Corrected
Description: None
Prep Level: Soil
Batch: 205499
Method: EPA 8015 Mod Ext
8015 TPH Extractables Soil
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 29-Mar-13

Units: mg/kg

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
none	Diesel Range Organics (C10-28)	10	3720	D1	122.	61.2		02-Apr-13 23:44	SNP1
none	Oil Range Organics (>C28-40)	10	1380	D1	612.	306.		02-Apr-13 23:44	SNP1

2 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0328SO004
Project ID: Magnolia, AR
Lab ID: 201077316
Description: None
Method: EPA 8015/8021
8015/8021 Med Soil

Project: 20152232
Site: None
Matrix: Soil
Prep Level: Soil
% Moisture: 19.6 Corrected
Batch: 205492
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 29-Mar-13

Units: mg/kg

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Gasoline Range Organics(C6-10)	10	316.	D6	31.1	13.2		01-Apr-13 23:36 DHR1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Client: CTEH

Client ID: MAAR0328SO004
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077316 (TCLP)
Matrix: Soil
% Moisture: 19.6 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205580
Method: EPA 8270 (TCLP)
GCMS SVOAs TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		0.100	0.0000400	7.50	01-Apr-13 18:53 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		0.100	0.0000600	0.130	01-Apr-13 18:53 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		0.100	0.0000800	0.500	01-Apr-13 18:53 JAM
118-74-1	Hexachlorobenzene	1	ND		0.100	0.0000700	0.130	01-Apr-13 18:53 JAM
67-72-1	Hexachloroethane	1	ND		0.100	0.0000600	3.00	01-Apr-13 18:53 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		0.100	0.000100	200.	01-Apr-13 18:53 JAM
	3&4-Methylphenol	1	ND		0.100	0.000100	200.	01-Apr-13 18:53 JAM
98-95-3	Nitrobenzene	1	ND		0.100	0.0000800	2.00	01-Apr-13 18:53 JAM
87-86-5	Pentachlorophenol	1	ND		0.250	0.0000500	100.	01-Apr-13 18:53 JAM
110-86-1	Pyridine	1	ND		0.100	0.000110	5.00	01-Apr-13 18:53 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		0.250	0.000090	400.	01-Apr-13 18:53 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		0.100	0.0000500	2.00	01-Apr-13 18:53 JAM

12 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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(504) 469-0333

Client: CTEH

Client ID: MAAR0328SO004
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077316 (TCLP)
Matrix: Soil
% Moisture: 19.6 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205577
Method: EPA 8260 (TCLP)
GCMS VOAs TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
71-43-2	Benzene	1	ND		0.100	0.0104	0.500	01-Apr-13 14:19 MHM
78-93-3	2-Butanone (MEK)	1	ND		0.200	0.0533	200.	01-Apr-13 14:19 MHM
56-23-5	Carbon tetrachloride	1	ND		0.100	0.0106	0.500	01-Apr-13 14:19 MHM
108-90-7	Chlorobenzene	1	ND		0.100	0.0132	100.	01-Apr-13 14:19 MHM
67-66-3	Chloroform	1	ND		0.100	0.0171	6.00	01-Apr-13 14:19 MHM
107-06-2	1,2-Dichloroethane	1	ND		0.100	0.0148	0.500	01-Apr-13 14:19 MHM
75-35-4	1,1-Dichloroethene	1	ND		0.100	0.0111	0.700	01-Apr-13 14:19 MHM
127-18-4	Tetrachloroethene	1	ND		0.100	0.0136	0.700	01-Apr-13 14:19 MHM
79-01-6	Trichloroethene	1	ND		0.100	0.0131	0.500	01-Apr-13 14:19 MHM
75-01-4	Vinyl chloride	1	ND		0.100	0.0113	0.200	01-Apr-13 14:19 MHM

10 compound(s) reported

Pace Analytical Services, Inc.
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Client: CTEH

Client ID: MAAR0328SO004
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077316 (TCLP)
Matrix: Soil
% Moisture: 19.6 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205582
Method: EPA 6010 (TCLP)
Metals, ICP, TCLP Leachate
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
7440-38-2	Arsenic	1	0.00849	J	0.200	0.00209	5.00	01-Apr-13 19:46	EJH
7440-39-3	Barium	1	0.397	J	2.00	0.00239	100.	01-Apr-13 19:46	EJH
7440-43-9	Cadmium	1	ND		0.100	0.000722	1.00	01-Apr-13 19:46	EJH
7440-47-3	Chromium	1	ND		0.200	0.00400	5.00	01-Apr-13 19:46	EJH
7439-92-1	Lead	1	0.0152	J	0.200	0.00230	5.00	01-Apr-13 19:46	EJH
7782-49-2	Selenium	1	ND		0.200	0.0286	1.00	01-Apr-13 19:46	EJH
7440-22-4	Silver	1	ND		0.200	0.00116	5.00	01-Apr-13 19:46	EJH

7 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
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(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0328SO004
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077316 (TCLP)
Matrix: Soil
% Moisture: 19.6 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205583
Method: EPA 7470 (TCLP)
Mercury TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.000200	0.0000340	0.200	01-Apr-13 14:03 MHB1

1 compound(s) reported

Protocol 4/12/2013 17:15:23

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
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(504) 469-0333

Client: CTEH

Client ID: MAAR0328SO005
Project ID: Magnolia, AR
Lab ID: 201077317
Description: None
Method: EPA 8015 Mod Ext
8015 TPH Extractables Soil

Project: 20152232
Site: None
Matrix: Soil
Prep Level: Soil
% Moisture: 17.6 Corrected
Batch: 205499
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 29-Mar-13

Units: mg/kg

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Diesel Range Organics (C10-28)	5	1120	D1	60.3	30.1		03-Apr-13 10:26 SNP1
none	Oil Range Organics (>C28-40)	5	501.	D1	301.	151.		03-Apr-13 10:26 SNP1

2 compound(s) reported

Protocol 4/12/2013 17:15:23

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0328SO005
Project ID: Magnolia, AR
Lab ID: 201077317
Description: None
Method: EPA 8015/8021
8015/8021 Med Soil

Project: 20152232
Site: None
Matrix: Soil
Prep Level: Soil
% Moisture: 17.6 Corrected
Batch: 205492
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 29-Mar-13

Units: mg/kg

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
none	Gasoline Range Organics(C6-10)	10	432.	D6	30.3	12.8		02-Apr-13 00:04	DHR1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Client: CTEH

Client ID: MAAR0328SO005
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077317 (TCLP)
Matrix: Soil
% Moisture: 17.6 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205580
Method: EPA 8270 (TCLP)
GCMS SVOAs TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		0.100	0.0000400	7.50	01-Apr-13 19:21 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		0.100	0.0000600	0.130	01-Apr-13 19:21 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		0.100	0.0000800	0.500	01-Apr-13 19:21 JAM
118-74-1	Hexachlorobenzene	1	ND		0.100	0.0000700	0.130	01-Apr-13 19:21 JAM
67-72-1	Hexachloroethane	1	ND		0.100	0.0000600	3.00	01-Apr-13 19:21 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		0.100	0.000100	200.	01-Apr-13 19:21 JAM
	3&4-Methylphenol	1	ND		0.100	0.000100	200.	01-Apr-13 19:21 JAM
98-95-3	Nitrobenzene	1	ND		0.100	0.0000800	2.00	01-Apr-13 19:21 JAM
87-86-5	Pentachlorophenol	1	ND		0.250	0.0000500	100.	01-Apr-13 19:21 JAM
110-86-1	Pyridine	1	ND		0.100	0.000110	5.00	01-Apr-13 19:21 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		0.250	0.000090	400.	01-Apr-13 19:21 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		0.100	0.0000500	2.00	01-Apr-13 19:21 JAM

12 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
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St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328SO005
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077317 (TCLP)
Matrix: Soil
% Moisture: 17.6 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205577
Method: EPA 8260 (TCLP)
GCMS VOAs TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
71-43-2	Benzene	1	ND		0.100	0.0104	0.500	01-Apr-13 14:40 MHM
78-93-3	2-Butanone (MEK)	1	ND		0.200	0.0533	200.	01-Apr-13 14:40 MHM
56-23-5	Carbon tetrachloride	1	ND		0.100	0.0106	0.500	01-Apr-13 14:40 MHM
108-90-7	Chlorobenzene	1	ND		0.100	0.0132	100.	01-Apr-13 14:40 MHM
67-66-3	Chloroform	1	ND		0.100	0.0171	6.00	01-Apr-13 14:40 MHM
107-06-2	1,2-Dichloroethane	1	ND		0.100	0.0148	0.500	01-Apr-13 14:40 MHM
75-35-4	1,1-Dichloroethene	1	ND		0.100	0.0111	0.700	01-Apr-13 14:40 MHM
127-18-4	Tetrachloroethene	1	ND		0.100	0.0136	0.700	01-Apr-13 14:40 MHM
79-01-6	Trichloroethene	1	ND		0.100	0.0131	0.500	01-Apr-13 14:40 MHM
75-01-4	Vinyl chloride	1	ND		0.100	0.0113	0.200	01-Apr-13 14:40 MHM

10 compound(s) reported

Pace Analytical Services, Inc.
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St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328SO005
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077317 (TCLP)
Matrix: Soil
% Moisture: 17.6 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205582
Method: EPA 6010 (TCLP)
Metals, ICP, TCLP Leachate
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
7440-38-2	Arsenic	1	0.00853	J	0.200	0.00209	5.00	01-Apr-13 19:50	EJH
7440-39-3	Barium	1	0.601	J	2.00	0.00239	100.	01-Apr-13 19:50	EJH
7440-43-9	Cadmium	1	ND		0.100	0.000722	1.00	01-Apr-13 19:50	EJH
7440-47-3	Chromium	1	ND		0.200	0.00400	5.00	01-Apr-13 19:50	EJH
7439-92-1	Lead	1	ND		0.200	0.00230	5.00	01-Apr-13 19:50	EJH
7782-49-2	Selenium	1	ND		0.200	0.0286	1.00	01-Apr-13 19:50	EJH
7440-22-4	Silver	1	ND		0.200	0.00116	5.00	01-Apr-13 19:50	EJH

7 compound(s) reported

Protocol 4/12/2013 17:15:23

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0328SO005
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077317 (TCLP)
Matrix: Soil
% Moisture: 17.6 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205583
Method: EPA 7470 (TCLP)
Mercury TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.000200	0.0000340	0.200	01-Apr-13 14:05 MHB1

1 compound(s) reported

Protocol 4/12/2013 17:15:23

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Sample Results

Client: CTEH

Client ID: MAAR0328SO006
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077318
Matrix: Soil
% Moisture: 7.6 Corrected
Description: None
Prep Level: Soil
Batch: 205499
Method: EPA 8015 Mod Ext
8015 TPH Extractables Soil
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 29-Mar-13

Units: mg/kg

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
none	Diesel Range Organics (C10-28)	20	18200	D1	213.	106.		03-Apr-13 01:35	SNP1
none	Oil Range Organics (>C28-40)	20	8530	D1	1060	532.		03-Apr-13 01:35	SNP1

2 compound(s) reported

Protocol 4/12/2013 17:15:23

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
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(504) 469-0333

Client: CTEH

Client ID: MAAR0328SO006
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077318
Matrix: Soil
% Moisture: 7.6 Corrected
Description: None
Prep Level: Soil
Batch: 205492
Method: EPA 8015/8021
8015/8021 Med Soil
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 29-Mar-13

Units: mg/kg

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Gasoline Range Organics(C6-10)	10	1900	D6	27.0	11.4		02-Apr-13 00:32 DHR1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328SO006
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077318 (TCLP)
Matrix: Soil
% Moisture: 7.6 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205580
Method: EPA 8270 (TCLP)
GCMS SVOAs TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		0.100	0.0000400	7.50	01-Apr-13 19:49 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		0.100	0.0000600	0.130	01-Apr-13 19:49 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		0.100	0.0000800	0.500	01-Apr-13 19:49 JAM
118-74-1	Hexachlorobenzene	1	ND		0.100	0.0000700	0.130	01-Apr-13 19:49 JAM
67-72-1	Hexachloroethane	1	ND		0.100	0.0000600	3.00	01-Apr-13 19:49 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		0.100	0.000100	200.	01-Apr-13 19:49 JAM
	3&4-Methylphenol	1	ND		0.100	0.000100	200.	01-Apr-13 19:49 JAM
98-95-3	Nitrobenzene	1	ND		0.100	0.0000800	2.00	01-Apr-13 19:49 JAM
87-86-5	Pentachlorophenol	1	ND		0.250	0.0000500	100.	01-Apr-13 19:49 JAM
110-86-1	Pyridine	1	ND		0.100	0.000110	5.00	01-Apr-13 19:49 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		0.250	0.000090	400.	01-Apr-13 19:49 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		0.100	0.0000500	2.00	01-Apr-13 19:49 JAM

12 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328SO006
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077318 (TCLP)
Matrix: Soil
% Moisture: 7.6 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205577
Method: EPA 8260 (TCLP)
GCMS VOAs TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
71-43-2	Benzene	1	0.150		0.100	0.0104	0.500	01-Apr-13 15:20 MHM
78-93-3	2-Butanone (MEK)	1	ND		0.200	0.0533	200.	01-Apr-13 15:20 MHM
56-23-5	Carbon tetrachloride	1	ND		0.100	0.0106	0.500	01-Apr-13 15:20 MHM
108-90-7	Chlorobenzene	1	ND		0.100	0.0132	100.	01-Apr-13 15:20 MHM
67-66-3	Chloroform	1	ND		0.100	0.0171	6.00	01-Apr-13 15:20 MHM
107-06-2	1,2-Dichloroethane	1	ND		0.100	0.0148	0.500	01-Apr-13 15:20 MHM
75-35-4	1,1-Dichloroethene	1	ND		0.100	0.0111	0.700	01-Apr-13 15:20 MHM
127-18-4	Tetrachloroethene	1	ND		0.100	0.0136	0.700	01-Apr-13 15:20 MHM
79-01-6	Trichloroethene	1	ND		0.100	0.0131	0.500	01-Apr-13 15:20 MHM
75-01-4	Vinyl chloride	1	ND		0.100	0.0113	0.200	01-Apr-13 15:20 MHM

10 compound(s) reported

Pace Analytical Services, Inc.
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St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328SO006
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077318 (TCLP)
Matrix: Soil
% Moisture: 7.6 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205582
Method: EPA 6010 (TCLP)
Metals, ICP, TCLP Leachate
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
7440-38-2	Arsenic	1	0.00647	J	0.200	0.00209	5.00	01-Apr-13 19:54	EJH
7440-39-3	Barium	1	0.487	J	2.00	0.00239	100.	01-Apr-13 19:54	EJH
7440-43-9	Cadmium	1	0.000967	J	0.100	0.000722	1.00	01-Apr-13 19:54	EJH
7440-47-3	Chromium	1	ND		0.200	0.00400	5.00	01-Apr-13 19:54	EJH
7439-92-1	Lead	1	0.0151	J	0.200	0.00230	5.00	01-Apr-13 19:54	EJH
7782-49-2	Selenium	1	ND		0.200	0.0286	1.00	01-Apr-13 19:54	EJH
7440-22-4	Silver	1	ND		0.200	0.00116	5.00	01-Apr-13 19:54	EJH

7 compound(s) reported

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Sample Results

Client: CTEH

Client ID: MAAR0328SO006
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077318 (TCLP)
Matrix: Soil
% Moisture: 7.6 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205583
Method: EPA 7470 (TCLP)
Mercury TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.000200	0.0000340	0.200	01-Apr-13 14:07 MHB1

1 compound(s) reported

Protocol 4/12/2013 17:15:23

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0328SO007
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077319
Matrix: Soil
% Moisture: 7.4 Corrected
Description: None
Prep Level: Soil
Batch: 205499
Method: EPA 8015 Mod Ext
8015 TPH Extractables Soil
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 29-Mar-13

Units: mg/kg

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
none	Diesel Range Organics (C10-28)	40	24900	D1	431.	216.		03-Apr-13 10:53	SNP1
none	Oil Range Organics (>C28-40)	40	11800	D1	2160	1080		03-Apr-13 10:53	SNP1

2 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0328SO007
Project ID: Magnolia, AR
Lab ID: 201077319
Description: None
Method: EPA 8015/8021
8015/8021 Med Soil

Project: 20152232
Site: None
Matrix: Soil
Prep Level: Soil
% Moisture: 7.4 Corrected
Batch: 205492

Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 29-Mar-13

Units: mg/kg

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
none	Gasoline Range Organics(C6-10)	10	2260	D6	27.0	11.4		02-Apr-13 01:00	DHR1

1 compound(s) reported

Protocol 4/12/2013 17:15:24

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
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St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328SO007
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077319 (TCLP)
Matrix: Soil
% Moisture: 7.4 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205580
Method: EPA 8270 (TCLP)
GCMS SVOAs TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		0.100	0.0000400	7.50	01-Apr-13 20:17 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		0.100	0.0000600	0.130	01-Apr-13 20:17 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		0.100	0.0000800	0.500	01-Apr-13 20:17 JAM
118-74-1	Hexachlorobenzene	1	ND		0.100	0.0000700	0.130	01-Apr-13 20:17 JAM
67-72-1	Hexachloroethane	1	ND		0.100	0.0000600	3.00	01-Apr-13 20:17 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		0.100	0.000100	200.	01-Apr-13 20:17 JAM
	3&4-Methylphenol	1	ND		0.100	0.000100	200.	01-Apr-13 20:17 JAM
98-95-3	Nitrobenzene	1	ND		0.100	0.0000800	2.00	01-Apr-13 20:17 JAM
87-86-5	Pentachlorophenol	1	ND		0.250	0.0000500	100.	01-Apr-13 20:17 JAM
110-86-1	Pyridine	1	ND		0.100	0.000110	5.00	01-Apr-13 20:17 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		0.250	0.000090	400.	01-Apr-13 20:17 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		0.100	0.0000500	2.00	01-Apr-13 20:17 JAM

12 compound(s) reported

Protocol 4/12/2013 17:15:24

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Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
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(504) 469-0333

Client: CTEH

Client ID: MAAR0328SO007
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077319 (TCLP)
Matrix: Soil
% Moisture: 7.4 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205577
Method: EPA 8260 (TCLP)
GCMS VOAs TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
71-43-2	Benzene	1	ND		0.100	0.0104	0.500	01-Apr-13 15:40 MHM
78-93-3	2-Butanone (MEK)	1	ND		0.200	0.0533	200.	01-Apr-13 15:40 MHM
56-23-5	Carbon tetrachloride	1	ND		0.100	0.0106	0.500	01-Apr-13 15:40 MHM
108-90-7	Chlorobenzene	1	ND		0.100	0.0132	100.	01-Apr-13 15:40 MHM
67-66-3	Chloroform	1	ND		0.100	0.0171	6.00	01-Apr-13 15:40 MHM
107-06-2	1,2-Dichloroethane	1	ND		0.100	0.0148	0.500	01-Apr-13 15:40 MHM
75-35-4	1,1-Dichloroethene	1	ND		0.100	0.0111	0.700	01-Apr-13 15:40 MHM
127-18-4	Tetrachloroethene	1	ND		0.100	0.0136	0.700	01-Apr-13 15:40 MHM
79-01-6	Trichloroethene	1	ND		0.100	0.0131	0.500	01-Apr-13 15:40 MHM
75-01-4	Vinyl chloride	1	ND		0.100	0.0113	0.200	01-Apr-13 15:40 MHM

10 compound(s) reported

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(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0328SO007
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077319 (TCLP)
Matrix: Soil
% Moisture: 7.4 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205582
Method: EPA 6010 (TCLP)
Metals, ICP, TCLP Leachate
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
7440-38-2	Arsenic	1	0.00813	J	0.200	0.00209	5.00	01-Apr-13 19:58	EJH
7440-39-3	Barium	1	0.139	J	2.00	0.00239	100.	01-Apr-13 19:58	EJH
7440-43-9	Cadmium	1	ND		0.100	0.000722	1.00	01-Apr-13 19:58	EJH
7440-47-3	Chromium	1	ND		0.200	0.00400	5.00	01-Apr-13 19:58	EJH
7439-92-1	Lead	1	0.0554	J	0.200	0.00230	5.00	01-Apr-13 19:58	EJH
7782-49-2	Selenium	1	ND		0.200	0.0286	1.00	01-Apr-13 19:58	EJH
7440-22-4	Silver	1	ND		0.200	0.00116	5.00	01-Apr-13 19:58	EJH

7 compound(s) reported

Protocol 4/12/2013 17:15:24

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0328SO007
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077319 (TCLP)
Matrix: Soil
% Moisture: 7.4 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205583
Method: EPA 7470 (TCLP)
Mercury TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.000200	0.0000340	0.200	01-Apr-13 14:09 MHB1

1 compound(s) reported

Protocol 4/12/2013 17:15:24

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
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(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0328SO008
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077320
Matrix: Soil
% Moisture: 7.6 Corrected
Description: None
Prep Level: Soil
Batch: 205499
Method: EPA 8015 Mod Ext
8015 TPH Extractables Soil
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 29-Mar-13

Units: mg/kg

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
none	Diesel Range Organics (C10-28)	20	14400	D1	216.	108.		03-Apr-13 02:31	SNP1
none	Oil Range Organics (>C28-40)	20	6260	D1	1080	540.		03-Apr-13 02:31	SNP1

2 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0328SO008
Project ID: Magnolia, AR
Lab ID: 201077320
Description: None
Method: EPA 8015/8021
8015/8021 Med Soil

Project: 20152232
Site: None
Matrix: Soil
Prep Level: Soil
% Moisture: 7.6 Corrected
Batch: 205492
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 29-Mar-13

Units: mg/kg

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
none	Gasoline Range Organics(C6-10)	10	510.	D6	27.1	11.5		02-Apr-13 01:28	DHR1

1 compound(s) reported

Protocol 4/12/2013 17:15:24

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical™

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St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0328SO008
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077320 (TCLP)
Matrix: Soil
% Moisture: 7.6 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205580
Method: EPA 8270 (TCLP)
GCMS SVOAs TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		0.100	0.0000400	7.50	01-Apr-13 20:45 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		0.100	0.0000600	0.130	01-Apr-13 20:45 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		0.100	0.0000800	0.500	01-Apr-13 20:45 JAM
118-74-1	Hexachlorobenzene	1	ND		0.100	0.0000700	0.130	01-Apr-13 20:45 JAM
67-72-1	Hexachloroethane	1	ND		0.100	0.0000600	3.00	01-Apr-13 20:45 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		0.100	0.000100	200.	01-Apr-13 20:45 JAM
	3&4-Methylphenol	1	ND		0.100	0.000100	200.	01-Apr-13 20:45 JAM
98-95-3	Nitrobenzene	1	ND		0.100	0.0000800	2.00	01-Apr-13 20:45 JAM
87-86-5	Pentachlorophenol	1	ND		0.250	0.0000500	100.	01-Apr-13 20:45 JAM
110-86-1	Pyridine	1	ND		0.100	0.000110	5.00	01-Apr-13 20:45 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		0.250	0.000090	400.	01-Apr-13 20:45 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		0.100	0.0000500	2.00	01-Apr-13 20:45 JAM

12 compound(s) reported

Protocol 4/12/2013 17:15:24

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
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St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328SO008
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077320 (TCLP)
Matrix: Soil
% Moisture: 7.6 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205577
Method: EPA 8260 (TCLP)
GCMS VOAs TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
71-43-2	Benzene	1	ND		0.100	0.0104	0.500	01-Apr-13 16:00 MHM
78-93-3	2-Butanone (MEK)	1	ND		0.200	0.0533	200.	01-Apr-13 16:00 MHM
56-23-5	Carbon tetrachloride	1	ND		0.100	0.0106	0.500	01-Apr-13 16:00 MHM
108-90-7	Chlorobenzene	1	ND		0.100	0.0132	100.	01-Apr-13 16:00 MHM
67-66-3	Chloroform	1	ND		0.100	0.0171	6.00	01-Apr-13 16:00 MHM
107-06-2	1,2-Dichloroethane	1	ND		0.100	0.0148	0.500	01-Apr-13 16:00 MHM
75-35-4	1,1-Dichloroethene	1	ND		0.100	0.0111	0.700	01-Apr-13 16:00 MHM
127-18-4	Tetrachloroethene	1	ND		0.100	0.0136	0.700	01-Apr-13 16:00 MHM
79-01-6	Trichloroethene	1	ND		0.100	0.0131	0.500	01-Apr-13 16:00 MHM
75-01-4	Vinyl chloride	1	ND		0.100	0.0113	0.200	01-Apr-13 16:00 MHM

10 compound(s) reported

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328SO008
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077320 (TCLP)
Matrix: Soil
% Moisture: 7.6 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205582
Method: EPA 6010 (TCLP)
Metals, ICP, TCLP Leachate
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
7440-38-2	Arsenic	1	0.00811	J	0.200	0.00209	5.00	01-Apr-13 20:01	EJH
7440-39-3	Barium	1	0.462	J	2.00	0.00239	100.	01-Apr-13 20:01	EJH
7440-43-9	Cadmium	1	0.00112	J	0.100	0.000722	1.00	01-Apr-13 20:01	EJH
7440-47-3	Chromium	1	ND		0.200	0.00400	5.00	01-Apr-13 20:01	EJH
7439-92-1	Lead	1	0.0208	J	0.200	0.00230	5.00	01-Apr-13 20:01	EJH
7782-49-2	Selenium	1	ND		0.200	0.0286	1.00	01-Apr-13 20:01	EJH
7440-22-4	Silver	1	ND		0.200	0.00116	5.00	01-Apr-13 20:01	EJH

7 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0328SO008
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077320 (TCLP)
Matrix: Soil
% Moisture: 7.6 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205583
Method: EPA 7470 (TCLP)
Mercury TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.000200	0.0000340	0.200	01-Apr-13 14:10 MHB1

1 compound(s) reported

Protocol 4/12/2013 17:15:24

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical™

Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
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(504) 469-0333

Client: CTEH

Client ID: MAAR0328SO009
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077321
Matrix: Soil
% Moisture: 6.7 Corrected
Description: None
Prep Level: Soil
Batch: 205499
Method: EPA 8015 Mod Ext
8015 TPH Extractables Soil
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 29-Mar-13

Units: mg/kg

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Diesel Range Organics (C10-28)	20	15300	D1	212.	106.		03-Apr-13 02:58 SNP1
none	Oil Range Organics (>C28-40)	20	7320	D1	1060	529.		03-Apr-13 02:58 SNP1

2 compound(s) reported

Protocol 4/12/2013 17:15:24

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328SO009
Project ID: Magnolia, AR
Lab ID: 201077321
Description: None
Method: EPA 8015/8021
8015/8021 Med Soil

Project: 20152232
Site: None
Matrix: Soil
Prep Level: Soil
% Moisture: 6.7 Corrected
Batch: 205492
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 29-Mar-13

Units: mg/kg

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
none	Gasoline Range Organics(C6-10)	10	685.	D6	26.8	11.3		02-Apr-13 01:55	DHR1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0328SO009
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077321 (TCLP)
Matrix: Soil
% Moisture: 6.7 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205580
Method: EPA 8270 (TCLP)
GCMS SVOAs TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		0.100	0.0000400	7.50	01-Apr-13 21:14 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		0.100	0.0000600	0.130	01-Apr-13 21:14 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		0.100	0.0000800	0.500	01-Apr-13 21:14 JAM
118-74-1	Hexachlorobenzene	1	ND		0.100	0.0000700	0.130	01-Apr-13 21:14 JAM
67-72-1	Hexachloroethane	1	ND		0.100	0.0000600	3.00	01-Apr-13 21:14 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		0.100	0.000100	200.	01-Apr-13 21:14 JAM
	3&4-Methylphenol	1	ND		0.100	0.000100	200.	01-Apr-13 21:14 JAM
98-95-3	Nitrobenzene	1	ND		0.100	0.0000800	2.00	01-Apr-13 21:14 JAM
87-86-5	Pentachlorophenol	1	ND		0.250	0.0000500	100.	01-Apr-13 21:14 JAM
110-86-1	Pyridine	1	ND		0.100	0.000110	5.00	01-Apr-13 21:14 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		0.250	0.000090	400.	01-Apr-13 21:14 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		0.100	0.0000500	2.00	01-Apr-13 21:14 JAM

12 compound(s) reported

Protocol 4/12/2013 17:15:24

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Client: CTEH

Client ID: MAAR0328SO009
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077321 (TCLP)
Matrix: Soil
% Moisture: 6.7 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205577
Method: EPA 8260 (TCLP)
GCMS VOAs TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
71-43-2	Benzene	1	ND		0.100	0.0104	0.500	01-Apr-13 16:19 MHM
78-93-3	2-Butanone (MEK)	1	ND		0.200	0.0533	200.	01-Apr-13 16:19 MHM
56-23-5	Carbon tetrachloride	1	ND		0.100	0.0106	0.500	01-Apr-13 16:19 MHM
108-90-7	Chlorobenzene	1	ND		0.100	0.0132	100.	01-Apr-13 16:19 MHM
67-66-3	Chloroform	1	ND		0.100	0.0171	6.00	01-Apr-13 16:19 MHM
107-06-2	1,2-Dichloroethane	1	ND		0.100	0.0148	0.500	01-Apr-13 16:19 MHM
75-35-4	1,1-Dichloroethene	1	ND		0.100	0.0111	0.700	01-Apr-13 16:19 MHM
127-18-4	Tetrachloroethene	1	ND		0.100	0.0136	0.700	01-Apr-13 16:19 MHM
79-01-6	Trichloroethene	1	ND		0.100	0.0131	0.500	01-Apr-13 16:19 MHM
75-01-4	Vinyl chloride	1	ND		0.100	0.0113	0.200	01-Apr-13 16:19 MHM

10 compound(s) reported

Protocol 4/12/2013 17:15:24

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328SO009
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077321 (TCLP)
Matrix: Soil
% Moisture: 6.7 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205582
Method: EPA 6010 (TCLP)
Metals, ICP, TCLP Leachate
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
7440-38-2	Arsenic	1	0.00689	J	0.200	0.00209	5.00	01-Apr-13 20:20	EJH
7440-39-3	Barium	1	0.391	J	2.00	0.00239	100.	01-Apr-13 20:20	EJH
7440-43-9	Cadmium	1	0.000863	J	0.100	0.000722	1.00	01-Apr-13 20:20	EJH
7440-47-3	Chromium	1	ND		0.200	0.00400	5.00	01-Apr-13 20:20	EJH
7439-92-1	Lead	1	0.0138	J	0.200	0.00230	5.00	01-Apr-13 20:20	EJH
7782-49-2	Selenium	1	ND		0.200	0.0286	1.00	01-Apr-13 20:20	EJH
7440-22-4	Silver	1	ND		0.200	0.00116	5.00	01-Apr-13 20:20	EJH

7 compound(s) reported

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
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(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0328SO009
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077321 (TCLP)
Matrix: Soil
% Moisture: 6.7 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205583
Method: EPA 7470 (TCLP)
Mercury TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.000200	0.0000340	0.200	01-Apr-13 14:12 MHB1

1 compound(s) reported

Protocol 4/12/2013 17:15:24

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
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(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0328SO010
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077322
Matrix: Soil
% Moisture: 7.4 Corrected
Description: None
Prep Level: Soil
Batch: 205499
Method: EPA 8015 Mod Ext
8015 TPH Extractables Soil
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 29-Mar-13

Units: mg/kg

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
none	Diesel Range Organics (C10-28)	20	7170	D1	212.	106.		03-Apr-13 03:26	SNP1
none	Oil Range Organics (>C28-40)	20	3550	D1	1060	530.		03-Apr-13 03:26	SNP1

2 compound(s) reported

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Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
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(504) 469-0333

Client: CTEH

Client ID: MAAR0328SO010
Project ID: Magnolia, AR
Lab ID: 201077322
Description: None
Method: EPA 8015/8021
8015/8021 Med Soil

Project: 20152232
Site: None
Matrix: Soil
Prep Level: Soil
% Moisture: 7.4 Corrected
Batch: 205492
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 29-Mar-13

Units: mg/kg

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
none	Gasoline Range Organics(C6-10)	10	903.	D6	27.0	11.4		02-Apr-13 02:22	DHR1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
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Client: CTEH

Client ID: MAAR0328SO010
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077322 (TCLP)
Matrix: Soil
% Moisture: 7.4 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205580
Method: EPA 8270 (TCLP)
GCMS SVOAs TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		0.100	0.0000400	7.50	01-Apr-13 21:42 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		0.100	0.0000600	0.130	01-Apr-13 21:42 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		0.100	0.0000800	0.500	01-Apr-13 21:42 JAM
118-74-1	Hexachlorobenzene	1	ND		0.100	0.0000700	0.130	01-Apr-13 21:42 JAM
67-72-1	Hexachloroethane	1	ND		0.100	0.0000600	3.00	01-Apr-13 21:42 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		0.100	0.000100	200.	01-Apr-13 21:42 JAM
	3&4-Methylphenol	1	ND		0.100	0.000100	200.	01-Apr-13 21:42 JAM
98-95-3	Nitrobenzene	1	ND		0.100	0.0000800	2.00	01-Apr-13 21:42 JAM
87-86-5	Pentachlorophenol	1	ND		0.250	0.0000500	100.	01-Apr-13 21:42 JAM
110-86-1	Pyridine	1	ND		0.100	0.000110	5.00	01-Apr-13 21:42 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		0.250	0.000090	400.	01-Apr-13 21:42 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		0.100	0.0000500	2.00	01-Apr-13 21:42 JAM

12 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
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(504) 469-0333

Client: CTEH

Client ID: MAAR0328SO010
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077322 (TCLP)
Matrix: Soil
% Moisture: 7.4 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205577
Method: EPA 8260 (TCLP)
GCMS VOAs TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
71-43-2	Benzene	1	ND		0.100	0.0104	0.500	01-Apr-13 16:39 MHM
78-93-3	2-Butanone (MEK)	1	ND		0.200	0.0533	200.	01-Apr-13 16:39 MHM
56-23-5	Carbon tetrachloride	1	ND		0.100	0.0106	0.500	01-Apr-13 16:39 MHM
108-90-7	Chlorobenzene	1	ND		0.100	0.0132	100.	01-Apr-13 16:39 MHM
67-66-3	Chloroform	1	ND		0.100	0.0171	6.00	01-Apr-13 16:39 MHM
107-06-2	1,2-Dichloroethane	1	ND		0.100	0.0148	0.500	01-Apr-13 16:39 MHM
75-35-4	1,1-Dichloroethene	1	ND		0.100	0.0111	0.700	01-Apr-13 16:39 MHM
127-18-4	Tetrachloroethene	1	ND		0.100	0.0136	0.700	01-Apr-13 16:39 MHM
79-01-6	Trichloroethene	1	ND		0.100	0.0131	0.500	01-Apr-13 16:39 MHM
75-01-4	Vinyl chloride	1	ND		0.100	0.0113	0.200	01-Apr-13 16:39 MHM

10 compound(s) reported

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328SO010
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077322 (TCLP)
Matrix: Soil
% Moisture: 7.4 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205582
Method: EPA 6010 (TCLP)
Metals, ICP, TCLP Leachate
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
7440-38-2	Arsenic	1	0.00659	J	0.200	0.00209	5.00	01-Apr-13 20:24	EJH
7440-39-3	Barium	1	0.536	J	2.00	0.00239	100.	01-Apr-13 20:24	EJH
7440-43-9	Cadmium	1	ND		0.100	0.000722	1.00	01-Apr-13 20:24	EJH
7440-47-3	Chromium	1	ND		0.200	0.00400	5.00	01-Apr-13 20:24	EJH
7439-92-1	Lead	1	0.0105	J	0.200	0.00230	5.00	01-Apr-13 20:24	EJH
7782-49-2	Selenium	1	ND		0.200	0.0286	1.00	01-Apr-13 20:24	EJH
7440-22-4	Silver	1	ND		0.200	0.00116	5.00	01-Apr-13 20:24	EJH

7 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0328SO010
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077322 (TCLP)
Matrix: Soil
% Moisture: 7.4 Not Corrected
Description: None
Prep Level: TCLP
Batch: 205583
Method: EPA 7470 (TCLP)
Mercury TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.000200	0.0000340	0.200	01-Apr-13 14:14 MHB1

1 compound(s) reported

Protocol 4/12/2013 17:15:25

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Pace Analytical Services, Inc.
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(504) 469-0333

Client: CTEH

Client ID: TB009
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077323
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205430
Method: EPA 8260
GCMS VOAs Water
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 29-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
67-64-1	Acetone	1	ND		10.0	8.88		29-Mar-13 18:54	RMP
71-43-2	Benzene	1	ND		5.00	0.518		29-Mar-13 18:54	RMP
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		29-Mar-13 18:54	RMP
75-25-2	Bromoform	1	ND		5.00	0.920		29-Mar-13 18:54	RMP
74-83-9	Bromomethane	1	ND		5.00	0.855		29-Mar-13 18:54	RMP
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		29-Mar-13 18:54	RMP
75-15-0	Carbon disulfide	1	ND		5.00	0.530		29-Mar-13 18:54	RMP
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		29-Mar-13 18:54	RMP
108-90-7	Chlorobenzene	1	1.34	J	5.00	0.662		29-Mar-13 18:54	RMP
75-00-3	Chloroethane	1	ND		5.00	1.12		29-Mar-13 18:54	RMP
67-66-3	Chloroform	1	ND		5.00	0.853		29-Mar-13 18:54	RMP
74-87-3	Chloromethane	1	ND		5.00	0.636		29-Mar-13 18:54	RMP
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		29-Mar-13 18:54	RMP
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		29-Mar-13 18:54	RMP
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		29-Mar-13 18:54	RMP
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		29-Mar-13 18:54	RMP
75-34-3	1,1-Dichloroethane	1	0.590	J	5.00	0.565		29-Mar-13 18:54	RMP
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		29-Mar-13 18:54	RMP
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		29-Mar-13 18:54	RMP
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		29-Mar-13 18:54	RMP
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		29-Mar-13 18:54	RMP
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		29-Mar-13 18:54	RMP
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		29-Mar-13 18:54	RMP
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		29-Mar-13 18:54	RMP
100-41-4	Ethylbenzene	1	ND		5.00	0.292		29-Mar-13 18:54	RMP
591-78-6	2-Hexanone	1	ND		10.0	1.28		29-Mar-13 18:54	RMP
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405		29-Mar-13 18:54	RMP
79-20-9	Methyl acetate	1	ND		10.0	2.36		29-Mar-13 18:54	RMP
75-09-2	Methylene chloride	1	1.96	J	5.00	1.44		29-Mar-13 18:54	RMP
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		29-Mar-13 18:54	RMP
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		29-Mar-13 18:54	RMP
100-42-5	Styrene	1	ND		5.00	0.571		29-Mar-13 18:54	RMP
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		29-Mar-13 18:54	RMP
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		29-Mar-13 18:54	RMP

Protocol 4/12/2013 17:15:25

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MDL denotes method detection limit
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: TB009
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077323
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205430
Method: EPA 8260
GCMS VOAs Water
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 29-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
108-88-3	Toluene	1	ND		5.00	0.536		29-Mar-13 18:54	RMP
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		29-Mar-13 18:54	RMP
79-00-5	1,1,2-Trichloroethane	1	0.950	J	5.00	0.915		29-Mar-13 18:54	RMP
79-01-6	Trichloroethene	1	ND		5.00	0.654		29-Mar-13 18:54	RMP
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575		29-Mar-13 18:54	RMP
75-01-4	Vinyl chloride	1	ND		5.00	0.564		29-Mar-13 18:54	RMP
	m&p-Xylene	1	ND		5.00	0.937		29-Mar-13 18:54	RMP
95-47-6	o-Xylene	1	ND		5.00	0.649		29-Mar-13 18:54	RMP

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Client: CTEH

Client ID: MAAR0328SCO001
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201079474
Matrix: Soil
% Moisture: 4.6 Corrected
Description: None
Prep Level: Soil
Batch: 205492
Method: EPA 8015/8021
8015/8021 Med Soil
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 29-Mar-13

Units: mg/kg

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
71-43-2	Benzene	10	1.80	D6	0.262	0.0545		01-Apr-13 20:21	RMP
100-41-4	Ethylbenzene	10	7.30	D6	0.262	0.0314		01-Apr-13 20:21	RMP
108-88-3	Toluene	10	6.05	D6	0.262	0.0168		01-Apr-13 20:21	RMP
	m&p-Xylene	10	12.7	D6	0.262	0.0398		01-Apr-13 20:21	RMP
95-47-6	o-Xylene	10	12.4	D6	0.262	0.0335		01-Apr-13 20:21	RMP

5 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Sample Results

Client: CTEH

Client ID: MAAR0328SCO001 (SPLP)
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201079475 (SPLP)
Matrix: Soil
% Moisture: 0 Not Corrected
Description: None
Prep Level: SPLP
Batch: 206245
Method: EPA 8015 Mod Ext (SPLP)
8015 TPH Extractables SPLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 10-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
none	Diesel Range Organics (C10-28)	1	0.966		0.250	0.0760		11-Apr-13 19:50	SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.500	0.0490		11-Apr-13 19:50	SNP1

2 compound(s) reported

Protocol 4/12/2013 17:15:25

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Client: CTEH

Client ID: MAAR0328SCO001 (SPLP)
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201079475 (SPLP)
Matrix: Soil
% Moisture: 0 Not Corrected
Description: None
Prep Level: SPLP
Batch: 206115
Method: EPA 8015/8021 (SPLP)
8015/8021 SPLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 11-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
71-43-2	Benzene	10	0.00780	J D6	0.0500	0.00104		11-Apr-13 13:02 DHR1
100-41-4	Ethylbenzene	10	0.263	B2,D6	0.0500	0.000600		11-Apr-13 13:02 DHR1
108-88-3	Toluene	10	0.617	B2,D6	0.0500	0.000320		11-Apr-13 13:02 DHR1
	m&p-Xylene	10	0.988	B2,D6	0.0500	0.000760		11-Apr-13 13:02 DHR1
95-47-6	o-Xylene	10	0.568	B2,D6	0.0500	0.000640		11-Apr-13 13:02 DHR1

5 compound(s) reported

Sample Results

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Client: CTEH

Client ID: MAAR0328SO001
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077313
Matrix: Soil
%Moisture: 12.1 Not Corrected
Description: None

Collected: 28-Mar-13
Received: 29-Mar-13

Analyte	Method	Batch	DF	Result	Qu	Units	Reporting Limit	MDL	Analysis	Limit
Cyanide, Reactive	SW-846 7.3.3.2	205559	1	ND		mg/kg	25.0	25.0	01-Apr-13 08:30 LJL	
Flash Point	EPA 1010	205562	1	>140		deg F			01-Apr-13 14:25 LJL	
pH	EPA 9045	205485	1	4.48		Std. Units			29-Mar-13 11:05 LVA	
Sulfide, Reactive	SW-846 7.3.4.2	205560	1	ND		mg/kg	50.0	50.0	01-Apr-13 14:15 LJL	

4 parameter(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Sample Results

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Client: CTEH

Client ID: MAAR0328SO002
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077314
Matrix: Soil
%Moisture: 12 Not Corrected
Description: None

Collected: 28-Mar-13
Received: 29-Mar-13

Analyte	Method	Batch	DF	Result	Qu	Units	Reporting Limit	MDL	Analysis	Limit
Cyanide, Reactive	SW-846 7.3.3.2	205559	1	ND		mg/kg	25.0	25.0	01-Apr-13 08:30 LJL	
Flash Point	EPA 1010	205562	1	>140		deg F			01-Apr-13 14:25 LJL	
pH	EPA 9045	205485	1	4.20		Std. Units			29-Mar-13 11:05 LVA	
Sulfide, Reactive	SW-846 7.3.4.2	205560	1	ND		mg/kg	50.0	50.0	01-Apr-13 14:15 LJL	

4 parameter(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Sample Results

Client: CTEH

Client ID: MAAR0328SO003
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077315
Matrix: Soil
%Moisture: 9.5 Not Corrected
Description: None

Collected: 28-Mar-13
Received: 29-Mar-13

Analyte	Method	Batch	DF	Result	Qu	Units	Reporting Limit	MDL	Analysis	Limit
Cyanide, Reactive	SW-846 7.3.3.2	205559	1	ND		mg/kg	25.0	25.0	01-Apr-13 08:30 LJL	
Flash Point	EPA 1010	205562	1	>140		deg F			01-Apr-13 14:25 LJL	
pH	EPA 9045	205485	1	4.28		Std. Units			29-Mar-13 11:05 LVA	
Sulfide, Reactive	SW-846 7.3.4.2	205560	1	ND		mg/kg	50.0	50.0	01-Apr-13 14:15 LJL	

4 parameter(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Sample Results

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Client: CTEH

Client ID: MAAR0328SO004
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077316
Matrix: Soil
%Moisture: 19.6 Not Corrected
Description: None

Collected: 28-Mar-13
Received: 29-Mar-13

Analyte	Method	Batch	DF	Result	Qu	Units	Reporting Limit	MDL	Analysis	Limit
Cyanide, Reactive	SW-846 7.3.3.2	205559	1	ND		mg/kg	25.0	25.0	01-Apr-13 08:30 LJL	
Flash Point	EPA 1010	205562	1	>140		deg F			01-Apr-13 14:25 LJL	
pH	EPA 9045	205485	1	4.78		Std. Units			29-Mar-13 11:05 LVA	
Sulfide, Reactive	SW-846 7.3.4.2	205560	1	ND		mg/kg	50.0	50.0	01-Apr-13 14:15 LJL	

4 parameter(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Sample Results

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Client: CTEH

Client ID: MAAR0328SO005
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077317
Matrix: Soil
%Moisture: 17.6 Not Corrected
Description: None

Collected: 28-Mar-13
Received: 29-Mar-13

Analyte	Method	Batch	DF	Result	Qu	Units	Reporting Limit	MDL	Analysis	Limit
Cyanide, Reactive	SW-846 7.3.3.2	205559	1	ND		mg/kg	25.0	25.0	01-Apr-13 08:30 LJL	
Flash Point	EPA 1010	205562	1	>140		deg F			01-Apr-13 14:25 LJL	
pH	EPA 9045	205485	1	5.04		Std. Units			29-Mar-13 11:05 LVA	
Sulfide, Reactive	SW-846 7.3.4.2	205560	1	ND		mg/kg	50.0	50.0	01-Apr-13 14:15 LJL	

4 parameter(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Sample Results

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Client: CTEH

Client ID: MAAR0328SO006
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077318
Matrix: Soil
%Moisture: 7.6 Not Corrected
Description: None

Collected: 28-Mar-13
Received: 29-Mar-13

Analyte	Method	Batch	DF	Result	Qu	Units	Reporting Limit	MDL	Analysis	Limit
Cyanide, Reactive	SW-846 7.3.3.2	205559	1	ND		mg/kg	25.0	25.0	01-Apr-13 08:30 LJL	
Flash Point	EPA 1010	205562	1	>140		deg F			01-Apr-13 14:25 LJL	
pH	EPA 9045	205485	1	4.20		Std. Units			29-Mar-13 11:05 LVA	
Sulfide, Reactive	SW-846 7.3.4.2	205560	1	ND		mg/kg	50.0	50.0	01-Apr-13 14:15 LJL	

4 parameter(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Sample Results

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Client: CTEH

Client ID: MAAR0328SO007
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077319
Matrix: Soil
%Moisture: 7.4 Not Corrected
Description: None

Collected: 28-Mar-13
Received: 29-Mar-13

Analyte	Method	Batch	DF	Result	Qu	Units	Reporting Limit	MDL	Analysis	Limit
Cyanide, Reactive	SW-846 7.3.3.2	205559	1	ND		mg/kg	25.0	25.0	01-Apr-13 08:30 LJL	
Flash Point	EPA 1010	205562	1	>140		deg F			01-Apr-13 14:25 LJL	
pH	EPA 9045	205485	1	4.26		Std. Units			29-Mar-13 11:05 LVA	
Sulfide, Reactive	SW-846 7.3.4.2	205560	1	ND		mg/kg	50.0	50.0	01-Apr-13 14:15 LJL	

4 parameter(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Sample Results

Client: CTEH

Client ID: MAAR0328SO008
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077320
Matrix: Soil
%Moisture: 7.6 Not Corrected
Description: None

Collected: 28-Mar-13
Received: 29-Mar-13

Analyte	Method	Batch	DF	Result	Qu	Units	Reporting Limit	MDL	Analysis	Limit
Cyanide, Reactive	SW-846 7.3.3.2	205559	1	ND		mg/kg	25.0	25.0	01-Apr-13 08:30 LJL	
Flash Point	EPA 1010	205562	1	>140		deg F			01-Apr-13 14:25 LJL	
pH	EPA 9045	205485	1	4.32		Std. Units			29-Mar-13 11:05 LVA	
Sulfide, Reactive	SW-846 7.3.4.2	205560	1	ND		mg/kg	50.0	50.0	01-Apr-13 14:15 LJL	

4 parameter(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Sample Results

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Client: CTEH

Client ID: MAAR0328SO009
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077321
Matrix: Soil
%Moisture: 6.7 Not Corrected
Description: None

Collected: 28-Mar-13
Received: 29-Mar-13

Analyte	Method	Batch	DF	Result	Qu	Units	Reporting Limit	MDL	Analysis	Limit
Cyanide, Reactive	SW-846 7.3.3.2	205559	1	ND		mg/kg	25.0	25.0	01-Apr-13 08:30 LJL	
Flash Point	EPA 1010	205562	1	>140		deg F			01-Apr-13 14:25 LJL	
pH	EPA 9045	205485	1	4.30		Std. Units			29-Mar-13 11:05 LVA	
Sulfide, Reactive	SW-846 7.3.4.2	205560	1	ND		mg/kg	50.0	50.0	01-Apr-13 14:15 LJL	

4 parameter(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Sample Results

Client: CTEH

Client ID: MAAR0328SO010
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201077322
Matrix: Soil
%Moisture: 7.4 Not Corrected
Description: None

Collected: 28-Mar-13
Received: 29-Mar-13

Analyte	Method	Batch	DF	Result	Qu	Units	Reporting Limit	MDL	Analysis	Limit
Cyanide, Reactive	SW-846 7.3.3.2	205559	1	ND		mg/kg	25.0	25.0	01-Apr-13 08:30 LJL	
Flash Point	EPA 1010	205562	1	>140		deg F			01-Apr-13 14:25 LJL	
pH	EPA 9045	205485	1	4.04		Std. Units			29-Mar-13 11:05 LVA	
Sulfide, Reactive	SW-846 7.3.4.2	205560	1	ND		mg/kg	50.0	50.0	01-Apr-13 14:15 LJL	

4 parameter(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Sample Results

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Client: CTEH

Client ID: MAAR0328SCO001
Project: 20152232
Project ID: Magnolia, AR
Site: None
Lab ID: 201079474
Matrix: Soil
%Moisture: 4.6 Corrected
Description: None

Collected: 28-Mar-13
Received: 29-Mar-13

Analyte	Method	Batch	DF	Result	Qu	Units	Reporting Limit	MDL	Analysis	Limit
Chloride	EPA 9251	206042	10	106.	D2	mg/kg	97.0	97.0	08-Apr-13 09:36 LVA	
Free Liquids	EPA 9095	206266	1	ND		mL/5min	1.00	1.00	10-Apr-13 11:10 TAE	

2 parameter(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Surrogate Recovery

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(504) 469-0333

Batch: 205580 **Project:** 20152232

Method: TCLP GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201077789	205580 BLANK 1		76	60	46	72	35	86		
201077805	205580 BLANK 2		59	49	35	59	28	79		
201077790	205580 LCS 1		94	64	42	79	32	91		
201077313	MAAR0328SO001		51	41	35	57	28	62		
201077791	MAAR0328SO001 MS 1		87	60	46	77	34	96		
201077792	MAAR0328SO001 MSD 1		82	57	40	74	30	90		
201077314	MAAR0328SO002		49	40	35	53	28	58		
201077315	MAAR0328SO003		60	49	36	59	30	68		
201077316	MAAR0328SO004		48	42	33	50	26	58		
201077317	MAAR0328SO005		61	49	44	64	32	73		
201077318	MAAR0328SO006		85	60	54	83	37	95		
201077319	MAAR0328SO007		78	28 *	46	70	35	90		
201077320	MAAR0328SO008		55	46	33	54	25	62		
201077321	MAAR0328SO009		80	65	49	76	36	93		
201077322	MAAR0328SO010		94	75	59	87	41	99		
	QC limits:		25-145	34-117	10-118	33-120	15-134	24-133		

Sur 1: 2,4,6-Tribromophenol (S)
Sur 2: 2-Fluorobiphenyl (S)
Sur 3: 2-Fluorophenol (S)
Sur 4: Nitrobenzene-d5 (S)
Sur 5: Phenol-d5 (S)
Sur 6: Terphenyl-d14 (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205430 **Project:** 20152232

Method: Water GC/MS Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201077107	205430 BLANK 1		90	98	94					
201077783	205430 BLANK 2		87	91	88					
201077108	205430 LCS 1		83	91	90					
201077784	205430 LCS 2		86	85	91					
201077109	CELL "C" 013-173-091 MS 1		88	80	86					
201077110	CELL "C" 013-173-091 MSD 1		91	83	86					
201077323	TB009		94	90	91					
	QC limits:		68-124	72-126	79-119					

Sur 1: 4-Bromofluorobenzene (S)
Sur 2: Dibromofluoromethane (S)
Sur 3: Toluene-d8 (S)

*** denotes surrogate recovery outside of QC limits.**
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205577 **Project:** 20152232

Method: TCLP GC/MS Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201077785	205577 BLANK 1		78	86	82					
201077876	205577 BLANK 2		80	83	84					
201077786	205577 LCS 1		97	96	99					
201077313	MAAR0328SO001		78	84	83					
201077787	MAAR0328SO001 MS 1		82	82	88					
201077788	MAAR0328SO001 MSD 1		82	80	85					
201077314	MAAR0328SO002		83	87	87					
201077315	MAAR0328SO003		83	81	83					
201077316	MAAR0328SO004		78	82	83					
201077317	MAAR0328SO005		80	81	86					
201077318	MAAR0328SO006		80	78	84					
201077319	MAAR0328SO007		81	80	82					
201077320	MAAR0328SO008		76	80	82					
201077321	MAAR0328SO009		82	87	87					
201077322	MAAR0328SO010		79	79	82					
	QC limits:		68-124	72-126	79-119					

Sur 1: 4-Bromofluorobenzene (S)
Sur 2: Dibromofluoromethane (S)
Sur 3: Toluene-d8 (S)

*** denotes surrogate recovery outside of QC limits.**
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205499 **Project:** 20152232

Method: Soil GC Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201077470	205499 BLANK 1		93	74						
201077471	205499 LCS 1		92	86						
201077313	MAAR0328SO001		0 D	0 D						
201077472	MAAR0328SO001 MS 1		0 D	0 D						
201077473	MAAR0328SO001 MSD 1		0 D	0 D						
201077314	MAAR0328SO002		0 D	0 D						
201077315	MAAR0328SO003		0 D	0 D						
201077316	MAAR0328SO004	G1	237 D	318 D						
201077317	MAAR0328SO005	G1	287 D	197 D						
201077318	MAAR0328SO006		0 D	0 D						
201077319	MAAR0328SO007		0 D	0 D						
201077320	MAAR0328SO008		0 D	0 D						
201077321	MAAR0328SO009		0 D	0 D						
201077322	MAAR0328SO010		0 D	0 D						
	QC limits:		16-147	16-127						

Sur 1: n-Pentacosane (S)
Sur 2: o-Terphenyl (S)

*** denotes surrogate recovery outside of QC limits.**
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 206245 **Project:** 20152232

Method: Water GC Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201080399	206245 BLANK 1		93	76						
201080782	206245 BLANK 2		64	59						
201080400	206245 LCS 1		55	55						
201079475	MAAR0328SCO001 (SPLP)		25	79						
	QC limits:		16-137	10-121						

Sur 1: n-Pentacosane (S)
Sur 2: o-Terphenyl (S)

Surrogates 4/12/2013 17:15:29

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205492 **Project:** 20152232

Method: Soil GC Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201077368	205492 BLANK 1		113							
201077369	205492 LCS 1		107							
201079474	MAAR0328SCO001		356 D							
201077313	MAAR0328SO001	G1	356 D							
201078098	MAAR0328SO001 MS 1	G1	524 D							
201078099	MAAR0328SO001 MSD 1	G1	442 D							
201077314	MAAR0328SO002	G1	574 D							
201077315	MAAR0328SO003	G1	383 D							
201077316	MAAR0328SO004	G1	327 D							
201077317	MAAR0328SO005	G1	255 D							
201077318	MAAR0328SO006	G1	896 D							
201077319	MAAR0328SO007	G1	955 D							
201077320	MAAR0328SO008	G1	607 D							
201077321	MAAR0328SO009	G1	498 D							
201077322	MAAR0328SO010	G1	488 D							
	QC limits:		60-129							

Sur 1: 4-Bromofluorobenzene (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 206115 **Project:** 20152232

Method: Water GC Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201079821	206115 BLANK 1		106							
201080446	206115 BLANK 2		104							
201080722	206115 BLANK 3		105							
201080873	206115 BLANK 4		101							
201079822	206115 LCS 1		106							
201080447	206115 LCS 2		105							
201080874	206115 LCS 3		104							
201080448	LEU-0080 MS 1		113							
201080449	LEU-0080 MSD 1		104							
201079475	MAAR0328SCO001 (SPLP)		102							
	QC limits:		60-129							

Sur 1: 4-Bromofluorobenzene (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Batch: 205580 **Project:** 20152232 **LCS:** 201077790 01-Apr-13 15:07

Method: TCLP GC/MS Semivolatile Organics **MS:** 201077791 01-Apr-13 16:31

Units: mg/L **MSD:** 201077792 01-Apr-13 17:00

Original for MS: Client Sample 201077313

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
1,4-Dichlorobenzene	0.500	0.331	66	0.500		0.319	0.315	64	63	1	45-110	35-110	20	
2,4-Dinitrotoluene	0.500	0.333	67	0.500		0.308	0.286	62	57	7	49-124	33-128	20	
Hexachloro-1,3-butadiene	0.500	0.285	57	0.500		0.279	0.274	56	55	2	34-110	27-110	20	
Hexachlorobenzene	0.500	0.329	66	0.500		0.342	0.333	68	67	3	52-115	40-111	20	
Hexachloroethane	0.500	0.316	63	0.500		0.313	0.309	63	62	1	43-110	35-110	20	
2-Methylphenol (o-Cresol)	0.500	0.383	77	0.500		0.373	0.371	75	74	0	46-110	10-126	20	
3&4-Methylphenol	1.00	0.830	83	1.00		0.787	0.795	79	80	1	45-117	38-128	20	
Nitrobenzene	0.500	0.382	76	0.500		0.390	0.382	78	77	2	41-112	29-118	20	
Pentachlorophenol	0.500	0.344	69	0.500		0.228	0.207	46	42	9	38-135	24-168	20	
Pyridine	0.500	0.282	56	0.500		0.179	0.169	36 *	34 *	5	24-118	40-112	20	Q1
2,4,5-Trichlorophenol	0.500	0.405	81	0.500		0.354	0.336	71	67	5	44-110	35-144	20	
2,4,6-Trichlorophenol	0.500	0.387	77	0.500		0.369	0.346	74	69	6	43-110	33-140	20	

12 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205430 **Project:** 20152232 **LCS:** 201077108 29-Mar-13 15:56

Method: Water GC/MS Volatile Organics **MS:** 201077109 02-Apr-13 0:19

Units: ug/L **MSD:** 201077110 02-Apr-13 0:39

Original for MS: Batch Sample 201077026

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acetone	50.0	65.4	131	50.0		57.8	61.3	116	123	6	10-198	10-202	20	
Benzene	50.0	47.9	96	50.0		46.6	47.1	93	94	1	68-129	60-138	20	
Bromodichloromethane	50.0	55.1	110	50.0		51.2	51.9	103	104	1	68-132	66-137	20	
Bromoform	50.0	63.2	126	50.0		56.3	58.3	113	117	3	56-153	53-156	20	
Bromomethane	50.0	79.5	159 *	50.0		63.1	63.6	126	127	1	47-149	43-151	20	Q10
2-Butanone (MEK)	50.0	59.8	120	50.0		46.7	46.7	93	93	0	18-173	14-184	20	
Carbon disulfide	50.0	66.2	132	50.0		54.8	58.0	110	116	6	25-166	17-176	20	
Carbon tetrachloride	50.0	52.7	105	50.0		50.6	50.4	101	101	0	56-146	51-151	20	
Chlorobenzene	50.0	56.2	112	50.0		48.8	51.1	98	102	5	74-131	71-135	20	
Chloroethane	50.0	81.8	164	50.0		66.5	68.4	133	137	3	28-190	21-191	20	
Chloroform	50.0	56.5	113	50.0		50.7	53.0	100	105	5	71-132	67-138	20	
Chloromethane	50.0	59.2	118	50.0		52.7	54.8	105	110	4	27-154	24-158	20	
1,2-Dibromo-3-chloropropane	50.0	55.2	110	50.0		47.7	49.6	95	99	4	40-155	38-162	20	
Dibromochloromethane	50.0	56.3	113	50.0		51.8	54.3	104	109	5	64-138	62-142	20	
1,2-Dibromoethane (EDB)	50.0	58.3	117	50.0		50.3	50.9	101	102	1	62-146	61-149	20	
Dichlorodifluoromethane	50.0	76.9	154	50.0		65.7	68.1	131	136	4	18-173	16-176	20	
1,1-Dichloroethane	50.0	53.6	107	50.0		49.1	50.0	98	100	2	63-135	61-141	20	
1,2-Dichloroethane	50.0	59.0	118	50.0		50.6	51.0	101	102	1	58-150	57-155	20	
1,1-Dichloroethene	50.0	58.1	116	50.0		52.6	54.2	105	108	3	50-151	40-163	20	
cis-1,2-Dichloroethene	50.0	53.0	106	50.0		46.5	49.5	93	99	6	65-132	61-138	20	
trans-1,2-Dichloroethene	50.0	51.1	102	50.0		44.1	46.5	88	93	5	56-137	52-144	20	
1,2-Dichloropropane	50.0	50.6	101	50.0		48.5	48.9	97	98	1	66-131	64-137	20	
cis-1,3-Dichloropropene	50.0	49.2	98	50.0		36.6	36.9	73	74	1	66-135	62-137	20	
trans-1,3-Dichloropropene	50.0	62.4	125	50.0		42.2	42.7	84	85	1	62-146	59-151	20	
Ethylbenzene	50.0	49.4	99	50.0		46.1	48.3	92	97	5	73-129	66-136	20	
2-Hexanone	50.0	52.0	104	50.0		41.8	45.3	84	91	8	29-158	27-165	20	
Isopropylbenzene (Cumene)	50.0	39.4	79	50.0		39.1	41.2	78	82	5	61-139	58-144	20	
Methylene chloride	50.0	62.2	124	50.0		55.8	57.0	112	114	2	41-171	35-165	20	
4-Methyl-2-pentanone (MIBK	50.0	52.7	105	50.0		46.0	46.6	92	93	1	46-159	43-165	20	
Methyl-tert-butyl ether	50.0	64.5	129	50.0		53.5	55.7	107	111	4	51-155	48-164	20	
Styrene	50.0	51.0	102	50.0		46.1	48.4	91	96	5	74-132	63-141	20	
1,1,2,2-Tetrachloroethane	50.0	48.2	96	50.0		44.6	46.9	89	94	5	46-153	41-160	20	
Tetrachloroethene	50.0	49.4	99	50.0		44.8	48.0	90	96	7	57-151	48-160	20	
Toluene	50.0	53.2	106	50.0		50.5	51.1	101	102	1	70-130	62-137	20	
1,1,1-Trichloroethane	50.0	55.8	112	50.0		51.0	51.9	102	104	2	65-132	61-138	20	
1,1,2-Trichloroethane	50.0	58.8	118	50.0		53.8	54.4	108	109	1	64-140	63-145	20	
Trichloroethene	50.0	48.3	97	50.0		46.5	45.7	93	92	2	71-131	62-142	20	
Trichlorofluoromethane	50.0	104.	207 *	50.0		89.7	88.0	179	176	2	37-188	19-196	20	Q10
Vinyl chloride	50.0	60.0	120	50.0		50.2	51.8	100	104	3	42-148	35-153	20	
m&p-Xylene	100.	101.	101	100.		90.2	94.5	90	95	5	71-132	64-138	20	
o-Xylene	50.0	48.0	96	50.0		46.4	47.7	93	95	3	69-129	63-136	20	

QC Protocol 4/12/2013 17:15:31

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205430 **Project:** 20152232 **LCS:** 201077108 29-Mar-13 15:56

Method: Water GC/MS Volatile Organics **MS:** 201077109 02-Apr-13 0:19

Units: ug/L **MSD:** 201077110 02-Apr-13 0:39

Original for MS: Batch Sample 201077026

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu

41 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205577 **Project:** 20152232 **LCS:** 201077786 01-Apr-13 11:19

Method: TCLP GC/MS Volatile Organics **MS:** 201077787 01-Apr-13 11:59

Units: mg/L **MSD:** 201077788 01-Apr-13 12:19

Original for MS: Client Sample 201077313

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Benzene	0.400	0.360	90	0.400		0.415	0.390	104	98	6	68-129	60-138	20	
2-Butanone (MEK)	0.400	0.404	101	0.400		0.237	0.185	59	46	24 *	18-173	14-184	20	
Carbon tetrachloride	0.400	0.392	98	0.400		0.418	0.393	105	98	6	56-146	51-151	20	
Chlorobenzene	0.400	0.400	100	0.400		0.402	0.396	101	99	2	74-131	71-135	20	
Chloroform	0.400	0.376	94	0.400		0.385	0.364	96	91	6	71-132	67-138	20	
1,2-Dichloroethane	0.400	0.409	102	0.400		0.396	0.352	99	88	12	58-150	57-155	20	
1,1-Dichloroethene	0.400	0.422	105	0.400		0.446	0.418	112	105	6	50-151	40-163	20	
Tetrachloroethene	0.400	0.352	88	0.400		0.388	0.372	97	93	4	57-151	48-160	20	
Trichloroethene	0.400	0.363	91	0.400		0.392	0.375	98	94	4	71-131	62-142	20	
Vinyl chloride	0.400	0.439	110	0.400		0.456	0.432	114	108	5	42-148	35-153	20	

10 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205499 **Project:** 20152232 **LCS:** 201077471 02-Apr-13 20:29

Method: Soil GC Semivolatile Organics **MS:** 201077472 02-Apr-13 21:52

Units: mg/kg **MSD:** 201077473 02-Apr-13 22:20

Original for MS: Client Sample 201077313

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Diesel Range Organics (C10-	40.0	32.9	82	44.9	10800	8200	10700	0 *	0 *	26 *	34-125	10-163	20	D1,Q3
1 compound(s) reported														

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 206245 **Project:** 20152232 **LCS:** 201080400 11-Apr-13 16:35

Method: Water GC Semivolatile Organics **MS:**

Units: mg/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Diesel Range Organics (C10-	0.400	0.140	35								10-115			Q5
1 compound(s) reported														

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205492 **Project:** 20152232 **LCS:** 201077369 01-Apr-13 19:27

Method: Soil GC Volatile Organics **MS:** 201078098 02-Apr-13 21:59

Units: mg/kg **MSD:** 201078099 02-Apr-13 22:27

Original for MS: Client Sample 201077313

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Gasoline Range Organics(C6-	25.0	21.8	87	28.4	607.	764.	663.	554 *	198 *	14	61-136	15-147	20	D6,Q3
1 compound(s) reported														

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205492 **Project:** 20152232 **LCS:** 201077369 01-Apr-13 19:54

Method: Soil GC Volatile Organics **MS:**

Units: mg/kg **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Benzene	1.00	1.19	119								78-133			
Ethylbenzene	1.00	1.18	118								81-133			
Toluene	1.00	1.07	107								79-129			
m&p-Xylene	2.00	2.33	116								80-132			
o-Xylene	1.00	1.12	112								80-129			

5 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 206115 **Project:** 20152232 **LCS:** 201080874 11-Apr-13 9:10

Method: Water GC Volatile Organics **MS:** 201080448 10-Apr-13 12:07

Units: mg/L **MSD:** 201080449 10-Apr-13 12:33

Original for MS: Batch Sample 201079346

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Benzene	0.0200	0.0242	121	0.0200	0.0000287	0.0241	0.0230	121	115	5	78-133	38-154	20	
Ethylbenzene	0.0200	0.0241	121	0.0200	0.0000268	0.0242	0.0231	121	115	5	81-133	40-158	20	
Toluene	0.0200	0.0219	110	0.0200	0.000113	0.0219	0.0209	109	104	5	79-129	40-152	20	
m&p-Xylene	0.0400	0.0475	119	0.0400	0.0000609	0.0478	0.0456	119	114	5	80-132	39-157	20	
o-Xylene	0.0200	0.0230	115	0.0200	0.0000316	0.0230	0.0221	115	110	4	80-129	37-160	20	

5 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205582 **Project:** 20152232 **LCS:** 201077812 01-Apr-13 19:10

Method: TCLP ICP Metals **MS:** 201077813 01-Apr-13 19:17

Units: mg/L **MSD:** 201077814 01-Apr-13 19:21

Original for MS: Batch Sample 201077660

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Arsenic	2.00	2.02	101	2.00	0.00700	1.97	1.90	98	95	4	84-117	80-120	20	
Barium	2.00	1.96	98	2.00	0.576	2.45	2.34	94	88	5	85-118	80-120	20	
Cadmium	2.00	2.09	105	2.00	0.00118	1.79	1.74	90	87	3	85-115	80-120	20	
Chromium	2.00	2.00	100	2.00		1.92	1.85	96	92	4	83-117	80-120	20	
Lead	2.00	2.11	105	2.00	0.0148	1.69	1.64	84	81	3	84-118	80-120	20	
Selenium	2.00	2.05	103	2.00		1.97	1.94	98	97	1	85-116	80-120	20	
Silver	1.00	1.02	102	1.00		0.957	0.929	96	93	3	80-120	80-120	20	

7 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Quality Control

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Batch: 205583 **Project:** 20152232 **LCS:** 201077816 01-Apr-13 13:44

Method: TCLP Mercury **MS:** 201077817 01-Apr-13 13:48

Units: mg/L **MSD:** 201077818 01-Apr-13 13:49

Original for MS: Batch Sample 201077660

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Mercury	0.00100	0.00101	101	0.00100		0.00100	0.00100	100	100	0	80-120	75-125	20	

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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(504) 469-0333

Blank Results

Blank ID: 205580 BLANK 1 **Project:** 20152232

Lab ID: 201077789

Prep Level: TCLP **Batch:** 205580

Method: TCLP GC/MS Semivolatile Organics

Prepared: 01-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		0.100	0.0000400	01-Apr-13 14:10 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		0.100	0.0000600	01-Apr-13 14:10 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		0.100	0.0000800	01-Apr-13 14:10 JAM
118-74-1	Hexachlorobenzene	1	ND		0.100	0.0000700	01-Apr-13 14:10 JAM
67-72-1	Hexachloroethane	1	ND		0.100	0.0000600	01-Apr-13 14:10 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		0.100	0.000100	01-Apr-13 14:10 JAM
	3&4-Methylphenol	1	ND		0.100	0.000100	01-Apr-13 14:10 JAM
98-95-3	Nitrobenzene	1	ND		0.100	0.0000800	01-Apr-13 14:10 JAM
87-86-5	Pentachlorophenol	1	ND		0.250	0.0000500	01-Apr-13 14:10 JAM
110-86-1	Pyridine	1	ND		0.100	0.000110	01-Apr-13 14:10 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		0.250	0.000090	01-Apr-13 14:10 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		0.100	0.0000500	01-Apr-13 14:10 JAM

12 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205580 BLANK 2 **Project:** 20152232

Lab ID: 201077805

Prep Level: TCLP **Batch:** 205580

Method: TCLP GC/MS Semivolatile Organics

Prepared: 01-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		0.100	0.0000400	01-Apr-13 14:39 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		0.100	0.0000600	01-Apr-13 14:39 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		0.100	0.0000800	01-Apr-13 14:39 JAM
118-74-1	Hexachlorobenzene	1	ND		0.100	0.0000700	01-Apr-13 14:39 JAM
67-72-1	Hexachloroethane	1	ND		0.100	0.0000600	01-Apr-13 14:39 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		0.100	0.000100	01-Apr-13 14:39 JAM
	3&4-Methylphenol	1	ND		0.100	0.000100	01-Apr-13 14:39 JAM
98-95-3	Nitrobenzene	1	ND		0.100	0.0000800	01-Apr-13 14:39 JAM
87-86-5	Pentachlorophenol	1	ND		0.250	0.0000500	01-Apr-13 14:39 JAM
110-86-1	Pyridine	1	ND		0.100	0.000110	01-Apr-13 14:39 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		0.250	0.000090	01-Apr-13 14:39 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		0.100	0.0000500	01-Apr-13 14:39 JAM

12 compound(s) reported

Protocol Blank 4/12/2013 17:15:3

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205577 BLANK 1 **Project:** 20152232

Lab ID: 201077785

Prep Level: TCLP **Batch:** 205577

Method: TCLP GC/MS Volatile Organics

Prepared: 01-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
71-43-2	Benzene	1	ND		0.100	0.0104	01-Apr-13 10:59 MHM
78-93-3	2-Butanone (MEK)	1	ND		0.200	0.0533	01-Apr-13 10:59 MHM
56-23-5	Carbon tetrachloride	1	ND		0.100	0.0106	01-Apr-13 10:59 MHM
108-90-7	Chlorobenzene	1	ND		0.100	0.0132	01-Apr-13 10:59 MHM
67-66-3	Chloroform	1	ND		0.100	0.0171	01-Apr-13 10:59 MHM
107-06-2	1,2-Dichloroethane	1	ND		0.100	0.0148	01-Apr-13 10:59 MHM
75-35-4	1,1-Dichloroethene	1	ND		0.100	0.0111	01-Apr-13 10:59 MHM
127-18-4	Tetrachloroethene	1	ND		0.100	0.0136	01-Apr-13 10:59 MHM
79-01-6	Trichloroethene	1	ND		0.100	0.0131	01-Apr-13 10:59 MHM
75-01-4	Vinyl chloride	1	ND		0.100	0.0113	01-Apr-13 10:59 MHM

10 compound(s) reported

Protocol Blank 4/12/2013 17:15:3

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205577 BLANK 2 **Project:** 20152232

Lab ID: 201077876

Prep Level: TCLP **Batch:** 205577

Method: TCLP GC/MS Volatile Organics

Prepared: 01-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
71-43-2	Benzene	1	ND		0.100	0.0104	01-Apr-13 14:59 MHM
78-93-3	2-Butanone (MEK)	1	ND		0.200	0.0533	01-Apr-13 14:59 MHM
56-23-5	Carbon tetrachloride	1	ND		0.100	0.0106	01-Apr-13 14:59 MHM
108-90-7	Chlorobenzene	1	ND		0.100	0.0132	01-Apr-13 14:59 MHM
67-66-3	Chloroform	1	ND		0.100	0.0171	01-Apr-13 14:59 MHM
107-06-2	1,2-Dichloroethane	1	ND		0.100	0.0148	01-Apr-13 14:59 MHM
75-35-4	1,1-Dichloroethene	1	ND		0.100	0.0111	01-Apr-13 14:59 MHM
127-18-4	Tetrachloroethene	1	ND		0.100	0.0136	01-Apr-13 14:59 MHM
79-01-6	Trichloroethene	1	ND		0.100	0.0131	01-Apr-13 14:59 MHM
75-01-4	Vinyl chloride	1	ND		0.100	0.0113	01-Apr-13 14:59 MHM

10 compound(s) reported

Protocol Blank 4/12/2013 17:15:3

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

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Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205430 BLANK 1 **Project:** 20152232

Lab ID: 201077107

Prep Level: Water **Batch:** 205430

Method: Water GC/MS Volatile Organics

Prepared: 29-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
67-64-1	Acetone	1	ND		10.0	8.88	29-Mar-13 15:37 RMP
71-43-2	Benzene	1	ND		5.00	0.518	29-Mar-13 15:37 RMP
75-27-4	Bromodichloromethane	1	ND		5.00	0.469	29-Mar-13 15:37 RMP
75-25-2	Bromoform	1	ND		5.00	0.920	29-Mar-13 15:37 RMP
74-83-9	Bromomethane	1	ND		5.00	0.855	29-Mar-13 15:37 RMP
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66	29-Mar-13 15:37 RMP
75-15-0	Carbon disulfide	1	ND		5.00	0.530	29-Mar-13 15:37 RMP
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528	29-Mar-13 15:37 RMP
108-90-7	Chlorobenzene	1	3.69	J	5.00	0.662	29-Mar-13 15:37 RMP
75-00-3	Chloroethane	1	ND		5.00	1.12	29-Mar-13 15:37 RMP
67-66-3	Chloroform	1	ND		5.00	0.853	29-Mar-13 15:37 RMP
74-87-3	Chloromethane	1	ND		5.00	0.636	29-Mar-13 15:37 RMP
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34	29-Mar-13 15:37 RMP
124-48-1	Dibromochloromethane	1	ND		5.00	0.630	29-Mar-13 15:37 RMP
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477	29-Mar-13 15:37 RMP
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553	29-Mar-13 15:37 RMP
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565	29-Mar-13 15:37 RMP
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738	29-Mar-13 15:37 RMP
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557	29-Mar-13 15:37 RMP
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578	29-Mar-13 15:37 RMP
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738	29-Mar-13 15:37 RMP
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579	29-Mar-13 15:37 RMP
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454	29-Mar-13 15:37 RMP
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526	29-Mar-13 15:37 RMP
100-41-4	Ethylbenzene	1	ND		5.00	0.292	29-Mar-13 15:37 RMP
591-78-6	2-Hexanone	1	ND		10.0	1.28	29-Mar-13 15:37 RMP
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405	29-Mar-13 15:37 RMP
79-20-9	Methyl acetate	1	ND		10.0	2.36	29-Mar-13 15:37 RMP
75-09-2	Methylene chloride	1	ND		5.00	1.44	29-Mar-13 15:37 RMP
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10	29-Mar-13 15:37 RMP
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687	29-Mar-13 15:37 RMP
100-42-5	Styrene	1	ND		5.00	0.571	29-Mar-13 15:37 RMP
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12	29-Mar-13 15:37 RMP
127-18-4	Tetrachloroethene	1	ND		5.00	0.679	29-Mar-13 15:37 RMP

Protocol Blank 4/12/2013 17:15:3

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205430 BLANK 1 **Project:** 20152232

Lab ID: 201077107

Prep Level: Water **Batch:** 205430

Method: Water GC/MS Volatile Organics

Prepared: 29-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
108-88-3	Toluene	1	ND		5.00	0.536	29-Mar-13 15:37 RMP
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554	29-Mar-13 15:37 RMP
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915	29-Mar-13 15:37 RMP
79-01-6	Trichloroethene	1	ND		5.00	0.654	29-Mar-13 15:37 RMP
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575	29-Mar-13 15:37 RMP
75-01-4	Vinyl chloride	1	ND		5.00	0.564	29-Mar-13 15:37 RMP
	m&p-Xylene	1	ND		5.00	0.937	29-Mar-13 15:37 RMP
95-47-6	o-Xylene	1	ND		5.00	0.649	29-Mar-13 15:37 RMP

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205499 BLANK 1 **Project:** 20152232

Lab ID: 201077470

Prep Level: Soil **Batch:** 205499

Method: Soil GC Semivolatile Organics

Prepared: 29-Mar-13

Units: mg/kg

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis	
none	Diesel Range Organics (C10-28)	1	ND		10.0	5.00	02-Apr-13 20:57	SNP1
none	Oil Range Organics (>C28-40)	1	ND		50.0	25.0	02-Apr-13 20:57	SNP1

2 compound(s) reported

Protocol Blank 4/12/2013 17:15:3

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 206245 BLANK 1 **Project:** 20152232

Lab ID: 201080399

Prep Level: Water **Batch:** 206245

Method: Water GC Semivolatile Organics

Prepared: 10-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Diesel Range Organics (C10-28)	1	ND		0.150	0.0760	11-Apr-13 16:07 SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.150	0.0490	11-Apr-13 16:07 SNP1

2 compound(s) reported

Protocol Blank 4/12/2013 17:15:3

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 206245 BLANK 2 **Project:** 20152232

Lab ID: 201080782

Prep Level: Water **Batch:** 206245

Method: Water GC Semivolatile Organics

Prepared: 10-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Diesel Range Organics (C10-28)	1	ND		0.150	0.0760	11-Apr-13 15:39 SNP1
none	Oil Range Organics (>C28-40)	1	ND		0.150	0.0490	11-Apr-13 15:39 SNP1

2 compound(s) reported

Protocol Blank 4/12/2013 17:15:3

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205492 BLANK 1 **Project:** 20152232

Lab ID: 201077368

Prep Level: Soil **Batch:** 205492

Method: Soil GC Volatile Organics

Prepared: 29-Mar-13

Units: mg/kg

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
71-43-2	Benzene	1	ND		0.0250	0.00520	01-Apr-13 18:59 DHR1
100-41-4	Ethylbenzene	1	ND		0.0250	0.00300	01-Apr-13 18:59 DHR1
108-88-3	Toluene	1	0.00730	J	0.0250	0.00160	01-Apr-13 18:59 DHR1
	m&p-Xylene	1	0.00503	J	0.0250	0.00380	01-Apr-13 18:59 DHR1
95-47-6	o-Xylene	1	ND		0.0250	0.00320	01-Apr-13 18:59 DHR1
none	Gasoline Range Organics(C6-10)	1	1.32	J	2.50	1.06	01-Apr-13 18:59 DHR1

6 compound(s) reported

Protocol Blank 4/12/2013 17:15:3

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 206115 BLANK 3 **Project:** 20152232

Lab ID: 201080722

Prep Level: Water **Batch:** 206115

Method: Water GC Volatile Organics

Prepared: 11-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
71-43-2	Benzene	1	0.000111	J	0.000500	0.000104	11-Apr-13 12:34 DHR1
100-41-4	Ethylbenzene	1	0.00212		0.000500	0.0000600	11-Apr-13 12:34 DHR1
108-88-3	Toluene	1	0.000762		0.000500	0.0000320	11-Apr-13 12:34 DHR1
	m&p-Xylene	1	0.00886		0.000500	0.0000760	11-Apr-13 12:34 DHR1
95-47-6	o-Xylene	1	0.00466		0.000500	0.0000640	11-Apr-13 12:34 DHR1
none	Gasoline Range Organics(C6-10)	1	0.134		0.0500	0.0212	11-Apr-13 12:34 DHR1

6 compound(s) reported

Protocol Blank 4/12/2013 17:15:3

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205582 BLANK 1 **Project:** 20152232

Lab ID: 201077811

Prep Level: TCLP **Batch:** 205582

Method: TCLP ICP Metals

Prepared: 01-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis	
7440-38-2	Arsenic	1	ND		0.200	0.00209	01-Apr-13 19:06	EJH
7440-39-3	Barium	1	ND		2.00	0.00239	01-Apr-13 19:06	EJH
7440-43-9	Cadmium	1	ND		0.100	0.000722	01-Apr-13 19:06	EJH
7440-47-3	Chromium	1	0.0107	J	0.200	0.00400	01-Apr-13 19:06	EJH
7439-92-1	Lead	1	ND		0.200	0.00230	01-Apr-13 19:06	EJH
7782-49-2	Selenium	1	ND		0.200	0.0286	01-Apr-13 19:06	EJH
7440-22-4	Silver	1	ND		0.200	0.00116	01-Apr-13 19:06	EJH

7 compound(s) reported

Protocol Blank 4/12/2013 17:15:3

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205583 BLANK 1 **Project:** 20152232

Lab ID: 201077815

Prep Level: TCLP **Batch:** 205583

Method: TCLP Mercury

Prepared: 01-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
7439-97-6	Mercury	1	ND		0.000200	0.0000340	01-Apr-13 13:42 MHB1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical™

Inorganics Quality Control

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152232

Parameter	Batch	Blank	Units	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
pH	205485		Std. Units	6.00	5.97	100							0	97-103		20	
Cyanide, Reactive	205559	<25.0	mg/kg	100.	4.33	4	100.	0.125	7.20		7		0	1-110	1-110	20	
Sulfide, Reactive	205560	<50.0	mg/kg	500.	440.	88	500.		440.		88		0	1-110	1-110	20	
Flash Point	205562		deg F	80.6	82.4	102							0				
Chloride	206042	<10.0	mg/kg	853.	793.	93	10100	106.	7960		78		2	90-110	75-125	20	D2
Free Liquids	206266	<1.00	mL/5min										0			20	

*** denotes recovery outside of QC limits.**

MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152232

Value	Description
D1	The analysis was performed at a dilution due to the high analyte concentration.
D2	The analysis was performed at a dilution due to the presence of matrix interferences.
D6	The sample was analyzed at a dilution based upon the screening information.
G1	Interferences are present which caused poor surrogate recovery.
Q1	The matrix spike recoveries are poor. Acceptable method performance for this analyte has been demonstrated by the laboratory control sample recovery.
Q10	The spike recovery was above the laboratory QC limits, however, the data are reported without qualification since the target analyte was not detected in the corresponding samples.
Q3	The matrix spike recoveries are poor due to the presence of this analyte in the sample at a concentration greater than 4 times the spiked amount. Acceptable method performance for this analyte has been demonstrated by the laboratory control sample.
Q5	Insufficient sample was provided to perform matrix spike analyses on any sample in this analytical batch. Method performance for this analyte has been demonstrated by the laboratory control sample recovery.
J	This estimated value for the analyte is below the adjusted reporting limit but above the instrument reporting limit.
U	The analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
B	This analyte was detected in the method blank.
E	The sample concentration is above the linear calibrated range of the analysis.
LCS	Laboratory Control Sample.
MS(D)	Matrix Spike (Duplicate).
DUP	Sample Duplicate.
RPD	Relative Percent Difference.
B2	This analyte was present in the method blank, however the data are reported since the sample results are greater than 10 times the blank concentration.

Pace Analytical Services, In
1000 Riverbend Blvd. Suite F
St. Rose, LA 7008
(504) 469-033

Chains of Custody

5120 North Shore Drive
North Little Rock, AR 72118
Phone: (501) 801-8500
Fax: (501) 801-8501
Website: www.cteh.com

Center for Toxic ... C.

SAMPLE CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

Page 1 of 1

	Send Report To:	Send Invoice To:
Name	Chase Ertzberger	~~Trey Chandler~~ Accounts Payable
Company	CTEH	CTEH
Address	5120 North Shore Drive North Little Rock, AR 72118	5120 North Shore Drive North Little Rock, AR 72118
Phone	(501)801-8500	(501)801-8500
Fax	(501)801-8501	(501)801-8501
e-mail	certzberger@cteh.com jmcormack@cteh.com	~~tchandler@cteh.com~~ Iraccounting@cteh.com

CTEH Project #:

Turnaround Requested:
Same Day X Next Day (24 hour) ___ Normal
___ Other (Specify) _____

Complete Data Packet Requested ☑ Yes ☐ No

Lab Contact Information:
~~Galson Laboratories~~
~~6601 Kirkville Road~~
~~E. Syracuse, NY 13057~~
1000 Riverbend Blvd
St. Rose, LA 70087

Client Sample Identification	Other Sample Identification	Sample Size	Units (Check one) ___L ___cm²	Sample Date	Sample Time (for non-air samples)	Initials	TCLP VOC	TCLP SVOC	TCLP Metals	Ignitability	Reactive sulfide	Reactive Cyanide	Corrosivity	TPH	8260 VOC	Matrix (A = air, B = bulk, S = soil, SW = wipe, T = tape, W = water)
MAAR032850001	Pile 6	2	4oz	03.28.13	1100	RS	X	X	X	X	X	X	X	X	20107313	
MAAR032850002	Pile 5				1130										~~20109~~ 314	
MAAR032850003	Pile 4				1440										7315	
MAAR032850004	Pile 4				1450										7316	
MAAR032850005	Pile 2				1505										7317	
MAAR032850006	Pile 3				1520										7318	
MAAR032850007	Pile 3				1535										7319	
MAAR032850008	Pile 1				1545										7320	
MAAR032850009	Pile 1				1550										7321	
MAAR032850010	Pile 7				1610										7322	
TB0009	Trip Blank														X W	
				03.28.13											7323	

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME	COMMENTS
	03.28.13 / 1730	UPS	03.28.13 / 1730	
UPS	3-29-13 0800		3-29-13 0800	1.6

Pace Analytical

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Sample Cond

20152232 20-CTEH

Courier: ☐ Pace Courier ☐ Hired Courier ☐ Fed X ☒ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC] F.O. **Custody Seals Intact:** ☐Yes ☐No

Therometer Used: ☐ Therm Fisher IR 5 ☒ Therm Fisher IR 6 ☐ Therm Fisher IR 7

Type of Ice: (Wet) Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: KMB 3/29

Temp must be measured from Temperature blank when present

				Comments:
Temperature Blank Present"?	☐Yes	☒No	☐N/A	1
Chain of Custody Present:	☒Yes	☐No	☐N/A	2
Chain of Custody Complete:	☒Yes	☐No	☐N/A	3
Chain of Custody Relinquished:	☒Yes	☐No	☐N/A	4
Sampler Name & Signature on COC:	☐Yes	☒No	☐N/A	5
Samples Arrived within Hold Time:	☒Yes	☐No	☐N/A	6 BUSH 1, 2 4oz jars.
Sufficient Volume:	☒Yes	☐No	☐N/A	7
Correct Containers Used:	☒Yes	☐No	☐N/A	8
Filtered vol. Rec. for Diss. tests	☐Yes	☐No	☒N/A	9
Sample Labels match COC:	☒Yes	☐No	☐N/A	10
All containers received within manafacture's precautionary and/or expiration dates.	☒Yes	☐No	☐N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐Yes	☐No	☒N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	☐Yes	☐No	☒N/A	13 If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐Yes	☒No	☐N/A	14
Trip Blank Present:	☒Yes	☐No		15

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution:

Per Client - TPH-G/D + 8260 repeat on Dry weight. 3/29/13

Coll. date of 3/28/13 used to log TB9999. KB

Additional analyses added 4/4/13 — See attached email - KMB. 4/6/13

ALLC003rev.08, 15Feb2013 SCUR Form - mod

Karen Brown - RE: TCLP samples.....

From: Scott Kluska <skluska@cteh.com>
To: Karen Brown <Karen.Brown@pacelabs.com>
Date: 3/29/2013 9:00 AM
Subject: RE: TCLP samples.....

Report Soil TCLP in mg/l and TPH, etc. in dry weight.

Thanks

Scott Kluska
Sr. Consultant
Center for Toxicology and Environmental Health, LLC (CTEH)
5120 North Shore Drive
North Little Rock, AR 72118
Office: 501-801-8500
Cell: 908-399-8875
1-866-869-2834 [24-HOUR ER Help Desk]
www.cteh.com

From: Karen Brown [mailto:Karen.Brown@pacelabs.com]
Sent: Friday, March 29, 2013 9:55 AM
To: Scott Kluska
Cc: Chase Ertzberger; James McCormack
Subject: RE: TCLP samples.....

Also, for the soils where TPH and 8260 have been added.....do you want these reported on a "dry weight" basis? In LA, we report "as received", but, I realize that other states report soils as "dry weight". Please advise.

Thanks

Karen H. Brown
Customer Service Manager
Pace Analytical Services, Inc.
New Orleans Laboratory
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087

Direct Line 504-305-3615

!
>>>

From: Scott Kluska <skluska@cteh.com>
To: Karen Brown <Karen.Brown@pacelabs.com>
Date: 3/29/2013 8:42 AM
Subject: RE: TCLP samples.....

Yes add Corrosivity.

We will ship samples out today for delivery tomorrow.

Scott Kluska
Sr. Consultant
Center for Toxicology and Environmental Health, LLC (CTEH)
5120 North Shore Drive
North Little Rock, AR 72118
Office: 501-801-8500
Cell: 908-399-8875
1-866-869-2834 [24–HOUR ER Help Desk]
www.cteh.com

From: Karen Brown [mailto:Karen.Brown@pacelabs.com]
Sent: Friday, March 29, 2013 9:22 AM
To: Scott Kluska
Cc: Chase Ertzberger; James McCormack
Subject: TCLP samples.....
Importance: High

Yes, but, I don't know when UPS arrives on Saturday. This morning, UPS First Overnight arrived before 7am (yesterday, I happened to be here when UPS arrived at 0640), but, this morning, no one was here.....and UPS did not leave the cooler. They left a note saying they would return after 0800.

Oh, UPS just arrived. I was not expecting 12 samples for TCLP. Will get results as soon as possible, but, not all expected before Tuesday.....

Also, note: Corrositivity (pH) was not requested on coc 1638655....do you want me to add it?

I will be working tomorrow.....and I will get you any data that is posted to the system.

Karen H. Brown
Customer Service Manager
Pace Analytical Services, Inc.

Karen Brown - RE: FINAL REPORT for 20152232

From: Scott Kluska <skluska@cteh.com>
To: Karen Brown <Karen.Brown@pacelabs.com>, 40432 samples <40432samples@cteh...
Date: 4/4/2013 2:15 PM
Subject: RE: FINAL REPORT for 20152232

Karen,

Can you please run sample # MAAR0328SO001 for BTEX (Totals), Chlorides and SPLP (EPA Method 1312), and paint filter test. I believe you ran 8015 for DRO/GRO and could pull the BTEX info.

Also, we will need % solids for all samples submitted.

Scott Kluska
Sr. Consultant
Center for Toxicology and Environmental Health, LLC (CTEH)
5120 North Shore Drive
North Little Rock, AR 72118
Office: 501-801-8500
Cell: 908-399-8875
1-866-869-2834 [24–HOUR ER Help Desk]
www.cteh.com

From: Karen Brown [mailto:Karen.Brown@pacelabs.com]
Sent: Wednesday, April 03, 2013 6:48 PM
To: 40432 samples; Chase Ertzberger; James McCormack; Scott Kluska
Subject: FINAL REPORT for 20152232
Importance: High

.pdf and EDD

Karen H. Brown
Customer Service Manager
Pace Analytical Services, Inc.
New Orleans Laboratory
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087

Direct Line 504-305-3615

Karen Brown - RE: FINAL REPORT for 20152232

From: Scott Kluska <skluska@cteh.com>
To: Karen Brown <Karen.Brown@pacelabs.com>
Date: 4/4/2013 3:05 PM
Subject: RE: FINAL REPORT for 20152232

SPLP-TPH-GRO and SPLP-TPH-DRO/ORO.

West of the Mississippi.

I looked at some of the results pages (i.e., MAAR0321WC001) and the % Moisture is listed as N/A.

Scott Kluska
Sr. Consultant
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1-866-869-2834 [24–HOUR ER Help Desk]
www.cteh.com

From: Karen Brown [mailto:Karen.Brown@pacelabs.com]
Sent: Thursday, April 04, 2013 3:49 PM
To: 40432 samples; Chase Ertzberger; James McCormack; Scott Kluska
Subject: RE: FINAL REPORT for 20152232
Importance: High

All.....please see attached report, 20152232

1. I can add BTEX by 8021 to the sample requested.
2. I can add Total Chloride and Paint Filter Test to the sample requested.
3. For SPLP, what tests do you want run after SPLP leaching? SPLP-Voa? SPLP-SVOA? SPLP-TPH-GRO? SPLP-TPH-DRO/ORO?
4. Is the site East or West of the Mississippi River? (This is needed to determine which SPLP leaching fluid to use during the procedure
5. In the upper right hand corner of the report, is %moisture information. Can you determine the %solids from this value? If not
   I will have to relog each sample separately for %solids.
6. Is MAAR032SO001 the only sample to add all of these tests to?

Please confirm my understanding of the request.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

April 05, 2013

James McCormack
CTEH
5120 North Shore Drive
North Little Rock, AR 72118

RE: Project 20152227
Project ID: Magnolia, AR

Dear James McCormack:

Enclosed are the analytical results for sample(s) received by the laboratory on March 29, 2013. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Karen Brown
karen.brown@pacelabs.com

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

Laboratory Certifications

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152227

Client: CTEH

Project ID: Magnolia, AR

Washington Department of Ecology C2078
Oregon Environmental Laboratory Accreditation - LA200001
U.S. Dept. of Agriculture Foreign Soil Import P330-10-00119
Pennsylvania Dept. of Env Protection (NELAC) 68-04202
Texas Commission on Env. Quality (NELAC) T104704405-09-TX
Kansas Department of Health and Environment (NELAC) E-10266
Florida Department of Health (NELAC) E87595
Oklahoma Department of Environmental Quality - 2010-139
Illinois Environmental Protection Agency - 0025721
California Env. Lab Accreditation Program Branch - 11277CA
Louisiana Dept. of Environmental Quality (NELAC/LELAP) 02006

4/5/2013 18:52:26

Sample Cross Reference

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152227

Client: CTEH

Project ID: Magnolia, AR

Client Sample ID	Lab ID	Matrix	Collection Date/Time	Received Date/Time
MAAR0328WC004	201077259	Other	28-Mar-13 00:00	29-Mar-13 08:00
MAAR0328WC005	201077260	Other	28-Mar-13 00:00	29-Mar-13 08:00
MAAR0328WC004 IMMISCIBLE	201077880	Other	28-Mar-13 00:00	29-Mar-13 08:00
MAAR0328WC005 IMMISCIBLE	201077881	Other	28-Mar-13 00:00	29-Mar-13 08:00

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Project: 20152227

Narrative detail for project management:

Samples 201077259 and 201077260 became biphasic during the leaching process, yielding two phases. The oil phases for the ZHE and non-ZHE leachates of sample 201077259 was 16.7% and 1.7%, respectively.

The oil phases for the ZHE and non-ZHE leachates of sample 201077260 was 3.6% and 2.0%, respectively.

Narrative detail for GC/MS semi-volatiles analyses:

Samples 201077880 and 20107881 were extracted at reduced volume and could not be concentrated to final method volume. In addtion, the samples required dilution prior to analysis due to the nature of the sample matrix.

Pace Analytical Services, Inc.
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(504) 469-0333

Project: 20152227

Sample Receipt Condition:

All samples were received in accordance with EPA protocol.

Holding Times:

All holding times were met.

Blanks:

All blank results were below reporting limits.

Laboratory Control Samples:

All LCS recoveries were within QC limits.

Matrix Spikes and Duplicates:

MS or MSD recoveries outside of QC limits are qualified in the Report of Quality Control section.

Surrogates:

Surrogate recoveries outside of QC limits are qualified in the surrogate results section.

Regulatory, Permit or Client Specified Limits:

34 results were found that exceeded regulatory, permit or client specified limits.

Pace Analytical Services, Inc.
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QC Cross Reference

Project: 20152227

Analytical Method	Batch	Sample used for QC
EPA 8015 Mod Ext	205475	Batch sample from another client
EPA 8015/8021	205492	Client sample MAAR0328SO001 from project 20152232
EPA 6010	205582	Client sample MAAR0329SO011 from project 20152273
EPA 7470	205583	Client sample MAAR0329SO011 from project 20152273
EPA 8270	205580	Client sample MAAR0328SO001 from project 20152232
EPA 8260	205577	Client sample MAAR0328SO001 from project 20152232
EPA 9045	205485	Batch sample from another client
SW-846 7.3.4.2	205560	Client sample MAAR0329SO011 from project 20152273
EPA 1010	205562	Client sample MAAR0329SO011 from project 20152273
SW-846 7.3.3.2	205559	Client sample MAAR0329SO011 from project 20152273

For the sample used as the original for the DUP or MS/MSD for the batch:

Project sample means a sample from this project was used.
Client sample means a sample from the same client but in a different project was used.
Batch sample means a sample from a different client was used.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328WC004
Project: 20152227
Project ID: Magnolia, AR
Site: None
Lab ID: 201077259
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: Soil
Batch: 205475
Method: EPA 8015 Mod Ext
8015 TPH Extractables Soil
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 29-Mar-13

Units: mg/kg

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Diesel Range Organics (C10-28)	10	103000	D1	1750	5.00		05-Apr-13 15:09 SNP1
none	Oil Range Organics (>C28-40)	10	49300	D1	8770	25.0		05-Apr-13 15:09 SNP1

2 compound(s) reported

Protocol 4/5/2013 18:53:16

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0328WC004
Project: 20152227
Project ID: Magnolia, AR
Site: None
Lab ID: 201077259
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: Soil
Batch: 205492
Method: EPA 8015/8021
8015/8021 Med Soil
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 29-Mar-13

Units: mg/kg

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
none	Gasoline Range Organics(C6-10)	1	1130		12.5	5.29		02-Apr-13 10:30	DHR1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328WC004
Project: 20152227
Project ID: Magnolia, AR
Site: None
Lab ID: 201077259 (TCLP)
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: TCLP
Batch: 205580
Method: EPA 8270 (TCLP)
GCMS SVOAs TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		0.100	0.0000400	7.50	01-Apr-13 15:35 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		0.100	0.0000600	0.130	01-Apr-13 15:35 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		0.100	0.0000800	0.500	01-Apr-13 15:35 JAM
118-74-1	Hexachlorobenzene	1	ND		0.100	0.0000700	0.130	01-Apr-13 15:35 JAM
67-72-1	Hexachloroethane	1	ND		0.100	0.0000600	3.00	01-Apr-13 15:35 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		0.100	0.000100	200.	01-Apr-13 15:35 JAM
	3&4-Methylphenol	1	ND		0.100	0.000100	200.	01-Apr-13 15:35 JAM
98-95-3	Nitrobenzene	1	ND		0.100	0.0000800	2.00	01-Apr-13 15:35 JAM
87-86-5	Pentachlorophenol	1	ND		0.250	0.0000500	100.	01-Apr-13 15:35 JAM
110-86-1	Pyridine	1	ND		0.100	0.000110	5.00	01-Apr-13 15:35 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		0.250	0.000090	400.	01-Apr-13 15:35 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		0.100	0.0000500	2.00	01-Apr-13 15:35 JAM

12 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328WC004
Project: 20152227
Project ID: Magnolia, AR
Site: None
Lab ID: 201077259 (TCLP)
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: TCLP
Batch: 205577
Method: EPA 8260 (TCLP)
GCMS VOAs TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
71-43-2	Benzene	1	ND		0.100	0.0104	0.500	01-Apr-13 13:39 MHM
78-93-3	2-Butanone (MEK)	1	ND		0.200	0.0533	200.	01-Apr-13 13:39 MHM
56-23-5	Carbon tetrachloride	1	ND		0.100	0.0106	0.500	01-Apr-13 13:39 MHM
108-90-7	Chlorobenzene	1	ND		0.100	0.0132	100.	01-Apr-13 13:39 MHM
67-66-3	Chloroform	1	ND		0.100	0.0171	6.00	01-Apr-13 13:39 MHM
107-06-2	1,2-Dichloroethane	1	ND		0.100	0.0148	0.500	01-Apr-13 13:39 MHM
75-35-4	1,1-Dichloroethene	1	ND		0.100	0.0111	0.700	01-Apr-13 13:39 MHM
127-18-4	Tetrachloroethene	1	ND		0.100	0.0136	0.700	01-Apr-13 13:39 MHM
79-01-6	Trichloroethene	1	ND		0.100	0.0131	0.500	01-Apr-13 13:39 MHM
75-01-4	Vinyl chloride	1	ND		0.100	0.0113	0.200	01-Apr-13 13:39 MHM

10 compound(s) reported

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328WC004
Project: 20152227
Project ID: Magnolia, AR
Site: None
Lab ID: 201077259 (TCLP)
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: TCLP
Batch: 205582
Method: EPA 6010 (TCLP)
Metals, ICP, TCLP Leachate
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
7440-38-2	Arsenic	1	0.00489	J	0.200	0.00209	5.00	01-Apr-13 20:05	EJH
7440-39-3	Barium	1	0.0800	J	2.00	0.00239	100.	01-Apr-13 20:05	EJH
7440-43-9	Cadmium	1	ND		0.100	0.000722	1.00	01-Apr-13 20:05	EJH
7440-47-3	Chromium	1	ND		0.200	0.00400	5.00	01-Apr-13 20:05	EJH
7439-92-1	Lead	1	ND		0.200	0.00230	5.00	01-Apr-13 20:05	EJH
7782-49-2	Selenium	1	ND		0.200	0.0286	1.00	01-Apr-13 20:05	EJH
7440-22-4	Silver	1	ND		0.200	0.00116	5.00	01-Apr-13 20:05	EJH

7 compound(s) reported

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0328WC004
Project: 20152227
Project ID: Magnolia, AR
Site: None
Lab ID: 201077259 (TCLP)
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: TCLP
Batch: 205583
Method: EPA 7470 (TCLP)
Mercury TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.000200	0.0000340	0.200	01-Apr-13 13:51 MHB1

1 compound(s) reported

Protocol 4/5/2013 18:53:17

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328WC005
Project: 20152227
Project ID: Magnolia, AR
Site: None
Lab ID: 201077260
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: Soil
Batch: 205475
Method: EPA 8015 Mod Ext
8015 TPH Extractables Soil
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 29-Mar-13

Units: mg/kg

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
none	Diesel Range Organics (C10-28)	100	275000	D1,P12	17900	8930		03-Apr-13 17:57	SNP1
none	Oil Range Organics (>C28-40)	100	130000	D1,P12	89300	44600		03-Apr-13 17:57	SNP1

2 compound(s) reported

Protocol 4/5/2013 18:53:17

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Sample Results

Client: CTEH

Client ID: MAAR0328WC005
Project: 20152227
Project ID: Magnolia, AR
Site: None
Lab ID: 201077260
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: Soil
Batch: 205492
Method: EPA 8015/8021
8015/8021 Med Soil
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 29-Mar-13

Units: mg/kg

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
none	Gasoline Range Organics(C6-10)	10	874.	D6	125.	52.9		02-Apr-13 03:17 DHR1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Pace Analytical Services, Inc.
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St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328WC005
Project: 20152227
Project ID: Magnolia, AR
Site: None
Lab ID: 201077260 (TCLP)
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: TCLP
Batch: 205580
Method: EPA 8270 (TCLP)
GCMS SVOAs TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		0.100	0.0000400	7.50	01-Apr-13 16:03 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		0.100	0.0000600	0.130	01-Apr-13 16:03 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		0.100	0.0000800	0.500	01-Apr-13 16:03 JAM
118-74-1	Hexachlorobenzene	1	ND		0.100	0.0000700	0.130	01-Apr-13 16:03 JAM
67-72-1	Hexachloroethane	1	ND		0.100	0.0000600	3.00	01-Apr-13 16:03 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		0.100	0.000100	200.	01-Apr-13 16:03 JAM
	3&4-Methylphenol	1	ND		0.100	0.000100	200.	01-Apr-13 16:03 JAM
98-95-3	Nitrobenzene	1	ND		0.100	0.0000800	2.00	01-Apr-13 16:03 JAM
87-86-5	Pentachlorophenol	1	ND		0.250	0.0000500	100.	01-Apr-13 16:03 JAM
110-86-1	Pyridine	1	ND		0.100	0.000110	5.00	01-Apr-13 16:03 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		0.250	0.000090	400.	01-Apr-13 16:03 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		0.100	0.0000500	2.00	01-Apr-13 16:03 JAM

12 compound(s) reported

Protocol 4/5/2013 18:53:17

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MDL denotes method detection limit

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328WC005
Project: 20152227
Project ID: Magnolia, AR
Site: None
Lab ID: 201077260 (TCLP)
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: TCLP
Batch: 205577
Method: EPA 8260 (TCLP)
GCMS VOAs TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
71-43-2	Benzene	1	ND		0.100	0.0104	0.500	01-Apr-13 13:59 MHM
78-93-3	2-Butanone (MEK)	1	ND		0.200	0.0533	200.	01-Apr-13 13:59 MHM
56-23-5	Carbon tetrachloride	1	ND		0.100	0.0106	0.500	01-Apr-13 13:59 MHM
108-90-7	Chlorobenzene	1	ND		0.100	0.0132	100.	01-Apr-13 13:59 MHM
67-66-3	Chloroform	1	ND		0.100	0.0171	6.00	01-Apr-13 13:59 MHM
107-06-2	1,2-Dichloroethane	1	ND		0.100	0.0148	0.500	01-Apr-13 13:59 MHM
75-35-4	1,1-Dichloroethene	1	ND		0.100	0.0111	0.700	01-Apr-13 13:59 MHM
127-18-4	Tetrachloroethene	1	ND		0.100	0.0136	0.700	01-Apr-13 13:59 MHM
79-01-6	Trichloroethene	1	ND		0.100	0.0131	0.500	01-Apr-13 13:59 MHM
75-01-4	Vinyl chloride	1	ND		0.100	0.0113	0.200	01-Apr-13 13:59 MHM

10 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
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St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328WC005
Project: 20152227
Project ID: Magnolia, AR
Site: None
Lab ID: 201077260 (TCLP)
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: TCLP
Batch: 205582
Method: EPA 6010 (TCLP)
Metals, ICP, TCLP Leachate
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
7440-38-2	Arsenic	1	0.00681	J	0.200	0.00209	5.00	01-Apr-13 20:16	EJH
7440-39-3	Barium	1	0.281	J	2.00	0.00239	100.	01-Apr-13 20:16	EJH
7440-43-9	Cadmium	1	ND		0.100	0.000722	1.00	01-Apr-13 20:16	EJH
7440-47-3	Chromium	1	ND		0.200	0.00400	5.00	01-Apr-13 20:16	EJH
7439-92-1	Lead	1	ND		0.200	0.00230	5.00	01-Apr-13 20:16	EJH
7782-49-2	Selenium	1	ND		0.200	0.0286	1.00	01-Apr-13 20:16	EJH
7440-22-4	Silver	1	ND		0.200	0.00116	5.00	01-Apr-13 20:16	EJH

7 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
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(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0328WC005
Project: 20152227
Project ID: Magnolia, AR
Site: None
Lab ID: 201077260 (TCLP)
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: TCLP
Batch: 205583
Method: EPA 7470 (TCLP)
Mercury TCLP
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.000200	0.0000340	0.200	01-Apr-13 13:53 MHB1

1 compound(s) reported

Protocol 4/5/2013 18:53:17

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328WC004 IMMISCIBLE
Project: 20152227
Project ID: Magnolia, AR
Site: None
Lab ID: 201077880
Matrix: Other
% Moisture: n/a
Description: None
Prep Level:
Batch: 205608
Method: EPA 8270
GCMS SVOAs TCLP Filtered Oil
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
106-46-7	1,4-Dichlorobenzene	4	ND	N	200.	29.8	7.50	02-Apr-13 11:28 JAM
121-14-2	2,4-Dinitrotoluene	4	ND	N	200.	29.4	0.130	02-Apr-13 11:28 JAM
87-68-3	Hexachloro-1,3-butadiene	4	ND	N	200.	31.3	0.500	02-Apr-13 11:28 JAM
118-74-1	Hexachlorobenzene	4	ND	N	200.	34.2	0.130	02-Apr-13 11:28 JAM
67-72-1	Hexachloroethane	4	ND	N	200.	34.7	3.00	02-Apr-13 11:28 JAM
95-48-7	2-Methylphenol (o-Cresol)	4	ND	N	200.	36.3	200.	02-Apr-13 11:28 JAM
	3&4-Methylphenol	4	ND	N	200.	28.0	200.	02-Apr-13 11:28 JAM
98-95-3	Nitrobenzene	4	ND	N	200.	34.6	2.00	02-Apr-13 11:28 JAM
87-86-5	Pentachlorophenol	4	ND	N	200.	23.4	100.	02-Apr-13 11:28 JAM
110-86-1	Pyridine	4	ND	N	200.	39.8	5.00	02-Apr-13 11:28 JAM
95-95-4	2,4,5-Trichlorophenol	4	ND	N	200.	27.5	400.	02-Apr-13 11:28 JAM
88-06-2	2,4,6-Trichlorophenol	4	ND	N	200.	30.1	2.00	02-Apr-13 11:28 JAM

12 compound(s) reported

Protocol 4/5/2013 18:53:17

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328WC004 IMMISCIBLE
Project: 20152227
Project ID: Magnolia, AR
Site: None
Lab ID: 201077880
Matrix: Other
% Moisture: n/a
Description: None
Prep Level:
Batch: 205606
Method: EPA 8260
GCMS VOAs TCLP Filtered Oil
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 02-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
71-43-2	Benzene	5	ND	D2	2.50	0.648	0.500	02-Apr-13 12:07 RMP
78-93-3	2-Butanone (MEK)	5	ND	D2	5.00	3.33	200.	02-Apr-13 12:07 RMP
56-23-5	Carbon tetrachloride	5	ND	D2	2.50	0.660	0.500	02-Apr-13 12:07 RMP
108-90-7	Chlorobenzene	5	ND	D2	2.50	0.828	100.	02-Apr-13 12:07 RMP
67-66-3	Chloroform	5	ND	D2	2.50	1.07	6.00	02-Apr-13 12:07 RMP
107-06-2	1,2-Dichloroethane	5	ND	D2	2.50	0.922	0.500	02-Apr-13 12:07 RMP
75-35-4	1,1-Dichloroethene	5	ND	D2	2.50	0.696	0.700	02-Apr-13 12:07 RMP
127-18-4	Tetrachloroethene	5	ND	D2	2.50	0.849	0.700	02-Apr-13 12:07 RMP
79-01-6	Trichloroethene	5	ND	D2	2.50	0.818	0.500	02-Apr-13 12:07 RMP
75-01-4	Vinyl chloride	5	ND	D2	2.50	0.705	0.200	02-Apr-13 12:07 RMP

10 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328WC004 IMMISCIBLE
Project: 20152227
Project ID: Magnolia, AR
Site: None
Lab ID: 201077880
Matrix: Other
% Moisture: n/a
Description: None
Prep Level:
Batch: 205598
Method: EPA 6010
Metals, ICP, TCLP Filtered Oil
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
7440-38-2	Arsenic	1	ND		1.00	0.104	5.00	01-Apr-13 20:42	EJH
7440-39-3	Barium	1	ND		20.0	0.248	100.	01-Apr-13 20:42	EJH
7440-43-9	Cadmium	1	ND		0.500	0.148	1.00	01-Apr-13 20:42	EJH
7440-47-3	Chromium	1	ND		1.00	0.151	5.00	01-Apr-13 20:42	EJH
7439-92-1	Lead	1	ND		0.500	0.129	5.00	01-Apr-13 20:42	EJH
7782-49-2	Selenium	1	ND		3.50	1.26	1.00	01-Apr-13 20:42	EJH
7440-22-4	Silver	1	ND		1.00	0.0620	5.00	01-Apr-13 20:42	EJH

7 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

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Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0328WC004 IMMISCIBLE
Project: 20152227
Project ID: Magnolia, AR
Site: None
Lab ID: 201077880
Matrix: Other
% Moisture: n/a
Description: None
Prep Level:
Batch: 205599
Method: EPA 7471
Mercury TCLP Filtered Oil
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.0200	0.00300	0.200	01-Apr-13 15:21 MHB1

1 compound(s) reported

Protocol 4/5/2013 18:53:17

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328WC005 IMMISCIBLE
Project: 20152227
Project ID: Magnolia, AR
Site: None
Lab ID: 201077881
Matrix: Other
% Moisture: n/a
Description: None
Prep Level:
Batch: 205608
Method: EPA 8270
GCMS SVOAs TCLP Filtered Oil
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
106-46-7	1,4-Dichlorobenzene	4	ND	N	200.	29.8	7.50	02-Apr-13 11:56 JAM
121-14-2	2,4-Dinitrotoluene	4	ND	N	200.	29.4	0.130	02-Apr-13 11:56 JAM
87-68-3	Hexachloro-1,3-butadiene	4	ND	N	200.	31.3	0.500	02-Apr-13 11:56 JAM
118-74-1	Hexachlorobenzene	4	ND	N	200.	34.2	0.130	02-Apr-13 11:56 JAM
67-72-1	Hexachloroethane	4	ND	N	200.	34.7	3.00	02-Apr-13 11:56 JAM
95-48-7	2-Methylphenol (o-Cresol)	4	ND	N	200.	36.3	200.	02-Apr-13 11:56 JAM
	3&4-Methylphenol	4	ND	N	200.	28.0	200.	02-Apr-13 11:56 JAM
98-95-3	Nitrobenzene	4	ND	N	200.	34.6	2.00	02-Apr-13 11:56 JAM
87-86-5	Pentachlorophenol	4	ND	N	200.	23.4	100.	02-Apr-13 11:56 JAM
110-86-1	Pyridine	4	ND	N	200.	39.8	5.00	02-Apr-13 11:56 JAM
95-95-4	2,4,5-Trichlorophenol	4	ND	N	200.	27.5	400.	02-Apr-13 11:56 JAM
88-06-2	2,4,6-Trichlorophenol	4	ND	N	200.	30.1	2.00	02-Apr-13 11:56 JAM

12 compound(s) reported

Protocol 4/5/2013 18:53:17

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328WC005 IMMISCIBLE
Project: 20152227
Project ID: Magnolia, AR
Site: None
Lab ID: 201077881
Matrix: Other
% Moisture: n/a
Description: None
Prep Level:
Batch: 205606
Method: EPA 8260
GCMS VOAs TCLP Filtered Oil
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 02-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
71-43-2	Benzene	5	ND	D2	2.50	0.648	0.500	02-Apr-13 12:27 RMP
78-93-3	2-Butanone (MEK)	5	ND	D2	5.00	3.33	200.	02-Apr-13 12:27 RMP
56-23-5	Carbon tetrachloride	5	ND	D2	2.50	0.660	0.500	02-Apr-13 12:27 RMP
108-90-7	Chlorobenzene	5	ND	D2	2.50	0.828	100.	02-Apr-13 12:27 RMP
67-66-3	Chloroform	5	ND	D2	2.50	1.07	6.00	02-Apr-13 12:27 RMP
107-06-2	1,2-Dichloroethane	5	ND	D2	2.50	0.922	0.500	02-Apr-13 12:27 RMP
75-35-4	1,1-Dichloroethene	5	ND	D2	2.50	0.696	0.700	02-Apr-13 12:27 RMP
127-18-4	Tetrachloroethene	5	ND	D2	2.50	0.849	0.700	02-Apr-13 12:27 RMP
79-01-6	Trichloroethene	5	ND	D2	2.50	0.818	0.500	02-Apr-13 12:27 RMP
75-01-4	Vinyl chloride	5	ND	D2	2.50	0.705	0.200	02-Apr-13 12:27 RMP

10 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0328WC005 IMMISCIBLE
Project: 20152227
Project ID: Magnolia, AR
Site: None
Lab ID: 201077881
Matrix: Other
% Moisture: n/a
Description: None
Prep Level:
Batch: 205598
Method: EPA 6010
Metals, ICP, TCLP Filtered Oil
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
7440-38-2	Arsenic	1	ND		1.00	0.104	5.00	01-Apr-13 20:46	EJH
7440-39-3	Barium	1	ND		20.0	0.248	100.	01-Apr-13 20:46	EJH
7440-43-9	Cadmium	1	ND		0.500	0.148	1.00	01-Apr-13 20:46	EJH
7440-47-3	Chromium	1	ND		1.00	0.151	5.00	01-Apr-13 20:46	EJH
7439-92-1	Lead	1	ND		0.500	0.129	5.00	01-Apr-13 20:46	EJH
7782-49-2	Selenium	1	ND		3.50	1.26	1.00	01-Apr-13 20:46	EJH
7440-22-4	Silver	1	ND		1.00	0.0620	5.00	01-Apr-13 20:46	EJH

7 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Client: CTEH

Client ID: MAAR0328WC005 IMMISCIBLE
Project: 20152227
Project ID: Magnolia, AR
Site: None
Lab ID: 201077881
Matrix: Other
% Moisture: n/a
Description: None
Prep Level:
Batch: 205599
Method: EPA 7471
Mercury TCLP Filtered Oil
Collected: 28-Mar-13
Received: 29-Mar-13
Prepared: 01-Apr-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.0200	0.00300	0.200	01-Apr-13 15:23 MHB1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Sample Results

Client: CTEH

Client ID: MAAR0328WC004
Project: 20152227
Project ID: Magnolia, AR
Site: None
Lab ID: 201077259
Matrix: Other
%Moisture: n/a
Description: None

Collected: 28-Mar-13
Received: 29-Mar-13

Analyte	Method	Batch	DF	Result	Qu	Units	Reporting Limit	MDL	Analysis	Limit
Cyanide, Reactive	SW-846 7.3.3.2	205559	1	ND		mg/kg	25.0	25.0	01-Apr-13 08:30 LJL	
Flash Point	EPA 1010	205562	1	>140		deg F			01-Apr-13 14:25 LJL	
pH	EPA 9045	205485	1	5.51		Std. Units			29-Mar-13 11:05 LVA	
Sulfide, Reactive	SW-846 7.3.4.2	205560	1	ND		mg/kg	50.0	50.0	01-Apr-13 14:15 LJL	

4 parameter(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Sample Results

Client: CTEH

Client ID: MAAR0328WC005
Project: 20152227
Project ID: Magnolia, AR
Site: None
Lab ID: 201077260
Matrix: Other
%Moisture: n/a
Description: None

Collected: 28-Mar-13
Received: 29-Mar-13

Analyte	Method	Batch	DF	Result	Qu	Units	Reporting Limit	MDL	Analysis	Limit
Cyanide, Reactive	SW-846 7.3.3.2	205559	1	ND		mg/kg	25.0	25.0	01-Apr-13 08:30 LJL	
Flash Point	EPA 1010	205562	1	>140		deg F			01-Apr-13 14:25 LJL	
pH	EPA 9045	205485	1	4.77		Std. Units			29-Mar-13 11:05 LVA	
Sulfide, Reactive	SW-846 7.3.4.2	205560	1	ND		mg/kg	50.0	50.0	01-Apr-13 14:15 LJL	

4 parameter(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Surrogate Recovery

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Batch: 205580 **Project:** 20152227

Method: TCLP GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201077789	205580 BLANK 1		76	60	46	72	35	86		
201077805	205580 BLANK 2		59	49	35	59	28	79		
201077790	205580 LCS 1		94	64	42	79	32	91		
201077791	MAAR0328SO001 MS 1		87	60	46	77	34	96		
201077792	MAAR0328SO001 MSD 1		82	57	40	74	30	90		
201077259	MAAR0328WC004		68	55	36	67	28	72		
201077260	MAAR0328WC005		60	49	40	62	31	61		
	QC limits:		25-145	34-117	10-118	33-120	15-134	24-133		

Sur 1: 2,4,6-Tribromophenol (S)
Sur 2: 2-Fluorobiphenyl (S)
Sur 3: 2-Fluorophenol (S)
Sur 4: Nitrobenzene-d5 (S)
Sur 5: Phenol-d5 (S)
Sur 6: Terphenyl-d14 (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205608 **Project:** 20152227

Method: GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201077923	205608 BLANK 1		53	69	60	74	57	100		
201077924	205608 LCS 1		102	67	84	71	75	78		
201077880	MAAR0328WC004 IMMISCIBL		0 D	0 D	0 D	0 D	0 D	0 D		
201077881	MAAR0328WC005 IMMISCIBL		0 D	0 D	0 D	0 D	0 D	0 D		
	QC limits:		10-124	22-119	17-110	10-125	13-121	30-149		

Sur 1: 2,4,6-Tribromophenol (S)
Sur 2: 2-Fluorobiphenyl (S)
Sur 3: 2-Fluorophenol (S)
Sur 4: Nitrobenzene-d5 (S)
Sur 5: Phenol-d5 (S)
Sur 6: Terphenyl-d14 (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205577 **Project:** 20152227

Method: TCLP GC/MS Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201077785	205577 BLANK 1		78	86	82					
201077876	205577 BLANK 2		80	83	84					
201077786	205577 LCS 1		97	96	99					
201077787	MAAR0328SO001 MS 1		82	82	88					
201077788	MAAR0328SO001 MSD 1		82	80	85					
201077259	MAAR0328WC004		83	77	84					
201077260	MAAR0328WC005		83	82	86					
	QC limits:		68-124	72-126	79-119					

Sur 1: 4-Bromofluorobenzene (S)
Sur 2: Dibromofluoromethane (S)
Sur 3: Toluene-d8 (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205606 **Project:** 20152227

Method: GC/MS Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201077918	205606 BLANK 1		100	106	100					
201077919	205606 LCS 1		107	111	111					
201077880	MAAR0328WC004 IMMISCIBL		113	119	126 D					
201077881	MAAR0328WC005 IMMISCIBL		97	112	118					
	QC limits:		68-124	72-126	79-119					

Sur 1: 4-Bromofluorobenzene (S)
Sur 2: Dibromofluoromethane (S)
Sur 3: Toluene-d8 (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205475 **Project:** 20152227

Method: Soil GC Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201077304	205475 BLANK 1		56	53						
201077305	205475 LCS 1		86	80						
201077259	MAAR0328WC004	G1	1590 D	343 D						
201077260	MAAR0328WC005		0 D	0 D						
201077306	PF3 MS 1		91	81						
201077307	PF3 MSD 1		124	99						
	QC limits:		16-147	16-127						

Sur 1: n-Pentacosane (S)
Sur 2: o-Terphenyl (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205492 **Project:** 20152227

Method: Soil GC Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201077368	205492 BLANK 1		113							
201077369	205492 LCS 1		107							
201078098	MAAR0328SO001 MS 1	G1	524 D							
201078099	MAAR0328SO001 MSD 1	G1	442 D							
201077259	MAAR0328WC004	G1	228 *							
201077260	MAAR0328WC005	G1	93							
	QC limits:		60-129							

Sur 1: 4-Bromofluorobenzene (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Batch: 205580 **Project:** 20152227 **LCS:** 201077790 01-Apr-13 15:07

Method: TCLP GC/MS Semivolatile Organics **MS:** 201077791 01-Apr-13 16:31

Units: mg/L **MSD:** 201077792 01-Apr-13 17:00

Original for MS: Batch Sample 201077313

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
1,4-Dichlorobenzene	0.500	0.331	66	0.500		0.319	0.315	64	63	1	45-110	35-110	20	
2,4-Dinitrotoluene	0.500	0.333	67	0.500		0.308	0.286	62	57	7	49-124	33-128	20	
Hexachloro-1,3-butadiene	0.500	0.285	57	0.500		0.279	0.274	56	55	2	34-110	27-110	20	
Hexachlorobenzene	0.500	0.329	66	0.500		0.342	0.333	68	67	3	52-115	40-111	20	
Hexachloroethane	0.500	0.316	63	0.500		0.313	0.309	63	62	1	43-110	35-110	20	
2-Methylphenol (o-Cresol)	0.500	0.383	77	0.500		0.373	0.371	75	74	0	46-110	10-126	20	
3&4-Methylphenol	1.00	0.830	83	1.00		0.787	0.795	79	80	1	45-117	38-128	20	
Nitrobenzene	0.500	0.382	76	0.500		0.390	0.382	78	77	2	41-112	29-118	20	
Pentachlorophenol	0.500	0.344	69	0.500		0.228	0.207	46	42	9	38-135	24-168	20	
Pyridine	0.500	0.282	56	0.500		0.179	0.169	36 *	34 *	5	24-118	40-112	20	Q1
2,4,5-Trichlorophenol	0.500	0.405	81	0.500		0.354	0.336	71	67	5	44-110	35-144	20	
2,4,6-Trichlorophenol	0.500	0.387	77	0.500		0.369	0.346	74	69	6	43-110	33-140	20	

12 compound(s) reported

QC Protocol 4/5/2013 18:53:21

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205608 **Project:** 20152227 **LCS:** 201077924 02-Apr-13 11:00

Method: GC/MS Semivolatile Organics **MS:**

Units: mg/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
1,4-Dichlorobenzene	50.0	31.3	63								46-115			
2,4-Dinitrotoluene	50.0	25.8	52								47-115			
Hexachloro-1,3-butadiene	50.0	30.2	60								41-115			
Hexachlorobenzene	50.0	29.6	59								47-115			
Hexachloroethane	50.0	32.5	65								46-115			
2-Methylphenol (o-Cresol)	50.0	32.3	65								44-115			
3&4-Methylphenol	100.	66.0	66								41-115			
Nitrobenzene	50.0	34.6	69								42-115			
Pentachlorophenol	50.0	19.1	38								28-118			
Pyridine	50.0	29.8	60								34-115			
2,4,5-Trichlorophenol	50.0	28.4	57								47-115			
2,4,6-Trichlorophenol	50.0	28.9	58								46-115			

12 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205577 **Project:** 20152227 **LCS:** 201077786 01-Apr-13 11:19

Method: TCLP GC/MS Volatile Organics **MS:** 201077787 01-Apr-13 11:59

Units: mg/L **MSD:** 201077788 01-Apr-13 12:19

Original for MS: Batch Sample 201077313

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Benzene	0.400	0.360	90	0.400		0.415	0.390	104	98	6	68-129	60-138	20	
2-Butanone (MEK)	0.400	0.404	101	0.400		0.237	0.185	59	46	24 *	18-173	14-184	20	
Carbon tetrachloride	0.400	0.392	98	0.400		0.418	0.393	105	98	6	56-146	51-151	20	
Chlorobenzene	0.400	0.400	100	0.400		0.402	0.396	101	99	2	74-131	71-135	20	
Chloroform	0.400	0.376	94	0.400		0.385	0.364	96	91	6	71-132	67-138	20	
1,2-Dichloroethane	0.400	0.409	102	0.400		0.396	0.352	99	88	12	58-150	57-155	20	
1,1-Dichloroethene	0.400	0.422	105	0.400		0.446	0.418	112	105	6	50-151	40-163	20	
Tetrachloroethene	0.400	0.352	88	0.400		0.388	0.372	97	93	4	57-151	48-160	20	
Trichloroethene	0.400	0.363	91	0.400		0.392	0.375	98	94	4	71-131	62-142	20	
Vinyl chloride	0.400	0.439	110	0.400		0.456	0.432	114	108	5	42-148	35-153	20	

10 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

QC Protocol 4/5/2013 18:53:21

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Batch: 205606 **Project:** 20152227 **LCS:** 201077919 02-Apr-13 11:47

Method: GC/MS Volatile Organics **MS:**

Units: mg/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Benzene	2.50	2.69	108								68-129			
2-Butanone (MEK)	2.50	3.97	159								18-173			
Carbon tetrachloride	2.50	2.51	101								56-146			
Chlorobenzene	2.50	2.47	99								74-131			
Chloroform	2.50	2.43	97								71-132			
1,2-Dichloroethane	2.50	2.89	116								58-150			
1,1-Dichloroethene	2.50	2.73	109								50-151			
Tetrachloroethene	2.50	2.16	86								57-151			
Trichloroethene	2.50	2.47	99								71-131			
Vinyl chloride	2.50	2.44	98								42-148			

10 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

QC Protocol 4/5/2013 18:53:21

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Batch: 205475 **Project:** 20152227 **LCS:** 201077305 03-Apr-13 14:39

Method: Soil GC Semivolatile Organics **MS:** 201077306 04-Apr-13 13:18

Units: mg/kg **MSD:** 201077307 04-Apr-13 13:46

Original for MS: Batch Sample 201077071

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Diesel Range Organics (C10-2	40.0	20.7	52	39.6		27.8	38.0	62	88	31 *	34-125	10-163	20	

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205492 **Project:** 20152227 **LCS:** 201077369 01-Apr-13 19:27

Method: Soil GC Volatile Organics **MS:** 201078098 02-Apr-13 21:59

Units: mg/kg **MSD:** 201078099 02-Apr-13 22:27

Original for MS: Batch Sample 201077313

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Gasoline Range Organics(C6-	25.0	21.8	87	28.4	607.	764.	663.	554 *	198 *	14	61-136	15-147	20	D6,Q3
1 compound(s) reported														

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205582 **Project:** 20152227 **LCS:** 201077812 01-Apr-13 19:10

Method: TCLP ICP Metals **MS:** 201077813 01-Apr-13 19:17

Units: mg/L **MSD:** 201077814 01-Apr-13 19:21

Original for MS: Batch Sample 201077660

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Arsenic	2.00	2.02	101	2.00	0.00700	1.97	1.90	98	95	4	84-117	80-120	20	
Barium	2.00	1.96	98	2.00	0.576	2.45	2.34	94	88	5	85-118	80-120	20	
Cadmium	2.00	2.09	105	2.00	0.00118	1.79	1.74	90	87	3	85-115	80-120	20	
Chromium	2.00	2.00	100	2.00		1.92	1.85	96	92	4	83-117	80-120	20	
Lead	2.00	2.11	105	2.00	0.0148	1.69	1.64	84	81	3	84-118	80-120	20	
Selenium	2.00	2.05	103	2.00		1.97	1.94	98	97	1	85-116	80-120	20	
Silver	1.00	1.02	102	1.00		0.957	0.929	96	93	3	80-120	80-120	20	

7 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205598 **Project:** 20152227 **LCS:** 201077889 01-Apr-13 20:39

Method: ICP Metals **MS:**

Units: mg/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Arsenic	100.	89.8	90								80-120			
Barium	100.	95.7	96								80-120			
Cadmium	100.	92.9	93								80-120			
Chromium	100.	94.4	94								80-120			
Lead	100.	91.9	92								80-120			
Selenium	100.	83.8	84								80-120			
Silver	50.0	44.9	90								80-120			

7 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Quality Control

Batch: 205583 **Project:** 20152227 **LCS:** 201077816 01-Apr-13 13:44

Method: TCLP Mercury **MS:** 201077817 01-Apr-13 13:48

Units: mg/L **MSD:** 201077818 01-Apr-13 13:49

Original for MS: Batch Sample 201077660

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Mercury	0.00100	0.00101	101	0.00100		0.00100	0.00100	100	100	0	80-120	75-125	20	

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205599 **Project:** 20152227 **LCS:** 201077891 01-Apr-13 15:19

Method: Mercury **MS:**

Units: mg/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Mercury	0.100	0.103	103								80-120			

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Blank Results

Blank ID: 205608 BLANK 1 **Project:** 20152227

Lab ID: 201077923

Prep Level: **Batch:** 205608

Method: GC/MS Semivolatile Organics

Prepared: 01-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		10.0	1.49	02-Apr-13 10:32 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	1.47	02-Apr-13 10:32 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		10.0	1.57	02-Apr-13 10:32 JAM
118-74-1	Hexachlorobenzene	1	ND		10.0	1.71	02-Apr-13 10:32 JAM
67-72-1	Hexachloroethane	1	ND		10.0	1.73	02-Apr-13 10:32 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	1.82	02-Apr-13 10:32 JAM
	3&4-Methylphenol	1	ND		10.0	1.40	02-Apr-13 10:32 JAM
98-95-3	Nitrobenzene	1	ND		10.0	1.73	02-Apr-13 10:32 JAM
87-86-5	Pentachlorophenol	1	ND		10.0	1.17	02-Apr-13 10:32 JAM
110-86-1	Pyridine	1	ND		10.0	1.99	02-Apr-13 10:32 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		10.0	1.37	02-Apr-13 10:32 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	1.50	02-Apr-13 10:32 JAM

12 compound(s) reported

Protocol Blank 4/5/2013 18:53:23

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205580 BLANK 1 **Project:** 20152227

Lab ID: 201077789

Prep Level: TCLP **Batch:** 205580

Method: TCLP GC/MS Semivolatile Organics

Prepared: 01-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		0.100	0.0000400	01-Apr-13 14:10 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		0.100	0.0000600	01-Apr-13 14:10 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		0.100	0.0000800	01-Apr-13 14:10 JAM
118-74-1	Hexachlorobenzene	1	ND		0.100	0.0000700	01-Apr-13 14:10 JAM
67-72-1	Hexachloroethane	1	ND		0.100	0.0000600	01-Apr-13 14:10 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		0.100	0.000100	01-Apr-13 14:10 JAM
	3&4-Methylphenol	1	ND		0.100	0.000100	01-Apr-13 14:10 JAM
98-95-3	Nitrobenzene	1	ND		0.100	0.0000800	01-Apr-13 14:10 JAM
87-86-5	Pentachlorophenol	1	ND		0.250	0.0000500	01-Apr-13 14:10 JAM
110-86-1	Pyridine	1	ND		0.100	0.000110	01-Apr-13 14:10 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		0.250	0.000090	01-Apr-13 14:10 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		0.100	0.0000500	01-Apr-13 14:10 JAM

12 compound(s) reported

Protocol Blank 4/5/2013 18:53:23

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MDL denotes method detection limit

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank Results

Blank ID: 205580 BLANK 2 **Project:** 20152227

Lab ID: 201077805

Prep Level: TCLP **Batch:** 205580

Method: TCLP GC/MS Semivolatile Organics

Prepared: 01-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		0.100	0.0000400	01-Apr-13 14:39 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		0.100	0.0000600	01-Apr-13 14:39 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		0.100	0.0000800	01-Apr-13 14:39 JAM
118-74-1	Hexachlorobenzene	1	ND		0.100	0.0000700	01-Apr-13 14:39 JAM
67-72-1	Hexachloroethane	1	ND		0.100	0.0000600	01-Apr-13 14:39 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		0.100	0.000100	01-Apr-13 14:39 JAM
	3&4-Methylphenol	1	ND		0.100	0.000100	01-Apr-13 14:39 JAM
98-95-3	Nitrobenzene	1	ND		0.100	0.0000800	01-Apr-13 14:39 JAM
87-86-5	Pentachlorophenol	1	ND		0.250	0.0000500	01-Apr-13 14:39 JAM
110-86-1	Pyridine	1	ND		0.100	0.000110	01-Apr-13 14:39 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		0.250	0.000090	01-Apr-13 14:39 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		0.100	0.0000500	01-Apr-13 14:39 JAM

12 compound(s) reported

Protocol Blank 4/5/2013 18:53:23

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205606 BLANK 1 **Project:** 20152227

Lab ID: 201077918

Prep Level: **Batch:** 205606

Method: GC/MS Volatile Organics

Prepared: 02-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
71-43-2	Benzene	1	ND		0.100	0.0259	02-Apr-13 11:26 RMP
78-93-3	2-Butanone (MEK)	1	ND		0.200	0.133	02-Apr-13 11:26 RMP
56-23-5	Carbon tetrachloride	1	ND		0.100	0.0264	02-Apr-13 11:26 RMP
108-90-7	Chlorobenzene	1	ND		0.100	0.0331	02-Apr-13 11:26 RMP
67-66-3	Chloroform	1	ND		0.100	0.0426	02-Apr-13 11:26 RMP
107-06-2	1,2-Dichloroethane	1	ND		0.100	0.0369	02-Apr-13 11:26 RMP
75-35-4	1,1-Dichloroethene	1	ND		0.100	0.0278	02-Apr-13 11:26 RMP
127-18-4	Tetrachloroethene	1	ND		0.100	0.0340	02-Apr-13 11:26 RMP
79-01-6	Trichloroethene	1	ND		0.100	0.0327	02-Apr-13 11:26 RMP
75-01-4	Vinyl chloride	1	ND		0.100	0.0282	02-Apr-13 11:26 RMP

10 compound(s) reported

Protocol Blank 4/5/2013 18:53:23

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205577 BLANK 1 **Project:** 20152227

Lab ID: 201077785

Prep Level: TCLP **Batch:** 205577

Method: TCLP GC/MS Volatile Organics

Prepared: 01-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
71-43-2	Benzene	1	ND		0.100	0.0104	01-Apr-13 10:59 MHM
78-93-3	2-Butanone (MEK)	1	ND		0.200	0.0533	01-Apr-13 10:59 MHM
56-23-5	Carbon tetrachloride	1	ND		0.100	0.0106	01-Apr-13 10:59 MHM
108-90-7	Chlorobenzene	1	ND		0.100	0.0132	01-Apr-13 10:59 MHM
67-66-3	Chloroform	1	ND		0.100	0.0171	01-Apr-13 10:59 MHM
107-06-2	1,2-Dichloroethane	1	ND		0.100	0.0148	01-Apr-13 10:59 MHM
75-35-4	1,1-Dichloroethene	1	ND		0.100	0.0111	01-Apr-13 10:59 MHM
127-18-4	Tetrachloroethene	1	ND		0.100	0.0136	01-Apr-13 10:59 MHM
79-01-6	Trichloroethene	1	ND		0.100	0.0131	01-Apr-13 10:59 MHM
75-01-4	Vinyl chloride	1	ND		0.100	0.0113	01-Apr-13 10:59 MHM

10 compound(s) reported

Protocol Blank 4/5/2013 18:53:23

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
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Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205475 BLANK 1 **Project:** 20152227

Lab ID: 201077304

Prep Level: Soil **Batch:** 205475

Method: Soil GC Semivolatile Organics

Prepared: 29-Mar-13

Units: mg/kg

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Diesel Range Organics (C10-28)	1	ND		10.0	5.00	03-Apr-13 15:07 SNP1
none	Oil Range Organics (>C28-40)	1	ND		50.0	25.0	03-Apr-13 15:07 SNP1

2 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205492 BLANK 1 **Project:** 20152227

Lab ID: 201077368

Prep Level: Soil **Batch:** 205492

Method: Soil GC Volatile Organics

Prepared: 29-Mar-13

Units: mg/kg

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
none	Gasoline Range Organics(C6-10)	1	1.32	J	2.50	1.06	01-Apr-13 18:59 DHR1

1 compound(s) reported

Protocol Blank 4/5/2013 18:53:23

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205598 BLANK 1 **Project:** 20152227

Lab ID: 201077888

Prep Level: **Batch:** 205598

Method: ICP Metals

Prepared: 01-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis	
7440-38-2	Arsenic	1	ND		1.00	0.104	01-Apr-13 20:35	EJH
7440-39-3	Barium	1	ND		20.0	0.248	01-Apr-13 20:35	EJH
7440-43-9	Cadmium	1	ND		0.500	0.148	01-Apr-13 20:35	EJH
7440-47-3	Chromium	1	ND		1.00	0.151	01-Apr-13 20:35	EJH
7439-92-1	Lead	1	ND		0.500	0.129	01-Apr-13 20:35	EJH
7782-49-2	Selenium	1	ND		3.50	1.26	01-Apr-13 20:35	EJH
7440-22-4	Silver	1	ND		1.00	0.0620	01-Apr-13 20:35	EJH

7 compound(s) reported

Protocol Blank 4/5/2013 18:53:23

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205582 BLANK 1 **Project:** 20152227

Lab ID: 201077811

Prep Level: TCLP **Batch:** 205582

Method: TCLP ICP Metals

Prepared: 01-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis	
7440-38-2	Arsenic	1	ND		0.200	0.00209	01-Apr-13 19:06	EJH
7440-39-3	Barium	1	ND		2.00	0.00239	01-Apr-13 19:06	EJH
7440-43-9	Cadmium	1	ND		0.100	0.000722	01-Apr-13 19:06	EJH
7440-47-3	Chromium	1	0.0107	J	0.200	0.00400	01-Apr-13 19:06	EJH
7439-92-1	Lead	1	ND		0.200	0.00230	01-Apr-13 19:06	EJH
7782-49-2	Selenium	1	ND		0.200	0.0286	01-Apr-13 19:06	EJH
7440-22-4	Silver	1	ND		0.200	0.00116	01-Apr-13 19:06	EJH

7 compound(s) reported

Protocol Blank 4/5/2013 18:53:23

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MDL denotes method detection limit

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205599 BLANK 1 **Project:** 20152227

Lab ID: 201077890

Prep Level: **Batch:** 205599

Method: Mercury

Prepared: 01-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
7439-97-6	Mercury	1	ND		0.0200	0.00300	01-Apr-13 15:17 MHB1

1 compound(s) reported

Protocol Blank 4/5/2013 18:53:23

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205583 BLANK 1 **Project:** 20152227

Lab ID: 201077815

Prep Level: TCLP **Batch:** 205583

Method: TCLP Mercury

Prepared: 01-Apr-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
7439-97-6	Mercury	1	ND		0.000200	0.0000340	01-Apr-13 13:42 MHB1

1 compound(s) reported

Protocol Blank 4/5/2013 18:53:23

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
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St. Rose, LA 70087
(504) 469-0333

Project: 20152227

Parameter	Batch	Blank	Units	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
pH	205485		Std. Units	6.00	5.97	100							0	97-103		20	
Cyanide, Reactive	205559	<25.0	mg/kg	100.	4.33	4	100.	0.125	7.20		7		0	1-110	1-110	20	
Sulfide, Reactive	205560	<50.0	mg/kg	500.	440.	88	500.		440.		88		0	1-110	1-110	20	
Flash Point	205562		deg F	80.6	82.4	102							0				

*** denotes recovery outside of QC limits.**

MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Pace Analytical Services, Inc.
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St. Rose, LA 70087
(504) 469-0333

Project: 20152227

Value	Description
D1	The analysis was performed at a dilution due to the high analyte concentration.
D2	The analysis was performed at a dilution due to the presence of matrix interferences.
D6	The sample was analyzed at a dilution based upon the screening information.
G1	Interferences are present which caused poor surrogate recovery.
N	See narrative for a detailed explanation.
P12	A reduced sample aliquot was prepared because of the observed nature of the sample matrix.
Q1	The matrix spike recoveries are poor. Acceptable method performance for this analyte has been demonstrated by the laboratory control sample recovery.
Q3	The matrix spike recoveries are poor due to the presence of this analyte in the sample at a concentration greater than 4 times the spiked amount. Acceptable method performance for this analyte has been demonstrated by the laboratory control sample.
J	This estimated value for the analyte is below the adjusted reporting limit but above the instrument reporting limit.
U	The analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
B	This analyte was detected in the method blank.
E	The sample concentration is above the linear calibrated range of the analysis.
LCS	Laboratory Control Sample.
MS(D)	Matrix Spike (Duplicate).
DUP	Sample Duplicate.
RPD	Relative Percent Difference.

Pace Analytical Services, In
1000 Riverbend Blvd. Suite F
St. Rose, LA 7008
(504) 469-033

Chains of Custody

20152227 20-CTEH

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20152227

Page: 1 of 1

1638655

Section A Required Client Information:

Company: ~~Lton Oil~~ CTEH
Address: 5120 Northshore Rd
N. Littlerock, AR 72118
Email To:
Phone: 501-801-8550 Fax:
Requested Due Date/TAT: 72 Hr TAT

Section B Required Project Information:

Report To: SKIUSKA@CTEH-COM
Copy To:
Purchase Order No.:
Project Name: LTON Oil
Project Number: 40432

Invoice Information:

Attention: Accounts Payable
Company Name: CTEH
Address: Little Rock, AR
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☒ RCRA ☐ OTHER

Site Location STATE: AR

WC004 = Weir 1-1601
WC005 = Weir 2-3019

Note: 0.1 w/ water Debris

Section D Required Client Information

Matrix Codes MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	TCLP SVOA	TCLP VOA	TCLP Metals	Reactive CN	Reactive Sulfide	Ignitability	TPH	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MAAR0328WC004	O	G	3/28/13					4	X									X	X	X	X	X	X	X		201077259
2	MAAR0328WC005	O	G	↓					4	X									X	X	X	X	X	X	X		7260
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

03-28-13

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	CTEH	03-28-13	1730	UPS	03-28-13	1730				
	UPS	3-29-13	0800	[signature]	3-29-13	0800	1.4	X	X	X

ORIGINAL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER:
SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY):

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

20152227 20-CTEH

Pace Analytical

Sample Con

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Courier: ☐ Pace Courier ☐ Hired Courier ☐ Fed X ☒ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC] **Custody Seals intact:** ☒Yes ☐No

Therometer Used:	☐ Therm Fisher IR 5 ☒ Therm Fisher IR 6 ☐ Therm Fisher IR 7

Type of Ice: (Wet) Blue None Samples on ice: [see COC]

Cooler Temperature: [see COC] Temp should be above freezing to 6°C

Date and Initials of person examining contents: 03-29-13 AS

Temp must be measured from Temperature blank when present

		Comments:
Temperature Blank Present"?	☒Yes ☐No ☐N/A	1
Chain of Custody Present:	☒Yes ☐No ☐N/A	2
Chain of Custody Complete:	☒Yes ☐No ☐N/A	3
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	4
Sampler Name & Signature on COC:	☒Yes ☐No ☐N/A	5
Samples Arrived within Hold Time:	☒Yes ☐No ☐N/A	6
Sufficient Volume:	☒Yes ☐No ☐N/A	7
Correct Containers Used:	☒Yes ☐No ☐N/A	8
Filtered vol. Rec. for Diss. tests	☐Yes ☐No ☒N/A	9
Sample Labels match COC:	☒Yes ☐No ☐N/A	10
All containers received within manafacture's precautionary and/or expiration dates.	☒Yes ☐No ☐N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐Yes ☐No ☒N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	☐Yes ☐No ☒N/A	13 If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO_3 _____ H_2SO_4 _____
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☒N/A	14
Trip Blank Present:	☐Yes ☒No	15

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution:

– pH Correction omitted in error. added to the samples

ALLC003rev.08, 15Feb2013 SCUR Form - mod

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

April 01, 2013

James McCormack
CTEH
5120 North Shore Drive
North Little Rock, AR 72118

RE: Project 20152152
Project ID: Magnolia, AR

Dear James McCormack:

Enclosed are the analytical results for sample(s) received by the laboratory on March 28, 2013. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Karen Brown
karen.brown@pacelabs.com

REPORT OF LABORATORY ANALYSIS

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Laboratory Certifications

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152152

Client: CTEH

Project ID: Magnolia, AR

Washington Department of Ecology C2078
Oregon Environmental Laboratory Accreditation - LA200001
U.S. Dept. of Agriculture Foreign Soil Import P330-10-00119
Pennsylvania Dept. of Env Protection (NELAC) 68-04202
Texas Commission on Env. Quality (NELAC) T104704405-09-TX
Kansas Department of Health and Environment (NELAC) E-10266
Florida Department of Health (NELAC) E87595
Oklahoma Department of Environmental Quality - 2010-139
Illinois Environmental Protection Agency - 0025721
California Env. Lab Accreditation Program Branch - 11277CA
Louisiana Dept. of Environmental Quality (NELAC/LELAP) 02006

4/1/2013 10:25:36

Sample Cross Reference

Pace Analytical Services, Inc.
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(504) 469-0333

Project: 20152152

Client: CTEH

Project ID: Magnolia, AR

Client Sample ID	Lab ID	Matrix	Collection Date/Time	Received Date/Time
MAAR0326WC003	201076683	Other	26-Mar-13 00:00	28-Mar-13 06:45

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Project: 20152152

Sample Receipt Condition:

All samples were received in accordance with EPA protocol.

Holding Times:

All holding times were met.

Blanks:

All blank results were below reporting limits.

Laboratory Control Samples:

All LCS recoveries were within QC limits.

Matrix Spikes and Duplicates:

MS or MSD recoveries outside of QC limits are qualified in the Report of Quality Control section.

Surrogates:

All surrogate recoveries were within QC limits.

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Project: 20152152

Analytical Method	Batch	Sample used for QC
EPA 6010	205504	Batch sample from another client
EPA 7470	205505	Batch sample from another client
EPA 8270	205497	Project sample MAAR0326WC003
EPA 8260	205518	Batch sample from another client
EPA 9045	205375	Project sample MAAR0326WC003
EPA 1010	205460	Batch sample from another client
SW-846 7.3.4.2	205463	Batch sample from another client
SW-846 7.3.3.2	205462	Batch sample from another client

Narrative1 4/1/2013 10:27:17

For the sample used as the original for the DUP or MS/MSD for the batch:

Project sample means a sample from this project was used.
Client sample means a sample from the same client but in a different project was used.
Batch sample means a sample from a different client was used.

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Client: CTEH

Client ID: MAAR0326WC003
Project: 20152152
Project ID: Magnolia, AR
Site: None
Lab ID: 201076683 (TCLP)
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: TCLP
Batch: 205497
Method: EPA 8270 (TCLP)
GCMS SVOAs TCLP
Collected: 26-Mar-13
Received: 28-Mar-13
Prepared: 29-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		0.100	0.0000400	7.50	29-Mar-13 14:02 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		0.100	0.0000600	0.130	29-Mar-13 14:02 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		0.100	0.0000800	0.500	29-Mar-13 14:02 JAM
118-74-1	Hexachlorobenzene	1	ND		0.100	0.0000700	0.130	29-Mar-13 14:02 JAM
67-72-1	Hexachloroethane	1	ND		0.100	0.0000600	3.00	29-Mar-13 14:02 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		0.100	0.000100	200.	29-Mar-13 14:02 JAM
	3&4-Methylphenol	1	ND		0.100	0.000100	200.	29-Mar-13 14:02 JAM
98-95-3	Nitrobenzene	1	ND		0.100	0.0000800	2.00	29-Mar-13 14:02 JAM
87-86-5	Pentachlorophenol	1	ND		0.250	0.0000500	100.	29-Mar-13 14:02 JAM
110-86-1	Pyridine	1	ND		0.100	0.000110	5.00	29-Mar-13 14:02 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		0.250	0.000090	400.	29-Mar-13 14:02 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		0.100	0.0000500	2.00	29-Mar-13 14:02 JAM

12 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Sample Results

Client: CTEH

Client ID: MAAR0326WC003
Project: 20152152
Project ID: Magnolia, AR
Site: None
Lab ID: 201076683 (TCLP)
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: TCLP
Batch: 205518
Method: EPA 8260 (TCLP)
GCMS VOAs TCLP
Collected: 26-Mar-13
Received: 28-Mar-13
Prepared: 29-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
71-43-2	Benzene	1	ND		0.100	0.0104	0.500	29-Mar-13 18:10 MHM
78-93-3	2-Butanone (MEK)	1	ND		0.200	0.0533	200.	29-Mar-13 18:10 MHM
56-23-5	Carbon tetrachloride	1	ND		0.100	0.0106	0.500	29-Mar-13 18:10 MHM
108-90-7	Chlorobenzene	1	ND		0.100	0.0132	100.	29-Mar-13 18:10 MHM
67-66-3	Chloroform	1	ND		0.100	0.0171	6.00	29-Mar-13 18:10 MHM
107-06-2	1,2-Dichloroethane	1	ND		0.100	0.0148	0.500	29-Mar-13 18:10 MHM
75-35-4	1,1-Dichloroethene	1	ND		0.100	0.0111	0.700	29-Mar-13 18:10 MHM
127-18-4	Tetrachloroethene	1	ND		0.100	0.0136	0.700	29-Mar-13 18:10 MHM
79-01-6	Trichloroethene	1	ND		0.100	0.0131	0.500	29-Mar-13 18:10 MHM
75-01-4	Vinyl chloride	1	ND		0.100	0.0113	0.200	29-Mar-13 18:10 MHM

10 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Client: CTEH

Client ID: MAAR0326WC003
Project: 20152152
Project ID: Magnolia, AR
Site: None
Lab ID: 201076683 (TCLP)
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: TCLP
Batch: 205504
Method: EPA 6010 (TCLP)
Metals, ICP, TCLP Leachate
Collected: 26-Mar-13
Received: 28-Mar-13
Prepared: 29-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7440-38-2	Arsenic	1	0.00632	J	0.200	0.00209	5.00	29-Mar-13 14:49 MHB1
7440-39-3	Barium	1	0.499	J	2.00	0.00239	100.	29-Mar-13 14:49 MHB1
7440-43-9	Cadmium	1	0.00149	J	0.100	0.000722	1.00	29-Mar-13 14:49 MHB1
7440-47-3	Chromium	1	ND		0.200	0.00400	5.00	29-Mar-13 14:49 MHB1
7439-92-1	Lead	1	ND		0.200	0.00230	5.00	29-Mar-13 14:49 MHB1
7782-49-2	Selenium	1	ND		0.200	0.0286	1.00	29-Mar-13 14:49 MHB1
7440-22-4	Silver	1	ND		0.200	0.00116	5.00	29-Mar-13 14:49 MHB1

7 compound(s) reported

Sample Results

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Client: CTEH

Client ID: MAAR0326WC003
Project: 20152152
Project ID: Magnolia, AR
Site: None
Lab ID: 201076683 (TCLP)
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: TCLP
Batch: 205505
Method: EPA 7470 (TCLP)
Mercury TCLP
Collected: 26-Mar-13
Received: 28-Mar-13
Prepared: 29-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.000200	0.0000340	0.200	29-Mar-13 14:54 MHB1

1 compound(s) reported

Protocol 4/1/2013 10:27:18

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
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Sample Results

Client: CTEH

Client ID: MAAR0326WC003
Project: 20152152
Project ID: Magnolia, AR
Site: None
Lab ID: 201076683
Matrix: Other
%Moisture: n/a
Description: None

Collected: 26-Mar-13
Received: 28-Mar-13

Analyte	Method	Batch	DF	Result	Qu	Units	Reporting Limit	MDL	Analysis	Limit
Cyanide, Reactive	SW-846 7.3.3.2	205462	1	ND		mg/kg	62.5	62.5	29-Mar-13 15:02 JMA	
Flash Point	EPA 1010	205460	1	>140		deg F			29-Mar-13 14:55 LJL	
pH	EPA 9045	205375	1	5.34		Std. Units			28-Mar-13 11:20 SMS2	
Sulfide, Reactive	SW-846 7.3.4.2	205463	1	ND		mg/kg	125.	125.	29-Mar-13 14:00 LJL	

4 parameter(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Surrogate Recovery

Batch: 205497 **Project:** 20152152

Method: TCLP GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201077465	205497 BLANK 1		66	52	36	68	27	70		
201077466	205497 LCS 1		96	64	42	80	31	84		
201076683	MAAR0326WC003		83	60	42	71	32	82		
201077467	MAAR0326WC003 MS 1		59	44	28	58	20	50		
201077468	MAAR0326WC003 MSD 1		60	53	40	77	30	81		
	QC limits:		25-145	34-117	10-118	33-120	15-134	24-133		

Sur 1: 2,4,6-Tribromophenol (S)
Sur 2: 2-Fluorobiphenyl (S)
Sur 3: 2-Fluorophenol (S)
Sur 4: Nitrobenzene-d5 (S)
Sur 5: Phenol-d5 (S)
Sur 6: Terphenyl-d14 (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

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Batch: 205518 **Project:** 20152152

Method: TCLP GC/MS Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201077551	205518 BLANK 1		80	82	82					
201077552	205518 LCS 1		80	86	85					
201076683	MAAR0326WC003		80	84	85					
201077553	V-641-B; PACKING, SS MS 1		88	88	89					
201077554	V-641-B; PACKING, SS MSD 1		83	82	85					
	QC limits:		68-124	72-126	79-119					

Sur 1: 4-Bromofluorobenzene (S)
Sur 2: Dibromofluoromethane (S)
Sur 3: Toluene-d8 (S)

Surrogates 4/1/2013 10:27:21

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Batch: 205497 **Project:** 20152152 **LCS:** 201077466 29-Mar-13 14:58

Method: TCLP GC/MS Semivolatile Organics **MS:** 201077467 29-Mar-13 14:30

Units: mg/L **MSD:** 201077468 29-Mar-13 13:33

Original for MS: Client Sample 201076683

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
1,4-Dichlorobenzene	0.500	0.321	64	0.500		0.247	0.314	49	63	24 *	45-110	35-110	20	
2,4-Dinitrotoluene	0.500	0.330	66	0.500		0.237	0.300	47	60	24 *	49-124	33-128	20	
Hexachloro-1,3-butadiene	0.500	0.290	58	0.500		0.225	0.277	45	55	21 *	34-110	27-110	20	
Hexachlorobenzene	0.500	0.328	66	0.500		0.209	0.319	42	64	42 *	52-115	40-111	20	
Hexachloroethane	0.500	0.309	62	0.500		0.241	0.294	48	59	20	43-110	35-110	20	
2-Methylphenol (o-Cresol)	0.500	0.367	73	0.500		0.250	0.227	50	45	9	46-110	10-126	20	
3&4-Methylphenol	1.00	0.764	77	1.00		0.492	0.551	49	55	11	45-117	38-128	20	
Nitrobenzene	0.500	0.392	79	0.500		0.301	0.390	60	78	26 *	41-112	29-118	20	
Pentachlorophenol	0.500	0.320	64	0.500		0.251	0.285	50	57	13	38-135	24-168	20	
Pyridine	0.500	0.151	30	0.500		0.134	0.170	27 *	34 *	24 *	24-118	40-112	20	Q1
2,4,5-Trichlorophenol	0.500	0.405	81	0.500		0.283	0.342	57	68	19	44-110	35-144	20	
2,4,6-Trichlorophenol	0.500	0.393	79	0.500		0.286	0.329	57	66	14	43-110	33-140	20	

12 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205518 **Project:** 20152152 **LCS:** 201077552 29-Mar-13 17:50

Method: TCLP GC/MS Volatile Organics **MS:** 201077553 29-Mar-13 19:11

Units: mg/L **MSD:** 201077554 29-Mar-13 19:31

Original for MS: Batch Sample 201075781

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Benzene	0.400	0.349	87	0.400		0.357	0.365	89	91	2	68-129	60-138	20	
2-Butanone (MEK)	0.400	0.324	81	0.400		0.252	0.366	63	92	37 *	18-173	14-184	20	
Carbon tetrachloride	0.400	0.408	102	0.400		0.397	0.406	99	102	2	56-146	51-151	20	
Chlorobenzene	0.400	0.393	98	0.400		0.395	0.399	99	100	1	74-131	71-135	20	
Chloroform	0.400	0.383	96	0.400		0.394	0.381	98	95	3	71-132	67-138	20	
1,2-Dichloroethane	0.400	0.394	98	0.400		0.404	0.396	101	99	2	58-150	57-155	20	
1,1-Dichloroethene	0.400	0.433	108	0.400		0.430	0.437	108	109	2	50-151	40-163	20	
Tetrachloroethene	0.400	0.359	90	0.400		0.354	0.363	89	91	3	57-151	48-160	20	
Trichloroethene	0.400	0.364	91	0.400		0.364	0.375	91	94	3	71-131	62-142	20	
Vinyl chloride	0.400	0.455	114	0.400		0.437	0.443	109	111	2	42-148	35-153	20	

10 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

QC Protocol 4/1/2013 10:27:22

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Quality Control

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Batch: 205504 **Project:** 20152152 **LCS:** 201077483 29-Mar-13 14:31

Method: TCLP ICP Metals **MS:** 201077484 29-Mar-13 14:38

Units: mg/L **MSD:** 201077485 29-Mar-13 14:41

Original for MS: Batch Sample 201076646

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Arsenic	2.00	1.86	93	2.00	0.00715	1.75	1.76	87	88	1	84-117	80-120	20	
Barium	2.00	1.92	96	2.00	1.15	2.98	3.00	92	93	1	85-118	80-120	20	
Cadmium	2.00	1.87	94	2.00	0.00162	1.49	1.49	74 *	74 *	0	85-115	80-120	20	Q1
Chromium	2.00	1.88	94	2.00		1.71	1.73	86	86	1	83-117	80-120	20	
Lead	2.00	1.91	95	2.00		1.42	1.42	71 *	71 *	0	84-118	80-120	20	Q1
Selenium	2.00	1.88	94	2.00		1.80	1.81	90	90	1	85-116	80-120	20	
Silver	1.00	0.960	96	1.00		0.901	0.900	90	90	0	80-120	80-120	20	

7 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Quality Control

Batch: 205505 **Project:** 20152152 **LCS:** 201077487 29-Mar-13 14:46

Method: TCLP Mercury **MS:** 201077488 29-Mar-13 14:49

Units: mg/L **MSD:** 201077489 29-Mar-13 14:51

Original for MS: Batch Sample 201075950

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Mercury	0.00100	0.00105	105	0.00100		0.00100	0.00100	100	100	0	80-120	75-125	20	

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205497 BLANK 1 **Project:** 20152152

Lab ID: 201077465

Prep Level: TCLP **Batch:** 205497

Method: TCLP GC/MS Semivolatile Organics

Prepared: 29-Mar-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		0.100	0.0000400	29-Mar-13 13:05 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		0.100	0.0000600	29-Mar-13 13:05 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		0.100	0.0000800	29-Mar-13 13:05 JAM
118-74-1	Hexachlorobenzene	1	ND		0.100	0.0000700	29-Mar-13 13:05 JAM
67-72-1	Hexachloroethane	1	ND		0.100	0.0000600	29-Mar-13 13:05 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		0.100	0.000100	29-Mar-13 13:05 JAM
	3&4-Methylphenol	1	ND		0.100	0.000100	29-Mar-13 13:05 JAM
98-95-3	Nitrobenzene	1	ND		0.100	0.0000800	29-Mar-13 13:05 JAM
87-86-5	Pentachlorophenol	1	ND		0.250	0.0000500	29-Mar-13 13:05 JAM
110-86-1	Pyridine	1	ND		0.100	0.000110	29-Mar-13 13:05 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		0.250	0.000090	29-Mar-13 13:05 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		0.100	0.0000500	29-Mar-13 13:05 JAM

12 compound(s) reported

Protocol Blank 4/1/2013 10:27:23

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
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Blank Results

Pace Analytical Services, Inc.
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(504) 469-0333

Blank ID: 205518 BLANK 1 **Project:** 20152152

Lab ID: 201077551

Prep Level: TCLP **Batch:** 205518

Method: TCLP GC/MS Volatile Organics

Prepared: 29-Mar-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
71-43-2	Benzene	1	ND		0.100	0.0104	29-Mar-13 17:30 MHM
78-93-3	2-Butanone (MEK)	1	ND		0.200	0.0533	29-Mar-13 17:30 MHM
56-23-5	Carbon tetrachloride	1	ND		0.100	0.0106	29-Mar-13 17:30 MHM
108-90-7	Chlorobenzene	1	ND		0.100	0.0132	29-Mar-13 17:30 MHM
67-66-3	Chloroform	1	ND		0.100	0.0171	29-Mar-13 17:30 MHM
107-06-2	1,2-Dichloroethane	1	ND		0.100	0.0148	29-Mar-13 17:30 MHM
75-35-4	1,1-Dichloroethene	1	ND		0.100	0.0111	29-Mar-13 17:30 MHM
127-18-4	Tetrachloroethene	1	ND		0.100	0.0136	29-Mar-13 17:30 MHM
79-01-6	Trichloroethene	1	ND		0.100	0.0131	29-Mar-13 17:30 MHM
75-01-4	Vinyl chloride	1	ND		0.100	0.0113	29-Mar-13 17:30 MHM

10 compound(s) reported

Protocol Blank 4/1/2013 10:27:23

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205504 BLANK 1 **Project:** 20152152

Lab ID: 201077482

Prep Level: TCLP **Batch:** 205504

Method: TCLP ICP Metals

Prepared: 29-Mar-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
7440-38-2	Arsenic	1	ND		0.200	0.00209	29-Mar-13 14:27 MHB1
7440-39-3	Barium	1	ND		2.00	0.00239	29-Mar-13 14:27 MHB1
7440-43-9	Cadmium	1	ND		0.100	0.000722	29-Mar-13 14:27 MHB1
7440-47-3	Chromium	1	ND		0.200	0.00400	29-Mar-13 14:27 MHB1
7439-92-1	Lead	1	ND		0.200	0.00230	29-Mar-13 14:27 MHB1
7782-49-2	Selenium	1	ND		0.200	0.0286	29-Mar-13 14:27 MHB1
7440-22-4	Silver	1	ND		0.200	0.00116	29-Mar-13 14:27 MHB1

7 compound(s) reported

Protocol Blank 4/1/2013 10:27:23

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205505 BLANK 1 **Project:** 20152152

Lab ID: 201077486

Prep Level: TCLP **Batch:** 205505

Method: TCLP Mercury

Prepared: 29-Mar-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
7439-97-6	Mercury	1	ND		0.000200	0.0000340	29-Mar-13 14:44 MHB1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152152

Parameter	Batch	Blank	Units	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
pH	205375		Std. Units	6.00	5.95	99							0	97-103		20	
Flash Point	205460		deg F	80.6	82.0	102							0				
Cyanide, Reactive	205462	<25.0	mg/kg	100.	8.15	8	100.	0.0500	2.88		3		0	1-110	1-110	20	
Sulfide, Reactive	205463	<50.0	mg/kg	500.	440.	88	500.		440.		88		0	1-110	1-110	20	

*** denotes recovery outside of QC limits.**

MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152152

Value	Description
Q1	The matrix spike recoveries are poor. Acceptable method performance for this analyte has been demonstrated by the laboratory control sample recovery.
J	This estimated value for the analyte is below the adjusted reporting limit but above the instrument reporting limit.
U	The analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
B	This analyte was detected in the method blank.
E	The sample concentration is above the linear calibrated range of the analysis.
LCS	Laboratory Control Sample.
MS(D)	Matrix Spike (Duplicate).
DUP	Sample Duplicate.
RPD	Relative Percent Difference.

Pace Analytical Services, In
1000 Riverbend Blvd. Suite F
St. Rose, LA 7008
(504) 469-033

Chains of Custody

20152152 20-CTEH

5120 North Shore Drive
North Little Rock, AR 72118
Phone: (501) 801-8500
Fax: (501) 801-8501
Website: www.cteh.com

Center for Toxi[illegible],C.

SAMPLE CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

Page 1 of 1

	Send Report To:	Send Invoice To:
Name	Chase Fertzberger	~~Trey Chandler~~ Accounts Payable
Company	CTEH	CTEH
Address	5120 North Shore Drive North Little Rock, AR 72118	5120 North Shore Drive North Little Rock, AR 72118
Phone	(501)801-8500	(501)801-8500
Fax	(501)801-8501	(501)801-8501
e-mail	cfertzberger@cteh.com jmccormuch@cteh.com	~~tchandler@cteh.com~~ raccounting@cteh.com

CTEH Project #: 110432 - Deleh

Turnaround Requested:
Same Day X Next Day (24 hour) ___ Normal
___ Other (Specify) _____

Complete Data Packet Requested ☐Yes ☐No

Lab Contact Information:
~~Galson Laboratories~~
~~6601 Kirkville Road~~
~~E. Syracuse, NY 13057~~
10000 Riverbend Dr. Suite F
~~Phillips~~ St. Rose, LA 70087

Client Sample Identification	Other Sample Identification	Sample Size	Units (Check one) ✓L ___cm² ___	Sample Date	Sample Time (for non-air samples)	Initials	TCLP SVOCs	TCLP VOCs	TCLP Metals	Corrosivity	reaction cyanide	Ignitability	reactive sulfide			Matrix A = air B = bulk S = soil SW = wipe T = tape W = water
MAAR0321WC0003		2	L	3-26-13	—	RS	X	X	X	X	X	X	X			

03-27-13

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME	COMMENTS
[signature]	3-27-13/1700	UPS	3-27-13/1700	No ice - temp
UPS	3/28/13	[signature]	3/28/13	@0645 14.8°C

Pace Analytical

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Sample Cond

20152152 20-CTEH

Courier: ☐ Pace Courier ☐ Hired Courier ☐ Fed X ☒ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC] **Custody Seals intact:** ☐Yes ☐No

Therometer Used:	☐ Therm Fisher IR 5 ☒ Therm Fisher IR 6 ☐ Therm Fisher IR 7

Type of Ice: Wet Blue (None)

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: KMB 3/28/13

Temp must be measured from Temperature blank when present

				Comments:
Temperature Blank Present"?	☐Yes	☒No	☐N/A	1
Chain of Custody Present:	☒Yes	☐No	☐N/A	2
Chain of Custody Complete:	☒Yes	☐No	☐N/A	3
Chain of Custody Relinquished:	☒Yes	☐No	☐N/A	4
Sampler Name & Signature on COC:	☐Yes	☒No	☐N/A	5
Samples Arrived within Hold Time:	☒Yes	☐No	☐N/A	6 RUSH!
Sufficient Volume:	☒Yes	☐No	☐N/A	7 2-Liters
Correct Containers Used:	☒Yes	☐No	☐N/A	8
Filtered vol. Rec. for Diss. tests	☐Yes	☐No	☒N/A	9
Sample Labels match COC:	☐Yes	☒No	☐N/A	10 Bottle labels say MAA0326 WC 003 Chain of Custody say MAA0321
All containers received within manafacture's precautionary and/or expiration dates.	☒Yes	☐No	☐N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐Yes	☐No	☒N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	☐Yes	☐No	☒N/A	13 If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☒N/A	14
Trip Blank Present:	☐Yes	☒No		15

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: Per Client - ID should be MAA0326...

ALLC003rev.08, 15Feb2013 SCUR Form - mod

Karen Brown - RE: Sample ID Discrepancy

From: Scott Kluska <skluska@cteh.com>
To: Karen Brown <Karen.Brown@pacelabs.com>
Date: 3/28/2013 7:57 AM
Subject: RE: Sample ID Discrepancy

The COC is wrong. It should read MAAR032**6**WC003. When do you expect these to be completed?

Thanks.

Scott Kluska
Sr. Consultant
Center for Toxicology and Environmental Health, LLC (CTEH)
5120 North Shore Drive
North Little Rock, AR 72118
Office: 501-801-8500
Cell: 908-399-8875
1-866-869-2834 [24–HOUR ER Help Desk]
www.cteh.com

From: Karen Brown [mailto:Karen.Brown@pacelabs.com]
Sent: Thursday, March 28, 2013 8:28 AM
To: Chase Ertzberger; James McCormack; Scott Kluska
Cc: 40432 samples
Subject: Sample ID Discrepancy
Importance: High

Please see attached COC.....
Sample labels and date of collection on chain of custody say MAAR032**6**WC003.

Client Sample Identification on chain of custody says MAAR032**1**WC003.

Please confirm which is correct.

Thank you.

Karen H. Brown
Customer Service Manager
Pace Analytical Services, Inc.
New Orleans Laboratory

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

March 29, 2013

James McCormack
CTEH
5120 North Shore Drive
North Little Rock, AR 72118

RE: Project 20152028
Project ID: Magnolia, AR

Dear James McCormack:

Enclosed are the analytical results for sample(s) received by the laboratory on March 26, 2013. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Karen Brown
karen.brown@pacelabs.com

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

Laboratory Certifications

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152028

Client: CTEH

Project ID: Magnolia, AR

Washington Department of Ecology C2078
Oregon Environmental Laboratory Accreditation - LA200001
U.S. Dept. of Agriculture Foreign Soil Import P330-10-00119
Pennsylvania Dept. of Env Protection (NELAC) 68-04202
Texas Commission on Env. Quality (NELAC) T104704405-09-TX
Kansas Department of Health and Environment (NELAC) E-10266
Florida Department of Health (NELAC) E87595
Oklahoma Department of Environmental Quality - 2010-139
Illinois Environmental Protection Agency - 0025721
California Env. Lab Accreditation Program Branch - 11277CA
Louisiana Dept. of Environmental Quality (NELAC/LELAP) 02006

3/29/2013 09:34:46

Sample Cross Reference

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152028

Client: CTEH

Project ID: Magnolia, AR

Client Sample ID	Lab ID	Matrix	Collection Date/Time	Received Date/Time
MAAR0325WC002	201075887	Other	25-Mar-13 00:00	26-Mar-13 06:45
TB006	201075891	Water	25-Mar-13 00:00	26-Mar-13 06:45

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152028

Sample Receipt Condition:

All samples were received in accordance with EPA protocol.

Holding Times:

All holding times were met.

Blanks:

All blank results were below reporting limits.

Laboratory Control Samples:

All LCS recoveries were within QC limits.

Matrix Spikes and Duplicates:

All MS/MSD recoveries or duplicate RPDs were within QC limits.

Surrogates:

All surrogate recoveries were within QC limits.

Regulatory, Permit or Client Specified Limits:

Results were found that exceeded regulatory, permit or client specified limits:

Method EPA 8260 sample 201075887 Benzene result 1.25mg/L is greater than .5mg/L limit

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

QC Cross Reference

Project: 20152028

Analytical Method	Batch	Sample used for QC
EPA 6010	205316	Project sample MAAR0325WC002
EPA 7470	205315	Batch sample from another client
EPA 8270	205262	Batch sample from another client
EPA 8260	205216	Client sample MAAR0323SW009A from project 20152031
EPA 8260	205312	Batch sample from another client
EPA 9045	205203	Batch sample from another client
SW-846 7.3.4.2	205278	Project sample MAAR0325WC002
EPA 1010	205280	Project sample MAAR0325WC002
SW-846 7.3.3.2	205279	Project sample MAAR0325WC002

Narrative1 3/29/2013 09:36:10

For the sample used as the original for the DUP or MS/MSD for the batch:

Project sample means a sample from this project was used.
Client sample means a sample from the same client but in a different project was used.
Batch sample means a sample from a different client was used.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0325WC002
Project: 20152028
Project ID: Magnolia, AR
Site: None
Lab ID: 201075887 (TCLP)
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: TCLP
Batch: 205262
Method: EPA 8270 (TCLP)
GCMS SVOAs TCLP
Collected: 25-Mar-13
Received: 26-Mar-13
Prepared: 27-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		0.100	0.0000400	7.50	27-Mar-13 15:53 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		0.100	0.0000600	0.130	27-Mar-13 15:53 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		0.100	0.0000800	0.500	27-Mar-13 15:53 JAM
118-74-1	Hexachlorobenzene	1	ND		0.100	0.0000700	0.130	27-Mar-13 15:53 JAM
67-72-1	Hexachloroethane	1	ND		0.100	0.0000600	3.00	27-Mar-13 15:53 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		0.100	0.000100	200.	27-Mar-13 15:53 JAM
	3&4-Methylphenol	1	0.0157	J	0.100	0.000100	200.	27-Mar-13 15:53 JAM
98-95-3	Nitrobenzene	1	ND		0.100	0.0000800	2.00	27-Mar-13 15:53 JAM
87-86-5	Pentachlorophenol	1	ND		0.250	0.0000500	100.	27-Mar-13 15:53 JAM
110-86-1	Pyridine	1	ND		0.100	0.000110	5.00	27-Mar-13 15:53 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		0.250	0.000090	400.	27-Mar-13 15:53 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		0.100	0.0000500	2.00	27-Mar-13 15:53 JAM

12 compound(s) reported

Protocol 3/29/2013 09:36:11

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
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Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical™

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Sample Results

Client: CTEH

Client ID: MAAR0325WC002
Project: 20152028
Project ID: Magnolia, AR
Site: None
Lab ID: 201075887 (TCLP)
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: TCLP
Batch: 205312
Method: EPA 8260 (TCLP)
GCMS VOAs TCLP
Collected: 25-Mar-13
Received: 26-Mar-13
Prepared: 27-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
71-43-2	Benzene	1	1.25		0.100	0.0104	0.500	27-Mar-13 13:36 MHM
78-93-3	2-Butanone (MEK)	1	ND		0.200	0.0533	200.	27-Mar-13 13:36 MHM
56-23-5	Carbon tetrachloride	1	ND		0.100	0.0106	0.500	27-Mar-13 13:36 MHM
108-90-7	Chlorobenzene	1	ND		0.100	0.0132	100.	27-Mar-13 13:36 MHM
67-66-3	Chloroform	1	ND		0.100	0.0171	6.00	27-Mar-13 13:36 MHM
107-06-2	1,2-Dichloroethane	1	ND		0.100	0.0148	0.500	27-Mar-13 13:36 MHM
75-35-4	1,1-Dichloroethene	1	ND		0.100	0.0111	0.700	27-Mar-13 13:36 MHM
127-18-4	Tetrachloroethene	1	ND		0.100	0.0136	0.700	27-Mar-13 13:36 MHM
79-01-6	Trichloroethene	1	ND		0.100	0.0131	0.500	27-Mar-13 13:36 MHM
75-01-4	Vinyl chloride	1	ND		0.100	0.0113	0.200	27-Mar-13 13:36 MHM

10 compound(s) reported

Protocol 3/29/2013 09:36:11

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0325WC002
Project: 20152028
Project ID: Magnolia, AR
Site: None
Lab ID: 201075887 (TCLP)
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: TCLP
Batch: 205316
Method: EPA 6010 (TCLP)
Metals, ICP, TCLP Leachate
Collected: 25-Mar-13
Received: 26-Mar-13
Prepared: 27-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
7440-38-2	Arsenic	1	0.00258	J	0.200	0.00209	5.00	27-Mar-13 14:14	EJH
7440-39-3	Barium	1	0.219	J	2.00	0.00239	100.	27-Mar-13 14:14	EJH
7440-43-9	Cadmium	1	ND		0.100	0.000722	1.00	27-Mar-13 14:14	EJH
7440-47-3	Chromium	1	ND		0.200	0.00400	5.00	27-Mar-13 14:14	EJH
7439-92-1	Lead	1	0.00756	J	0.200	0.00230	5.00	27-Mar-13 14:14	EJH
7782-49-2	Selenium	1	ND		0.200	0.0286	1.00	27-Mar-13 14:14	EJH
7440-22-4	Silver	1	ND		0.200	0.00116	5.00	27-Mar-13 14:14	EJH

7 compound(s) reported

Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0325WC002
Project: 20152028
Project ID: Magnolia, AR
Site: None
Lab ID: 201075887 (TCLP)
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: TCLP
Batch: 205315
Method: EPA 7470 (TCLP)
Mercury TCLP
Collected: 25-Mar-13
Received: 26-Mar-13
Prepared: 27-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.000200	0.0000340	0.200	27-Mar-13 15:07 MHB1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: TB006
Project: 20152028
Project ID: Magnolia, AR
Site: None
Lab ID: 201075891
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205216
Method: EPA 8260
GCMS VOAs Water
Collected: 25-Mar-13
Received: 26-Mar-13
Prepared: 26-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
67-64-1	Acetone	1	ND		10.0	8.88		26-Mar-13 15:42 MHM
71-43-2	Benzene	1	0.680	J	5.00	0.518		26-Mar-13 15:42 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469		26-Mar-13 15:42 MHM
75-25-2	Bromoform	1	ND		5.00	0.920		26-Mar-13 15:42 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855		26-Mar-13 15:42 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66		26-Mar-13 15:42 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530		26-Mar-13 15:42 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528		26-Mar-13 15:42 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662		26-Mar-13 15:42 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12		26-Mar-13 15:42 MHM
67-66-3	Chloroform	1	ND		5.00	0.853		26-Mar-13 15:42 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636		26-Mar-13 15:42 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34		26-Mar-13 15:42 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630		26-Mar-13 15:42 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477		26-Mar-13 15:42 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553		26-Mar-13 15:42 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565		26-Mar-13 15:42 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738		26-Mar-13 15:42 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557		26-Mar-13 15:42 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578		26-Mar-13 15:42 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738		26-Mar-13 15:42 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579		26-Mar-13 15:42 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454		26-Mar-13 15:42 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526		26-Mar-13 15:42 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292		26-Mar-13 15:42 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28		26-Mar-13 15:42 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405		26-Mar-13 15:42 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36		26-Mar-13 15:42 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44		26-Mar-13 15:42 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10		26-Mar-13 15:42 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687		26-Mar-13 15:42 MHM
100-42-5	Styrene	1	ND		5.00	0.571		26-Mar-13 15:42 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12		26-Mar-13 15:42 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679		26-Mar-13 15:42 MHM

Protocol 3/29/2013 09:36:11

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit
Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Client: CTEH

Client ID: TB006
Project: 20152028
Project ID: Magnolia, AR
Site: None
Lab ID: 201075891
Matrix: Water
% Moisture: n/a
Description: None
Prep Level: Water
Batch: 205216
Method: EPA 8260
GCMS VOAs Water
Collected: 25-Mar-13
Received: 26-Mar-13
Prepared: 26-Mar-13

Units: ug/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
108-88-3	Toluene	1	ND		5.00	0.536		26-Mar-13 15:42 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554		26-Mar-13 15:42 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915		26-Mar-13 15:42 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654		26-Mar-13 15:42 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575		26-Mar-13 15:42 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564		26-Mar-13 15:42 MHM
	m&p-Xylene	1	ND		5.00	0.937		26-Mar-13 15:42 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649		26-Mar-13 15:42 MHM

42 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

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Sample Results

Client: CTEH

Client ID: MAAR0325WC002
Project: 20152028
Project ID: Magnolia, AR
Site: None
Lab ID: 201075887
Matrix: Other
%Moisture: n/a
Description: None

Collected: 25-Mar-13
Received: 26-Mar-13

Analyte	Method	Batch	DF	Result	Qu	Units	Reporting Limit	MDL	Analysis	Limit
Cyanide, Reactive	SW-846 7.3.3.2	205279	1	ND		mg/kg	25.0	25.0	27-Mar-13 08:55 LJL	
Flash Point	EPA 1010	205280	1	>140		deg F			27-Mar-13 13:45 LJL	
pH	EPA 9045	205203	1	6.35		Std. Units			26-Mar-13 10:25 JMA	
Sulfide, Reactive	SW-846 7.3.4.2	205278	1	ND		mg/kg	50.0	50.0	28-Mar-13 08:45 LJL	

4 parameter(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical™

Surrogate Recovery

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(504) 469-0333

Batch: 205262 **Project:** 20152028

Method: TCLP GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201076329	205262 BLANK 1		81	52	41	76	29	88		
201076330	205262 LCS 1		65	54	45	78	32	82		
201076331	540-130321-WS MS 1		100	65	55	92	37	99		
201076332	540-130321-WS MSD 1		85	56	50	82	34	88		
201075887	MAAR0325WC002		83	61	36	72	33	83		
	QC limits:		25-145	34-117	10-118	33-120	15-134	24-133		

Sur 1: 2,4,6-Tribromophenol (S)
Sur 2: 2-Fluorobiphenyl (S)
Sur 3: 2-Fluorophenol (S)
Sur 4: Nitrobenzene-d5 (S)
Sur 5: Phenol-d5 (S)
Sur 6: Terphenyl-d14 (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205216 **Project:** 20152028

Method: Water GC/MS Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201075972	205216 BLANK 1		78	89	81					
201075973	205216 LCS 1		83	92	87					
201075974	MAAR0323SW009A MS 1		84	91	88					
201075975	MAAR0323SW009A MSD 1		84	87	88					
201075891	TB006		79	84	82					
	QC limits:		68-124	72-126	79-119					

Sur 1: 4-Bromofluorobenzene (S)
Sur 2: Dibromofluoromethane (S)
Sur 3: Toluene-d8 (S)

*** denotes surrogate recovery outside of QC limits.**
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Surrogate Recovery

Batch: 205312 **Project:** 20152028

Method: TCLP GC/MS Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201076487	205312 BLANK 1		77	88	82					
201076488	205312 LCS 1		89	90	86					
201075887	MAAR0325WC002		80	89	82					
201076490	SAND FROM BLASTING(LEAD		81	88	87					
201076489	SAND FROM BLASTING(LEAD		81	87	85					
	QC limits:		68-124	72-126	79-119					

Sur 1: 4-Bromofluorobenzene (S)
Sur 2: Dibromofluoromethane (S)
Sur 3: Toluene-d8 (S)

*** denotes surrogate recovery outside of QC limits.**
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

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Batch: 205262 **Project:** 20152028 **LCS:** 201076330 27-Mar-13 15:25

Method: TCLP GC/MS Semivolatile Organics **MS:** 201076331 27-Mar-13 17:18

Units: mg/L **MSD:** 201076332 27-Mar-13 17:46

Original for MS: Batch Sample 201075426

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
1,4-Dichlorobenzene	0.500	0.318	64	0.500		0.374	0.351	75	70	6	45-110	35-110	20	
2,4-Dinitrotoluene	0.500	0.306	61	0.500		0.360	0.329	72	66	9	49-124	33-128	20	
Hexachloro-1,3-butadiene	0.500	0.271	54	0.500		0.346	0.312	69	62	10	34-110	27-110	20	
Hexachlorobenzene	0.500	0.315	63	0.500		0.385	0.336	77	67	14	52-115	40-111	20	
Hexachloroethane	0.500	0.293	59	0.500		0.350	0.338	70	68	3	43-110	35-110	20	
2-Methylphenol (o-Cresol)	0.500	0.264	53	0.500		0.380	0.373	76	75	2	46-110	10-126	20	
3&4-Methylphenol	1.00	0.609	61	1.00		0.790	0.774	79	77	2	45-117	38-128	20	
Nitrobenzene	0.500	0.393	79	0.500		0.474	0.428	95	86	10	41-112	29-118	20	
Pentachlorophenol	0.500	0.259	52	0.500		0.216	0.221	43	44	2	38-135	24-168	20	
Pyridine	0.500	0.184	37	0.500		0.216	0.204	43	41	6	24-118	40-112	20	
2,4,5-Trichlorophenol	0.500	0.355	71	0.500		0.438	0.400	88	80	9	44-110	35-144	20	
2,4,6-Trichlorophenol	0.500	0.340	68	0.500		0.438	0.400	88	80	9	43-110	33-140	20	

12 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205216 **Project:** 20152028 **LCS:** 201075973 26-Mar-13 10:47

Method: Water GC/MS Volatile Organics **MS:** 201075974 26-Mar-13 16:22

Units: ug/L **MSD:** 201075975 26-Mar-13 16:42

Original for MS: Batch Sample 201075936

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Acetone	50.0	61.1	122	50.0		57.3	54.0	115	108	6	10-198	10-202	20	
Benzene	50.0	48.4	97	50.0	2.00	49.7	49.2	95	94	1	68-129	60-138	20	
Bromodichloromethane	50.0	49.8	100	50.0		48.2	47.7	96	96	1	68-132	66-137	20	
Bromoform	50.0	56.0	112	50.0		49.3	47.8	99	96	3	56-153	53-156	20	
Bromomethane	50.0	42.8	86	50.0		44.0	40.2	88	80	9	47-149	43-151	20	
2-Butanone (MEK)	50.0	64.7	129	50.0		51.8	48.9	104	98	6	18-173	14-184	20	
Carbon disulfide	50.0	56.8	114	50.0		56.7	53.9	113	108	5	25-166	17-176	20	
Carbon tetrachloride	50.0	53.0	106	50.0		47.0	48.1	94	96	2	56-146	51-151	20	
Chlorobenzene	50.0	50.7	101	50.0		50.3	49.3	101	99	2	74-131	71-135	20	
Chloroethane	50.0	37.6	75	50.0		49.7	46.3	99	93	7	28-190	21-191	20	
Chloroform	50.0	51.1	102	50.0		50.5	48.2	101	96	5	71-132	67-138	20	
Chloromethane	50.0	35.0	70	50.0		32.7	31.0	66	62	6	27-154	24-158	20	
1,2-Dibromo-3-chloropropane	50.0	53.2	106	50.0		41.7	42.0	83	84	1	40-155	38-162	20	
Dibromochloromethane	50.0	54.4	109	50.0		50.9	50.5	102	101	1	64-138	62-142	20	
1,2-Dibromoethane (EDB)	50.0	54.6	109	50.0		49.4	48.4	99	97	2	62-146	61-149	20	
Dichlorodifluoromethane	50.0	18.0	36	50.0		16.8	15.7	34	31	7	18-173	16-176	20	
1,1-Dichloroethane	50.0	51.0	102	50.0		49.9	48.9	100	98	2	63-135	61-141	20	
1,2-Dichloroethane	50.0	51.4	103	50.0		46.5	46.4	93	93	0	58-150	57-155	20	
1,1-Dichloroethene	50.0	53.1	106	50.0		55.7	51.5	111	103	8	50-151	40-163	20	
cis-1,2-Dichloroethene	50.0	53.3	107	50.0		53.6	51.7	107	103	4	65-132	61-138	20	
trans-1,2-Dichloroethene	50.0	53.6	107	50.0		55.2	51.9	110	104	6	56-137	52-144	20	
1,2-Dichloropropane	50.0	51.5	103	50.0		50.6	49.4	101	99	2	66-131	64-137	20	
cis-1,3-Dichloropropene	50.0	47.7	96	50.0		46.9	46.6	94	93	1	66-135	62-137	20	
trans-1,3-Dichloropropene	50.0	53.9	108	50.0		49.3	49.0	99	98	1	62-146	59-151	20	
Ethylbenzene	50.0	46.3	93	50.0	1.61	48.4	47.8	94	92	1	73-129	66-136	20	
2-Hexanone	50.0	55.0	110	50.0		44.1	45.1	88	90	2	29-158	27-165	20	
Isopropylbenzene (Cumene)	50.0	45.3	91	50.0		46.2	46.1	92	92	0	61-139	58-144	20	
Methylene chloride	50.0	60.2	120	50.0		59.1	54.9	118	110	7	41-171	35-165	20	
4-Methyl-2-pentanone (MIBK	50.0	59.3	119	50.0		48.6	48.4	97	97	0	46-159	43-165	20	
Methyl-tert-butyl ether	50.0	56.2	112	50.0		51.5	49.3	103	99	4	51-155	48-164	20	
Styrene	50.0	49.0	98	50.0		47.6	47.0	95	94	1	74-132	63-141	20	
1,1,2,2-Tetrachloroethane	50.0	50.5	101	50.0		46.3	46.6	93	93	1	46-153	41-160	20	
Tetrachloroethene	50.0	48.0	96	50.0		48.5	47.9	97	96	1	57-151	48-160	20	
Toluene	50.0	47.5	95	50.0	2.49	49.1	48.6	93	92	1	70-130	62-137	20	
1,1,1-Trichloroethane	50.0	53.5	107	50.0		48.5	49.3	97	99	2	65-132	61-138	20	
1,1,2-Trichloroethane	50.0	54.0	108	50.0		50.1	50.8	100	102	1	64-140	63-145	20	
Trichloroethene	50.0	46.4	93	50.0		46.3	46.2	93	92	0	71-131	62-142	20	
Trichlorofluoromethane	50.0	54.5	109	50.0		53.5	50.8	107	102	5	37-188	19-196	20	
Vinyl chloride	50.0	31.1	62	50.0		30.5	28.9	61	58	6	42-148	35-153	20	
m&p-Xylene	100.	96.3	96	100.	2.49	99.2	95.3	97	93	4	71-132	64-138	20	
o-Xylene	50.0	47.1	94	50.0	1.98	49.5	48.2	95	93	3	69-129	63-136	20	

QC Protocol 3/29/2013 09:36:16

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205216 **Project:** 20152028 **LCS:** 201075973 26-Mar-13 10:47

Method: Water GC/MS Volatile Organics **MS:** 201075974 26-Mar-13 16:22

Units: ug/L **MSD:** 201075975 26-Mar-13 16:42

Original for MS: Batch Sample 201075936

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu

41 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205312 **Project:** 20152028 **LCS:** 201076488 27-Mar-13 13:16

Method: TCLP GC/MS Volatile Organics **MS:** 201076489 27-Mar-13 14:17

Units: mg/L **MSD:** 201076490 27-Mar-13 14:37

Original for MS: Batch Sample 201075848

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Benzene	0.400	0.409	102	0.400		0.402	0.416	101	104	3	68-129	60-138	20	
2-Butanone (MEK)	0.400	0.357	89	0.400		0.356	0.344	89	86	3	18-173	14-184	20	
Carbon tetrachloride	0.400	0.392	98	0.400		0.396	0.376	99	94	5	56-146	51-151	20	
Chlorobenzene	0.400	0.404	101	0.400		0.395	0.414	99	104	5	74-131	71-135	20	
Chloroform	0.400	0.411	103	0.400		0.398	0.412	100	103	3	71-132	67-138	20	
1,2-Dichloroethane	0.400	0.386	97	0.400		0.387	0.376	97	94	3	58-150	57-155	20	
1,1-Dichloroethene	0.400	0.457	114	0.400		0.436	0.490	109	123	12	50-151	40-163	20	
Tetrachloroethene	0.400	0.407	102	0.400		0.389	0.409	97	102	5	57-151	48-160	20	
Trichloroethene	0.400	0.387	97	0.400		0.382	0.392	95	98	3	71-131	62-142	20	
Vinyl chloride	0.400	0.445	111	0.400		0.421	0.437	105	109	4	42-148	35-153	20	

10 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205316 **Project:** 20152028 **LCS:** 201076527 27-Mar-13 14:11

Method: TCLP ICP Metals **MS:** 201076528 27-Mar-13 14:18

Units: mg/L **MSD:** 201076529 27-Mar-13 14:21

Original for MS: Client Sample 201075887

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Arsenic	2.00	1.82	91	2.00	0.00258	1.81	1.78	90	89	1	84-117	80-120	20	
Barium	2.00	1.86	93	2.00	0.219	2.07	2.03	93	91	2	85-118	80-120	20	
Cadmium	2.00	1.86	93	2.00		1.75	1.73	87	86	1	85-115	80-120	20	
Chromium	2.00	1.79	90	2.00		1.75	1.72	87	86	2	83-117	80-120	20	
Lead	2.00	1.91	95	2.00	0.00756	1.78	1.77	89	88	1	84-118	80-120	20	
Selenium	2.00	1.87	93	2.00		1.88	1.85	94	92	2	85-116	80-120	20	
Silver	1.00	0.903	90	1.00		0.874	0.883	87	88	1	80-120	80-120	20	

7 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205315 **Project:** 20152028 **LCS:** 201076523 27-Mar-13 15:00

Method: TCLP Mercury **MS:** 201076530 27-Mar-13 15:03

Units: mg/L **MSD:** 201076531 27-Mar-13 15:05

Original for MS: Batch Sample 201075725

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Mercury	0.00100	0.00102	102	0.00100		0.00101	0.00103	101	103	2	80-120	75-125	20	

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205262 BLANK 1 **Project:** 20152028

Lab ID: 201076329

Prep Level: TCLP **Batch:** 205262

Method: TCLP GC/MS Semivolatile Organics

Prepared: 27-Mar-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		0.100	0.0000400	27-Mar-13 14:57 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		0.100	0.0000600	27-Mar-13 14:57 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		0.100	0.0000800	27-Mar-13 14:57 JAM
118-74-1	Hexachlorobenzene	1	ND		0.100	0.0000700	27-Mar-13 14:57 JAM
67-72-1	Hexachloroethane	1	ND		0.100	0.0000600	27-Mar-13 14:57 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		0.100	0.000100	27-Mar-13 14:57 JAM
	3&4-Methylphenol	1	ND		0.100	0.000100	27-Mar-13 14:57 JAM
98-95-3	Nitrobenzene	1	ND		0.100	0.0000800	27-Mar-13 14:57 JAM
87-86-5	Pentachlorophenol	1	ND		0.250	0.0000500	27-Mar-13 14:57 JAM
110-86-1	Pyridine	1	ND		0.100	0.000110	27-Mar-13 14:57 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		0.250	0.000090	27-Mar-13 14:57 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		0.100	0.0000500	27-Mar-13 14:57 JAM

12 compound(s) reported

Protocol Blank 3/29/2013 09:36:17

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205312 BLANK 1 **Project:** 20152028

Lab ID: 201076487

Prep Level: TCLP **Batch:** 205312

Method: TCLP GC/MS Volatile Organics

Prepared: 27-Mar-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
71-43-2	Benzene	1	0.0250	J	0.100	0.0104	27-Mar-13 12:56 MHM
78-93-3	2-Butanone (MEK)	1	ND		0.200	0.0533	27-Mar-13 12:56 MHM
56-23-5	Carbon tetrachloride	1	ND		0.100	0.0106	27-Mar-13 12:56 MHM
108-90-7	Chlorobenzene	1	ND		0.100	0.0132	27-Mar-13 12:56 MHM
67-66-3	Chloroform	1	ND		0.100	0.0171	27-Mar-13 12:56 MHM
107-06-2	1,2-Dichloroethane	1	ND		0.100	0.0148	27-Mar-13 12:56 MHM
75-35-4	1,1-Dichloroethene	1	ND		0.100	0.0111	27-Mar-13 12:56 MHM
127-18-4	Tetrachloroethene	1	ND		0.100	0.0136	27-Mar-13 12:56 MHM
79-01-6	Trichloroethene	1	ND		0.100	0.0131	27-Mar-13 12:56 MHM
75-01-4	Vinyl chloride	1	ND		0.100	0.0113	27-Mar-13 12:56 MHM

10 compound(s) reported

Protocol Blank 3/29/2013 09:36:17

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205216 BLANK 1 **Project:** 20152028

Lab ID: 201075972

Prep Level: Water **Batch:** 205216

Method: Water GC/MS Volatile Organics

Prepared: 26-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
67-64-1	Acetone	1	ND		10.0	8.88	26-Mar-13 10:27 MHM
71-43-2	Benzene	1	ND		5.00	0.518	26-Mar-13 10:27 MHM
75-27-4	Bromodichloromethane	1	ND		5.00	0.469	26-Mar-13 10:27 MHM
75-25-2	Bromoform	1	ND		5.00	0.920	26-Mar-13 10:27 MHM
74-83-9	Bromomethane	1	ND		5.00	0.855	26-Mar-13 10:27 MHM
78-93-3	2-Butanone (MEK)	1	ND		10.0	2.66	26-Mar-13 10:27 MHM
75-15-0	Carbon disulfide	1	ND		5.00	0.530	26-Mar-13 10:27 MHM
56-23-5	Carbon tetrachloride	1	ND		5.00	0.528	26-Mar-13 10:27 MHM
108-90-7	Chlorobenzene	1	ND		5.00	0.662	26-Mar-13 10:27 MHM
75-00-3	Chloroethane	1	ND		5.00	1.12	26-Mar-13 10:27 MHM
67-66-3	Chloroform	1	ND		5.00	0.853	26-Mar-13 10:27 MHM
74-87-3	Chloromethane	1	ND		5.00	0.636	26-Mar-13 10:27 MHM
96-12-8	1,2-Dibromo-3-chloropropane	1	ND		5.00	4.34	26-Mar-13 10:27 MHM
124-48-1	Dibromochloromethane	1	ND		5.00	0.630	26-Mar-13 10:27 MHM
106-93-4	1,2-Dibromoethane (EDB)	1	ND		5.00	0.477	26-Mar-13 10:27 MHM
75-71-8	Dichlorodifluoromethane	1	ND		5.00	0.553	26-Mar-13 10:27 MHM
75-34-3	1,1-Dichloroethane	1	ND		5.00	0.565	26-Mar-13 10:27 MHM
107-06-2	1,2-Dichloroethane	1	ND		5.00	0.738	26-Mar-13 10:27 MHM
75-35-4	1,1-Dichloroethene	1	ND		5.00	0.557	26-Mar-13 10:27 MHM
156-59-2	cis-1,2-Dichloroethene	1	ND		5.00	0.578	26-Mar-13 10:27 MHM
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	0.738	26-Mar-13 10:27 MHM
78-87-5	1,2-Dichloropropane	1	ND		5.00	0.579	26-Mar-13 10:27 MHM
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	0.454	26-Mar-13 10:27 MHM
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	0.526	26-Mar-13 10:27 MHM
100-41-4	Ethylbenzene	1	ND		5.00	0.292	26-Mar-13 10:27 MHM
591-78-6	2-Hexanone	1	ND		10.0	1.28	26-Mar-13 10:27 MHM
98-82-8	Isopropylbenzene (Cumene)	1	ND		5.00	0.405	26-Mar-13 10:27 MHM
79-20-9	Methyl acetate	1	ND		10.0	2.36	26-Mar-13 10:27 MHM
75-09-2	Methylene chloride	1	ND		5.00	1.44	26-Mar-13 10:27 MHM
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	1.10	26-Mar-13 10:27 MHM
1634-04-4	Methyl-tert-butyl ether	1	ND		5.00	0.687	26-Mar-13 10:27 MHM
100-42-5	Styrene	1	ND		5.00	0.571	26-Mar-13 10:27 MHM
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	1.12	26-Mar-13 10:27 MHM
127-18-4	Tetrachloroethene	1	ND		5.00	0.679	26-Mar-13 10:27 MHM

Protocol Blank 3/29/2013 09:36:17

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MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205216 BLANK 1 **Project:** 20152028

Lab ID: 201075972

Prep Level: Water **Batch:** 205216

Method: Water GC/MS Volatile Organics

Prepared: 26-Mar-13

Units: ug/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
108-88-3	Toluene	1	0.540	J	5.00	0.536	26-Mar-13 10:27 MHM
71-55-6	1,1,1-Trichloroethane	1	ND		5.00	0.554	26-Mar-13 10:27 MHM
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	0.915	26-Mar-13 10:27 MHM
79-01-6	Trichloroethene	1	ND		5.00	0.654	26-Mar-13 10:27 MHM
75-69-4	Trichlorofluoromethane	1	ND		5.00	0.575	26-Mar-13 10:27 MHM
75-01-4	Vinyl chloride	1	ND		5.00	0.564	26-Mar-13 10:27 MHM
	m&p-Xylene	1	ND		5.00	0.937	26-Mar-13 10:27 MHM
95-47-6	o-Xylene	1	ND		5.00	0.649	26-Mar-13 10:27 MHM

42 compound(s) reported

Protocol Blank 3/29/2013 09:36:17

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205316 BLANK 1 **Project:** 20152028

Lab ID: 201076526

Prep Level: TCLP **Batch:** 205316

Method: TCLP ICP Metals

Prepared: 27-Mar-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis	
7440-38-2	Arsenic	1	ND		0.200	0.00209	27-Mar-13 14:07	EJH
7440-39-3	Barium	1	0.00928	J	2.00	0.00239	27-Mar-13 14:07	EJH
7440-43-9	Cadmium	1	ND		0.100	0.000722	27-Mar-13 14:07	EJH
7440-47-3	Chromium	1	ND		0.200	0.00400	27-Mar-13 14:07	EJH
7439-92-1	Lead	1	ND		0.200	0.00230	27-Mar-13 14:07	EJH
7782-49-2	Selenium	1	ND		0.200	0.0286	27-Mar-13 14:07	EJH
7440-22-4	Silver	1	ND		0.200	0.00116	27-Mar-13 14:07	EJH

7 compound(s) reported

Protocol Blank 3/29/2013 09:36:17

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205315 BLANK 1 **Project:** 20152028

Lab ID: 201076522

Prep Level: TCLP **Batch:** 205315

Method: TCLP Mercury

Prepared: 27-Mar-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
7439-97-6	Mercury	1	ND		0.000200	0.0000340	27-Mar-13 14:58 MHB1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152028

Parameter	Batch	Blank	Units	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
pH	205203		Std. Units	6.00	5.98	100							3	97-103		20	
Sulfide, Reactive	205278	<50.0	mg/kg	500.	440.	88	500.		440.		88		0	1-110	1-110	20	
Cyanide, Reactive	205279	<25.0	mg/kg	100.	5.03	5	100.	0.0750	6.98		7		0	1-110	1-110	20	
Flash Point	205280		deg F	80.6	82.4	102							0				

*** denotes recovery outside of QC limits.**

MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20152028

Value	Description
J	This estimated value for the analyte is below the adjusted reporting limit but above the instrument reporting limit.
U	The analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
B	This analyte was detected in the method blank.
E	The sample concentration is above the linear calibrated range of the analysis.
LCS	Laboratory Control Sample.
MS(D)	Matrix Spike (Duplicate).
DUP	Sample Duplicate.
RPD	Relative Percent Difference.

Pace Analytical Services, In
1000 Riverbend Blvd. Suite F
St. Rose, LA 7008
(504) 469-033

Chains of Custody

20152028 20-CTEH

5120 North Shore Drive
North Little Rock, AR 72118
Phone: (501) 801-8500
Fax: (501) 801-8501
Website: www.cteh.com

Center for Toxicolo
SAMPLE CHAIN OF C

Page 1 of 1

	Send Report To:	Send Invoice To:
Name	Chase Ertzberger	Accounts Payable
Company	CTEH	CTEH
Address	2332 Anders Lane Kemah, Texas 77565	5120 North Shore Drive North Little Rock, AR 72118
Phone	(281)535-2834	(501)801-8500
Fax	(281)535-0232	(501)801-8501
e-mail	certzberger@cteh.com jmccormach@cteh.com	lraccounting@cteh.com

CTEH Project #: 40432-Delek

Turnaround Requested:
Same Day __Next Day (24 hour) ~~X~~ Normal
X Other (Specify) 72 hours

Complete Data Packet Requested ☑ Yes ~~X No~~

Lab Contact Information:
~~Galson Laboratories~~
~~6601 Kirkville Road~~
~~E. Syracuse, NY 13057~~
1000 Riverbend Blvd
St. Rose, LA 70087

Client Sample Identification	Other Sample Identification	Sample Size	Units (Check one) X L __cm²	Sample Date	Sample Time (for non-air samples)	Initials	~~Modified NIOSH 1604~~	TCLP SVOCs	TCLP VOCs	TCLP Metals	Corrosivity	Reactive Cyanide	Reactive Sulfide	Ignitability	VOC 8260	Matrix A = air B = bulk S = soil SW = wipe T = tape W = water
MAAR0325WC002		5	L	03.25.13		ARM		X	X	X	X	X	X	X		W
TB006		2		—		—									X	W

20107588 7

20107589 1

03.25.13

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME	COMMENTS
Rid Sha	03.25.13/1710	UPS	03.25.13/1710	
UPS	3.26.13	0645	[signature]	Temp 1.3°

Pace Analytical

Urb. Jardines de Guaynabo
Calle Mrginal Blq A-10
Guaynabo, PR 00969

Sample C

20152028 20-CTEH

Courier: ☐ Pace Courier ☐ Hired Courier ☐ Fed X ☒ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

1st Am

Custody Seal on Cooler/Box Present: [see COC] **Custody Seals intact:** ☐Yes ☐No

Therometer Used:	☐ Therm Fisher IR 5 ☒ Therm Fisher IR 6 ☐ Therm Fisher IR 7

Type of Ice: (Wet) Blue None

Samples on ice: [see COC]

Date and initials of person examining contents: 3/20/13

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Temp must be measured from Temperature blank when present

					Comments:
Temperature Blank Present"?	☒Yes	☐No	☐N/A	1	
Chain of Custody Present:	☒Yes	☐No	☐N/A	2	
Chain of Custody Complete:	☒Yes	☐No	☐N/A	3	
Chain of Custody Relinquished:	☒Yes	☐No	☐N/A	4	
Sampler Name & Signature on COC:	☒Yes	☐No	☐N/A	5	
Samples Arrived within Hold Time:	☒Yes	☐No	☐N/A	6	RUSH
Sufficient Volume:	☒Yes	☐No	☐N/A	7	5 Liters - Ambers
Correct Containers Used:	☒Yes	☐No	☐N/A	8	
Filtered vol. Rec. for Diss. tests	☐Yes	☐No	☒N/A	9	
Sample Labels match COC:	☒Yes	☐No	☐N/A	10	
All containers received within manafacture's precautionary and/or expiration dates.	☒Yes	☐No	☐N/A	11	
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐Yes	☐No	☒N/A	12	
All containers preservation checked found to be in compliance with EPA recommendation.	☒Yes	☐No	☐N/A	13	If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO_3 _____ H_2SO_4 _____
Headspace in VOA Vials (>6mm):	☐Yes	☒No	☐N/A	14	
Trip Blank Present:	☒Yes	☐No		15	

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: RUSH

ALLC003rev.08, 15Feb2013pr SCUR Form - mod

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

March 26, 2013

James McCormack
CTEH
5120 North Shore Drive
North Little Rock, AR 72118

RE: Project 20151953
Project ID: Magnolia, AR

Dear James McCormack:

Enclosed are the analytical results for sample(s) received by the laboratory on March 22, 2013. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Karen Brown
karen.brown@pacelabs.com

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

Laboratory Certifications

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20151953

Client: CTEH

Project ID: Magnolia, AR

Washington Department of Ecology C2078
Oregon Environmental Laboratory Accreditation - LA200001
U.S. Dept. of Agriculture Foreign Soil Import P330-10-00119
Pennsylvania Dept. of Env Protection (NELAC) 68-04202
Texas Commission on Env. Quality (NELAC) T104704405-09-TX
Kansas Department of Health and Environment (NELAC) E-10266
Florida Department of Health (NELAC) E87595
Oklahoma Department of Environmental Quality - 2010-139
Illinois Environmental Protection Agency - 0025721
California Env. Lab Accreditation Program Branch - 11277CA
Louisiana Dept. of Environmental Quality (NELAC/LELAP) 02006

3/26/2013 10:13:35

Sample Cross Reference

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20151953

Client: CTEH

Project ID: Magnolia, AR

Client Sample ID	Lab ID	Matrix	Collection Date/Time	Received Date/Time
MAAR0321WC001	201075361	Other	21-Mar-13 00:00	22-Mar-13 10:20

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20151953

Sample Receipt Condition:

All samples were received in accordance with EPA protocol.

Holding Times:

All holding times were met.

Blanks:

All blank results were below reporting limits.

Laboratory Control Samples:

All LCS recoveries were within QC limits.

Matrix Spikes and Duplicates:

MS or MSD recoveries outside of QC limits are qualified in the Report of Quality Control section.

Surrogates:

All surrogate recoveries were within QC limits.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20151953

Analytical Method	Batch	Sample used for QC
EPA 6010	205143	Batch sample from another client
EPA 7470	205142	Batch sample from another client
EPA 8270	205125	Batch sample from another client
EPA 8260	205137	Batch sample from another client
EPA 9045	205085	Batch sample from another client
SW-846 7.3.4.2	205117	Batch sample from another client
EPA 1010	205155	Project sample MAAR0321WC001
SW-846 7.3.3.2	205116	Batch sample from another client

Narrative1 3/26/2013 10:15:12

For the sample used as the original for the DUP or MS/MSD for the batch:

Project sample means a sample from this project was used.
Client sample means a sample from the same client but in a different project was used.
Batch sample means a sample from a different client was used.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0321WC001
Project: 20151953
Project ID: Magnolia, AR
Site: None
Lab ID: 201075361 (TCLP)
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: TCLP
Batch: 205125
Method: EPA 8270 (TCLP)
GCMS SVOAs TCLP
Collected: 21-Mar-13
Received: 22-Mar-13
Prepared: 25-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		0.100	0.0000400	7.50	25-Mar-13 12:39 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		0.100	0.0000600	0.130	25-Mar-13 12:39 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		0.100	0.0000800	0.500	25-Mar-13 12:39 JAM
118-74-1	Hexachlorobenzene	1	ND		0.100	0.0000700	0.130	25-Mar-13 12:39 JAM
67-72-1	Hexachloroethane	1	ND		0.100	0.0000600	3.00	25-Mar-13 12:39 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		0.100	0.000100	200.	25-Mar-13 12:39 JAM
	3&4-Methylphenol	1	ND		0.100	0.000100	200.	25-Mar-13 12:39 JAM
98-95-3	Nitrobenzene	1	ND		0.100	0.0000800	2.00	25-Mar-13 12:39 JAM
87-86-5	Pentachlorophenol	1	ND		0.250	0.0000500	100.	25-Mar-13 12:39 JAM
110-86-1	Pyridine	1	ND		0.100	0.000110	5.00	25-Mar-13 12:39 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		0.250	0.000090	400.	25-Mar-13 12:39 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		0.100	0.0000500	2.00	25-Mar-13 12:39 JAM

12 compound(s) reported

Protocol 3/26/2013 10:15:14

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0321WC001
Project: 20151953
Project ID: Magnolia, AR
Site: None
Lab ID: 201075361 (TCLP)
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: TCLP
Batch: 205137
Method: EPA 8260 (TCLP)
GCMS VOAs TCLP
Collected: 21-Mar-13
Received: 22-Mar-13
Prepared: 25-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
71-43-2	Benzene	1	ND		0.100	0.0104	0.500	25-Mar-13 11:29 RMP
78-93-3	2-Butanone (MEK)	1	ND		0.200	0.0533	200.	25-Mar-13 11:29 RMP
56-23-5	Carbon tetrachloride	1	ND		0.100	0.0106	0.500	25-Mar-13 11:29 RMP
108-90-7	Chlorobenzene	1	ND		0.100	0.0132	100.	25-Mar-13 11:29 RMP
67-66-3	Chloroform	1	ND		0.100	0.0171	6.00	25-Mar-13 11:29 RMP
107-06-2	1,2-Dichloroethane	1	ND		0.100	0.0148	0.500	25-Mar-13 11:29 RMP
75-35-4	1,1-Dichloroethene	1	ND		0.100	0.0111	0.700	25-Mar-13 11:29 RMP
127-18-4	Tetrachloroethene	1	ND		0.100	0.0136	0.700	25-Mar-13 11:29 RMP
79-01-6	Trichloroethene	1	ND		0.100	0.0131	0.500	25-Mar-13 11:29 RMP
75-01-4	Vinyl chloride	1	ND		0.100	0.0113	0.200	25-Mar-13 11:29 RMP

10 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0321WC001
Project: 20151953
Project ID: Magnolia, AR
Site: None
Lab ID: 201075361 (TCLP)
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: TCLP
Batch: 205143
Method: EPA 6010 (TCLP)
Metals, ICP, TCLP Leachate
Collected: 21-Mar-13
Received: 22-Mar-13
Prepared: 25-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis	
7440-38-2	Arsenic	1	0.0112	J	0.200	0.00209	5.00	25-Mar-13 18:34	EJH
7440-39-3	Barium	1	0.581	J	2.00	0.00239	100.	25-Mar-13 18:34	EJH
7440-43-9	Cadmium	1	ND		0.100	0.000722	1.00	25-Mar-13 18:34	EJH
7440-47-3	Chromium	1	ND		0.200	0.00400	5.00	25-Mar-13 18:34	EJH
7439-92-1	Lead	1	0.00363	J	0.200	0.00230	5.00	25-Mar-13 18:34	EJH
7782-49-2	Selenium	1	ND		0.200	0.0286	1.00	25-Mar-13 18:34	EJH
7440-22-4	Silver	1	ND		0.200	0.00116	5.00	25-Mar-13 18:34	EJH

7 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Sample Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Client: CTEH

Client ID: MAAR0321WC001
Project: 20151953
Project ID: Magnolia, AR
Site: None
Lab ID: 201075361 (TCLP)
Matrix: Other
% Moisture: n/a
Description: None
Prep Level: TCLP
Batch: 205142
Method: EPA 7470 (TCLP)
Mercury TCLP
Collected: 21-Mar-13
Received: 22-Mar-13
Prepared: 25-Mar-13

Units: mg/L

CAS No.	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Reg Limit	Analysis
7439-97-6	Mercury	1	ND		0.000200	0.0000340	0.200	26-Mar-13 08:33 MHB1

1 compound(s) reported

Protocol 3/26/2013 10:15:14

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Sample Results

Pace Analytical Services, Inc.
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(504) 469-0333

Client: CTEH

Client ID: MAAR0321WC001
Project: 20151953
Project ID: Magnolia, AR
Site: None
Lab ID: 201075361
Matrix: Other
%Moisture: n/a
Description: None

Collected: 21-Mar-13
Received: 22-Mar-13

Analyte	Method	Batch	DF	Result	Qu	Units	Reporting Limit	MDL	Analysis	Limit
Cyanide, Reactive	SW-846 7.3.3.2	205116	1	ND		mg/kg	25.0	25.0	25-Mar-13 14:13 TAE	
Flash Point	EPA 1010	205155	1	>140		deg F			25-Mar-13 13:20 LJL	
pH	EPA 9045	205085	1	5.93		Std. Units			23-Mar-13 11:10 LVA	
Sulfide, Reactive	SW-846 7.3.4.2	205117	1	ND		mg/kg	50.0	50.0	25-Mar-13 12:30 LJL	

4 parameter(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical™

Surrogate Recovery

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Batch: 205125 **Project:** 20151953

Method: TCLP GC/MS Semivolatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201075657	205125 BLANK 1		55	48	24	57	17	67		
201075661	205125 BLANK 2		93	58	50	68	43	76		
201075658	205125 LCS 1		64	54	40	71	30	80		
201075361	MAAR0321WC001		87	53	57	65	48	74		
	QC limits:		25-145	34-117	10-118	33-120	15-134	24-133		

Sur 1: 2,4,6-Tribromophenol (S)
Sur 2: 2-Fluorobiphenyl (S)
Sur 3: 2-Fluorophenol (S)
Sur 4: Nitrobenzene-d5 (S)
Sur 5: Phenol-d5 (S)
Sur 6: Terphenyl-d14 (S)

*** denotes surrogate recovery outside of QC limits.**

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Surrogate Recovery

Batch: 205137 **Project:** 20151953

Method: TCLP GC/MS Volatile Organics

Lab ID	Sample ID	Qu	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
201075702	205137 BLANK 1		82	94	84					
201075703	205137 LCS 1		88	94	88					
201075361	MAAR0321WC001		84	95	86					
201075704	WDR 544860 MS 1		89	96	88					
201075705	WDR 544860 MSD 1		82	90	87					
	QC limits:		68-124	72-126	79-119					

Sur 1: 4-Bromofluorobenzene (S)
Sur 2: Dibromofluoromethane (S)
Sur 3: Toluene-d8 (S)

*** denotes surrogate recovery outside of QC limits.**
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
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(504) 469-0333

Batch: 205125 **Project:** 20151953 **LCS:** 201075658 25-Mar-13 12:14

Method: TCLP GC/MS Semivolatile Organics **MS:**

Units: mg/L **MSD:**

Original for MS:

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
1,4-Dichlorobenzene	0.500	0.296	59								45-110			
2,4-Dinitrotoluene	0.500	0.284	57								49-124			
Hexachloro-1,3-butadiene	0.500	0.266	53								34-110			
Hexachlorobenzene	0.500	0.306	61								52-115			
Hexachloroethane	0.500	0.273	55								43-110			
2-Methylphenol (o-Cresol)	0.500	0.293	59								46-110			
3&4-Methylphenol	1.00	0.587	59								45-117			
Nitrobenzene	0.500	0.355	71								41-112			
Pentachlorophenol	0.500	0.241	48								38-135			
Pyridine	0.500	0.170	34								24-118			
2,4,5-Trichlorophenol	0.500	0.342	69								44-110			
2,4,6-Trichlorophenol	0.500	0.333	67								43-110			

12 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Pace Analytical Services, Inc.
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(504) 469-0333

Batch: 205137 **Project:** 20151953 **LCS:** 201075703 25-Mar-13 11:08

Method: TCLP GC/MS Volatile Organics **MS:** 201075704 25-Mar-13 12:09

Units: mg/L **MSD:** 201075705 25-Mar-13 12:30

Original for MS: Batch Sample 201075323

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Benzene	0.400	0.440	110	0.400	12.6	8.04	8.52	0 *	0 *	6	66-132	58-140	20	Q3
2-Butanone (MEK)	0.400	0.650	162	0.400	0.130	0.798	0.659	167	132	19	16-167	11-180	20	
Carbon tetrachloride	0.400	0.433	108	0.400		0.430	0.387	108	97	11	55-143	50-148	20	
Chlorobenzene	0.400	0.453	113	0.400		0.443	0.408	111	102	8	71-131	69-136	20	
Chloroform	0.400	0.457	114	0.400		0.455	0.406	114	102	11	69-134	65-140	20	
1,2-Dichloroethane	0.400	0.460	115	0.400		0.447	0.413	112	103	8	59-145	58-151	20	
1,1-Dichloroethene	0.400	0.482	120	0.400		0.466	0.440	117	110	6	46-156	32-169	20	
Tetrachloroethene	0.400	0.440	110	0.400		0.434	0.384	109	96	12	55-156	44-162	20	
Trichloroethene	0.400	0.419	105	0.400		0.422	0.389	103	95	8	68-134	58-145	20	
Vinyl chloride	0.400	0.374	94	0.400		0.329	0.331	82	83	1	40-152	32-157	20	

10 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Batch: 205143 **Project:** 20151953 **LCS:** 201075772 25-Mar-13 18:09

Method: TCLP ICP Metals **MS:** 201075773 25-Mar-13 18:17

Units: mg/L **MSD:** 201075774 25-Mar-13 18:20

Original for MS: Batch Sample 201074644

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Arsenic	2.00	1.81	91	2.00	0.0140	1.80	1.80	89	89	0	85-116	68-127	20	
Barium	2.00	2.00	100	2.00	0.266	2.18	2.19	96	96	0	85-119	63-130	20	
Cadmium	2.00	1.79	90	2.00		1.54	1.52	77	76	1	85-115	64-123	20	
Chromium	2.00	1.86	93	2.00		1.78	1.77	89	89	0	85-115	63-126	20	
Lead	2.00	1.84	92	2.00	0.00394	1.48	1.47	74	73	1	85-117	57-129	20	
Selenium	2.00	1.81	91	2.00		1.82	1.80	91	90	1	85-117	66-127	20	
Silver	1.00	0.959	96	1.00	0.00180	0.920	0.922	92	92	0	78-122	34-151	20	

7 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

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Quality Control

Batch: 205142 **Project:** 20151953 **LCS:** 201075767 26-Mar-13 8:26

Method: TCLP Mercury **MS:** 201075768 26-Mar-13 8:29

Units: mg/L **MSD:** 201075769 26-Mar-13 8:31

Original for MS: Batch Sample 201075323

Parameter Name	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Mercury	0.00100	0.00103	103	0.00100		0.00101	0.00102	101	102	1	80-120	75-125	20	

1 compound(s) reported

*** denotes recovery outside of QC limits.**
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205125 BLANK 1 **Project:** 20151953

Lab ID: 201075657

Prep Level: TCLP **Batch:** 205125

Method: TCLP GC/MS Semivolatile Organics

Prepared: 25-Mar-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		0.100	0.0000400	25-Mar-13 11:23 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		0.100	0.0000600	25-Mar-13 11:23 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		0.100	0.0000800	25-Mar-13 11:23 JAM
118-74-1	Hexachlorobenzene	1	ND		0.100	0.0000700	25-Mar-13 11:23 JAM
67-72-1	Hexachloroethane	1	ND		0.100	0.0000600	25-Mar-13 11:23 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		0.100	0.000100	25-Mar-13 11:23 JAM
	3&4-Methylphenol	1	ND		0.100	0.000100	25-Mar-13 11:23 JAM
98-95-3	Nitrobenzene	1	ND		0.100	0.0000800	25-Mar-13 11:23 JAM
87-86-5	Pentachlorophenol	1	ND		0.250	0.0000500	25-Mar-13 11:23 JAM
110-86-1	Pyridine	1	ND		0.100	0.000110	25-Mar-13 11:23 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		0.250	0.000090	25-Mar-13 11:23 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		0.100	0.0000500	25-Mar-13 11:23 JAM

12 compound(s) reported

Protocol Blank 3/26/2013 10:15:19

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205125 BLANK 2 **Project:** 20151953

Lab ID: 201075661

Prep Level: TCLP **Batch:** 205125

Method: TCLP GC/MS Semivolatile Organics

Prepared: 25-Mar-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
106-46-7	1,4-Dichlorobenzene	1	ND		0.100	0.0000400	25-Mar-13 11:48 JAM
121-14-2	2,4-Dinitrotoluene	1	ND		0.100	0.0000600	25-Mar-13 11:48 JAM
87-68-3	Hexachloro-1,3-butadiene	1	ND		0.100	0.0000800	25-Mar-13 11:48 JAM
118-74-1	Hexachlorobenzene	1	ND		0.100	0.0000700	25-Mar-13 11:48 JAM
67-72-1	Hexachloroethane	1	ND		0.100	0.0000600	25-Mar-13 11:48 JAM
95-48-7	2-Methylphenol (o-Cresol)	1	ND		0.100	0.000100	25-Mar-13 11:48 JAM
	3&4-Methylphenol	1	ND		0.100	0.000100	25-Mar-13 11:48 JAM
98-95-3	Nitrobenzene	1	ND		0.100	0.0000800	25-Mar-13 11:48 JAM
87-86-5	Pentachlorophenol	1	ND		0.250	0.0000500	25-Mar-13 11:48 JAM
110-86-1	Pyridine	1	ND		0.100	0.000110	25-Mar-13 11:48 JAM
95-95-4	2,4,5-Trichlorophenol	1	ND		0.250	0.000090	25-Mar-13 11:48 JAM
88-06-2	2,4,6-Trichlorophenol	1	ND		0.100	0.0000500	25-Mar-13 11:48 JAM

12 compound(s) reported

Protocol Blank 3/26/2013 10:15:19

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205137 BLANK 1 **Project:** 20151953

Lab ID: 201075702

Prep Level: TCLP **Batch:** 205137

Method: TCLP GC/MS Volatile Organics

Prepared: 25-Mar-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
71-43-2	Benzene	1	ND		0.100	0.0104	25-Mar-13 10:47 RMP
78-93-3	2-Butanone (MEK)	1	ND		0.200	0.0533	25-Mar-13 10:47 RMP
56-23-5	Carbon tetrachloride	1	ND		0.100	0.0106	25-Mar-13 10:47 RMP
108-90-7	Chlorobenzene	1	ND		0.100	0.0132	25-Mar-13 10:47 RMP
67-66-3	Chloroform	1	ND		0.100	0.0171	25-Mar-13 10:47 RMP
107-06-2	1,2-Dichloroethane	1	ND		0.100	0.0148	25-Mar-13 10:47 RMP
75-35-4	1,1-Dichloroethene	1	ND		0.100	0.0111	25-Mar-13 10:47 RMP
127-18-4	Tetrachloroethene	1	ND		0.100	0.0136	25-Mar-13 10:47 RMP
79-01-6	Trichloroethene	1	ND		0.100	0.0131	25-Mar-13 10:47 RMP
75-01-4	Vinyl chloride	1	ND		0.100	0.0113	25-Mar-13 10:47 RMP

10 compound(s) reported

Protocol Blank 3/26/2013 10:15:19

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205143 BLANK 1 **Project:** 20151953

Lab ID: 201075771

Prep Level: TCLP **Batch:** 205143

Method: TCLP ICP Metals

Prepared: 25-Mar-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis	
7440-38-2	Arsenic	1	0.00257	J	0.200	0.00209	25-Mar-13 18:06	EJH
7440-39-3	Barium	1	ND		2.00	0.00239	25-Mar-13 18:06	EJH
7440-43-9	Cadmium	1	ND		0.100	0.000722	25-Mar-13 18:06	EJH
7440-47-3	Chromium	1	ND		0.200	0.00400	25-Mar-13 18:06	EJH
7439-92-1	Lead	1	0.00819	J	0.200	0.00230	25-Mar-13 18:06	EJH
7782-49-2	Selenium	1	ND		0.200	0.0286	25-Mar-13 18:06	EJH
7440-22-4	Silver	1	ND		0.200	0.00116	25-Mar-13 18:06	EJH

7 compound(s) reported

Protocol Blank 3/26/2013 10:15:19

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Blank Results

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Blank ID: 205142 BLANK 1 **Project:** 20151953

Lab ID: 201075766

Prep Level: TCLP **Batch:** 205142

Method: TCLP Mercury

Prepared: 25-Mar-13

Units: mg/L

CAS Numb	Analyte	Dilution	Result	Qu	Reporting Limit	MDL	Analysis
7439-97-6	Mercury	1	ND		0.000200	0.0000340	26-Mar-13 08:24 MHB1

1 compound(s) reported

ND denotes the analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
MDL denotes method detection limit

Limits are corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
Regulatory limit may denote an actual regulatory limit or a client-requested notification limit.

Pace Analytical™

Inorganics Quality Control

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20151953

Parameter	Batch	Blank	Units	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
pH	205085		Std. Units	6.00	5.99	100							1	97-103		20	
Cyanide, Reactive	205116	<25.0	mg/kg	100.	6.15	6	100.	0.0250	4.60		5		0	1-110	1-110	20	
Sulfide, Reactive	205117	<50.0	mg/kg	500.	440.	88	500.		440.		88		0	1-110	1-110	20	
Flash Point	205155		deg F	80.6	82.0	102							0				

*** denotes recovery outside of QC limits.**

MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose, LA 70087
(504) 469-0333

Project: 20151953

Value	Description
Q3	The matrix spike recoveries are poor due to the presence of this analyte in the sample at a concentration greater than 4 times the spiked amount. Acceptable method performance for this analyte has been demonstrated by the laboratory control sample.
J	This estimated value for the analyte is below the adjusted reporting limit but above the instrument reporting limit.
U	The analyte was analyzed for but not detected at the reporting limit or method detection limit indicated.
B	This analyte was detected in the method blank.
E	The sample concentration is above the linear calibrated range of the analysis.
LCS	Laboratory Control Sample.
MS(D)	Matrix Spike (Duplicate).
DUP	Sample Duplicate.
RPD	Relative Percent Difference.

Pace Analytical Services, In
1000 Riverbend Blvd. Suite F
St. Rose, LA 7008
(504) 469-033

Chains of Custody

20151953 20-CTEH

5120 North Shore Drive
North Little Rock, AR 72118
Phone: (501) 801-8500
Fax: (501) 801-8501
Website: www.cteh.com

Center for Toxi ... C.
SAMPLE CHAIN C ... RM

Page 1 of 1

	Send Report To:	Send Invoice To:
Name	Chase Ertzberger	~~Trey Chandler~~ Accounts Payable
Company	CTEH	CTEH
Address	5120 North Shore Drive North Little Rock, AR 72118	5120 North Shore Drive North Little Rock, AR 72118
Phone	(501)801-8500	(501)801-8500
Fax	(501)801-8501	(501)801-8501
e-mail	certzberger@cteh.com jmccormack@cteh.com	~~tchandler@cteh.com~~ raccounting@cteh.com

CTEH Project #: 40432 – Delek

Turnaround Requested:
Same Day X Next Day (24 hour) ___ No
___Other (Specify) Rush TAT

Complete Data Packet Requested ☐Yes ☐

Lab Contact Information:
~~Galson Laboratories~~
~~6601 Kirkville Road~~
~~E. Syracuse, NY 13057~~
1000 Riverbend Blvd
St. Rose, LA 70087

Client Sample Identification	Other Sample Identification	Sample Size	Units (Check one) ✓L ___cm²	Sample Date	Sample Time (for non-air samples)	Initials	TCLP SVOCs	TCLP VOCs	TCLP Metals	Ignitability	Corrosivity	Reactive cyanide	Reactive sulfide	Ignitability
MAAR0321WC001		2	L	03.21.13	—	ARM	X	X	X		X	X	X	X

20107536

03.21.13

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME	COMMENTS
	03.21.13/1708	FedEx	03.21.13/1708	
FedEx	3-22-13 1020		3-22-13 1020	ambient

Pace Analytical

Urb. Jardines de Guaynabo
Calle Mrginal Blq A-10
Guaynabo, PR 00969

Sample Conditi

20151953 20-CTEH

Courier: ☐ Pace Courier ☐ Hired Courier ☒ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC] **Custody Seals intact:** ☐Yes ☐No

Therometer Used:	☐ Therm Fisher IR 5 ☐ Therm Fisher IR 6 ☐ Therm Fisher IR 7

Type of Ice: Wet Blue (None) Ambient

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: [illegible] 3/22

Temp must be measured from Temperature blank when present

			Comments:
Temperature Blank Present"?	☐Yes ☒No ☐N/A	1	
Chain of Custody Present:	☒Yes ☐No ☐N/A	2	
Chain of Custody Complete:	☒Yes ☐No ☐N/A	3	
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	4	
Sampler Name & Signature on COC:	☐Yes ☒No ☐N/A	5	
Samples Arrived within Hold Time:	☒Yes ☐No ☐N/A	6	
Sufficient Volume:	☐Yes ☐No ☐N/A	7	2L Ambers sent - 1 Broken in transit - Crude covered boom + other material
Correct Containers Used:	☒Yes ☐No ☐N/A	8	
Filtered vol. Rec. for Diss. tests	☐Yes ☐No ☒N/A	9	
Sample Labels match COC:	☒Yes ☐No ☐N/A	10	
All containers received within manafacture's precautionary and/or expiration dates.	☒Yes ☐No ☐N/A	11	
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐Yes ☐No ☒N/A	12	
All containers preservation checked found to be in compliance with EPA recommendation.	☐Yes ☐No ☒N/A	13	If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☒N/A	14	
Trip Blank Present:	☐Yes ☒No	15	

Client Notification/ Resolution:

Person Contacted: J. McCormack Date/Time: 3/22/13

Comments/ Resolution: (See email)

RUSH requested - 1 Jar broken - but should have sufficient sample for analyses. JB

ALLC003rev.08, 15Feb2013pr SCUR Form - mod

From: James McCormack <jmccormack@cteh.com>
To: Karen Brown <Karen.Brown@pacelabs.com>
Date: 3/22/2013 11:34 AM
Subject: Re: MAAR0321WC001 sample received today.....

Run as fast as possible

James A. McCormack
CTEH, LLC
317-473-0688 cell

On Mar 22, 2013, at 11:33 AM, "Karen Brown" <Karen.Brown@pacelabs.com> wrote:

> We received this sample today for TCLP V/SV;/Metals and RCI. This is requested as "RUSH". "24hours" is not possible for TCLP, and I did not know this sample was coming. Is a due date of 3/27 acceptable? This would be a 3 business day TAT with a 1.75X multiplier. It is possible that we may have some results on Tuesday, 3/26.
>
> Also, one jar was broken in transit, but, we should have sufficient sample remaining to run the testing requested.
>
> Please advise asap.
>
> Thank you!!
>
>
>
> Karen H. Brown
> Customer Service Manager
> Pace Analytical Services, Inc.
> New Orleans Laboratory
> 1000 Riverbend Blvd. Suite F
> St. Rose, LA 70087
>
> Direct Line 504-305-3615
>
>
>
> _____
> The email and documents accompanying this transmission contain confidential information belonging to the sender who is legally privileged. The information is intended only for the use of the individual(s) or entity(ies) named herein. If you are not the intended recipient, you are hereby notified that any disclosure, copying distribution or the taking of any action in reliance on the contents of this information is strictly prohibited. If you have received this in error, please immediately notify us by telephone (1.888.990.PACE) to arrange for return of the original documents.
> <DOC032213-03222013104336_1.pdf>

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ATTACHMENT L- WASTE TRACKING LOG

CTEH CENTER FOR TOXICOLOGY AND ENVIRONMENTAL HEALTH,LLC

Waste Tracking - LOTT - Magnolia, AR

Manifest No.	Haul Date	Net Weight (tons)	Transporter	R/O VENDOR	Roll Off No.	Box Size	Area	Accum. Start Date	Ready for Shipping	Material Description	Date Sampled
OILY ABSORBENTS (NON-HAZARDOUS) ROLL-OFF											
111294	3/28/2013	1.69	TAS	TAS	19538	25Y	Staging	3/21/13	X	Boom and Pads	3/21/2013
	TOTAL	**1.69**									
OILY DEBRIS (NON-HAZARDOUS) ROLL-OFF											
Manifest No.	**Haul Date**	**Net Weight (tons)**	**Transporter**	**R/O VENDOR**	**Roll Off No.**	**Box Size**	**Area**	**Accum. Start Date**	**Ready for Shipping**	**Material Description**	**Date Sampled**
111291	3/27/2013	5.39	TAS	TAS	B1095R	25Y	Staging	3/20/13	1	Debris	3/21/2013
116193	3/26/2013	3.71	TAS	TAS	2023	25Y	Staging	3/20/13	1	PPE and Debris	3/21/2013
111292	3/27/2013	2.04	TAS	TAS	B2120	25Y	Staging	3/20/13	1	PPE and Debris	3/21/2013
116198	3/27/2013	6.77	TAS	TAS	19408	25Y	Staging	3/20/13	1	PPE and Debris	3/21/2013
116195	3/27/2013	6.58	TAS	TAS	19544	25Y	Staging	3/20/13	1	Debris	3/21/2013
116196	3/27/2013	4.68	TAS	TAS	4346	25Y	Staging	3/20/13	1	Debris	3/21/2013
111290	3/27/2013	4.60	TAS	TAS	2948	25Y	Staging	3/21/13	1	PPE and Debris	3/21/2013
116194	3/26/2013	4.88	TAS	TAS	19412	25Y	Staging	3/20/13	1	PPE and Debris	3/21/2013
116197	3/27/2013	2.65	TAS	TAS	19661	25Y	Staging	3/20/13	1	PPE and Debris	3/21/2013
1112293	3/28/2013	1.69	TAS	TAS	19538	25Y	Staging	3/20/13	1	PPE and Debris	3/21/2013
111296	4/2/2013	4.89	TAS	TAS	N29516	25Y	Staging	3/22/13	2	PPE and Debris	3/26/2013
111297	4/2/2013	3.18	TAS	ETS	RB26126	25Y	Staging	3/23/13	2	Boom, Pads, PPE	3/26/2013
116187	4/3/2013	8.25	TAS	ETS	RBR250423	25Y	Staging	3/23/13	2	Debris	3/26/2013
116190	4/2/2013	5.21	TAS	ETS	RBR250252	25Y	Staging	3/24/13	2	Debris	3/26/2013
111302	4/5/2013	7.77	TAS	ETS	PMI1119	25Y	Staging	3/24/13	2	PPE and Debris	3/26/2013
111295	4/1/2013	6.89	TAS	ETS	RBR250130	25Y	Staging	3/25/13	2	PPE and Debris	3/26/2013

111293	4/1/2013	8.09	TAS	ETS	2503	25Y	Staging	3/26/13	2	PPE and Debris	3/26/2013
111301	4/5/2013	4.73	TAS	TAS	19538	25Y	Staging	3/28/13	2	PPE and Debris	4/2/2013
111235	4/5/2013	2.46	TAS	TAS	???	25Y	Staging	3/28/13	3	PPE and Debris	4/3/2013
111325	4/5/2013	3.47	TAS	TAS	???	25Y	Staging	3/28/13	4	PPE and Debris	4/4/2013
135333	4/12/2013	2.12	TAS	TAS	19413	25Y	Staging	3/28/13	3	PPE and Debris	4/2/2013
135331	4/10/2013	5.48	TAS	TAS	4346	25Y	Staging	3/29/13	3	PPE and Debris	4/2/2013
135329	4/11/2013	3.78	TAS	TAS	RBR250221	25Y	Staging	3/29/13	3	PPE and Debris	4/2/2013
135327	4/16/2013	6.54	TAS	TAS	38162LRK	25Y	Staging	3/29/13	3	PPE and Debris	4/2/2013
135328	4/12/2013	0.57	TAS	TAS	19544	25Y	Staging	3/29/13	3	PPE and Debris	4/2/2013
135326	4/16/2013	3.53	TAS	TAS	2023	25Y	Staging	3/29/13	3	PPE and Debris	4/2/2013
135336	4/17/2013	4.22	TAS	TAS	19412	25Y	Staging	3/29/13	3	PPE and Debris	4/2/2013
135330	4/11/2013	4.23	TAS	TAS	19661	25Y	Staging	3/29/13	3	PPE and Debris	4/2/2013
111549	5/2/2013	1.45	TAS	TAS	XXX	25Y	Staging	4/12/13	3	PPE and Debris	4/2/2013
	TOTAL	**124.17**									

OILY WATER (NON-HAZARDOUS) TANKER TRUCKS

BOL #	Haul Date		Transporter	Truck #	Area of Collection	Quantity (gals)	Material Description	Date Sampled
7582	3/13/2013	1	LOTT	1618 / 24	Tank 1003	6,400	Oily Water	
7585	3/13/2013	1	LOTT	1618 / 24	Tank 1003	6,400	Oily Water	
7586	3/13/2013	1	LOTT	1618 / 24	Tank 1003	6,400	Oily Water	
7589	3/13/2013	1	LOTT	1618 / 24	Tank 1003	6,400	Oily Water	
7591	3/14/2013	1	LOTT	1618 / 24	Tank 1003	6,400	Oily Water	
7595	3/18/2013	1	LOTT	1615 / 28	Tank 1003	6,400	Oily Water	
7597	3/18/2013	1	LOTT	1615 / 28	Tank 1003	6,400	Oily Water	
7598	3/18/2013	1	LOTT	1614 / 25	Tank 1003	6,400	Oily Water	
7600	3/18/2013	1	LOTT	1614 / 25	Tank 1003	6,400	Oily Water	
7601	3/18/2013	1	LOTT	1615 / 25	Tank 1003	6,400	Oily Water	
7602	3/18/2013	1	LOTT	1615 / 25	Tank 1003	6,400	Oily Water	
7606	3/18/2013	1	LOTT	1615 / 25	Tank 1003	6,400	Oily Water	
7607	3/18/2013	1	LOTT	1614 / 25	Tank 1003	6,400	Oily Water	

7608	3/18/2013	1	LOTT	1615 / 28	Tank 1003	6,400	Oily Water	
7610	3/19/2013	1	LOTT	1614 / 25	Tank 1003	6,400	Oily Water	
7611	3/19/2013	1	LOTT	1614 / 25	Tank 1003	6,400	Oily Water	
7612	3/19/2013	1	LOTT	1614 / 25	Tank 1003	6,400	Oily Water	
7613	3/20/2013	1	LOTT	1614 / 25	Tank 1003	6,400	Oily Water	
7614	3/20/2013	1	LOTT	1614 / 25	Tank 1003	6,400	Oily Water	
7616	3/19/2013	1	LOTT	1618 / 28	Tank 1003	6,400	Oily Water	
7617	3/19/2013	1	LOTT	1618 / 28	Tank 1003	6,400	Oily Water	
7618	3/20/2013	1	LOTT	1614 / 25	Tank 1003	6,400	Oily Water	
7620	3/19/2013	1	LOTT	1618 / 28	Tank 1003	6,400	Oily Water	
7621	3/19/2013	1	LOTT	1618 / 28	Tank 1003	6,400	Oily Water	
7625	3/20/2013	1	LOTT	1618 / 24	Tank 1003	6,400	Oily Water	
7628	3/20/2013	1	LOTT	1618 / 24	Tank 1003	6,400	Oily Water	
7629	3/20/2013	1	LOTT	1618 / 24	Tank 1003	6,400	Oily Water	
7630	3/20/2013	1	LOTT	1618 / 24	Tank 1003	6,400	Oily Water	
7633	3/21/2013	1	LOTT	1615 / 24	Tank 1003	6,400	Oily Water	
7634	3/21/2013	1	LOTT	???? / 25	Tank 1003	6,400	Oily Water	
7635	3/21/2013	1	LOTT	1614 / 25	Tank 1003	6,400	Oily Water	
7636	3/22/2013	1	LOTT	1614 / 25	Tank 1003	6,400	Oily Water	
7639	3/21/2013	1	LOTT	1618 / 24	Tank 1003	6,400	Oily Water	
7640	3/21/2013	1	LOTT	1615 / 24	Tank 1003	6,400	Oily Water	
7741	3/17/2013	1	LOTT	1615 / 24	Tank 1003	6,400	Oily Water	
7742	3/17/2013	1	LOTT	1614 / 25	Tank 1003	6,400	Oily Water	
7743	3/17/2013	1	LOTT	1614 / 25	Tank 1003	6,400	Oily Water	
7744	3/17/2013	1	LOTT	1615 / 24	Tank 1003	6,400	Oily Water	
7745	3/17/2013	1	LOTT	1614 / 25	Tank 1003	6,400	Oily Water	
7748	3/17/2013	1	LOTT	1615 / 24	Tank 1003	6,400	Oily Water	
7749	3/17/2013	1	LOTT	1614 / 25	Tank 1003	6,400	Oily Water	
7819	3/21/2013	1	LOTT	1614 / 25	Tank 1003	6,400	Oily Water	
7820	3/21/2013	1	LOTT	1615 / 24	Tank 1003	6,400	Oily Water	

7825	3/22/2013	1	LOTT	1614 / 25	Tank 1003	6,400	Oily Water		
10016	3/14/2013	1	LOTT	1618 / 24	Tank 1003	6,400	Oily Water		
10017	3/14/2013	1	LOTT	1618 / 24	Tank 1003	6,400	Oily Water		
10020	3/14/2013	1	LOTT	1618 / 24	Tank 1003	6,400	Oily Water		
10038	3/17/2013	1	LOTT	1615 / 24	Tank 1003	6,400	Oily Water		
?????	3/21/2013	1	LOTT	1614 / 25	Tank 1003	6,400	Oily Water		
?????	3/25/2013	1	LOTT	1614 / 25	Tank 1003	6,400	Oily Water		
?????	3/25/2013	1	LOTT	1614 / 25	Tank 1003	6,400	Oily Water		
?????	3/25/2013	1	LOTT	1614 / 25	Tank 1003	6,400	Oily Water		
?????	3/25/2013	1	LOTT	1614 / 25	Tank 1003	6,400	Oily Water		
TOTALS		**53**				**339,200**			

OIL IMPACTED SOIL (NON-HAZARDOUS) ROLL-OFF

Manifest No.	Haul Date	Net Weight (tons)	Transporter	R/O VENDOR	Roll Off No.	Box Size	Area	Accum. Start Date	Ready for Shipping	Material Description	Date Sampled
1065247	4/9/2013	23.39	TAS	TAS	2120	25 yd	Stagging		1	Soil	
1065243	4/9/2013	24.64	TAS	TAS	1167	25 yd	Stagging		1	Soil	
1065242	4/9/2013	23.05	TAS	TAS	19540	25 yd	Stagging		1	Soil	
1065244	4/10/2013	23.80	TAS	TAS	2948	25 yd	Stagging		1	Soil	
1065245	4/10/2013	23.62	TAS	TAS	2362	25 yd	Stagging		1	Soil	
1277902	4/10/2013	20.69	TAS	TAS	2120	25 yd	Stagging		1	Soil	
1277900	4/10/2013	22.92	TAS	TAS	2040	25 yd	Stagging		1	Soil	
1065246	4/12/2013	22.94	TAS	TAS	4346	25 yd	Stagging		1	Soil	
1277897	4/12/2013	21.49	TAS	TAS	19661	25 yd	Stagging		1	Soil	
1277901	4/12/2013	14.64	TAS	TAS	19540	25 yd	Stagging		1	Soil	
1277903	4/12/2013	20.32	TAS	TAS	250221	25 yd	Stagging		1	Soil	
1277895	4/15/2013	18.35	TAS	TAS	19544	25 yd	Stagging		1	Soil	
1277896	4/16/2013	18.39	TAS	TAS	414335	25 yd	Stagging		1	Soil	
1277891	4/17/2013	19.73	TAS	TAS	19540	25 yd	Stagging		1	Soil	

1277899	4/17/2013	19.28	TAS	TAS	32120	25 yd	Stagging		1	Soil	
1277898	4/17/2013	20.73	TAS	TAS	2948	25 yd	Stagging		1	Soil	
1277892	4/17/2013	15.42	TAS	TAS	19544	25 yd	Stagging		1	Soil	
1277884	5/1/2013	20.11	TAS	TAS	2120	25 yd	Stagging		1	Soil	
	Total	**373.51**									

OILY WATER / SLUDGE (NON-HAZARDOUS) FRAC TANKS											
Manifest No.	**Haul Date**	**Net Weight (tons)**	**Transporter**	**R/O VENDOR**	**Roll Off No.**	**Box Size**	**Area**	**Accum. Start Date**	**Ready for Shipping**	**Material Description**	**Date Sampled**
1277893	4/19/2013	5.70	TAS	ETS	N40455/39296	25yd	Stagging	4/4/13	1	oily water/sludge	
1277889	4/22/2013	4.93	TAS	TAS	51609	25yd	Stagging	4/4/13	1	oily water/sludge	
1277883	4/22/2013	4.82	TAS	TAS	51612	25yd	Stagging	4/4/13	1	oily water/sludge	
	TOTAL	**15.45**									

ATTACHMENT M – PHOTO LOG

Date: 3/12/2013	**Location: Point Of Release at Strainer**
Photo ID:	**Magnolia, Arkansas**
Description: Point Of Release at Strainer	

Date: 3/12/2013	**Location: Failure Point**
Photo ID:	**Magnolia, Arkansas**
Description: Failure Point	

Date: 3/12/2013	**Location: Initial Release**
Photo ID:	**Magnolia, Arkansas**
Description: Initial release under road leading to retention pond	

Date: 3/12/2013	**Location: Retention Pond**
Photo ID:	**Magnolia, Arkansas**
Description: Retention Pond	

Date: 3/12/2013	**Location: Retention pond facing strainer**
Photo ID:	**Magnolia, Arkansas**
Description: Retention pond facing strainer	

Date: 3/12/2013	**Location: Beaver Dam**
Photo ID:	**Magnolia, Arkansas**
Description: Workers performing cleanup activities at the Beaver Dam/Pond	

Date: 3/12/2013	**Location: Beaver Dam**
Photo ID:	**Magnolia, Arkansas**
Description: Workers performing cleanup activities at the Beaver Dam/Pond	

Date: 3/12/2013	**Location: Beaver Dam**
Photo ID:	**Magnolia, Arkansas**
Description: Skimming operations at beaver dam	

Date: 3/12/2013	**Location: Weir 1**
Photo ID:	**Magnolia, Arkansas**
Description: Skimming operations at Weir 1	

Date: 3/12/2013	**Location: Weir 2**
Photo ID:	**Magnolia, Arkansas**
Description: Weir 2: oil pad pick up point 100ft upstream	

Date: 3/12/2013	**Location: Weir 2**
Photo ID:	**Magnolia, Arkansas**
Description: Weir 2: Boom and oil pads deployed	

Date: 3/12/2013	**Location: Weir 2 back side**
Photo ID:	**Magnolia, Arkansas**
Description: Weir 2: Boom and oil pads deployed	

Date: 3/12/2013	**Location: Weir 2**
Photo ID:	**Magnolia, Arkansas**
Description: Weir 2: Boom deployed just before (upstream) Weir 2	

Date: 3/12/2013	**Location: Weir 2**
Photo ID:	**Magnolia, Arkansas**
Description: Weir 2: Boom deployed downstream	

Date: 3/18/2013	**Location: Near Beaver Dam**
Photo ID:	**Magnolia, Arkansas**
Description: Skimming operations	

Date: 3/18/2013	**Location: Division 1B / 1C**
Photo ID:	**Magnolia, Arkansas**
Description: Skimming operations at Division 1B / 1C	

Date: 3/18/2013	**Location: Division 1C**
Photo ID:	**Magnolia, Arkansas**
Description: Cleaning bank of creek and skimming operations	

Date: 3/18/2013	**Location: Weir 2**
Photo ID:	**Magnolia, Arkansas**
Description: Pumping Operations at Weir 2	

Date: 3/18/2013	**Location: Poly Pipe Culvert**
Photo ID:	**Magnolia, Arkansas**
Description: Downstream	

Date: 5/06/2013	**Location: Division 2**
Photo ID:	**Magnolia, Arkansas**
Description: Boom maintenance	

Date: 5/06/2013	**Location: Division 3**
Photo ID:	**Magnolia, Arkansas**
Description: Boom maintenance	

Date: 5/06/2013	**Location: Division 3**
Photo ID:	**Magnolia, Arkansas**
Description: Boom maintenance	

Date: 5/06/2013	**Location: Division 1**
Photo ID:	**Magnolia, Arkansas**
Description: Boom maintenance	

ATTACHMENT N - RECOVERED OIL SUMMARY

Table 1 - Summary of Mass Balance/Oil Budget

Magnolia Station Event
Lion Oil Trading & Transportation, Inc.

Prepared by: Center for Toxicology and Environmental Health, L.L.C.
Date: 7/8/2013

Sources	bbls	gallons	Source/Notes
TOTAL SPILL VOLUME	5,891	247,422	Based on 4/12/2013 email from John Warren, Vice President, Delek Logistics Partners
Spill volume captured in the Magnolia Station detention pond	3,245	136,290	Based on spreadsheet provided by John Warren, Vice President, Delek Logistics Partners - see Table 2.
Evaporation from detention pond	65	2,726	Best professional judgment. Assume (conservatively) that 2% of the volume captured in the detention pond evaporated. Evaporation estimates from ADIOS for oil with an API gravity of 35 is 34% five days post release.
Dispersion from detention pond	32	1,363	Best professional judgment. Assume (conservatively) that 1% of the volume captured in the detention pond dispersed into the water column. Dispersion estimate from ADIOS2 for oil with an API gravity of 35 is 5% five days post release.
Spill volume associated with affected on-site soil	312.5	13,126	See Table 5A
ESTIMATE OF ON-SITE SPILL VOLUME COLLECTED	3,655	153,505	Collected on-Site oil estimate = volume captured from detention pond + evaporation + dispersion + oil volume associated with on-site soil
Maximum spill volume that was available for release off-site	2,236	93,917	Maximum off-site release = total spill volume - estimated on-site spill volume collected; Note - this volume assumes that there is no unaccounted for oil remaining in on-site media
Spill volume recovered from off-site and placed into Tank 1003	2,114	88,788	Based on spreadsheet provided by John Warren, Vice President, Delek Logistics Partners - see Table 2.
Evaporation from inactive beaver pond and stream	45	1,878	2% of maximum off-site volume; see additional rationale above
Dispersion from inactive beaver pond and stream	22	939	1% of maximum off-site volume; see additional rationale above
Spill volume associated with the water decanted from tank 1003	0.16	6.9	See Table 3A - assume all oil associated with the decanted water is from off-site
Spill volume associated with oiled debris removed from off-site	16.7	699.55	See Table 4
Spill volume associated with oiled sorbent removed from off-site	1.13	47.61	See Table 4
Spill volume associated with oily water/sludge in frac tanks	29.0	1,217	See Table 6A - assume all oil associated with the frac tanks is from off-site
ESTIMATE OF OFF-SITE SPILL VOLUME COLLECTED	2,228	93,577	Collected off-site oil estimate = off-site spill volume collected in Tank 1003 + evaporation + dispersion + oil volume in decanted water + oil associated with debris and sorbents + oil volume from frac tanks
ESTIMATE OF ALL OIL COLLECTED (ON-SITE & OFF-SITE)	5,883	247,081	All oil collected = collected on-site oil + collected off-site oil
ESTIMATE OF TOTAL SPILLED OIL VOLUME THAT IS UNACCOUNTED FOR	8.11	341	Oil Unaccounted = Total Spill Volume - All Collected Oil

Notes:
1) ADIOS2 (Automated Data Inquiry for Oil Spills) is an oil weathering model developed by NOAA

Table 2 - Spill Volume Stored in Tank 1003 and Estimate of Station and Off-Site Recovery

Magnolia Station Event
Lion Oil Trading & Transportation, Inc.

Prepared by: Center for Toxicology and Environmental Health, L.L.C.
Date: 7/8/2013

Date	Gauge (ft)	Total (bbls)	Oil (bbls)	Water (bbls)	Station Recovery Total (bbls)	Creek Recovery Total (bbls)	Total Oil Recovered in 1003 (bbls)
3/9/2013	1.2	1020	708	312	---	---	---
3/10/2013	6.5	5522	2549	2974	690	1151	1841
3/11/2013	12.2	10365	4588	5777	2530	1350	3880
3/12/2013	13.4	11385	4928	6457	2870	1350	4220
3/13/2013	13.4	11385	4928	6457	2870	1350	4220
3/14/2013	12.7	10790	5013	5777	2890	1415	4305
3/15/2013	12.8	10875	5268	5607	2890	1670	4560
3/16/2013	13.3	11300	5098	6202	2890	1500	4390
3/17/2013	13.6	11555	5183	6372	2905	1570	4475
3/18/2013	12.45	10578	5268	5310	2905	1655	4560
3/19/2013	11.625	9877	5289	4588	2905	1676	4581
3/20/2013	10.5	8921	5293	3628	2905	1680	4585
3/21/2013	9.375	7965	5629	2336	2905	2016	4921
3/22/2013	7.75	6584	5225	1359	2905	1612	4517
3/23/2013	7.75	6584	5225	1359	2905	1612	4517
3/24/2013	7.92	6729	5242	1487	2905	1629	4534
3/25/2013	8.17	6941	5306	1635	2905	1693	4598
3/26/2013	7.77	6601	5259	1342	2905	1646	4551
3/27/2013	7.77	6601	5259	1342	2905	1646	4551
3/28/2013	7.92	6729	5285	1444	2905	1672	4577
3/29/2013	7.92	6729	5285	1444	2905	1672	4577
3/30/2013	7.92	6729	5285	1444	2905	1672	4577
3/31/2013	8.04	6831	5386	1444	2905	1773	4678
4/1/2013	8.04	6831	5386	1444	2905	1773	4678
4/2/2013	8.04	6831	5386	1444	2905	1773	4678
4/3/2013	8.04	6831	5386	1444	2905	1773	4678
4/4/2013	8.04	6831	5386	1444	2905	1773	4678
4/5/2013	8.25	7009	6067	942	3245	2114	5359

NOTES:

1) Values provided on 3/24/2013 by John Warren, Vice President, Delek Logistic Partners
2) The amount of oil and water in the tank on 3/9/2013 represents the pre-release condition (i.e., 1020 bbl of oil and water were in the tank prior to the release).
3) The total amount of oil recovered from the Magnolia Station retention pond was estimated by counting the number and volume of vacuum truck loads placed in tank 1003 and assuming that the water content of the oil collected from the retention pond was negligible.
4) The total amount of oil recovered from the off-site response area (Inactive Beaver Pond, unnamed creek, and Little Cornie Bayou) was estimated by subtracting the station recovery total and the amount of oil in the tank on 3/9/2013 (708 bbls) from the tank total.
5) The total amount of oil recovered from the off-site response area may be biased slightly high due to an oil-water emulsion being counted as oil. A de-emulsifier was applied to the tank on or about 3/21/2013.
6) Oil volumes have been corrected for basic sediments and water. Station and creek recovery volumes were corrected equally.

Table 3A - Spill Volume Associated with the Water Decanted from Tank 1003

Magnolia Station Event
Lion Oil Trading & Transportation, Inc.

Prepared by: Center for Toxicology and Environmental Health, L.L.C.
Date: 7/8/2013

Parameter	Units	Value
Volume of Oily Water	gallons	339,200
	liters	1,284,008
Oil & Grease Content	mg/l	17.31
	mg	22,226,173
	lbs	49.00
Density	lbs/gal	7.1
1/Density	gal/lbs	0.141
Amount of Oil Recovered	gal	6.9

Notes:
1) Total weight disposed from CTEH waste tracking spreadsheet provided 7/1/2013
2) 53 loads of oily water were disposed, each load was 6,400 gallons - total of 339,200 gallons
3) Oil & grease results were only available for 7 of the 53 loads of oily water (Table 3B); the mean of these 7 samples was used in this analysis
4) The API Gravity of the product was 34.7 at 60 degrees F, a density of 7.1 lbs/gal was taken from the engineeringtoolbox.com web site for this API gravity

Table 3B - Oil & Grease Data Summary

Sample #	Date	Oil & Grease Content (mg/L)
AE03449	3/14/2013	7.7
AE04354	3/17/2013	12
AE04356	3/18/2013	25.7
AE04355	3/18/2013	40
AE04327	3/19/2013	15.6
AE05228	3/22/2013	14.3
AE05229	3/22/2013	5.9
AE06146	3/25/2013	no result shown
	Average	**17.31**

Notes:
1) Oil & Grease data were taken from several Certificates of Analysis produced by Lion Oil Company 1000 McHenry St., El Dorado, AR 71730, footnotes on these analyses state "if you have questions regarding these analyses or procedures, please contact Jeb Graham or Mike Allison at 410"

Table 4 - Spill Volume Associated with Oiled Sorbent and Debris

Magnolia Station Event
Lion Oil Trading & Transportation, Inc.

Prepared by: Center for Toxicology and Environmental Health, L.L.C.
Date: 7/8/2013

Waste Type	Total Weight Disposed (tons)	Total Weight Disposed (lbs)	Estimated % Oil per Debris or Sorbent wet weight	Total Weight of Oil (lbs)	Density (lbs/gal)	Amount of Oil Recovered (gal)
Oily Sorbents	1.69	3,380	10.00%	338	7.1	47.61
Oily Debris	124.17	248,340	2.00%	4966.8	7.1	699.55

NOTES:
1) Total weight disposed from CTEH waste tracking spreadsheet provided 7/1/2013
2) The estimated percent oil on affected debris and sorbent is based on best professional judgment (i.e., no analytical evaluation of these items has occurred); The percent oiling on affected debris from the Enbridge Line 6B mass balance ranges from 0.02% to 4.64%; sorbents were assumed to have a higher percent oiling relative to debris as they are designed to collect oil.
3) The API Gravity of the product was 34.7 at 60 degrees F, a density of 7.1 lbs/gal was taken from the engineeringtoolbox.com web site for this API gravity

Table 5A - Spill Volume Associated with Affected On-Site Soil

Magnolia Station Event
Lion Oil Trading & Transportation, Inc.

Prepared by: Center for Toxicology and Environmental Health, L.L.C.
Date: 7/8/2013

Parameter	Units	Value
Total Weight Disposed	tons	373.51
Total Weight Disposed	lbs	747,020
Average TPH Concentration	ug/kg	18,444,000
Correction Factor	unitless	7.6
Average Percent Solids	%	89%
Corrected TPH	ug/kg	124,755,216
Estimated % Crude Oil per Soil wet weight (wt/wt)	%	12.48%
Estimated Crude Oil Recovered	lbs	93,195
Density	lbs/gal	7.1
1/Density	gal/lbs	0.141
Estimated Crude Oil Recovered	gallons	13,126

Notes:
1) Total weight disposed from CTEH waste tracking spreadsheet provided 7/1/2013
2) Average TPH concentration and % solids derived in Table 5B
3) As TPH may not capture the heavier fraction of the spilled crude oil, a correction factor of 7.6 was used, this CF was taken from the mass balance produced for the Enbridge Line 6B release.
4) Corrected TPH value is derived as: Total TPH x Correction Factor x Total Percent Solids
5) Estimated % crude oil per soil wet weight = corrected TPH x 1.0E-09
6) Estimated crude oil recovered = total weight disposed X estimated % crude oil per soil wet weight
7) The API Gravity of the product was 34.7 at 60 degrees F, a density of 7.1 lbs/gal was taken from the engineeringtoolbox.com web site for this API gravity

Table 5B - Derived TPH and % Solids Values

Sample ID	DRO	ORO	GRO	TPH	% Moisture	% Solids
MAAR0328SO001	10,800	5,610	607	17,017	12.1	87.9
MAAR0328SO002	12,700	5,870	907	19,477	12	88
MAAR0328SO003	10,700	5,480	607	16,787	9.5	90.5
MAAR0328SO004	3,720	1,380	316	5,416	19.6	80.4
MAAR0328SO005	1,120	501	432	2,053	17.6	82.4
MAAR0328SO006	18,200	8,530	1,900	28,630	7.6	92.4
MAAR0328SO007	24,900	11,800	2,260	38,960	7.4	92.6
MAAR0328SO008	14,400	6,260	510	21,170	7.6	92.4
MAAR0328SO009	15,300	7,320	685	23,305	6.7	93.3
MAAR0328SO010	7,170	3,550	903	11,623	7.4	92.6
			Average	18,444	11	89

Notes:
1) Data from 4/3/2013 analytical package from Pace Analytical to J. McCormack (Project 20152232)
2) DRO - Diesel Range Organics (C10-28) in mg/kg
3) ORO - Oil Range Organics (>C28-40) in mg/kg
4) GRO - Gasoline Range Organics (C6-10) in mg/kg
5) TPH - Total Petroleum Hydrocarbons, the sum of DRO, ORO and GRO in mg/kg
6) % solids = 100 - % moisture

Table 6A - Spill Volume Associated with Oily Water/Sludge from Frac Tanks

Magnolia Station Event
Lion Oil Trading & Transportation, Inc.

Prepared by: Center for Toxicology and Environmental Health, L.L.C.
Date: 7/8/2013

Parameter	Units	Value
Total Weight Disposed	tons	15.45
Total Weight Disposed	lbs	30,900
Average TPH Concentration	ppm	279,652
Estimated % of Total Weight that is TPH	%	27.96%
Estimated Crude Oil Recovered	lbs	8,640
Density	lbs/gal	7.1
1/Density	gal/lbs	0.141
Estimated Crude Oil Recovered	gallons	1,217

Notes:
1) Total weight disposed from CTEH waste tracking spreadsheet provided 7/1/2013
2) Average TPH concentration derived in Table 6B
3) It is a conservative assumption to use TPH percentage to estimate crude oil recovered because some heavier fractions of the crude oil may not be captured by the TPH analysis
4) The API Gravity of the product was 34.7 at 60 degrees F, a density of 7.1 lbs/gal was taken from the engineeringtoolbox.com web site for this API gravity

Table 6B - Derived TPH

Sample ID	DRO	ORO	GRO	TPH
MAAR0328WC004	103,000	49,300	1,130	153,430
MAAR0328WC005	275,000	130,000	874	405,874
			Average	279,652

Notes:
1) Units for DRO, ORO, GRO, and TPH - mg/kg
2) Data from 4/5/2013 analytical package from Pace Analytical to J. McCormack (Project 20152227)
3) DRO - Diesel Range Organics (C10-28)
4) ORO - Oil Range Organics (>C28-40)
5) GRO - Gasoline Range Organics (C6-10)
6) TPH - Total Petroleum Hydrocarbons, the sum of DRO, ORO and GRO