

AP - 073

**STAGE 1
WORKPLAN**

8/22/2007



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August 22, 2007

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VIA FEDERAL EXPRESS
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Oil Conservation Division
Environmental Bureau

Mr. Glenn Von Gonten
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

SUBJECT: STAGE 1 ABATEMENT PLAN (AP-073)
STATE L-2 TANK BATTERY

Dear Mr. Von Gonten:

On behalf of Chesapeake Operating, Inc., BBC International, Inc. respectfully submits the enclosed Stage 1 Abatement Plan (AP-073).

If you have any questions, please do not hesitate to contact myself at (505) 397-6388 or via e-mail at cbrunson@bbcinternational.com or Bradley Blevins with Chesapeake Operating, Inc. at (505) 391-1462, extension 6224 or via e-mail at bblevins@chkenergy.com.

Sincerely,

BBC International, Inc.

Cliff P. Brunson, CEI, CRS
President

cc: Chris Williams – NMOCD, Hobbs
Bradley Blevins – Chesapeake, Hobbs
Harlan Brown – Chesapeake, Oklahoma City



STATE L-2 TANK BATTERY

UNIT LETTER "L", SECTION 19, TOWNSHIP 17 SOUTH, RANGE 36 EAST
LEA COUNTY, NEW MEXICO

STAGE 1 ABATEMENT PLAN (AP-073)

AUGUST 2007

CHESAPEAKE OPERATING, INC.

HOBBS, NM

PREPARED BY:

BBC INTERNATIONAL, INC.
WORLD-WIDE ENVIRONMENTAL SPECIALISTS
1324 W. MARLAND BLVD.
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1.0 INTRODUCTION

The subject site is located east of Buckeye, New Mexico in Lea County in Unit Letter L, of Section 19, Township 17 South, and Range 36 East. The site is a former operating tank battery. Chesapeake Operating, Inc. (Chesapeake) purchased the tank battery from Concho Exploration in February 2004.

In the spring of 2007, Chesapeake decided to abandon the tank battery. As part of the process of abandonment, site investigation activities were conducted by BBC International, Inc. (BBC) in May 2007. An air rotary drilling rig was utilized to collect samples in order to delineate the lateral and vertical extent of potential hydrocarbon and chloride impact around the tank battery site. Laboratory analyses indicated soil and ground water impact above New Mexico Oil Conservation Division (NMOCD) guidelines and the New Mexico Water Quality Control Commission (WQCC) ground water standards.

On May 30, 2007, the NMOCD was notified via e-mail of the groundwater impact at the site (**See Appendix I**). The NMOCD notified Chesapeake in a letter dated June 19, 2007 that a Stage I Abatement Plan was required for the State L-2 Tank Battery to investigate groundwater contamination in accordance with NMOCD's regulations found in Rule 19 of the New Mexico Administrative Code, Chapter 15, Part 15.1.19 (19.15.1.19 NMAC) because chlorides released from the tank battery had contaminated ground water at concentrations that exceed the WQCC ground water protection standards specified at 20.6.2.3103 NMAC.

Chesapeake is unaware of any previous investigations related to this site.

Chesapeake has retained BBC International, Inc. (BBC) to investigate and manage the site activities at the State L-2 Tank Battery.

2.0 SITE DESCRIPTION

The subject property is located in southern Lea County in the southeastern corner of New Mexico. The area is in the Pecos River Valley section of the Great Plains physiographic province and is located in the southern margin of the Llano Estacado. The region is generally a treeless, gently sloping plain, with shallow playa lakes, sand dunes and covered with short prairie grass. The climate of the area is classified as semi-arid to arid and is characterized by low annual rainfall, low humidity, and a high average annual temperature. Local precipitation averages approximately 13 inches per year. Evaporation in the region is approximately 100 inches per year (Nicholson and Clebsch).

The site is located in the northwestern quadrant of Section 19, Township 17 South, Range 36 East. The site is located in the eastern portion of the Buckeye area.

Currently, the site is surrounded by oil field operations and ranch land.

3.0 SITE ACTIVITIES

In May 2007, BBC conducted drilling and soil sampling within the site to delineate the lateral and vertical extents of hydrocarbon and chloride impact. Soil samples at each borehole were taken at one (1) foot bgs, three (3) feet bgs, five (5) feet bgs, and at five (5) foot intervals thereafter. Headspace measurements using a photo ionization detector (PID) and chloride field screens were used to determine which sample in the range between five (5) feet bgs and total depth of the soil boring qualified for laboratory analyses (e.g. the sample with highest results of field tests). The sample collected at the extent of each boring was also submitted for laboratory analysis. Consequently, five (5) soil samples from each soil boring were submitted to a laboratory and analyzed for total petroleum hydrocarbons (TPH), including speciation of gasoline range organics (GRO) and diesel range organics (DRO), chloride, benzene, toluene, ethylbenzene, and xylene (BTEX). Please see **Table 1** for summaries of soil analytical data and **Appendix II** for all laboratory analytical reports.

The first soil boring, SB1, was advanced on May 1, 2007 in an area of depression directly south of the tank pad. The samples taken at one (1) foot bgs and at the extent of drilling showed constituents of concern (COCs) to be below NMOCD regulatory guidelines or were non-detectable. Chloride levels in the boring declined from higher concentrations at three (3) feet bgs to low levels at thirty (30) feet bgs. Within the same range of depth, GRO remained below 400 ppm throughout. DRO spiked at thirty (30) feet bgs and dropped below detectable levels at fifty (50) feet bgs. See **Table 1** for a summary of soil analytical data. SB1 was drilled to groundwater and was renamed Temporary MW (SB1). A groundwater sample collected on May 3, 2007 contained COCs in excess of the New Mexico Water Quality Control Commission (WQCC) standards. Please refer to **Figure 1** for the location of all samples collected, and see **Table 2** for a summary of groundwater analytical data. All drilling logs are located in **Appendix IV**.

On May 3, 2007, SB2 was drilled northeast of SB1 and was located between the former heater treater area and the tank pad. All constituents with the exception of chloride were non-detectable throughout. Chloride concentrations declined from 729 ppm at one (1) foot bgs to 254 ppm at thirty nine (39) feet bgs. SB3 was placed northeast of SB2 and directly north of the former location of the heater treater. The trend in SB3 was similar to SB2 in that all constituents with the exception of chloride were non-detectable throughout. Chloride was detected at 184 ppm at one (1) foot bgs, peaked to 1,600 ppm at five (5) feet bgs, and then declined to 117 ppm at thirty-five (35) feet bgs.

Three (3) additional soil borings were drilled on May 21, 2007. SB4 was placed south of the heater treater area and east of SB1 at the farthest southeast corner

of the site. Again, at SB4, all constituents with the exception of chloride were non-detectable. Chloride at SB4 fell from 5,040 ppm at one (1) foot bgs to 342 ppm at thirty-five (35) feet bgs.

SB5 was located in the center of the former location of the tank on the east side of the tank pad. Laboratory analyses at one (1) foot bgs indicated that BTEX was present in concentrations above regulatory guidelines. The remaining samples were within guidelines and showed declining BTEX with depth, ending at twenty (20) feet bgs with non-detectable levels. Chloride was detected at 2,320 ppm at one (1) foot bgs and declined until the twenty (20) foot bgs sample detected only 152 ppm. GRO and DRO dropped below guidelines at the five (5) foot sample and continued through twenty (20) feet bgs.

SB6 was placed on the west side of the tank pad. Low amounts of BTEX were found from one (1) to five (5) feet bgs and quantities were non-detectable deeper than five (5) feet. Chloride fell from 1,680 ppm at one (1) foot bgs to 125 ppm at twenty-five (25) feet bgs. GRO was detected in amounts no greater than 224 ppm, and DRO was no higher than 241 ppm throughout the profile. Both GRO and DRO became non-detectable in the fifteen (15) foot and twenty-five (25) foot samples.

4.0 STAGE 1 ABATEMENT SITE INVESTIGATION

Chesapeake is submitting this Stage 1 Abatement Plan in accordance with the NMOCD's Rule 19 (19.15.1.19 NMAC) to investigate potential ground water contamination at Chesapeake's State L-2 Tank Battery site located in Section 19, Township 17 South, Range 36 East, Lea County, New Mexico.

Chesapeake proposes the following to investigate and delineate the site utilizing the advancement of soil borings and ground water monitoring wells and associated laboratory analyses.

4.1 Soil

A minimum of four (4) soil borings will be advanced at the site to delineate the vertical and horizontal extent of potential hydrocarbon and chloride contamination present in the vadose zone. The proposed location of these soil borings are depicted on **Figure 3**.

The locations of the proposed soil borings are necessary to delineate the area of soil impact of hydrocarbons and chloride that may exist in the vadose zone at the site.

Site history information, conditions, and field screening analytical techniques for hydrocarbons and chloride will dictate the depth and any additional number of soil borings advanced at the site.

An air-rotary rig equipped with split-spoon sampling tools will be used to advance the soil borings and collect the soil samples. The soil borings advanced at the site will be sampled initially in the near surface (0-3 feet below ground surface (bgs)), then sampled every five feet until terminus.

4.2 QA/QC Sampling Procedures-Soil

The soil samples will be obtained by personnel utilizing appropriate sampling tools and wearing clean disposable gloves. The soil samples will be collected using sampling tools that will be decontaminated using an Alconox detergent solution and rinsed with distilled water between sampling events. The drilling equipment will be decontaminated prior to being brought on the site as well as decontaminated between soil borings.

Each soil sampling interval will be split into two equal portions and placed in separate containers. The first portion of the sample will be placed into a container to field screen the soil using a photo ionization detector (PID) for hydrocarbon detection, then using a titration analysis for chloride. The second portion of the sample will be placed in a sterile glass container equipped with a Teflon-lined lid furnished by the testing laboratory. Each container will be filled to capacity with soil. All containers will be labeled, placed on ice in an insulated cooler, and chilled to a temperature of approximately 40°F (4°C). The cooler will be sealed for delivery to the laboratory for laboratory testing utilizing proper chain of custody documentation throughout the sampling process. The samples will be delivered for analysis to Trace Laboratories, Inc. in Lubbock, Texas. The laboratory will be responsible for proper QA/QC procedures utilized during the analytical process. These procedures are either transmitted with the laboratory reports or are on file at the laboratory.

4.3 Laboratory Analysis-Soil

The soil samples will be analyzed for all constituents contained in the following analytical methods for initial site characterization according to NMOCD requirements:

- Metals – Method SW6020
- Total Mercury – Method 7470
- Total Petroleum Hydrocarbons (TPH) – Method SW 846-8015 Modified DRO/GRO
- Volatile Organic Compounds (VOCs (including BTEX)) – Method SW 846-8260B
- Semi-volatile Organic Compounds (SVOCs) – Method SW 846-8270C
- Chloride – Method E300
- Cyanide – Method E335.3
- Nitrogen, Nitrite – Method E354.1
- pH – Method E150.1

4.4 Ground Water

A minimum of four (4) ground water monitoring wells will be advanced and installed at the site to delineate the vertical and horizontal extent of potential hydrocarbon and chloride contamination present in the vadose zone and the ground water aquifer. The proposed location of these ground water monitoring wells are depicted on **Figure 3**.

The locations of the proposed ground water monitoring wells are necessary to assist in delineating the impact of the ground water from the operations of the former tank battery.

Two (2) up gradient wells and two (2) down gradient wells of the former tank battery will be installed in order to define the site geology and hydrogeology of potential vadose-zone and ground water contamination, subsurface hydraulic conductivity, transmissivity, storativity, and rate and direction of potential contaminant migration. If site conditions warrant the collection of additional data concerning ground water, additional ground water monitoring wells may be installed.

An air-rotary rig equipped with split-spoon sampling tools will be used to advance the ground water monitoring wells and collect the soil samples. The ground water monitoring wells advanced at the site will be sampled initially in the near surface (0-3 feet below ground surface (bgs)), then sampled every five feet until terminus.

4.5 QA/QC Sampling Procedures-Soil (Ground Water Monitoring Wells)

The soil samples will be obtained by personnel utilizing appropriate sampling tools and wearing clean disposable gloves. The soil samples will be collected using sampling tools that will be decontaminated using an Alconox detergent solution and rinsed with distilled water between sampling events. The drilling equipment will be decontaminated prior to being brought on the site as well as decontaminated between soil borings.

Each soil sampling interval will be split into two equal portions and placed in separate containers. The first portion of the sample will be placed into a container to field screen the soil using chloride titration analysis. The second portion of the sample will be placed in a sterile glass container equipped with a Teflon-lined lid furnished by the testing laboratory. Each container will be filled to capacity with soil. All containers will be labeled, placed on ice in an insulated cooler, and chilled to a temperature of approximately 40°F (4°C). The cooler will be sealed for delivery to the laboratory for laboratory testing utilizing proper chain of custody documentation throughout the sampling process. The samples will be delivered for analysis to Trace Laboratories, Inc. in Lubbock, Texas.

The laboratory will be responsible for proper QA/QC procedures utilized during the analytical process. These procedures are either transmitted with the laboratory reports or are on file at the laboratory.

4.6 Laboratory Analysis-Soil (Ground Water Monitoring Wells)

The soil samples will be analyzed for all constituents contained in the following analytical methods for initial site characterization according to NMOCD requirements:

- Metals – Method SW6020
- Total Mercury – Method 7470
- Total Petroleum Hydrocarbons (TPH) – Method SW 846-8015 Modified DRO/GRO
- Volatile Organic Compounds (VOCs (including BTEX)) – Method SW 846-8260B
- Semi-volatile Organic Compounds (SVOCs) – Method SW 846-8270C
- Chloride – Method E300
- Cyanide – Method E335.3
- Nitrogen, Nitrite – Method E354.1
- pH – Method E150.1

4.7 Ground Water Monitor Well Construction and Development

The proposed ground water monitor wells will be completed in the locations as depicted in **Figure 3**. The wells will be constructed of a minimum of fifteen (15) feet of 2 inch (2") PVC well screen with ten (10) feet of well screen below the water table. Blank PVC riser will be extended to the surface. Filter sand will be installed to two-three (2-3) feet above the well screen followed by a bentonite plug and cement grout to the surface with a cement pad and locking vault put in place.

The ground water monitor wells will be developed by surging and bailing or pumping to facilitate ground water flow into the well bore. Following development, the wells will be gauged for depth to ground water and to determine if free hydrocarbons are present. A minimum of twelve (12) hours after installation, the wells will be gauged, purged, and sampled for the required constituents.

4.8 QA/QC Sampling Procedures-Ground Water

The ground water monitor wells will be developed and purged prior to sampling. Monitoring wells with a sufficient recharge will be purged by removing a minimum of three well volumes. Monitoring wells that do not recharge sufficiently will be purged until no additional ground water can be obtained.

After purging the newly installed wells, groundwater samples will be collected with a disposable Teflon sampler and polyethylene line by personnel wearing clean, disposable gloves. Groundwater sample containers will be filled in the order of decreasing volatilization sensitivity (i.e., BTEX containers filled first and PAH containers second).

Ground water samples collected for BTEX analysis will be placed in 40 ml glass VOA vials equipped with Teflon lined caps that will be provided by the analytical laboratory. The vials will be filled to a positive meniscus, sealed, and visually checked to ensure the absence of air bubbles.

Ground water samples collected for PAH analysis will be filled to capacity in sterile, one (1) liter glass containers equipped with Teflon lined caps. Ground water samples collected for metals analysis will be filled to capacity in sterile, one (1) liter plastic containers equipped with Teflon lined caps. All of the sampling containers will be provided by the analytical laboratory.

All containers will be labeled, placed on ice in an insulated cooler, and chilled to a temperature of approximately 40°F (4°C). The cooler will be sealed for delivery to the laboratory for laboratory testing utilizing proper chain of custody documentation throughout the sampling process. The samples will be delivered for analysis to Trace Laboratories, Inc. in Lubbock, Texas.

The laboratory will be responsible for proper QA/QC procedures utilized during the analytical process. These procedures are either transmitted with the laboratory reports or are on file at the laboratory.

4.9 Laboratory Analysis-Ground Water Monitoring Wells

The ground water samples will be analyzed for all constituents contained in the following analytical methods for initial site characterization according to NMOC requirements:

- Metals – Method SW6020
- Total Mercury – Method 7470
- Volatile Organic Compounds (VOCs (including BTEX)) – Method SW 846-8260B
- Semi-volatile Organic Compounds (SVOCs) – Method SW 846-8270C
- Chloride – Method E300
- Cyanide – Method E335.3
- Nitrogen, Nitrite – Method E354.1
- pH – Method E150.1
- Total Dissolved Solids – E160.1

5.0 MONITORING PLAN

All site ground water monitoring wells will be gauged and sampled on a quarterly basis during the life of the abatement process. The constituents analyzed for will be determined in consultation with the NMOCD after the initial characterization of the first sampling event after the installation of the ground water monitoring wells.

6.0 AQUIFER DESCRIPTION

Several aquifers are located in the Buckeye area, the Quaternary alluvium, the Ogallala formation, and the Triassic Dockum Group which is composed of the Chinle formation and the Santa Rosa Sandstone (Nicholson and Clebsch). The community of Buckeye obtains ground water for domestic use from the Ogallala formation which is the major fresh water aquifer in the area. According to the New Mexico Office of the State Engineer (NMOSE), current depth to water in the site vicinity is approximately 40 to 50 feet and ground water flow direction in the Ogallala aquifer is towards the east southeast.

The site is within the limits of the Lea County Basin as declared by the New Mexico Office of the State Engineer (NMOSE). In the Lea County Basin, the sole source of drinking water is the Ogallala Aquifer. In the Southern High Plains area, the Ogallala Aquifer ranges in saturated thickness from 25 feet to 175 feet. Recharge to the aquifer is fed wholly by precipitation and most water infiltration occurs through playas. Typical recharge rates to the unconfined Ogallala in this area are approximately 0.25 to 0.5 inch/year (Nicholson and Clebsch).

7.0 INVENTORY OF WATER WELLS WITHIN ONE MILE

An inventory of water wells located within one mile of the site can be found in **Appendix III**. These well locations were obtained from the website of the New Mexico Office of the State Engineer.

8.0 SURFACE OWNERSHIP

Chesapeake will conduct a one-mile radius search from the site of all known and registered surface owners. A review of the public tax rolls of Lea County, NM will identify the name and addresses of the surface owners within one mile of the site and a list will be generated. **Figure 2** is a diagram depicting the one-mile radius search.

9.0 SCHEDULE OF ACTIVITIES

All Stage 1 Abatement Plan activities will commence within 30 days of the final approval of the Stage 1 Abatement Plan following the public notice period and approval from the NMOCD. A schedule of site activities will be submitted to the NMOCD upon final approval of the Stage 1 Abatement Plan along with follow up

quarterly progress reports then a final report upon completion of investigative Stage 1 Abatement activities.

10.0 DELIVERABLES

A Stage 1 Abatement Plan Site Investigation Report will be submitted within 60 days upon completion of investigative activities which will include, but not limited to, a description and history of the site, site map, a description of site investigative activities, summary data tables, laboratory analytical data, ground water gradient map, isoconcentration maps and cross sections that depict any identified contamination that may have been released from the former tank battery, and any data necessary to select and design an effective abatement option under NMOCD Rule 19 Stage 2 Abatement requirements.

A paper and electronic copy of all work plans and/or reports will be submitted to both the Santa Fe, New Mexico and Hobbs, New Mexico offices of the NMOCD.

11.0 ABATEMENT PROCESS

On behalf of Chesapeake, BBC has submitted this Stage 1 Abatement Plan (AP-061) in accordance with NMOCD Rule 19 NMAC 15.1.19.

Upon NMOCD approval of the Stage 1 Abatement Plan, all public notice and participation requirements under Rule 19 (19.15.1.19 NMAC), specifically Rule 19G, will be followed.

12.0 REFERENCES

Nicholson, Jr., Alexander and Clebsch, Jr. Alfred, 1961, *Geology and Ground-Water Conditions in Southern Lea County, New Mexico*, *Ground-Water Report 6*, New Mexico Bureau of Mines and Mineral Resources, Socorro, New Mexico, 120pp.

NMOSE – New Mexico Office of the State Engineer, iWaters website:
<http://iwaters.ose.state.nm.us:7001/iWATERS/>

FIGURE 1

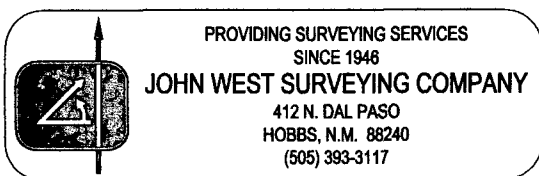
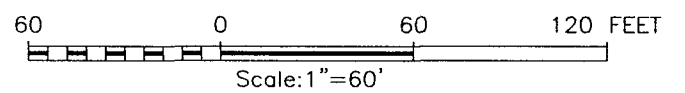
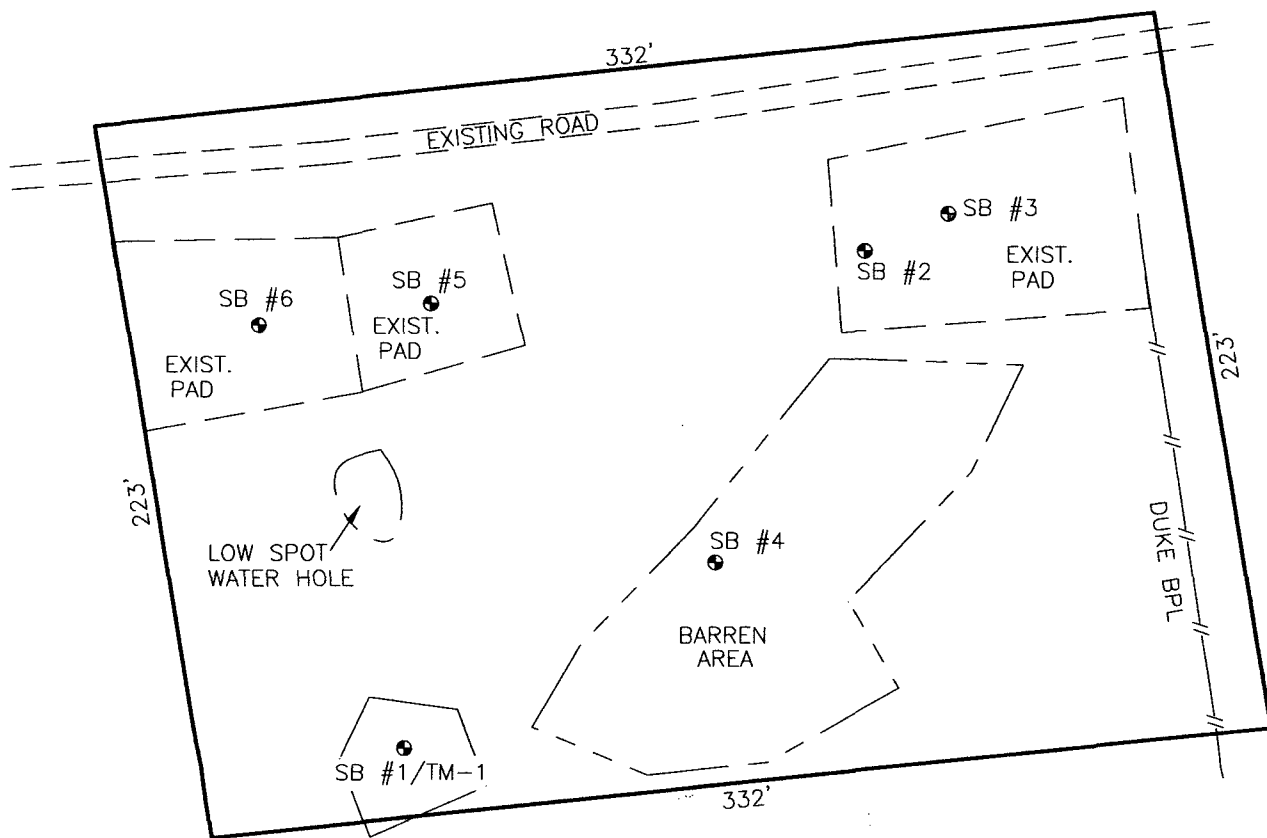
SITE DIAGRAM WITH SOIL BORINGS AND MONITOR WELLS

STATE L-2 TANK BATTERY

August 2007

**Chesapeake Operating, Inc.
Hobbs, NM**

**Prepared by:
BBC International, Inc.**



BBC INTERNATIONAL

FIGURE 1 SITE DIAGRAM
AT THE STATE L-2 BATTERY IN
SECTION 19, TOWNSHIP 17 SOUTH, RANGE 36 EAST,
N.M.P.M., LEA COUNTY, NEW MEXICO

Survey Date: 7/9/07	Sheet 1 of 1 Sheets
W.O. Number: 07.11.0846	Drawn By: L.A.
Date: 7/19/07	DISK: CD#6
	07110846

FIGURE 2

ONE-MILE RADIUS MAP

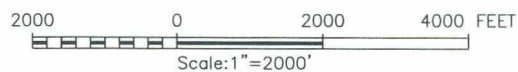
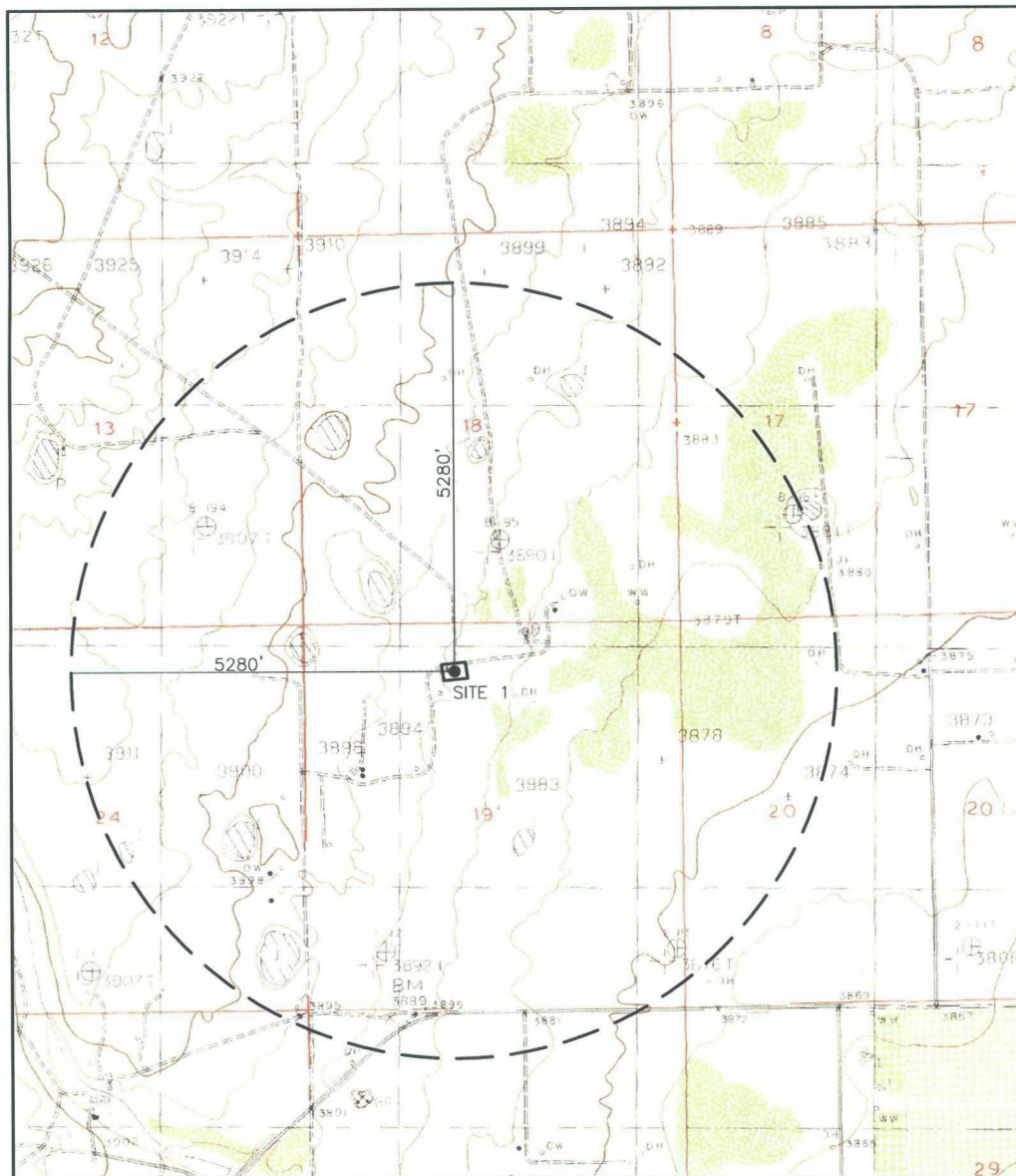
STATE L-2 TANK BATTERY

August 2007

Chesapeake Operating, Inc.
Hobbs, NM

Prepared by:
BBC International, Inc.

SECTION 19, TOWNSHIP 17 SOUTH, RANGE 36 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.



BBC INTERNATIONAL

FIGURE 2 ONE MILE RADIUS MAP
AT THE #2 STATE L BATTERY IN
SECTION 19, TOWNSHIP 17 SOUTH, RANGE 36 EAST,
N.M.P.M., LEA COUNTY, NEW MEXICO

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

Survey Date: 7/9/07	Sheet 1 of 1 Sheets
W.O. Number: 07.11.0846	Drawn By: L.A.
Date: 7/19/07	DISK: CD#6
	07110846

FIGURE 3

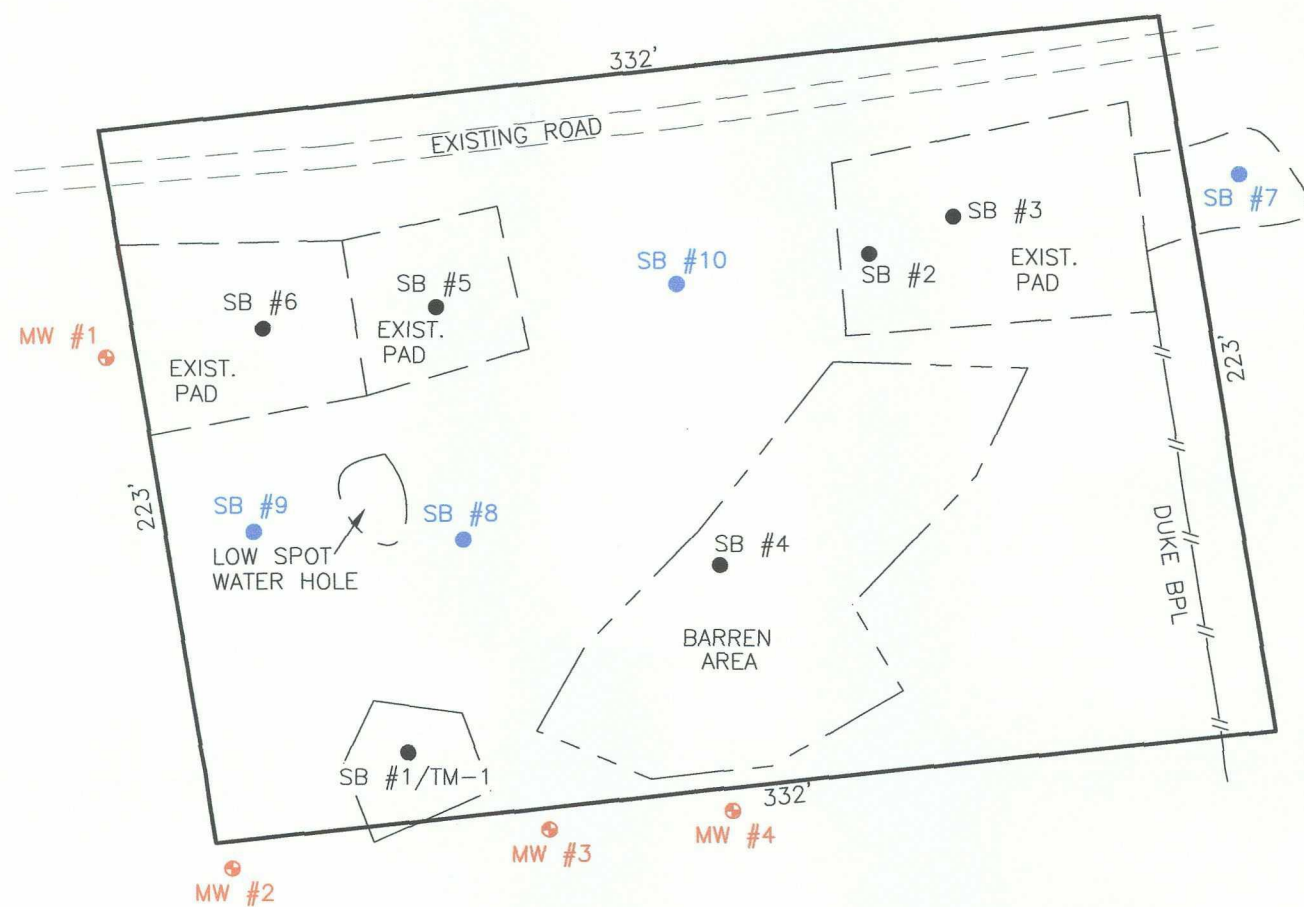
PROPOSED SOIL BORING AND MONITOR WELLS

STATE L-2 TANK BATTERY

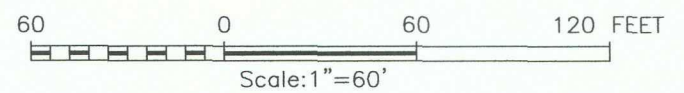
August 2007

Chesapeake Operating, Inc.
Hobbs, NM

Prepared by:
BBC International, Inc.



- ⊕ - PROPOSED MONITORING WELL
- - PROPOSED SOIL BORING
- - EXISTING SOIL BORING



BBC INTERNATIONAL

FIGURE 3 SITE DIAGRAM
AT THE STATE L-2 BATTERY IN
SECTION 19, TOWNSHIP 17 SOUTH, RANGE 36 EAST,
N.M.P.M., LEA COUNTY, NEW MEXICO

Survey Date: 7/9/07	Sheet 1 of 1 Sheets
W.O. Number: 07.11.0846	Drawn By: L.A.
Date: 7/19/07	DISK: CD#6
07110846	REV: 8/20/07

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

APPENDIX I

CORRESPONDENCE

STATE L-2 TANK BATTERY

August 2007

Chesapeake Operating, Inc.
Hobbs, NM

Prepared by:
BBC International, Inc.

Cliff P. Brunson

From: Cliff P. Brunson [cbrunson@bbcinternational.com]
Sent: Wednesday, May 30, 2007 6:15 PM
To: Wayne Price
Cc: Bradley Blevins; Harlan Brown; Curtis Blake; Ken Swinney; Jennifer Gilkey
Subject: Chesapeake #2 State L Tank Battery-Groundwater Impact Notification

Mr. Price,

This Email is formal notification that Chesapeake Operating, Inc. has encountered a chloride impacted ground water bearing formation at the #2 State L Tank Battery during a site investigation prior to reclamation of the abandoned facility. During the investigation and assessment activities, a soil boring was advanced to the south of the battery to groundwater. Hydrocarbons were encountered in the soil during the advancement and a temporary monitor well was installed. The well was developed, measured, and sampled. Hydrocarbons were non-detect, but 601 ppm of chloride was detected. The temporary well was plugged and abandoned. The following is general information regarding the site:

Name: #2 State L Battery;

Operator: Chesapeake Operating, Inc.;

Location: Township 17S, Range 36E, Section 19;

County: Lea County, New Mexico; and

Depth to ground water: 40.8 feet (based on a measurement from the ground surface to the water encountered in the monitor well).

Chesapeake has ceased investigation activities until further direction from the NMOCD.

Chesapeake will keep the NMOCD informed of any activities at the site.

As you are aware Chesapeake is currently working with Glenn Von Gonten on another remediation site in Lea County and would like to request Glenn as our point of contact on this site.

If you have questions, please contact me at (505) 397-6388 or via email at cbrunson@bbcinternational.com or Bradley Blevins of Chesapeake at (505) 391-1462, ext. 6224 or via e-mail at bblevins@chkenergy.com.

Best regards,

Cliff Brunson

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Cliff P. Brunson, CEI, CRS
 President
 BBC International, Inc.
 World-Wide Environmental Specialists
 Mailing Address:
 P. O. Box 805

8/14/2007



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

Mark E. Fesmire, P.E.

Director

Oil Conservation Division

JUNE 19, 2007

Mr. Brad Blevins
Chesapeake Operating, Inc.
P.O. Box 190
Hobbs, NM 88240

**RE: REQUIREMENT TO SUBMIT ABATEMENT PLAN
CHESAPEAKE STATE L-2
UNIT LETTER "L", SECTION 19, TOWNSHIP 17 SOUTH, RANGE 36 EAST
LEA COUNTY, NEW MEXICO
AP073**

Dear Mr. Blevins:

The New Mexico Oil Conservation Division (OCD) has determined after reviewing the notice submitted by BBC International on behalf of Chesapeake Operating, Inc. (Chesapeake), that Chesapeake must submit a Stage 1 Abatement Plan in accordance with OCD Rule 19 (19.15.1.19 NMAC) to investigate ground water contamination at its State L-2 Tank Battery site located in Unit Letter "L", Section 19, Township 17 South, Range 36 East, Lea County, New Mexico. OCD is requiring an abatement plan because chlorides released from Chesapeake's Tank Battery has contaminated ground water at concentrations that exceed the WQCC ground water protection standards specified at 20.6.2.3103 NMAC.

The Stage 1 Abatement Plan proposal must be submitted to the OCD Santa Fe Office with a copy provided to the OCD Hobbs District Office and must meet of all the requirements specified in Rule 19 (19.15.1.19 NMAC), including, but not limited to, the public notice and participation requirements specified in Rule 19G. The Stage 1 Abatement Plan is due sixty (60) days from the receipt by Chesapeake of this written notice.

The Stage 1 Abatement Plan must meet all of the requirements specified in OCD Rule 19E.3, including, but not limited to, a site investigation work plan and monitoring program that will enable it to characterize the release using an appropriate number of isoconcentration maps and

Mr. Brad Blevins

June 19, 2007

Page 2

cross sections that depict the contamination and to provide the data necessary to select and design an effective abatement option.

In addition to the Stage 1 Abatement Plan, Chesapeake must also submit a Form C-141 to document this release and impact to ground water. Chesapeake should submit one paper copy and one electronic copy of all future workplans and/or reports and must include the Case Number (AP073) on all future correspondence. If you have any questions, please contact Glenn von Gonten of my staff at (505) 476-3488.

Sincerely,

A handwritten signature in cursive script, appearing to read "W Price".

Wayne Price
Environmental Bureau Chief

LWP:gyg

cc: Larry Johnson, OCD Hobbs District

APPENDIX II

ANALYTICAL DATA

STATE L-2 TANK BATTERY

August 2007

**Chesapeake Operating, Inc.
Hobbs, NM**

**Prepared by:
BBC International, Inc.**

Summary Report

Cliff Brunson
BBC International
1324 W. Marland
Hobbs, NM, 88240

Report Date: May 10, 2007

Work Order: 7050323



Project Location: Buckeye, NM
Project Name: #2 State L Batt

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
123318	SB1 @ 1'/003880	soil	2007-05-01	14:53	2007-05-03
123319	SB1 @ 3'/003855	soil	2007-05-01	14:54	2007-05-03
123320	SB1 @ 5'/004119	soil	2007-05-01	14:55	2007-05-03
123321	SB1 @ 30'/004085	soil	2007-05-01	15:25	2007-05-03
123322	SB1 @ 50'/00481	soil	2007-05-01	16:37	2007-05-03

Sample - Field Code	BTEX				MTBE	TPH DRO	TPH GRO
	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)	MTBE (mg/Kg)	DRO (mg/Kg)	GRO (mg/Kg)
123318 - SB1 @ 1'/003880	<0.0100	<0.0100	0.0346	0.0463		<50.0	3.27
123319 - SB1 @ 3'/003855	<0.100	<0.100	0.560	1.16		840	183
123320 - SB1 @ 5'/004119	0.256	<0.200	5.35	6.50		614	392
123321 - SB1 @ 30'/004085	<0.100	<0.100	1.38	2.94		3150	273
123322 - SB1 @ 50'/00481	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	2.37

Sample: 123318 - SB1 @ 1'/003880

Param	Flag	Result	Units	RL
Chloride		198	mg/Kg	1.00

Sample: 123319 - SB1 @ 3'/003855

Param	Flag	Result	Units	RL
Chloride		987	mg/Kg	1.00

Sample: 123320 - SB1 @ 5'/004119

Param	Flag	Result	Units	RL
Chloride		380	mg/Kg	1.00

Sample: 123321 - SB1 @ 30'/004085

TraceAnalysis, Inc. • 6701 Aberdeen Ave., Suite 9 • Lubbock, TX 79424-1515 • (806) 794-1296
This is only a summary. Please, refer to the complete report package for quality control data.

Report Date: May 10, 2007

Work Order: 7050323
#2 State L Batt

Page Number: 2 of 2
Buckeye.NM

Param	Flag	Result	Units	RL
Chloride		10.0	mg/Kg	1.00

Sample: 123322 - SB1 @ 50'/00481

Param	Flag	Result	Units	RL
Chloride		138	mg/Kg	1.00

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
200 East Sunset Road, Suite E
5002 Basin Street, Suite A1
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Ft. Worth, Texas 76132

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432•689•6301
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FAX 806•794•1298
FAX 915•585•4944
FAX 432•689•6313

E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Cliff Brunson
BBC International
1324 W. Marland
Hobbs, NM, 88240

Report Date: May 10, 2007

Work Order: 7050323



Project Location: Buckeye, NM
Project Name: #2 State L Batt
Project Number: #2 State L Batt

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
123318	SB1 @ 1'/003880	soil	2007-05-01	14:53	2007-05-03
123319	SB1 @ 3'/003855	soil	2007-05-01	14:54	2007-05-03
123320	SB1 @ 5'/004119	soil	2007-05-01	14:55	2007-05-03
123321	SB1 @ 30'/004085	soil	2007-05-01	15:25	2007-05-03
123322	SB1 @ 50'/00481	soil	2007-05-01	16:37	2007-05-03

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 20 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Case Narrative

Samples for project #2 State L Batt. were received by TraceAnalysis, Inc. on 2007-05-03 and assigned to work order 7050323. Samples for work order 7050323 were received intact at a temperature of 4 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method
BTEX	S 8021B
Chloride (IC)	E 300.0
TPH DRO	Mod. 8015B
TPH GRO	S 8015B

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 7050323 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 123318 - SB1 @ 1'/003880

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	36962	Date Analyzed:	2007-05-03	Analyzed By:	KB
Prep Batch:	32065	Sample Preparation:	2007-05-03	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		0.0346	mg/Kg	1	0.0100
Xylene		0.0463	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.829	mg/Kg	1	1.00	83	52.1 - 131
4-Bromofluorobenzene (4-BFB)		0.869	mg/Kg	1	1.00	87	48.7 - 146

Sample: 123318 - SB1 @ 1'/003880

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	37120	Date Analyzed:	2007-05-07	Analyzed By:	ER
Prep Batch:	32194	Sample Preparation:	2007-05-07	Prepared By:	ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		198	mg/Kg	50	1.00

Sample: 123318 - SB1 @ 1'/003880

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	36975	Date Analyzed:	2007-05-03	Analyzed By:	TG
Prep Batch:	32074	Sample Preparation:		Prepared By:	TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		165	mg/Kg	1	150	110	33.3 - 164

Sample: 123318 - SB1 @ 1'/003880

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	36963	Date Analyzed:	2007-05-03	Analyzed By:	KB
Prep Batch:	32065	Sample Preparation:	2007-05-03	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		3.27	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.00	mg/Kg	1	1.00	100	33.2 - 160
4-Bromofluorobenzene (4-BFB)		1.16	mg/Kg	1	1.00	116	10 - 227

Sample: 123319 - SB1 @ 3'/003855

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 36964 Date Analyzed: 2007-05-03 Analyzed By: KB
Prep Batch: 32066 Sample Preparation: 2007-05-03 Prepared By: KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene	1	<0.100	mg/Kg	10	0.0100
Toluene		<0.100	mg/Kg	10	0.0100
Ethylbenzene		0.560	mg/Kg	10	0.0100
Xylene		1.16	mg/Kg	10	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.582	mg/Kg	10	1.00	58	52.1 - 131
4-Bromofluorobenzene (4-BFB)		0.810	mg/Kg	10	1.00	81	48.7 - 146

Sample: 123319 - SB1 @ 3'/003855

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 37120 Date Analyzed: 2007-05-07 Analyzed By: ER
Prep Batch: 32194 Sample Preparation: 2007-05-07 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		987	mg/Kg	100	1.00

Sample: 123319 - SB1 @ 3'/003855

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 36975 Date Analyzed: 2007-05-03 Analyzed By: TG
Prep Batch: 32074 Sample Preparation: Prepared By: TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		840	mg/Kg	5	50.0

¹ Sample ran at dilution due to hydrocarbons with a retention time greater than xylene.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	²	381	mg/Kg	5	150	254	33.3 - 164

Sample: 123319 - SB1 @ 3'/003855

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 36965 Date Analyzed: 2007-05-03 Analyzed By: KB
Prep Batch: 32066 Sample Preparation: 2007-05-03 Prepared By: KB

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		183	mg/Kg	10	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.678	mg/Kg	10	1.00	68	33.2 - 160
4-Bromofluorobenzene (4-BFB)		1.30	mg/Kg	10	1.00	130	10 - 227

Sample: 123320 - SB1 @ 5'/004119

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 36964 Date Analyzed: 2007-05-03 Analyzed By: KB
Prep Batch: 32066 Sample Preparation: 2007-05-03 Prepared By: KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		0.256	mg/Kg	20	0.0100
Toluene		<0.200	mg/Kg	20	0.0100
Ethylbenzene		5.35	mg/Kg	20	0.0100
Xylene		6.50	mg/Kg	20	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.564	mg/Kg	20	1.00	56	52.1 - 131
4-Bromofluorobenzene (4-BFB)	³	1.66	mg/Kg	20	1.00	166	48.7 - 146

Sample: 123320 - SB1 @ 5'/004119

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 37029 Date Analyzed: 2007-05-07 Analyzed By: ER
Prep Batch: 32127 Sample Preparation: 2007-05-06 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		380	mg/Kg	50	1.00

²High surrogate recovery due to peak interference.

³High surrogate recovery due to peak interference.

Sample: 123320 - SB1 @ 5'/004119

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 36975 Date Analyzed: 2007-05-03 Analyzed By: TG
Prep Batch: 32074 Sample Preparation: Prepared By: TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		614	mg/Kg	10	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	4	576	mg/Kg	10	150	384	33.3 - 164

Sample: 123320 - SB1 @ 5'/004119

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 36965 Date Analyzed: 2007-05-03 Analyzed By: KB
Prep Batch: 32066 Sample Preparation: 2007-05-03 Prepared By: KB

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		392	mg/Kg	20	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.814	mg/Kg	20	1.00	81	33.2 - 160
4-Bromofluorobenzene (4-BFB)		2.14	mg/Kg	20	1.00	214	10 - 227

Sample: 123321 - SB1 @ 30'/004085

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 36964 Date Analyzed: 2007-05-03 Analyzed By: KB
Prep Batch: 32066 Sample Preparation: 2007-05-03 Prepared By: KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene	5	<0.100	mg/Kg	10	0.0100
Toluene		<0.100	mg/Kg	10	0.0100
Ethylbenzene		1.38	mg/Kg	10	0.0100
Xylene		2.94	mg/Kg	10	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.650	mg/Kg	10	1.00	65	52.1 - 131
4-Bromofluorobenzene (4-BFB)		1.09	mg/Kg	10	1.00	109	48.7 - 146

⁴High surrogate recovery due to peak interference.

⁵Sample ran at dilution due to hydrocarbons with a retention time greater than xylene.

Sample: 123321 - SB1 @ 30'/004085

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 37120 Date Analyzed: 2007-05-07 Analyzed By: ER
Prep Batch: 32194 Sample Preparation: 2007-05-07 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		10.0	mg/Kg	5	1.00

Sample: 123321 - SB1 @ 30'/004085

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 36976 Date Analyzed: 2007-05-03 Analyzed By: TG
Prep Batch: 32074 Sample Preparation: Prepared By: TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		3150	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	6	1050	mg/Kg	1	150	700	33.3 - 164

Sample: 123321 - SB1 @ 30'/004085

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 36965 Date Analyzed: 2007-05-03 Analyzed By: KB
Prep Batch: 32066 Sample Preparation: 2007-05-03 Prepared By: KB

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		273	mg/Kg	10	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.939	mg/Kg	10	1.00	94	33.2 - 160
4-Bromofluorobenzene (4-BFB)		1.27	mg/Kg	10	1.00	127	10 - 227

Sample: 123322 - SB1 @ 50'/00481

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 36962 Date Analyzed: 2007-05-03 Analyzed By: KB
Prep Batch: 32065 Sample Preparation: 2007-05-03 Prepared By: KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100

⁶Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

continued

sample 123322 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.878	mg/Kg	1	1.00	88	52.1 - 131
4-Bromofluorobenzene (4-BFB)		0.859	mg/Kg	1	1.00	86	48.7 - 146

Sample: 123322 - SB1 @ 50'/00481

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 37120 Date Analyzed: 2007-05-07 Analyzed By: ER
Prep Batch: 32194 Sample Preparation: 2007-05-07 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		138	mg/Kg	5	1.00

Sample: 123322 - SB1 @ 50'/00481

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 36976 Date Analyzed: 2007-05-03 Analyzed By: TG
Prep Batch: 32074 Sample Preparation: Prepared By: TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		202	mg/Kg	1	150	135	33.3 - 164

Sample: 123322 - SB1 @ 50'/00481

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 36963 Date Analyzed: 2007-05-03 Analyzed By: KB
Prep Batch: 32065 Sample Preparation: 2007-05-03 Prepared By: KB

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		2.37	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.06	mg/Kg	1	1.00	106	33.2 - 160
4-Bromofluorobenzene (4-BFB)		1.16	mg/Kg	1	1.00	116	10 - 227

Method Blank (1) QC Batch: 36962

QC Batch: 36962
Prep Batch: 32065

Date Analyzed: 2007-05-03
QC Preparation: 2007-05-03

Analyzed By: KB
Prepared By: KB

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00333	mg/Kg	0.01
Toluene		<0.00372	mg/Kg	0.01
Ethylbenzene		<0.00206	mg/Kg	0.01
Xylene		<0.00259	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.843	mg/Kg	1	1.00	84	73.2 - 113
4-Bromofluorobenzene (4-BFB)		0.598	mg/Kg	1	1.00	60	54 - 102

Method Blank (1) QC Batch: 36963

QC Batch: 36963
Prep Batch: 32065

Date Analyzed: 2007-05-03
QC Preparation: 2007-05-03

Analyzed By: KB
Prepared By: KB

Parameter	Flag	MDL Result	Units	RL
GRO		<0.459	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.06	mg/Kg	1	1.00	106	73.2 - 125
4-Bromofluorobenzene (4-BFB)		0.709	mg/Kg	1	1.00	71	51.9 - 110

Method Blank (1) QC Batch: 36964

QC Batch: 36964
Prep Batch: 32066

Date Analyzed: 2007-05-03
QC Preparation: 2007-05-03

Analyzed By: KB
Prepared By: KB

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00333	mg/Kg	0.01
Toluene		<0.00372	mg/Kg	0.01
Ethylbenzene		<0.00206	mg/Kg	0.01
Xylene		<0.00259	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.861	mg/Kg	1	1.00	86	73.2 - 113
4-Bromofluorobenzene (4-BFB)		0.631	mg/Kg	1	1.00	63	54 - 102

Method Blank (1) QC Batch: 36965

QC Batch: 36965
Prep Batch: 32066

Date Analyzed: 2007-05-03
QC Preparation: 2007-05-03

Analyzed By: KB
Prepared By: KB

Parameter	Flag	MDL Result	Units	RL
GRO		<0.459	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.09	mg/Kg	1	1.00	109	73.2 - 125
4-Bromofluorobenzene (4-BFB)		0.757	mg/Kg	1	1.00	76	51.9 - 110

Method Blank (1) QC Batch: 36975

QC Batch: 36975
Prep Batch: 32074

Date Analyzed: 2007-05-03
QC Preparation: 2007-05-04

Analyzed By: TG
Prepared By: TG

Parameter	Flag	MDL Result	Units	RL
DRO		<22.3	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		155	mg/Kg	1	150	103	33.3 - 164

Method Blank (1) QC Batch: 36976

QC Batch: 36976
Prep Batch: 32074

Date Analyzed: 2007-05-03
QC Preparation: 2007-05-04

Analyzed By: TG
Prepared By: TG

Parameter	Flag	MDL Result	Units	RL
DRO		<22.3	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		160	mg/Kg	1	150	107	33.3 - 164

Method Blank (1) QC Batch: 37029

QC Batch: 37029
Prep Batch: 32127

Date Analyzed: 2007-05-07
QC Preparation: 2007-05-06

Analyzed By: ER
Prepared By: ER

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.140	mg/Kg	1

Method Blank (1) QC Batch: 37120

QC Batch: 37120
Prep Batch: 32194

Date Analyzed: 2007-05-07
QC Preparation: 2007-05-07

Analyzed By: ER
Prepared By: ER

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.140	mg/Kg	1

Laboratory Control Spike (LCS-1)

QC Batch: 36962
Prep Batch: 32065

Date Analyzed: 2007-05-03
QC Preparation: 2007-05-03

Analyzed By: KB
Prepared By: KB

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.956	mg/Kg	1	1.00	<0.00333	96	76.3 - 117
Toluene	0.934	mg/Kg	1	1.00	<0.00372	93	77.3 - 114
Ethylbenzene	0.906	mg/Kg	1	1.00	<0.00206	91	75.4 - 115
Xylene	2.70	mg/Kg	1	3.00	<0.00259	90	73.2 - 112

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.971	mg/Kg	1	1.00	<0.00333	97	76.3 - 117	2	20
Toluene	0.952	mg/Kg	1	1.00	<0.00372	95	77.3 - 114	2	20
Ethylbenzene	0.926	mg/Kg	1	1.00	<0.00206	93	75.4 - 115	2	20
Xylene	2.76	mg/Kg	1	3.00	<0.00259	92	73.2 - 112	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.889	0.898	mg/Kg	1	1.00	89	90	74.5 - 113
4-Bromofluorobenzene (4-BFB)	0.799	0.825	mg/Kg	1	1.00	80	82	68.3 - 110

Laboratory Control Spike (LCS-1)

QC Batch: 36963
Prep Batch: 32065

Date Analyzed: 2007-05-03
QC Preparation: 2007-05-03

Analyzed By: KB
Prepared By: KB

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	8.99	mg/Kg	1	10.0	<0.459	90	79.6 - 113

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	9.00	mg/Kg	1	10.0	<0.459	90	79.6 - 113	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.890	0.910	mg/Kg	1	1.00	89	91	77.1 - 117
4-Bromofluorobenzene (4-BFB)	0.839	1.02	mg/Kg	1	1.00	84	102	78.1 - 118

Laboratory Control Spike (LCS-1)

QC Batch: 36964
Prep Batch: 32066

Date Analyzed: 2007-05-03
QC Preparation: 2007-05-03

Analyzed By: KB
Prepared By: KB

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.890	mg/Kg	1	1.00	<0.00333	89	76.3 - 117
Toluene	0.871	mg/Kg	1	1.00	<0.00372	87	77.3 - 114
Ethylbenzene	0.835	mg/Kg	1	1.00	<0.00206	84	75.4 - 115
Xylene	2.48	mg/Kg	1	3.00	<0.00259	83	73.2 - 112

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.909	mg/Kg	1	1.00	<0.00333	91	76.3 - 117	2	20
Toluene	0.890	mg/Kg	1	1.00	<0.00372	89	77.3 - 114	2	20
Ethylbenzene	0.858	mg/Kg	1	1.00	<0.00206	86	75.4 - 115	3	20
Xylene	2.55	mg/Kg	1	3.00	<0.00259	85	73.2 - 112	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.861	0.846	mg/Kg	1	1.00	86	85	74.5 - 113
4-Bromofluorobenzene (4-BFB)	0.786	0.769	mg/Kg	1	1.00	79	77	68.3 - 110

Laboratory Control Spike (LCS-1)

QC Batch: 36965
Prep Batch: 32066

Date Analyzed: 2007-05-03
QC Preparation: 2007-05-03

Analyzed By: KB
Prepared By: KB

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	9.21	mg/Kg	1	10.0	<0.459	92	79.6 - 113

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	9.05	mg/Kg	1	10.0	<0.459	90	79.6 - 113	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.951	0.950	mg/Kg	1	1.00	95	95	77.1 - 117
4-Bromofluorobenzene (4-BFB)	0.882	0.835	mg/Kg	1	1.00	88	84	78.1 - 118

Laboratory Control Spike (LCS-1)

QC Batch: 36975
Prep Batch: 32074

Date Analyzed: 2007-05-03
QC Preparation: 2007-05-04

Analyzed By: TG
Prepared By: TG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	232	mg/Kg	1	250	<22.3	93	54.3 - 149

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	212	mg/Kg	1	250	<22.3	85	54.3 - 149	9	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	155	133	mg/Kg	1	150	103	89	33.3 - 164

Laboratory Control Spike (LCS-1)

QC Batch: 36976
Prep Batch: 32074

Date Analyzed: 2007-05-03
QC Preparation: 2007-05-04

Analyzed By: TG
Prepared By: TG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	216	mg/Kg	1	250	<22.3	86	54.3 - 149

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	177	mg/Kg	1	250	<22.3	71	54.3 - 149	20	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	155	143	mg/Kg	1	150	103	95	33.3 - 164

Laboratory Control Spike (LCS-1)

QC Batch: 37029
Prep Batch: 32127

Date Analyzed: 2007-05-07
QC Preparation: 2007-05-06

Analyzed By: ER
Prepared By: ER

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	12.6	mg/Kg	1	12.5	<0.140	101	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	13.6	mg/Kg	1	12.5	<0.140	109	90 - 110	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 37120
Prep Batch: 32194

Date Analyzed: 2007-05-07
QC Preparation: 2007-05-07

Analyzed By: ER
Prepared By: ER

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	12.8	mg/Kg	1	12.5	<0.140	102	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	13.8	mg/Kg	1	12.5	<0.140	110	90 - 110	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 123304

QC Batch: 36962
Prep Batch: 32065

Date Analyzed: 2007-05-03
QC Preparation: 2007-05-03

Analyzed By: KB
Prepared By: KB

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.803	mg/Kg	1	1.00	<0.00333	80	39.6 - 141
Toluene	0.837	mg/Kg	1	1.00	<0.00372	84	45.4 - 138
Ethylbenzene	0.875	mg/Kg	1	1.00	<0.00206	88	48 - 141
Xylene	2.62	mg/Kg	1	3.00	<0.00259	87	45.3 - 142

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.775	mg/Kg	1	1.00	<0.00333	78	39.6 - 141	4	20
Toluene	0.806	mg/Kg	1	1.00	<0.00372	81	45.4 - 138	4	20
Ethylbenzene	0.841	mg/Kg	1	1.00	<0.00206	84	48 - 141	4	20
Xylene	2.51	mg/Kg	1	3.00	<0.00259	84	45.3 - 142	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.858	0.942	mg/Kg	1	1	86	94	51.5 - 138
4-Bromofluorobenzene (4-BFB)	0.871	0.943	mg/Kg	1	1	87	94	52.2 - 139

Matrix Spike (MS-1) Spiked Sample: 123304

QC Batch: 36963
Prep Batch: 32065

Date Analyzed: 2007-05-03
QC Preparation: 2007-05-03

Analyzed By: KB
Prepared By: KB

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	7.61	mg/Kg	1	10.0	<0.459	76	40.7 - 157

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	9.12	mg/Kg	1	10.0	<0.459	91	40.7 - 157	18	19.6

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.753	0.879	mg/Kg	1	1	75	88	34.9 - 155
4-Bromofluorobenzene (4-BFB)	0.926	1.02	mg/Kg	1	1	93	102	58.5 - 153

Matrix Spike (MS-1) Spiked Sample: 123328

QC Batch: 36964
Prep Batch: 32066

Date Analyzed: 2007-05-03
QC Preparation: 2007-05-03

Analyzed By: KB
Prepared By: KB

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.690	mg/Kg	1	1.00	<0.00333	69	39.6 - 141
Toluene	0.720	mg/Kg	1	1.00	<0.00372	72	45.4 - 138
Ethylbenzene	0.744	mg/Kg	1	1.00	<0.00206	74	48 - 141
Xylene	2.22	mg/Kg	1	3.00	<0.00259	74	45.3 - 142

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.714	mg/Kg	1	1.00	<0.00333	71	39.6 - 141	3	20
Toluene	0.745	mg/Kg	1	1.00	<0.00372	74	45.4 - 138	3	20
Ethylbenzene	0.775	mg/Kg	1	1.00	<0.00206	78	48 - 141	4	20
Xylene	2.32	mg/Kg	1	3.00	<0.00259	77	45.3 - 142	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.740	0.771	mg/Kg	1	1	74	77	51.5 - 138
4-Bromofluorobenzene (4-BFB)	0.737	0.771	mg/Kg	1	1	74	77	52.2 - 139

Matrix Spike (MS-1) Spiked Sample: 123328

QC Batch: 36965
Prep Batch: 32066

Date Analyzed: 2007-05-03
QC Preparation: 2007-05-03

Analyzed By: KB
Prepared By: KB

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	8.95	mg/Kg	1	10.0	<0.459	90	40.7 - 157

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	8.97	mg/Kg	1	10.0	<0.459	90	40.7 - 157	0	19.6

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.953	0.918	mg/Kg	1	1	95	92	34.9 - 155
4-Bromofluorobenzene (4-BFB)	1.05	1.04	mg/Kg	1	1	105	104	58.5 - 153

Matrix Spike (MS-1) Spiked Sample: 123305

QC Batch: 36975
Prep Batch: 32074

Date Analyzed: 2007-05-03
QC Preparation: 2007-05-04

Analyzed By: TG
Prepared By: TG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	222	mg/Kg	1	250	<22.3	89	35.1 - 161

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	228	mg/Kg	1	250	<22.3	91	35.1 - 161	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	141	144	mg/Kg	1	150	94	96	33.3 - 164

Matrix Spike (MS-1) Spiked Sample: 123323

QC Batch: 36976
Prep Batch: 32074

Date Analyzed: 2007-05-03
QC Preparation: 2007-05-04

Analyzed By: TG
Prepared By: TG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	208	mg/Kg	1	250	<22.3	83	35.1 - 161

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	175	mg/Kg	1	250	<22.3	70	35.1 - 161	17	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	172	152	mg/Kg	1	150	115	101	33.3 - 164

Matrix Spike (MS-1) Spiked Sample: 123320

QC Batch: 37029
Prep Batch: 32127

Date Analyzed: 2007-05-07
QC Preparation: 2007-05-06

Analyzed By: ER
Prepared By: ER

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	950	mg/Kg	100	1250	379.511	46	75.6 - 117

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	⁸ 826	mg/Kg	100	1250	379.511	36	75.6 - 117	14	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 123328

QC Batch: 37120
Prep Batch: 32194

Date Analyzed: 2007-05-07
QC Preparation: 2007-05-07

Analyzed By: ER
Prepared By: ER

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	⁹ 56.4	mg/Kg	5	62.5	14.914	66	75.6 - 117

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	¹⁰ 54.2	mg/Kg	5	62.5	14.914	63	75.6 - 117	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1)

QC Batch: 36962

Date Analyzed: 2007-05-03

Analyzed By: KB

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0969	97	85 - 115	2007-05-03
Toluene		mg/Kg	0.100	0.0953	95	85 - 115	2007-05-03
Ethylbenzene		mg/Kg	0.100	0.0933	93	85 - 115	2007-05-03
Xylene		mg/Kg	0.300	0.279	93	85 - 115	2007-05-03

Standard (CCV-1)

QC Batch: 36962

Date Analyzed: 2007-05-03

Analyzed By: KB

⁷Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

⁸Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

⁹Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

¹⁰Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0921	92	85 - 115	2007-05-03
Toluene		mg/Kg	0.100	0.0906	91	85 - 115	2007-05-03
Ethylbenzene		mg/Kg	0.100	0.0886	89	85 - 115	2007-05-03
Xylene		mg/Kg	0.300	0.264	88	85 - 115	2007-05-03

Standard (ICV-1)

QC Batch: 36963

Date Analyzed: 2007-05-03

Analyzed By: KB

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.904	90	85 - 115	2007-05-03

Standard (CCV-1)

QC Batch: 36963

Date Analyzed: 2007-05-03

Analyzed By: KB

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.939	94	85 - 115	2007-05-03

Standard (ICV-1)

QC Batch: 36964

Date Analyzed: 2007-05-03

Analyzed By: KB

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0925	92	85 - 115	2007-05-03
Toluene		mg/Kg	0.100	0.0920	92	85 - 115	2007-05-03
Ethylbenzene		mg/Kg	0.100	0.0888	89	85 - 115	2007-05-03
Xylene		mg/Kg	0.300	0.264	88	85 - 115	2007-05-03

Standard (CCV-1)

QC Batch: 36964

Date Analyzed: 2007-05-03

Analyzed By: KB

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0912	91	85 - 115	2007-05-03
Toluene		mg/Kg	0.100	0.0893	89	85 - 115	2007-05-03
Ethylbenzene		mg/Kg	0.100	0.0866	87	85 - 115	2007-05-03
Xylene		mg/Kg	0.300	0.259	86	85 - 115	2007-05-03

Standard (ICV-1)

QC Batch: 36965

Date Analyzed: 2007-05-03

Analyzed By: KB

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.962	96	85 - 115	2007-05-03

Standard (CCV-1)

QC Batch: 36965

Date Analyzed: 2007-05-03

Analyzed By: KB

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.943	94	85 - 115	2007-05-03

Standard (CCV-1)

QC Batch: 36975

Date Analyzed: 2007-05-03

Analyzed By: TG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	237	95	85 - 115	2007-05-03

Standard (CCV-2)

QC Batch: 36975

Date Analyzed: 2007-05-03

Analyzed By: TG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	244	98	85 - 115	2007-05-03

Standard (ICV-1)

QC Batch: 36976

Date Analyzed: 2007-05-03

Analyzed By: TG

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	223	89	85 - 115	2007-05-03

Standard (CCV-1)

QC Batch: 36976

Date Analyzed: 2007-05-03

Analyzed By: TG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	229	92	85 - 115	2007-05-03

Standard (ICV-1)

QC Batch: 37029

Date Analyzed: 2007-05-07

Analyzed By: ER

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.2	98	90 - 110	2007-05-07

Standard (CCV-1)

QC Batch: 37029

Date Analyzed: 2007-05-07

Analyzed By: ER

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.1	97	90 - 110	2007-05-07

Standard (ICV-1)

QC Batch: 37120

Date Analyzed: 2007-05-07

Analyzed By: ER

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.2	98	90 - 110	2007-05-07

Standard (CCV-1)

QC Batch: 37120

Date Analyzed: 2007-05-07

Analyzed By: ER

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.2	98	90 - 110	2007-05-07

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Project Location (including state): Buckeye NM

Matrix: WATER, AIR, SLUDGE

Preservative Method: NONE, HNO₃, H₂SO₄, HCl

LAB #	LAB USE ONLY	FIELD CODE	# CONTAINERS	VOLUME / AMOUNT	PRESERVATIVE METHOD			SAMPLING	
					DATE	TIME	DATE	TIME	
12318	SB10	1/003880	1	4oz	✓	✓	✓	5-1-7	2:53
19	SB10	3/003855	1	4oz	✓	✓	✓	5-1-7	2:54
20	SB10	5/004119	1	4oz	✓	✓	✓	5-1-7	2:55
21	SB10	30/004085	1	4oz	✓	✓	✓	5-1-7	3:25
22	SB10	50/00481	1	4oz	✓	✓	✓	5-1-7	4:37

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Summary Report

Cliff Brunson
BBC International
1324 W. Marland
Hobbs, NM, 88240

Report Date: May 15, 2007

Work Order: 7050718

Project Location: Buckeye,NM
Project Name: State L #2

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
123489	SB2 @ 1' #004013	soil	2007-05-03	08:00	2007-05-05
123490	SB2 @ 3' #004008	soil	2007-05-03	08:02	2007-05-05
123491	SB2 @ 5' #003995	soil	2007-05-03	08:04	2007-05-05
123492	SB2 @ 20' #003898	soil	2007-05-03	08:05	2007-05-05
123493	SB2 @ 39' #003914	soil	2007-05-03	08:53	2007-05-05
123494	SB3 @ 1' #004000	soil	2007-05-03	09:12	2007-05-05
123495	SB3 @ 3' #003986	soil	2007-05-03	09:13	2007-05-05
123496	SB3 @ 5' #004010	soil	2007-05-03	09:14	2007-05-05
123497	SB3 @ 20' #003901	soil	2007-05-03	09:26	2007-05-05
123498	SB3 @ 35' #003874	soil	2007-05-03	09:49	2007-05-05

Sample - Field Code	BTEX				MTBE	TPH DRO	TPH GRO
	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)	MTBE (mg/Kg)	DRO (mg/Kg)	GRO (mg/Kg)
123489 - SB2 @ 1' #004013	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
123490 - SB2 @ 3' #004008	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
123491 - SB2 @ 5' #003995	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
123492 - SB2 @ 20' #003898	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
123493 - SB2 @ 39' #003914	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
123494 - SB3 @ 1' #004000	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
123495 - SB3 @ 3' #003986	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
123496 - SB3 @ 5' #004010	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
123497 - SB3 @ 20' #003901	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
123498 - SB3 @ 35' #003874	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00

Sample: 123489 - SB2 @ 1' #004013

Param	Flag	Result	Units	RL
Chloride		729	mg/Kg	1.00

Sample: 123490 - SB2 @ 3' #004008

Param	Flag	Result	Units	RL
Chloride		454	mg/Kg	1.00

Sample: 123491 - SB2 @ 5' #003995

Param	Flag	Result	Units	RL
Chloride		565	mg/Kg	1.00

Sample: 123492 - SB2 @ 20' #003898

Param	Flag	Result	Units	RL
Chloride		243	mg/Kg	1.00

Sample: 123493 - SB2 @ 39' #003914

Param	Flag	Result	Units	RL
Chloride		254	mg/Kg	1.00

Sample: 123494 - SB3 @ 1' #004000

Param	Flag	Result	Units	RL
Chloride		194	mg/Kg	1.00

Sample: 123495 - SB3 @ 3' #003986

Param	Flag	Result	Units	RL
Chloride		337	mg/Kg	1.00

Sample: 123496 - SB3 @ 5' #004010

Param	Flag	Result	Units	RL
Chloride		1600	mg/Kg	1.00

Sample: 123497 - SB3 @ 20' #003901

Param	Flag	Result	Units	RL
Chloride		477	mg/Kg	1.00

Sample: 123498 - SB3 @ 35' #003874

Param	Flag	Result	Units	RL
Chloride		117	mg/Kg	1.00

TRACE ANALYSIS, INC.

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E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Cliff Brunson
BBC International
1324 W. Marland
Hobbs, NM, 88240

Report Date: May 15, 2007

Work Order: 7050718



Project Location: Buckeye.NM
Project Name: State L #2
Project Number: State L #2

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
123489	SB2 @ 1' #004013	soil	2007-05-03	08:00	2007-05-05
123490	SB2 @ 3' #004008	soil	2007-05-03	08:02	2007-05-05
123491	SB2 @ 5' #003995	soil	2007-05-03	08:04	2007-05-05
123492	SB2 @ 20' #003898	soil	2007-05-03	08:05	2007-05-05
123493	SB2 @ 39' #003914	soil	2007-05-03	08:53	2007-05-05
123494	SB3 @ 1' #004000	soil	2007-05-03	09:12	2007-05-05
123495	SB3 @ 3' #003986	soil	2007-05-03	09:13	2007-05-05
123496	SB3 @ 5' #004010	soil	2007-05-03	09:14	2007-05-05
123497	SB3 @ 20' #003901	soil	2007-05-03	09:26	2007-05-05
123498	SB3 @ 35' #003874	soil	2007-05-03	09:49	2007-05-05

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 22 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Case Narrative

Samples for project State L #2 were received by TraceAnalysis, Inc. on 2007-05-05 and assigned to work order 7050718. Samples for work order 7050718 were received intact at a temperature of 4 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method
BTEX	S 8021B
Chloride (IC)	E 300.0
TPH DRO	Mod. 8015B
TPH GRO	S 8015B

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring; however, it may not pertain to the samples for work order 7050718 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 123489 - SB2 @ 1' #004013

Analysis: BTEX
QC Batch: 37038
Prep Batch: 32135

Analytical Method: S 8021B
Date Analyzed: 2007-05-07
Sample Preparation: 2007-05-07

Prep Method: S 5035
Analyzed By: MT
Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.802	mg/Kg	1	1.00	80	52.1 - 131
4-Bromofluorobenzene (4-BFB)		0.764	mg/Kg	1	1.00	76	48.7 - 146

Sample: 123489 - SB2 @ 1' #004013

Analysis: Chloride (IC)
QC Batch: 37168
Prep Batch: 32245

Analytical Method: E 300.0
Date Analyzed: 2007-05-11
Sample Preparation: 2007-05-11

Prep Method: N/A
Analyzed By: ER
Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		729	mg/Kg	50	1.00

Sample: 123489 - SB2 @ 1' #004013

Analysis: TPH DRO
QC Batch: 37046
Prep Batch: 32141

Analytical Method: Mod. 8015B
Date Analyzed: 2007-05-07
Sample Preparation: 2007-05-07

Prep Method: N/A
Analyzed By: DS
Prepared By: TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		175	mg/Kg	1	150	117	33.3 - 164

Sample: 123489 - SB2 @ 1' #004013

Analysis: TPH GRO
QC Batch: 37039
Prep Batch: 32135

Analytical Method: S 8015B
Date Analyzed: 2007-05-07
Sample Preparation: 2007-05-07

Prep Method: S 5035
Analyzed By: MT
Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.981	mg/Kg	1	1.00	98	33.2 - 160
4-Bromofluorobenzene (4-BFB)		0.952	mg/Kg	1	1.00	95	10 - 227

Sample: 123490 - SB2 @ 3' #004008

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 37038 Date Analyzed: 2007-05-07 Analyzed By: MT
Prep Batch: 32135 Sample Preparation: 2007-05-07 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.915	mg/Kg	1	1.00	92	52.1 - 131
4-Bromofluorobenzene (4-BFB)		0.869	mg/Kg	1	1.00	87	48.7 - 146

Sample: 123490 - SB2 @ 3' #004008

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 37208 Date Analyzed: 2007-05-14 Analyzed By: ER
Prep Batch: 32270 Sample Preparation: 2007-05-14 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		454	mg/Kg	50	1.00

Sample: 123490 - SB2 @ 3' #004008

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 37046 Date Analyzed: 2007-05-07 Analyzed By: DS
Prep Batch: 32141 Sample Preparation: 2007-05-07 Prepared By: TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		183	mg/Kg	1	150	122	33.3 - 164

Sample: 123490 - SB2 @ 3' #004008

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 37039 Date Analyzed: 2007-05-07 Analyzed By: MT
Prep Batch: 32135 Sample Preparation: 2007-05-07 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.14	mg/Kg	1	1.00	114	33.2 - 160
4-Bromofluorobenzene (4-BFB)		1.08	mg/Kg	1	1.00	108	10 - 227

Sample: 123491 - SB2 @ 5' #003995

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 37038 Date Analyzed: 2007-05-07 Analyzed By: MT
Prep Batch: 32135 Sample Preparation: 2007-05-07 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.927	mg/Kg	1	1.00	93	52.1 - 131
4-Bromofluorobenzene (4-BFB)		0.882	mg/Kg	1	1.00	88	48.7 - 146

Sample: 123491 - SB2 @ 5' #003995

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 37208 Date Analyzed: 2007-05-14 Analyzed By: ER
Prep Batch: 32270 Sample Preparation: 2007-05-14 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		565	mg/Kg	50	1.00

Sample: 123491 - SB2 @ 5' #003995

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 37046 Date Analyzed: 2007-05-07 Analyzed By: DS
Prep Batch: 32141 Sample Preparation: 2007-05-07 Prepared By: TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		159	mg/Kg	1	150	106	33.3 - 164

Sample: 123491 - SB2 @ 5' #003995

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 37039 Date Analyzed: 2007-05-07 Analyzed By: MT
Prep Batch: 32135 Sample Preparation: 2007-05-07 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.15	mg/Kg	1	1.00	115	33.2 - 160
4-Bromofluorobenzene (4-BFB)		1.09	mg/Kg	1	1.00	109	10 - 227

Sample: 123492 - SB2 @ 20' #003898

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 37038 Date Analyzed: 2007-05-07 Analyzed By: MT
Prep Batch: 32135 Sample Preparation: 2007-05-07 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.795	mg/Kg	1	1.00	80	52.1 - 131
4-Bromofluorobenzene (4-BFB)		0.755	mg/Kg	1	1.00	75	48.7 - 146

Sample: 123492 - SB2 @ 20' #003898

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 37168 Date Analyzed: 2007-05-11 Analyzed By: ER
Prep Batch: 32245 Sample Preparation: 2007-05-11 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		243	mg/Kg	50	1.00

Sample: 123492 - SB2 @ 20' #003898

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 37046 Date Analyzed: 2007-05-07 Analyzed By: DS
Prep Batch: 32141 Sample Preparation: 2007-05-07 Prepared By: TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		185	mg/Kg	1	150	123	33.3 - 164

Sample: 123492 - SB2 @ 20' #003898

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 37039 Date Analyzed: 2007-05-07 Analyzed By: MT
Prep Batch: 32135 Sample Preparation: 2007-05-07 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.984	mg/Kg	1	1.00	98	33.2 - 160
4-Bromofluorobenzene (4-BFB)		0.930	mg/Kg	1	1.00	93	10 - 227

Sample: 123493 - SB2 @ 39' #003914

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 37038 Date Analyzed: 2007-05-07 Analyzed By: MT
Prep Batch: 32135 Sample Preparation: 2007-05-07 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.820	mg/Kg	1	1.00	82	52.1 - 131
4-Bromofluorobenzene (4-BFB)		0.791	mg/Kg	1	1.00	79	48.7 - 146

Sample: 123493 - SB2 @ 39' #003914

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 37208 Date Analyzed: 2007-05-14 Analyzed By: ER
Prep Batch: 32270 Sample Preparation: 2007-05-14 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		254	mg/Kg	50	1.00

Sample: 123493 - SB2 @ 39' #003914

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 37046 Date Analyzed: 2007-05-07 Analyzed By: DS
Prep Batch: 32141 Sample Preparation: 2007-05-07 Prepared By: TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		218	mg/Kg	1	150	145	33.3 - 164

Sample: 123493 - SB2 @ 39' #003914

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 37039 Date Analyzed: 2007-05-07 Analyzed By: MT
Prep Batch: 32135 Sample Preparation: 2007-05-07 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.03	mg/Kg	1	1.00	103	33.2 - 160
4-Bromofluorobenzene (4-BFB)		0.972	mg/Kg	1	1.00	97	10 - 227

Sample: 123494 - SB3 @ 1' #004000

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 37038 Date Analyzed: 2007-05-07 Analyzed By: MT
Prep Batch: 32135 Sample Preparation: 2007-05-07 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100

continued ...

sample 123494 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.729	mg/Kg	1	1.00	73	52.1 - 131
4-Bromofluorobenzene (4-BFB)		0.688	mg/Kg	1	1.00	69	48.7 - 146

Sample: 123494 - SB3 @ 1' #004000

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 37208 Date Analyzed: 2007-05-14 Analyzed By: ER
Prep Batch: 32270 Sample Preparation: 2007-05-14 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		194	mg/Kg	50	1.00

Sample: 123494 - SB3 @ 1' #004000

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 37046 Date Analyzed: 2007-05-07 Analyzed By: DS
Prep Batch: 32141 Sample Preparation: 2007-05-07 Prepared By: TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		191	mg/Kg	1	150	127	33.3 - 164

Sample: 123494 - SB3 @ 1' #004000

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 37039 Date Analyzed: 2007-05-07 Analyzed By: MT
Prep Batch: 32135 Sample Preparation: 2007-05-07 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.907	mg/Kg	1	1.00	91	33.2 - 160
4-Bromofluorobenzene (4-BFB)		0.843	mg/Kg	1	1.00	84	10 - 227

Sample: 123495 - SB3 @ 3' #003986

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5035
QC Batch: 37038	Date Analyzed: 2007-05-07	Analyzed By: MT
Prep Batch: 32135	Sample Preparation: 2007-05-07	Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.736	mg/Kg	1	1.00	74	52.1 - 131
4-Bromofluorobenzene (4-BFB)		0.712	mg/Kg	1	1.00	71	48.7 - 146

Sample: 123495 - SB3 @ 3' #003986

Analysis: Chloride (IC)	Analytical Method: E 300.0	Prep Method: N/A
QC Batch: 37208	Date Analyzed: 2007-05-14	Analyzed By: ER
Prep Batch: 32270	Sample Preparation: 2007-05-14	Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		337	mg/Kg	50	1.00

Sample: 123495 - SB3 @ 3' #003986

Analysis: TPH DRO	Analytical Method: Mod. 8015B	Prep Method: N/A
QC Batch: 37046	Date Analyzed: 2007-05-07	Analyzed By: DS
Prep Batch: 32141	Sample Preparation: 2007-05-07	Prepared By: TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		190	mg/Kg	1	150	127	33.3 - 164

Sample: 123495 - SB3 @ 3' #003986

Analysis: TPH GRO	Analytical Method: S 8015B	Prep Method: S 5035
QC Batch: 37039	Date Analyzed: 2007-05-07	Analyzed By: MT
Prep Batch: 32135	Sample Preparation: 2007-05-07	Prepared By: MT

continued ...

sample 123495 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.918	mg/Kg	1	1.00	92	33.2 - 160
4-Bromofluorobenzene (4-BFB)		0.872	mg/Kg	1	1.00	87	10 - 227

Sample: 123496 - SB3 @ 5' #004010

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 37038 Date Analyzed: 2007-05-07 Analyzed By: MT
Prep Batch: 32135 Sample Preparation: 2007-05-07 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.752	mg/Kg	1	1.00	75	52.1 - 131
4-Bromofluorobenzene (4-BFB)		0.715	mg/Kg	1	1.00	72	48.7 - 146

Sample: 123496 - SB3 @ 5' #004010

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 37208 Date Analyzed: 2007-05-14 Analyzed By: ER
Prep Batch: 32270 Sample Preparation: 2007-05-14 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1600	mg/Kg	100	1.00

Sample: 123496 - SB3 @ 5' #004010

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 37046 Date Analyzed: 2007-05-07 Analyzed By: DS
Prep Batch: 32141 Sample Preparation: 2007-05-07 Prepared By: TG

continued ...

sample 123496 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		191	mg/Kg	1	150	127	33.3 - 164

Sample: 123496 - SB3 @ 5' #004010

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 37039 Date Analyzed: 2007-05-07 Analyzed By: MT
Prep Batch: 32135 Sample Preparation: 2007-05-07 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.941	mg/Kg	1	1.00	94	33.2 - 160
4-Bromofluorobenzene (4-BFB)		0.876	mg/Kg	1	1.00	88	10 - 227

Sample: 123497 - SB3 @ 20' #003901

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 37038 Date Analyzed: 2007-05-07 Analyzed By: MT
Prep Batch: 32135 Sample Preparation: 2007-05-07 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.797	mg/Kg	1	1.00	80	52.1 - 131
4-Bromofluorobenzene (4-BFB)		0.754	mg/Kg	1	1.00	75	48.7 - 146

Sample: 123497 - SB3 @ 20' #003901

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 37208 Date Analyzed: 2007-05-14 Analyzed By: ER
Prep Batch: 32270 Sample Preparation: 2007-05-14 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		477	mg/Kg	50	1.00

Sample: 123497 - SB3 @ 20' #003901

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 37046 Date Analyzed: 2007-05-07 Analyzed By: DS
Prep Batch: 32141 Sample Preparation: 2007-05-07 Prepared By: TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		186	mg/Kg	1	150	124	33.3 - 164

Sample: 123497 - SB3 @ 20' #003901

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 37039 Date Analyzed: 2007-05-07 Analyzed By: MT
Prep Batch: 32135 Sample Preparation: 2007-05-07 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.988	mg/Kg	1	1.00	99	33.2 - 160
4-Bromofluorobenzene (4-BFB)		0.922	mg/Kg	1	1.00	92	10 - 227

Sample: 123498 - SB3 @ 35' #003874

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 37038 Date Analyzed: 2007-05-07 Analyzed By: MT
Prep Batch: 32135 Sample Preparation: 2007-05-07 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.782	mg/Kg	1	1.00	78	52.1 - 131
4-Bromofluorobenzene (4-BFB)		0.752	mg/Kg	1	1.00	75	48.7 - 146

Sample: 123498 - SB3 @ 35' #003874

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 37210 Date Analyzed: 2007-05-15 Analyzed By: ER
Prep Batch: 32272 Sample Preparation: 2007-05-14 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		117	mg/Kg	5	1.00

Sample: 123498 - SB3 @ 35' #003874

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 37046 Date Analyzed: 2007-05-07 Analyzed By: DS
Prep Batch: 32141 Sample Preparation: 2007-05-07 Prepared By: TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		200	mg/Kg	1	150	133	33.3 - 164

Sample: 123498 - SB3 @ 35' #003874

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 37039 Date Analyzed: 2007-05-07 Analyzed By: MT
Prep Batch: 32135 Sample Preparation: 2007-05-07 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.976	mg/Kg	1	1.00	98	33.2 - 160
4-Bromofluorobenzene (4-BFB)		0.920	mg/Kg	1	1.00	92	10 - 227

Method Blank (1) QC Batch: 37038

QC Batch: 37038 Date Analyzed: 2007-05-07 Analyzed By: MT
Prep Batch: 32135 QC Preparation: 2007-05-07 Prepared By: MT

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00333	mg/Kg	0.01
Toluene		<0.00372	mg/Kg	0.01
Ethylbenzene		<0.00206	mg/Kg	0.01
Xylene		<0.00259	mg/Kg	0.01

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.777	mg/Kg	1	1.00	78	73.2 - 113
4-Bromofluorobenzene (4-BFB)		0.554	mg/Kg	1	1.00	55	54 - 102

Method Blank (1) QC Batch: 37039

QC Batch: 37039
Prep Batch: 32135

Date Analyzed: 2007-05-07
QC Preparation: 2007-05-07

Analyzed By: MT
Prepared By: MT

Parameter	Flag	MDL Result	Units	RL
GRO		<0.459	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.993	mg/Kg	1	1.00	99	73.2 - 125
4-Bromofluorobenzene (4-BFB)		0.680	mg/Kg	1	1.00	68	51.9 - 110

Method Blank (1) QC Batch: 37046

QC Batch: 37046
Prep Batch: 32141

Date Analyzed: 2007-05-07
QC Preparation: 2007-05-07

Analyzed By: DS
Prepared By: DS

Parameter	Flag	MDL Result	Units	RL
DRO		<22.3	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		204	mg/Kg	1	150	136	33.3 - 164

Method Blank (1) QC Batch: 37168

QC Batch: 37168
Prep Batch: 32245

Date Analyzed: 2007-05-11
QC Preparation: 2007-05-11

Analyzed By: ER
Prepared By: ER

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.140	mg/Kg	1

Method Blank (1) QC Batch: 37208

QC Batch: 37208
Prep Batch: 32270

Date Analyzed: 2007-05-14
QC Preparation: 2007-05-14

Analyzed By: ER
Prepared By: ER

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.140	mg/Kg	1

Method Blank (1) QC Batch: 37210

QC Batch: 37210 Date Analyzed: 2007-05-15 Analyzed By: ER
Prep Batch: 32272 QC Preparation: 2007-05-14 Prepared By: ER

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.140	mg/Kg	1

Laboratory Control Spike (LCS-1)

QC Batch: 37038 Date Analyzed: 2007-05-07 Analyzed By: MT
Prep Batch: 32135 QC Preparation: 2007-05-07 Prepared By: MT

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.882	mg/Kg	1	1.00	<0.00333	88	76.3 - 117
Toluene	0.866	mg/Kg	1	1.00	<0.00372	87	77.3 - 114
Ethylbenzene	0.833	mg/Kg	1	1.00	<0.00206	83	75.4 - 115
Xylene	2.47	mg/Kg	1	3.00	<0.00259	82	73.2 - 112

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.918	mg/Kg	1	1.00	<0.00333	92	76.3 - 117	4	20
Toluene	0.906	mg/Kg	1	1.00	<0.00372	91	77.3 - 114	4	20
Ethylbenzene	0.875	mg/Kg	1	1.00	<0.00206	88	75.4 - 115	5	20
Xylene	2.60	mg/Kg	1	3.00	<0.00259	87	73.2 - 112	5	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.826	0.842	mg/Kg	1	1.00	83	84	74.5 - 113
4-Bromofluorobenzene (4-BFB)	0.747	0.766	mg/Kg	1	1.00	75	77	68.3 - 110

Laboratory Control Spike (LCS-1)

QC Batch: 37039 Date Analyzed: 2007-05-07 Analyzed By: MT
Prep Batch: 32135 QC Preparation: 2007-05-07 Prepared By: MT

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	9.20	mg/Kg	1	10.0	<0.459	92	79.6 - 113

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	9.14	mg/Kg	1	10.0	<0.459	91	79.6 - 113	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.00	0.950	mg/Kg	1	1.00	100	95	77.1 - 117
4-Bromofluorobenzene (4-BFB)	0.878	0.825	mg/Kg	1	1.00	88	82	78.1 - 118

Laboratory Control Spike (LCS-1)

QC Batch: 37046
Prep Batch: 32141

Date Analyzed: 2007-05-07
QC Preparation: 2007-05-07

Analyzed By: DS
Prepared By: DS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	292	mg/Kg	1	250	<22.3	117	54.3 - 149

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	258	mg/Kg	1	250	<22.3	103	54.3 - 149	12	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	179	168	mg/Kg	1	150	119	112	33.3 - 164

Laboratory Control Spike (LCS-1)

QC Batch: 37168
Prep Batch: 32245

Date Analyzed: 2007-05-11
QC Preparation: 2007-05-11

Analyzed By: ER
Prepared By: ER

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	12.1	mg/Kg	1	12.5	<0.140	97	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	13.2	mg/Kg	1	12.5	<0.140	106	90 - 110	9	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 37208
Prep Batch: 32270

Date Analyzed: 2007-05-14
QC Preparation: 2007-05-14

Analyzed By: ER
Prepared By: ER

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	12.8	mg/Kg	1	12.5	<0.140	102	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	13.3	mg/Kg	1	12.5	<0.140	106	90 - 110	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 37210
Prep Batch: 32272

Date Analyzed: 2007-05-15
QC Preparation: 2007-05-14

Analyzed By: ER
Prepared By: ER

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	12.7	mg/Kg	1	12.5	<0.140	102	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	12.8	mg/Kg	1	12.5	<0.140	102	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 123484

QC Batch: 37038
Prep Batch: 32135

Date Analyzed: 2007-05-07
QC Preparation: 2007-05-07

Analyzed By: MT
Prepared By: MT

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.784	mg/Kg	1	1.00	<0.00333	78	39.6 - 141
Toluene	0.876	mg/Kg	1	1.00	<0.00372	88	45.4 - 138
Ethylbenzene	0.917	mg/Kg	1	1.00	<0.00206	92	48 - 141
Xylene	3.03	mg/Kg	1	3.00	0.168	95	45.3 - 142

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.792	mg/Kg	1	1.00	<0.00333	79	39.6 - 141	1	20
Toluene	0.887	mg/Kg	1	1.00	<0.00372	89	45.4 - 138	1	20
Ethylbenzene	0.950	mg/Kg	1	1.00	<0.00206	95	48 - 141	4	20
Xylene	2.83	mg/Kg	1	3.00	0.168	89	45.3 - 142	7	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.862	0.876	mg/Kg	1	1	86	88	51.5 - 138
4-Bromofluorobenzene (4-BFB)	1.18	1.36	mg/Kg	1	1	118	136	52.2 - 139

Matrix Spike (MS-1) Spiked Sample: 123487

QC Batch: 37046
Prep Batch: 32141

Date Analyzed: 2007-05-07
QC Preparation: 2007-05-07

Analyzed By: DS
Prepared By: DS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	264	mg/Kg	1	250	<22.3	106	35.1 - 161

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	259	mg/Kg	1	250	<22.3	104	35.1 - 161	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	170	165	mg/Kg	1	150	113	110	33.3 - 164

Matrix Spike (MS-1) Spiked Sample: 123492

QC Batch: 37168
Prep Batch: 32245

Date Analyzed: 2007-05-11
QC Preparation: 2007-05-11

Analyzed By: ER
Prepared By: ER

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	¹ 430	mg/Kg	50	625	242.786	30	75.6 - 117

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	² 370	mg/Kg	50	625	242.786	20	75.6 - 117	15	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 123493

QC Batch: 37208
Prep Batch: 32270

Date Analyzed: 2007-05-14
QC Preparation: 2007-05-14

Analyzed By: ER
Prepared By: ER

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	³ 535	mg/Kg	50	625	253.611	45	75.6 - 117

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

continued ...

¹ Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

² Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

³ Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

matrix spikes continued ...

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	⁴ 539	mg/Kg	50	625	253.611	46	75.6 - 117	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 123498

QC Batch: 37210
Prep Batch: 32272

Date Analyzed: 2007-05-15
QC Preparation: 2007-05-14

Analyzed By: ER
Prepared By: ER

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	⁵ 266	mg/Kg	5	62.5	117.066	238	75.6 - 117

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	⁶ 248	mg/Kg	5	62.5	117.066	209	75.6 - 117	7	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1)

QC Batch: 37038

Date Analyzed: 2007-05-07

Analyzed By: MT

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0897	90	85 - 115	2007-05-07
Toluene		mg/Kg	0.100	0.0905	90	85 - 115	2007-05-07
Ethylbenzene		mg/Kg	0.100	0.0869	87	85 - 115	2007-05-07
Xylene		mg/Kg	0.300	0.259	86	85 - 115	2007-05-07

Standard (CCV-1)

QC Batch: 37038

Date Analyzed: 2007-05-07

Analyzed By: MT

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0893	89	85 - 115	2007-05-07
Toluene		mg/Kg	0.100	0.0876	88	85 - 115	2007-05-07
Ethylbenzene		mg/Kg	0.100	0.0854	85	85 - 115	2007-05-07
Xylene		mg/Kg	0.300	0.256	85	85 - 115	2007-05-07

⁴Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

⁵Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

⁶Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

Standard (ICV-1)

QC Batch: 37039

Date Analyzed: 2007-05-07

Analyzed By: MT

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.926	92	85 - 115	2007-05-07

Standard (CCV-1)

QC Batch: 37039

Date Analyzed: 2007-05-07

Analyzed By: MT

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.937	94	85 - 115	2007-05-07

Standard (ICV-1)

QC Batch: 37046

Date Analyzed: 2007-05-07

Analyzed By: DS

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	254	102	85 - 115	2007-05-07

Standard (CCV-1)

QC Batch: 37046

Date Analyzed: 2007-05-07

Analyzed By: DS

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	260	104	85 - 115	2007-05-07

Standard (CCV-2)

QC Batch: 37046

Date Analyzed: 2007-05-07

Analyzed By: DS

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	280	112	85 - 115	2007-05-07

Standard (ICV-1)

QC Batch: 37168

Date Analyzed: 2007-05-11

Analyzed By: ER

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.2	98	90 - 110	2007-05-11

Standard (CCV-1)

QC Batch: 37168

Date Analyzed: 2007-05-11

Analyzed By: ER

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.2	98	90 - 110	2007-05-11

Standard (ICV-1)

QC Batch: 37208

Date Analyzed: 2007-05-14

Analyzed By: ER

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.4	99	90 - 110	2007-05-14

Standard (CCV-1)

QC Batch: 37208

Date Analyzed: 2007-05-14

Analyzed By: ER

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.3	98	90 - 110	2007-05-14

Standard (ICV-1)

QC Batch: 37210

Date Analyzed: 2007-05-15

Analyzed By: ER

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.3	98	90 - 110	2007-05-15

Standard (CCV-1)

QC Batch: 37210

Date Analyzed: 2007-05-15

Analyzed By: ER

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.2	98	90 - 110	2007-05-15

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Project #:

Project Name: *#2 State L. Booth*
Sampler Signature: *[Signature]*

Project Location (including state):

Buckeye NM

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX				PRESERVATIVE METHOD					SAMPLING	
				WATER	SOIL	AIR	SLUDGE	HCl	HNO ₃	H ₂ SO ₄	NaOH	ICE	NONE	DATE
123489	SB2@1' #004013	1	4oz	✓							✓		5-30-07	8:00
90	SB2@3' #004008	1	4oz	✓							✓		5-30-07	8:02
91	SB2@5' #003995	1	4oz	✓							✓		5-30-07	8:04
92	SB2@20' #003898	1	4oz	✓							✓		5-30-07	8:06
93	SB2@39' #003814	1	4oz	✓							✓		5-3-07	8:13
94	SB3@1' #004000	1	4oz	✓							✓		5-30-07	9:12
95	SB3@3' #003980	1	4oz	✓							✓		5-3-07	9:13
96	SB3@5' #004010	1	4oz	✓							✓		5-3-07	9:14
97	SB3@20' #003901	1	4oz	✓							✓		5-3-07	9:26
98	SB3@35' #003874	1	4oz	✓							✓		5-3-07	9:40

Relinquished by: *[Signature]* Date: *5-30-08* Time: *4:00*

Relinquished by: Date: Time:

Relinquished by: Date: Time:

Received at laboratory by: *[Signature]* Date: *05001 1030*

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # *7050718*

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 3021B / 602 / 3260B / 624	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
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REMARKS:

LAB USE ONLY

Infect: *Y/N*
Headspace: *Y/N*
Temp: *Y/N*
Ldg-in-Review: *Y/N*
☐ Dry Weight Basis Required
☐ TRRP Report Required
☐ Check if Special Reporting Limits Are Needed

Carrier # *BUS*

Summary Report

Cliff Brunson
BBC International
1324 W. Marland
Hobbs, NM, 88240

Report Date: May 15, 2007

Work Order: 7050716



Project Location: Buckeye, NM
Project Name: State L #2

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
123483	Temporary MW (SB1)	water	2007-05-03	10:44	2007-05-05

Sample - Field Code	BTEX				MTBE	TPH DRO	TPH GRO
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)	MTBE (mg/L)	DRO (mg/L)	GRO (mg/L)
123483 - Temporary MW (SB1)	0.126	0.00930	0.0575	0.0891		<5.00	0.968

Sample: 123483 - Temporary MW (SB1)

Param	Flag	Result	Units	RL
Chloride		601	mg/L	0.500

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Analytical and Quality Control Report

Cliff Brunson
BBC International
1324 W. Marland
Hobbs, NM, 88240

Report Date: May 15, 2007

Work Order: 7050716



Project Location: Buckeye, NM
Project Name: State L #2
Project Number: State L #2

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
123483	Temporary MW (SB1)	water	2007-05-03	10:44	2007-05-05

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 9 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Case Narrative

Samples for project State L #2 were received by TraceAnalysis, Inc. on 2007-05-05 and assigned to work order 7050716. Samples for work order 7050716 were received intact without headspace and at a temperature of 4 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method
BTEX	S 8021B
Chloride (IC)	E 300.0
TPH DRO	Mod. 8015B
TPH GRO	S 8015B

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 7050716 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 123483 - Temporary MW (SB1)

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5030B
QC Batch: 37170 Date Analyzed: 2007-05-11 Analyzed By: MT
Prep Batch: 32241 Sample Preparation: 2007-05-11 Prepared By: KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		0.126	mg/L	5	0.00100
Toluene		0.00930	mg/L	5	0.00100
Ethylbenzene		0.0575	mg/L	5	0.00100
Xylene		0.0891	mg/L	5	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.469	mg/L	5	0.500	94	80.4 - 120
4-Bromofluorobenzene (4-BFB)		0.371	mg/L	5	0.500	74	72.3 - 116

Sample: 123483 - Temporary MW (SB1)

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 37142 Date Analyzed: 2007-05-10 Analyzed By: ER
Prep Batch: 32212 Sample Preparation: 2007-05-10 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		601	mg/L	50	0.500

Sample: 123483 - Temporary MW (SB1)

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 37077 Date Analyzed: 2007-05-08 Analyzed By: DS
Prep Batch: 32163 Sample Preparation: 2007-05-08 Prepared By: TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<5.00	mg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		16.1	mg/L	1	15.0	107	40.7 - 174

Sample: 123483 - Temporary MW (SB1)

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5030B
QC Batch: 37196 Date Analyzed: 2007-05-14 Analyzed By: KB
Prep Batch: 32261 Sample Preparation: 2007-05-14 Prepared By: KB

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		0.968	mg/L	5	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.390	mg/L	5	0.500	78	69 - 130
4-Bromofluorobenzene (4-BFB)	¹	0.315	mg/L	5	0.500	63	67 - 115

Method Blank (1) QC Batch: 37077

QC Batch: 37077
Prep Batch: 32163

Date Analyzed: 2007-05-08
QC Preparation: 2007-05-08

Analyzed By: DS
Prepared By: DS

Parameter	Flag	MDL Result	Units	RL
DRO		<1.06	mg/L	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		16.6	mg/L	1	15.0	111	40.7 - 174

Method Blank (1) QC Batch: 37142

QC Batch: 37142
Prep Batch: 32212

Date Analyzed: 2007-05-10
QC Preparation: 2007-05-10

Analyzed By: ER
Prepared By: ER

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.172	mg/L	0.5

Method Blank (1) QC Batch: 37170

QC Batch: 37170
Prep Batch: 32241

Date Analyzed: 2007-05-11
QC Preparation: 2007-05-11

Analyzed By: MT
Prepared By: KB

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000595	mg/L	0.001
Toluene		<0.000327	mg/L	0.001
Ethylbenzene		<0.000377	mg/L	0.001
Xylene		<0.000366	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0973	mg/L	1	0.100	97	79.5 - 117
4-Bromofluorobenzene (4-BFB)		0.0771	mg/L	1	0.100	77	67.7 - 110

¹ Surrogate BFB out due to matrix interference. Sample was reran on 5/14/2007 to confirm matrix interference results.

Method Blank (1) QC Batch: 37196

QC Batch: 37196
Prep Batch: 32261

Date Analyzed: 2007-05-14
QC Preparation: 2007-05-14

Analyzed By: KB
Prepared By: KB

Parameter	Flag	MDL Result	Units	RL
GRO		<0.0353	mg/L	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0978	mg/L	1	0.100	98	78.2 - 123
4-Bromofluorobenzene (4-BFB)		0.0744	mg/L	1	0.100	74	62.1 - 112

Laboratory Control Spike (LCS-1)

QC Batch: 37077
Prep Batch: 32163

Date Analyzed: 2007-05-08
QC Preparation: 2007-05-08

Analyzed By: DS
Prepared By: DS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	23.8	mg/L	1	25.0	<1.06	95	56.9 - 128

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	21.3	mg/L	1	25.0	<1.06	85	56.9 - 128	11	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	14.5	13.2	mg/L	1	15.0	97	88	40.7 - 174

Laboratory Control Spike (LCS-1)

QC Batch: 37142
Prep Batch: 32212

Date Analyzed: 2007-05-10
QC Preparation: 2007-05-10

Analyzed By: ER
Prepared By: ER

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	12.1	mg/L	1	12.5	<0.172	97	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	12.2	mg/L	1	12.5	<0.172	98	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 37170
Prep Batch: 32241

Date Analyzed: 2007-05-11
QC Preparation: 2007-05-11

Analyzed By: MT
Prepared By: KB

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.0993	mg/L	1	0.100	<0.000595	99	74 - 115
Toluene	0.0995	mg/L	1	0.100	<0.000327	100	78.7 - 109
Ethylbenzene	0.0982	mg/L	1	0.100	<0.000377	98	78.7 - 113
Xylene	0.293	mg/L	1	0.300	<0.000366	98	76 - 111

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.101	mg/L	1	0.100	<0.000595	101	74 - 115	2	20
Toluene	0.100	mg/L	1	0.100	<0.000327	100	78.7 - 109	1	20
Ethylbenzene	0.0988	mg/L	1	0.100	<0.000377	99	78.7 - 113	1	20
Xylene	0.295	mg/L	1	0.300	<0.000366	98	76 - 111	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0957	0.0941	mg/L	1	0.100	96	94	82.2 - 113
4-Bromofluorobenzene (4-BFB)	0.0903	0.0900	mg/L	1	0.100	90	90	79.6 - 119

Laboratory Control Spike (LCS-1)

QC Batch: 37196
Prep Batch: 32261

Date Analyzed: 2007-05-14
QC Preparation: 2007-05-14

Analyzed By: KB
Prepared By: KB

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	0.886	mg/L	1	1.00	<0.0353	89	75.6 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	0.936	mg/L	1	1.00	<0.0353	94	75.6 - 115	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0976	0.0998	mg/L	1	0.100	98	100	74.7 - 119
4-Bromofluorobenzene (4-BFB)	0.0891	0.0930	mg/L	1	0.100	89	93	82 - 112

Matrix Spike (MS-1) Spiked Sample: 123483

QC Batch: 37077
Prep Batch: 32163

Date Analyzed: 2007-05-08
QC Preparation: 2007-05-08

Analyzed By: DS
Prepared By: DS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	21.4	mg/L	1	25.0	<1.06	86	61.9 - 112.2

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	23.4	mg/L	1	25.0	<1.06	94	61.9 - 112.2	9	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	17.4	14.8	mg/L	1	15	116	99	40.7 - 174

Matrix Spike (MS-1) Spiked Sample: 123590

QC Batch: 37142
Prep Batch: 32212

Date Analyzed: 2007-05-10
QC Preparation: 2007-05-10

Analyzed By: ER
Prepared By: ER

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	24.4	mg/L	1	12.5	10.3625	112	10 - 188

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	24.0	mg/L	1	12.5	10.3625	109	10 - 188	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1)

QC Batch: 37077

Date Analyzed: 2007-05-08

Analyzed By: DS

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	216	86	85 - 115	2007-05-08

Standard (CCV-1)

QC Batch: 37077

Date Analyzed: 2007-05-08

Analyzed By: DS

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	215	86	85 - 115	2007-05-08

Standard (ICV-1)

QC Batch: 37142

Date Analyzed: 2007-05-10

Analyzed By: ER

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	12.0	96	90 - 110	2007-05-10

Standard (CCV-1)

QC Batch: 37142

Date Analyzed: 2007-05-10

Analyzed By: ER

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	12.2	98	90 - 110	2007-05-10

Standard (ICV-1)

QC Batch: 37170

Date Analyzed: 2007-05-11

Analyzed By: MT

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0974	97	85 - 115	2007-05-11
Toluene		mg/L	0.100	0.0988	99	85 - 115	2007-05-11
Ethylbenzene		mg/L	0.100	0.0978	98	85 - 115	2007-05-11
Xylene		mg/L	0.300	0.296	99	85 - 115	2007-05-11

Standard (CCV-1)

QC Batch: 37170

Date Analyzed: 2007-05-11

Analyzed By: MT

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0975	98	85 - 115	2007-05-11
Toluene		mg/L	0.100	0.0962	96	85 - 115	2007-05-11
Ethylbenzene		mg/L	0.100	0.0943	94	85 - 115	2007-05-11
Xylene		mg/L	0.300	0.281	94	85 - 115	2007-05-11

Standard (ICV-1)

QC Batch: 37196

Date Analyzed: 2007-05-14

Analyzed By: KB

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.917	92	85 - 115	2007-05-14

Standard (CCV-1)

QC Batch: 37196

Date Analyzed: 2007-05-14

Analyzed By: KB

Report Date: May 15, 2007
State L #2

Work Order: 7050716
State L #2

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Buckeye, NM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.874	87	85 - 115	2007-05-14

155 McCutcheon, Suite H
El Paso, Texas 79932
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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

15051 3976588

1505) 397 0392

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SAMPLING

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REMARKS: Theory Accliment - all west

☐ Dry Weight Basis Required

☐ TRRP Report Required

☒ Check if Special Reporting Limits Are Needed

5157

MTBE 8021B / 602 / 8260B / 624
BTEX 8021B / ~~8021B~~ / ~~8021B~~
TPH 418.1 / TX1005 / TX1005 Ext(C35)
TPH 8015 GRO / DRO / ~~8015~~
PAH 8270C / 625
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7
TCLP Metals Ag As Ba Cd Cr Pb Se Hg
TCLP Volatiles
TCLP Semi Volatiles
TCLP Pesticides
RCI
GC/MS Vol. 8260B / 624
GC/MS Semi. Vol. 8270C / 625
PCB's 8082 / 606
Pesticides 8081A / 606
BOD, TSS, pH
Moisture Content
Chloride

Turn Around Time if different from standard
Hold

ANALYSIS REQUEST
(Circle or Specify Method No.)

Submission of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

ORIGINAL COPY

Summary Report

Cliff Brunson
BBC International
1324 W. Marland
Hobbs, NM, 88240

Report Date: June 19, 2007

Work Order: 7052525



Project Location: Buckeye, NM
Project Name: State L #2

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
125541	SB4 @ 1'	soil	2007-05-21	13:00	2007-05-25
125542	SB4 @ 3'	soil	2007-05-21	13:02	2007-05-25
125543	SB4 @ 5'	soil	2007-05-21	13:08	2007-05-25
125544	SB4 @ 20'	soil	2007-05-21	13:34	2007-05-25
125545	SB4 @ 35'	soil	2007-05-21	14:06	2007-05-25
125546	SB5 @ 1'	soil	2007-05-21	14:50	2007-05-25
125547	SB5 @ 3'	soil	2007-05-21	14:53	2007-05-25
125548	SB5 @ 5'	soil	2007-05-21	14:55	2007-05-25
125549	SB5 @ 10'	soil	2007-05-21	15:00	2007-05-25
125550	SB5 @ 20'	soil	2007-05-21	15:16	2007-05-25
125551	SB6 @ 1'	soil	2007-05-21	15:43	2007-05-25
125552	SB6 @ 3'	soil	2007-05-21	15:44	2007-05-25
125553	SB6 @ 5'	soil	2007-05-21	15:46	2007-05-25
125554	SB6 @ 15'	soil	2007-05-21	16:08	2007-05-25
125555	SB6 @ 25'	soil	2007-05-21	16:30	2007-05-25

Sample - Field Code	BTEX				MTBE	TPH DRO	TPH GRO
	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)	MTBE (mg/Kg)	DRO (mg/Kg)	GRO (mg/Kg)
125541 - SB4 @ 1'	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
125542 - SB4 @ 3'	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
125543 - SB4 @ 5'	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
125544 - SB4 @ 20'	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
125545 - SB4 @ 35'	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
125546 - SB5 @ 1'	4.70	21.3	13.3	42.9		9530	1700
125547 - SB5 @ 3'	1.03	4.58	4.65	13.4		1150	868
125548 - SB5 @ 5'	<0.0100	0.0124	0.0214	0.148		<50.0	17.0
125549 - SB5 @ 10'	<0.0100	<0.0100	0.0250	0.118		66.1	17.7
125550 - SB5 @ 20'	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	3.12
125551 - SB6 @ 1'	<0.200	<0.200	1.70	3.29		241	216
125552 - SB6 @ 3'	<0.200	0.761	1.43	3.37		116	224
125553 - SB6 @ 5'	<0.0100	<0.0100	<0.0100	0.0345		<50.0	6.92
125554 - SB6 @ 15'	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
125555 - SB6 @ 25'	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00

Sample: 125541 - SB4 @ 1'

Param	Flag	Result	Units	RL
Chloride		5040	mg/Kg	1.00

Sample: 125542 - SB4 @ 3'

Param	Flag	Result	Units	RL
Chloride		1830	mg/Kg	1.00

Sample: 125543 - SB4 @ 5'

Param	Flag	Result	Units	RL
Chloride		3970	mg/Kg	1.00

Sample: 125544 - SB4 @ 20'

Param	Flag	Result	Units	RL
Chloride		386	mg/Kg	1.00

Sample: 125545 - SB4 @ 35'

Param	Flag	Result	Units	RL
Chloride		342	mg/Kg	1.00

Sample: 125546 - SB5 @ 1'

Param	Flag	Result	Units	RL
Chloride		2320	mg/Kg	1.00

Sample: 125547 - SB5 @ 3'

Param	Flag	Result	Units	RL
Chloride		1920	mg/Kg	1.00

Sample: 125548 - SB5 @ 5'

Param	Flag	Result	Units	RL
Chloride		2180	mg/Kg	1.00

Sample: 125549 - SB5 @ 10'

Param	Flag	Result	Units	RL
Chloride		833	mg/Kg	1.00

Sample: 125550 - SB5 @ 20'

Param	Flag	Result	Units	RL
Chloride		152	mg/Kg	1.00

Sample: 125551 - SB6 @ 1'

Param	Flag	Result	Units	RL
Chloride		1680	mg/Kg	1.00

Sample: 125552 - SB6 @ 3'

Param	Flag	Result	Units	RL
Chloride		1230	mg/Kg	1.00

Sample: 125553 - SB6 @ 5'

Param	Flag	Result	Units	RL
Chloride		317	mg/Kg	1.00

Sample: 125554 - SB6 @ 15'

Param	Flag	Result	Units	RL
Chloride		1270	mg/Kg	1.00

Sample: 125555 - SB6 @ 25'

Param	Flag	Result	Units	RL
Chloride		125	mg/Kg	1.00

TRACE ANALYSIS, INC.

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E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Cliff Brunson
BBC International
1324 W. Marland
Hobbs, NM, 88240

Report Date: June 19, 2007

Work Order: 7052525




Project Location: Buckeye, NM
Project Name: State L #2
Project Number: State L #2

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
125541	SB4 @ 1'	soil	2007-05-21	13:00	2007-05-25
125542	SB4 @ 3'	soil	2007-05-21	13:02	2007-05-25
125543	SB4 @ 5'	soil	2007-05-21	13:08	2007-05-25
125544	SB4 @ 20'	soil	2007-05-21	13:34	2007-05-25
125545	SB4 @ 35'	soil	2007-05-21	14:06	2007-05-25
125546	SB5 @ 1'	soil	2007-05-21	14:50	2007-05-25
125547	SB5 @ 3'	soil	2007-05-21	14:53	2007-05-25
125548	SB5 @ 5'	soil	2007-05-21	14:55	2007-05-25
125549	SB5 @ 10'	soil	2007-05-21	15:00	2007-05-25
125550	SB5 @ 20'	soil	2007-05-21	15:16	2007-05-25
125551	SB6 @ 1'	soil	2007-05-21	15:43	2007-05-25
125552	SB6 @ 3'	soil	2007-05-21	15:44	2007-05-25
125553	SB6 @ 5'	soil	2007-05-21	15:46	2007-05-25
125554	SB6 @ 15'	soil	2007-05-21	16:08	2007-05-25
125555	SB6 @ 25'	soil	2007-05-21	16:30	2007-05-25

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 36 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.


Dr. Blair Leftwich, Director

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Case Narrative

Samples for project State L #2 were received by TraceAnalysis, Inc. on 2007-05-25 and assigned to work order 7052525. Samples for work order 7052525 were received intact at a temperature of 4 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method
BTEX	S 8021B
Chloride (IC)	E 300.0
TPH DRO	Mod. 8015B
TPH GRO	S 8015B

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 7052525 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 125541 - SB4 @ 1'

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	37541	Date Analyzed:	2007-05-25	Analyzed By:	MT
Prep Batch:	32545	Sample Preparation:	2007-05-25	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.934	mg/Kg	1	1.00	93	52.1 - 131
4-Bromofluorobenzene (4-BFB)		0.944	mg/Kg	1	1.00	94	48.7 - 146

Sample: 125541 - SB4 @ 1'

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	38249	Date Analyzed:	2007-06-15	Analyzed By:	ER
Prep Batch:	33114	Sample Preparation:	2007-06-15	Prepared By:	ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		5040	mg/Kg	500	1.00

Sample: 125541 - SB4 @ 1'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	37552	Date Analyzed:	2007-05-26	Analyzed By:	TG
Prep Batch:	32551	Sample Preparation:	2007-05-25	Prepared By:	TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		223	mg/Kg	1	150	149	62.5 - 164

Sample: 125541 - SB4 @ 1'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	37543	Date Analyzed:	2007-05-25	Analyzed By:	MT
Prep Batch:	32545	Sample Preparation:	2007-05-25	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.949	mg/Kg	1	1.00	95	33.2 - 160
4-Bromofluorobenzene (4-BFB)		1.01	mg/Kg	1	1.00	101	10 - 227

Sample: 125542 - SB4 @ 3'

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 37618 Date Analyzed: 2007-05-29 Analyzed By: KB
Prep Batch: 32598 Sample Preparation: 2007-05-29 Prepared By: KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.802	mg/Kg	1	1.00	80	52.1 - 131
4-Bromofluorobenzene (4-BFB)		0.673	mg/Kg	1	1.00	67	48.7 - 146

Sample: 125542 - SB4 @ 3'

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 38249 Date Analyzed: 2007-06-15 Analyzed By: ER
Prep Batch: 33114 Sample Preparation: 2007-06-15 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1830	mg/Kg	100	1.00

Sample: 125542 - SB4 @ 3'

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 37552 Date Analyzed: 2007-05-26 Analyzed By: TG
Prep Batch: 32551 Sample Preparation: 2007-05-25 Prepared By: TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		222	mg/Kg	1	150	148	62.5 - 164

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Sample: 125542 - SB4 @ 3'

Analysis: TPH GRO
QC Batch: 37543
Prep Batch: 32545

Analytical Method: S 8015B
Date Analyzed: 2007-05-25
Sample Preparation: 2007-05-25

Prep Method: S 5035
Analyzed By: MT
Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.516	mg/Kg	1	1.00	52	33.2 - 160
4-Bromofluorobenzene (4-BFB)		0.506	mg/Kg	1	1.00	51	10 - 227

Sample: 125543 - SB4 @ 5'

Analysis: BTEX
QC Batch: 37541
Prep Batch: 32545

Analytical Method: S 8021B
Date Analyzed: 2007-05-25
Sample Preparation: 2007-05-25

Prep Method: S 5035
Analyzed By: MT
Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	1	1.50	mg/Kg	1	1.00	150	52.1 - 131
4-Bromofluorobenzene (4-BFB)		1.42	mg/Kg	1	1.00	142	48.7 - 146

Sample: 125543 - SB4 @ 5'

Analysis: Chloride (IC)
QC Batch: 38249
Prep Batch: 33114

Analytical Method: E 300.0
Date Analyzed: 2007-06-15
Sample Preparation: 2007-06-15

Prep Method: N/A
Analyzed By: ER
Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		3970	mg/Kg	500	1.00

Sample: 125543 - SB4 @ 5'

Analysis: TPH DRO
QC Batch: 37552
Prep Batch: 32551

Analytical Method: Mod. 8015B
Date Analyzed: 2007-05-26
Sample Preparation: 2007-05-25

Prep Method: N/A
Analyzed By: TG
Prepared By: TG

¹High surrogate recovery. Sample non-detect, result bias high.

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Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		213	mg/Kg	1	150	142	62.5 - 164

Sample: 125543 - SB4 @ 5'

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 37543 Date Analyzed: 2007-05-25 Analyzed By: MT
Prep Batch: 32545 Sample Preparation: 2007-05-25 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.38	mg/Kg	1	1.00	138	33.2 - 160
4-Bromofluorobenzene (4-BFB)		1.41	mg/Kg	1	1.00	141	10 - 227

Sample: 125544 - SB4 @ 20'

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 37541 Date Analyzed: 2007-05-25 Analyzed By: MT
Prep Batch: 32545 Sample Preparation: 2007-05-25 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.863	mg/Kg	1	1.00	86	52.1 - 131
4-Bromofluorobenzene (4-BFB)		0.801	mg/Kg	1	1.00	80	48.7 - 146

Sample: 125544 - SB4 @ 20'

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 38249 Date Analyzed: 2007-06-15 Analyzed By: ER
Prep Batch: 33114 Sample Preparation: 2007-06-15 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		386	mg/Kg	50	1.00

Sample: 125544 - SB4 @ 20'

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 37552 Date Analyzed: 2007-05-26 Analyzed By: TG
Prep Batch: 32551 Sample Preparation: 2007-05-25 Prepared By: TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		222	mg/Kg	1	150	148	62.5 - 164

Sample: 125544 - SB4 @ 20'

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 37543 Date Analyzed: 2007-05-25 Analyzed By: MT
Prep Batch: 32545 Sample Preparation: 2007-05-25 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.891	mg/Kg	1	1.00	89	33.2 - 160
4-Bromofluorobenzene (4-BFB)		0.849	mg/Kg	1	1.00	85	10 - 227

Sample: 125545 - SB4 @ 35'

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 37541 Date Analyzed: 2007-05-25 Analyzed By: MT
Prep Batch: 32545 Sample Preparation: 2007-05-25 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.815	mg/Kg	1	1.00	82	52.1 - 131
4-Bromofluorobenzene (4-BFB)		0.754	mg/Kg	1	1.00	75	48.7 - 146

Sample: 125545 - SB4 @ 35'

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 38249 Date Analyzed: 2007-06-15 Analyzed By: ER
Prep Batch: 33114 Sample Preparation: 2007-06-15 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		342	mg/Kg	50	1.00

Sample: 125545 - SB4 @ 35'

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 37552 Date Analyzed: 2007-05-26 Analyzed By: TG
Prep Batch: 32551 Sample Preparation: 2007-05-25 Prepared By: TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		218	mg/Kg	1	150	145	62.5 - 164

Sample: 125545 - SB4 @ 35'

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 37543 Date Analyzed: 2007-05-25 Analyzed By: MT
Prep Batch: 32545 Sample Preparation: 2007-05-25 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.853	mg/Kg	1	1.00	85	33.2 - 160
4-Bromofluorobenzene (4-BFB)		0.799	mg/Kg	1	1.00	80	10 - 227

Sample: 125546 - SB5 @ 1'

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 37548 Date Analyzed: 2007-05-25 Analyzed By: MT
Prep Batch: 32548 Sample Preparation: 2007-05-25 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		4.70	mg/Kg	20	0.0100
Toluene		21.3	mg/Kg	20	0.0100
Ethylbenzene		13.3	mg/Kg	20	0.0100

continued ...

sample 125546 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Xylene		42.9	mg/Kg	20	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	²	0.446	mg/Kg	20	1.00	45	52.1 - 131
4-Bromofluorobenzene (4-BFB)	³	2.13	mg/Kg	20	1.00	213	48.7 - 146

Sample: 125546 - SB5 @ 1'

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 38249 Date Analyzed: 2007-06-15 Analyzed By: ER
Prep Batch: 33114 Sample Preparation: 2007-06-15 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2320	mg/Kg	100	1.00

Sample: 125546 - SB5 @ 1'

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 37678 Date Analyzed: 2007-05-30 Analyzed By: TG
Prep Batch: 32609 Sample Preparation: 2007-05-29 Prepared By: TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		9530	mg/Kg	10	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	⁴	1090	mg/Kg	10	150	727	62.5 - 164

Sample: 125546 - SB5 @ 1'

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 37549 Date Analyzed: 2007-05-25 Analyzed By: MT
Prep Batch: 32548 Sample Preparation: 2007-05-25 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		1700	mg/Kg	20	1.00

²Surrogate out due to peak interference.

³High surrogate recovery due to peak interference.

⁴High surrogate recovery due to peak interference.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.903	mg/Kg	20	1.00	90	33.2 - 160
4-Bromofluorobenzene (4-BFB)	⁵	5.88	mg/Kg	20	1.00	588	10 - 227

Sample: 125547 - SB5 @ 3'

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 37548 Date Analyzed: 2007-05-25 Analyzed By: MT
Prep Batch: 32548 Sample Preparation: 2007-05-25 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		1.03	mg/Kg	20	0.0100
Toluene		4.58	mg/Kg	20	0.0100
Ethylbenzene		4.65	mg/Kg	20	0.0100
Xylene		13.4	mg/Kg	20	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	⁶	0.475	mg/Kg	20	1.00	48	52.1 - 131
4-Bromofluorobenzene (4-BFB)		1.09	mg/Kg	20	1.00	109	48.7 - 146

Sample: 125547 - SB5 @ 3'

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 38249 Date Analyzed: 2007-06-15 Analyzed By: ER
Prep Batch: 33114 Sample Preparation: 2007-06-15 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1920	mg/Kg	100	1.00

Sample: 125547 - SB5 @ 3'

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 37552 Date Analyzed: 2007-05-26 Analyzed By: TG
Prep Batch: 32551 Sample Preparation: 2007-05-25 Prepared By: TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		1150	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	⁷	310	mg/Kg	1	150	207	62.5 - 164

⁵High surrogate recovery due to peak interference.

⁶Surrogate out due to peak interference.

⁷High surrogate recovery due to peak interference.

Sample: 125547 - SB5 @ 3'

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 37549 Date Analyzed: 2007-05-25 Analyzed By: MT
Prep Batch: 32548 Sample Preparation: 2007-05-25 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		868	mg/Kg	20	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	^s	0.312	mg/Kg	20	1.00	31	33.2 - 160
4-Bromofluorobenzene (4-BFB)		1.79	mg/Kg	20	1.00	179	10 - 227

Sample: 125548 - SB5 @ 5'

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 37541 Date Analyzed: 2007-05-25 Analyzed By: MT
Prep Batch: 32545 Sample Preparation: 2007-05-25 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		0.0124	mg/Kg	1	0.0100
Ethylbenzene		0.0214	mg/Kg	1	0.0100
Xylene		0.148	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.892	mg/Kg	1	1.00	89	52.1 - 131
4-Bromofluorobenzene (4-BFB)		0.922	mg/Kg	1	1.00	92	48.7 - 146

Sample: 125548 - SB5 @ 5'

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 38249 Date Analyzed: 2007-06-15 Analyzed By: ER
Prep Batch: 33114 Sample Preparation: 2007-06-15 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2180	mg/Kg	100	1.00

Sample: 125548 - SB5 @ 5'

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 37552 Date Analyzed: 2007-05-26 Analyzed By: TG
Prep Batch: 32551 Sample Preparation: 2007-05-25 Prepared By: TG

^sSurrogate out due to peak interference.

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		233	mg/Kg	1	150	155	62.5 - 164

Sample: 125548 - SB5 @ 5'

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 37543 Date Analyzed: 2007-05-25 Analyzed By: MT
Prep Batch: 32545 Sample Preparation: 2007-05-25 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		17.0	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.844	mg/Kg	1	1.00	84	33.2 - 160
4-Bromofluorobenzene (4-BFB)		1.15	mg/Kg	1	1.00	115	10 - 227

Sample: 125549 - SB5 @ 10'

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 37541 Date Analyzed: 2007-05-25 Analyzed By: MT
Prep Batch: 32545 Sample Preparation: 2007-05-25 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		0.0250	mg/Kg	1	0.0100
Xylene		0.118	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.06	mg/Kg	1	1.00	106	52.1 - 131
4-Bromofluorobenzene (4-BFB)		1.09	mg/Kg	1	1.00	109	48.7 - 146

Sample: 125549 - SB5 @ 10'

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 38249 Date Analyzed: 2007-06-15 Analyzed By: ER
Prep Batch: 33114 Sample Preparation: 2007-06-15 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		833	mg/Kg	50	1.00

Sample: 125549 - SB5 @ 10'

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 37552 Date Analyzed: 2007-05-26 Analyzed By: TG
Prep Batch: 32551 Sample Preparation: 2007-05-25 Prepared By: TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		66.1	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		239	mg/Kg	1	150	159	62.5 - 164

Sample: 125549 - SB5 @ 10'

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 37543 Date Analyzed: 2007-05-25 Analyzed By: MT
Prep Batch: 32545 Sample Preparation: 2007-05-25 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		17.7	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.997	mg/Kg	1	1.00	100	33.2 - 160
4-Bromofluorobenzene (4-BFB)		1.49	mg/Kg	1	1.00	149	10 - 227

Sample: 125550 - SB5 @ 20'

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 37541 Date Analyzed: 2007-05-25 Analyzed By: MT
Prep Batch: 32545 Sample Preparation: 2007-05-25 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.982	mg/Kg	1	1.00	98	52.1 - 131
4-Bromofluorobenzene (4-BFB)		0.953	mg/Kg	1	1.00	95	48.7 - 146

Sample: 125550 - SB5 @ 20'

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 38249 Date Analyzed: 2007-06-15 Analyzed By: ER
Prep Batch: 33114 Sample Preparation: 2007-06-15 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		152	mg/Kg	5	1.00

Sample: 125550 - SB5 @ 20'

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 37552 Date Analyzed: 2007-05-26 Analyzed By: TG
Prep Batch: 32551 Sample Preparation: 2007-05-25 Prepared By: TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	⁹	275	mg/Kg	1	150	183	62.5 - 164

Sample: 125550 - SB5 @ 20'

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 37543 Date Analyzed: 2007-05-25 Analyzed By: MT
Prep Batch: 32545 Sample Preparation: 2007-05-25 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		3.12	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.03	mg/Kg	1	1.00	103	33.2 - 160
4-Bromofluorobenzene (4-BFB)		1.19	mg/Kg	1	1.00	119	10 - 227

Sample: 125551 - SB6 @ 1'

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 37548 Date Analyzed: 2007-05-25 Analyzed By: MT
Prep Batch: 32548 Sample Preparation: 2007-05-25 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene	¹⁰	<0.200	mg/Kg	20	0.0100
Toluene		<0.200	mg/Kg	20	0.0100
Ethylbenzene		1.70	mg/Kg	20	0.0100

⁹High surrogate recovery. Sample non-detect. result bias high.

¹⁰Sample ran at dilution due to hydrocarbons with a retention time greater than xylene.

continued ...

sample 125551 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Xylene		3.29	mg/Kg	20	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.608	mg/Kg	20	1.00	61	52.1 - 131
4-Bromofluorobenzene (4-BFB)		1.03	mg/Kg	20	1.00	103	48.7 - 146

Sample: 125551 - SB6 @ 1'

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 38310 Date Analyzed: 2007-06-18 Analyzed By: ER
Prep Batch: 33169 Sample Preparation: 2007-06-18 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1680	mg/Kg	100	1.00

Sample: 125551 - SB6 @ 1'

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 37552 Date Analyzed: 2007-05-26 Analyzed By: TG
Prep Batch: 32551 Sample Preparation: 2007-05-25 Prepared By: TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		241	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	¹¹	251	mg/Kg	1	150	167	62.5 - 164

Sample: 125551 - SB6 @ 1'

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 37549 Date Analyzed: 2007-05-25 Analyzed By: MT
Prep Batch: 32548 Sample Preparation: 2007-05-25 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		216	mg/Kg	20	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.626	mg/Kg	20	1.00	63	33.2 - 160

continued ...

¹¹ High surrogate recovery due to peak interference.

sample continued ...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-Bromofluorobenzene (4-BFB)		2.22	mg/Kg	20	1.00	222	10 - 227

Sample: 125552 - SB6 @ 3'

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 37548 Date Analyzed: 2007-05-25 Analyzed By: MT
Prep Batch: 32548 Sample Preparation: 2007-05-25 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene	¹²	<0.200	mg/Kg	20	0.0100
Toluene		0.761	mg/Kg	20	0.0100
Ethylbenzene		1.43	mg/Kg	20	0.0100
Xylene		3.37	mg/Kg	20	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.595	mg/Kg	20	1.00	60	52.1 - 131
4-Bromofluorobenzene (4-BFB)		0.808	mg/Kg	20	1.00	81	48.7 - 146

Sample: 125552 - SB6 @ 3'

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 38310 Date Analyzed: 2007-06-18 Analyzed By: ER
Prep Batch: 33169 Sample Preparation: 2007-06-18 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1230	mg/Kg	100	1.00

Sample: 125552 - SB6 @ 3'

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 37552 Date Analyzed: 2007-05-26 Analyzed By: TG
Prep Batch: 32551 Sample Preparation: 2007-05-25 Prepared By: TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		116	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	¹³	321	mg/Kg	1	150	214	62.5 - 164

¹²Sample ran at dilution due to hydrocarbons with a retention time greater than xylene.

¹³High surrogate recovery due to peak interference.

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Sample: 125552 - SB6 @ 3'

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 37549 Date Analyzed: 2007-05-25 Analyzed By: MT
Prep Batch: 32548 Sample Preparation: 2007-05-25 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		224	mg/Kg	20	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.665	mg/Kg	20	1.00	66	33.2 - 160
4-Bromofluorobenzene (4-BFB)		1.28	mg/Kg	20	1.00	128	10 - 227

Sample: 125553 - SB6 @ 5'

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 37541 Date Analyzed: 2007-05-25 Analyzed By: MT
Prep Batch: 32545 Sample Preparation: 2007-05-25 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		0.0345	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.905	mg/Kg	1	1.00	90	52.1 - 131
4-Bromofluorobenzene (4-BFB)		0.901	mg/Kg	1	1.00	90	48.7 - 146

Sample: 125553 - SB6 @ 5'

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 38310 Date Analyzed: 2007-06-18 Analyzed By: ER
Prep Batch: 33169 Sample Preparation: 2007-06-18 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		317	mg/Kg	50	1.00

Sample: 125553 - SB6 @ 5'

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 37552 Date Analyzed: 2007-05-26 Analyzed By: TG
Prep Batch: 32551 Sample Preparation: 2007-05-25 Prepared By: TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		176	mg/Kg	1	150	117	62.5 - 164

Sample: 125553 - SB6 @ 5'

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 37543 Date Analyzed: 2007-05-25 Analyzed By: MT
Prep Batch: 32545 Sample Preparation: 2007-05-25 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		6.92	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.942	mg/Kg	1	1.00	94	33.2 - 160
4-Bromofluorobenzene (4-BFB)		1.01	mg/Kg	1	1.00	101	10 - 227

Sample: 125554 - SB6 @ 15'

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 37541 Date Analyzed: 2007-05-25 Analyzed By: MT
Prep Batch: 32545 Sample Preparation: 2007-05-25 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.939	mg/Kg	1	1.00	94	52.1 - 131
4-Bromofluorobenzene (4-BFB)		0.884	mg/Kg	1	1.00	88	48.7 - 146

Sample: 125554 - SB6 @ 15'

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 38310 Date Analyzed: 2007-06-18 Analyzed By: ER
Prep Batch: 33169 Sample Preparation: 2007-06-18 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1270	mg/Kg	100	1.00

Sample: 125554 - SB6 @ 15'

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 37553 Date Analyzed: 2007-05-26 Analyzed By: TG
Prep Batch: 32551 Sample Preparation: 2007-05-25 Prepared By: TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		219	mg/Kg	1	150	146	62.5 - 164

Sample: 125554 - SB6 @ 15'

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 37543 Date Analyzed: 2007-05-25 Analyzed By: MT
Prep Batch: 32545 Sample Preparation: 2007-05-25 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.994	mg/Kg	1	1.00	99	33.2 - 160
4-Bromofluorobenzene (4-BFB)		0.984	mg/Kg	1	1.00	98	10 - 227

Sample: 125555 - SB6 @ 25'

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 37541 Date Analyzed: 2007-05-25 Analyzed By: MT
Prep Batch: 32545 Sample Preparation: 2007-05-25 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.02	mg/Kg	1	1.00	102	52.1 - 131
4-Bromofluorobenzene (4-BFB)		0.958	mg/Kg	1	1.00	96	48.7 - 146

Sample: 125555 - SB6 @ 25'

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 38310 Date Analyzed: 2007-06-18 Analyzed By: ER
Prep Batch: 33169 Sample Preparation: 2007-06-18 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		125	mg/Kg	5	1.00

Sample: 125555 - SB6 @ 25'

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 37553 Date Analyzed: 2007-05-26 Analyzed By: TG
Prep Batch: 32551 Sample Preparation: 2007-05-25 Prepared By: TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		240	mg/Kg	1	150	160	62.5 - 164

Sample: 125555 - SB6 @ 25'

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 37543 Date Analyzed: 2007-05-25 Analyzed By: MT
Prep Batch: 32545 Sample Preparation: 2007-05-25 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.08	mg/Kg	1	1.00	108	33.2 - 160
4-Bromofluorobenzene (4-BFB)		1.04	mg/Kg	1	1.00	104	10 - 227

Method Blank (1) QC Batch: 37541

QC Batch: 37541 Date Analyzed: 2007-05-25 Analyzed By: MT
Prep Batch: 32545 QC Preparation: 2007-05-25 Prepared By: MT

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00333	mg/Kg	0.01
Toluene		<0.00372	mg/Kg	0.01
Ethylbenzene		<0.00206	mg/Kg	0.01
Xylene		<0.00259	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.01	mg/Kg	1	1.00	101	73.2 - 113
4-Bromofluorobenzene (4-BFB)		0.724	mg/Kg	1	1.00	72	54 - 102

Method Blank (1) QC Batch: 37543

QC Batch: 37543
Prep Batch: 32545

Date Analyzed: 2007-05-25
QC Preparation: 2007-05-25

Analyzed By: MT
Prepared By: MT

Parameter	Flag	MDL Result	Units	RL
GRO		<0.459	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.09	mg/Kg	1	1.00	109	73.2 - 125
4-Bromofluorobenzene (4-BFB)		0.787	mg/Kg	1	1.00	79	51.9 - 110

Method Blank (1) QC Batch: 37548

QC Batch: 37548
Prep Batch: 32548

Date Analyzed: 2007-05-25
QC Preparation: 2007-05-25

Analyzed By: MT
Prepared By: MT

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00333	mg/Kg	0.01
Toluene		<0.00372	mg/Kg	0.01
Ethylbenzene		<0.00206	mg/Kg	0.01
Xylene		<0.00259	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.854	mg/Kg	1	1.00	85	73.2 - 113
4-Bromofluorobenzene (4-BFB)		0.653	mg/Kg	1	1.00	65	54 - 102

Method Blank (1) QC Batch: 37549

QC Batch: 37549
Prep Batch: 32548

Date Analyzed: 2007-05-25
QC Preparation: 2007-05-25

Analyzed By: MT
Prepared By: MT

Parameter	Flag	MDL Result	Units	RL
GRO		<0.459	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.957	mg/Kg	1	1.00	96	73.2 - 125
4-Bromofluorobenzene (4-BFB)		0.727	mg/Kg	1	1.00	73	51.9 - 110

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Method Blank (1) QC Batch: 37552

QC Batch: 37552
Prep Batch: 32551

Date Analyzed: 2007-05-26
QC Preparation: 2007-05-25

Analyzed By: TG
Prepared By: TG

Parameter	Flag	MDL Result	Units	RL
DRO		<10.7	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		246	mg/Kg	1	150	164	62.5 - 164

Method Blank (1) QC Batch: 37553

QC Batch: 37553
Prep Batch: 32551

Date Analyzed: 2007-05-26
QC Preparation: 2007-05-25

Analyzed By: TG
Prepared By: TG

Parameter	Flag	MDL Result	Units	RL
DRO		<10.7	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		228	mg/Kg	1	150	152	62.5 - 164

Method Blank (1) QC Batch: 37618

QC Batch: 37618
Prep Batch: 32598

Date Analyzed: 2007-05-29
QC Preparation: 2007-05-29

Analyzed By: KB
Prepared By: KB

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00333	mg/Kg	0.01
Toluene		<0.00372	mg/Kg	0.01
Ethylbenzene		<0.00206	mg/Kg	0.01
Xylene		<0.00259	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.882	mg/Kg	1	1.00	88	73.2 - 113
4-Bromofluorobenzene (4-BFB)		0.600	mg/Kg	1	1.00	60	54 - 102

Method Blank (1) QC Batch: 37678

QC Batch: 37678
Prep Batch: 32609

Date Analyzed: 2007-05-30
QC Preparation: 2007-05-29

Analyzed By: TG
Prepared By: TG

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Parameter	Flag	MDL Result	Units	RL
DRO		<10.7	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		222	mg/Kg	1	150	148	62.5 - 164

Method Blank (1) QC Batch: 38249

QC Batch: 38249
Prep Batch: 33114

Date Analyzed: 2007-06-15
QC Preparation: 2007-06-15

Analyzed By: ER
Prepared By: ER

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.140	mg/Kg	1

Method Blank (1) QC Batch: 38310

QC Batch: 38310
Prep Batch: 33169

Date Analyzed: 2007-06-18
QC Preparation: 2007-06-18

Analyzed By: ER
Prepared By: ER

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.140	mg/Kg	1

Laboratory Control Spike (LCS-1)

QC Batch: 37541
Prep Batch: 32545

Date Analyzed: 2007-05-25
QC Preparation: 2007-05-25

Analyzed By: MT
Prepared By: MT

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.01	mg/Kg	1	1.00	<0.00333	101	76.3 - 117
Toluene	1.00	mg/Kg	1	1.00	<0.00372	100	77.3 - 114
Ethylbenzene	0.968	mg/Kg	1	1.00	<0.00206	97	75.4 - 115
Xylene	2.88	mg/Kg	1	3.00	<0.00259	96	73.2 - 112

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	1.01	mg/Kg	1	1.00	<0.00333	101	76.3 - 117	0	20
Toluene	0.999	mg/Kg	1	1.00	<0.00372	100	77.3 - 114	0	20
Ethylbenzene	0.968	mg/Kg	1	1.00	<0.00206	97	75.4 - 115	0	20
Xylene	2.89	mg/Kg	1	3.00	<0.00259	96	73.2 - 112	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.930	0.953	mg/Kg	1	1.00	93	95	74.5 - 113
4-Bromofluorobenzene (4-BFB)	0.882	0.903	mg/Kg	1	1.00	88	90	68.3 - 110

Laboratory Control Spike (LCS-1)

QC Batch: 37543
Prep Batch: 32545

Date Analyzed: 2007-05-25
QC Preparation: 2007-05-25

Analyzed By: MT
Prepared By: MT

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	8.92	mg/Kg	1	10.0	<0.459	89	79.6 - 113

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	9.86	mg/Kg	1	10.0	<0.459	99	79.6 - 113	10	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.966	0.947	mg/Kg	1	1.00	97	95	77.1 - 117
4-Bromofluorobenzene (4-BFB)	0.890	0.889	mg/Kg	1	1.00	89	89	78.1 - 118

Laboratory Control Spike (LCS-1)

QC Batch: 37548
Prep Batch: 32548

Date Analyzed: 2007-05-25
QC Preparation: 2007-05-25

Analyzed By: MT
Prepared By: MT

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.977	mg/Kg	1	1.00	<0.00333	94	76.3 - 117
Toluene	0.949	mg/Kg	1	1.00	<0.00372	95	77.3 - 114
Ethylbenzene	0.904	mg/Kg	1	1.00	<0.00206	90	75.4 - 115
Xylene	2.71	mg/Kg	1	3.00	<0.00259	90	73.2 - 112

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.942	mg/Kg	1	1.00	<0.00333	94	76.3 - 117	4	20
Toluene	0.917	mg/Kg	1	1.00	<0.00372	92	77.3 - 114	3	20
Ethylbenzene	0.875	mg/Kg	1	1.00	<0.00206	88	75.4 - 115	3	20
Xylene	2.62	mg/Kg	1	3.00	<0.00259	87	73.2 - 112	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.844	0.858	mg/Kg	1	1.00	84	86	74.5 - 113
4-Bromofluorobenzene (4-BFB)	0.817	0.821	mg/Kg	1	1.00	82	82	68.3 - 110

Laboratory Control Spike (LCS-1)

QC Batch: 37549
Prep Batch: 32548

Date Analyzed: 2007-05-25
QC Preparation: 2007-05-25

Analyzed By: MT
Prepared By: MT

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	8.95	mg/Kg	1	10.0	<0.459	90	79.6 - 113

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	9.39	mg/Kg	1	10.0	<0.459	94	79.6 - 113	5	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.937	0.957	mg/Kg	1	1.00	94	96	77.1 - 117
4-Bromofluorobenzene (4-BFB)	0.893	0.902	mg/Kg	1	1.00	89	90	78.1 - 118

Laboratory Control Spike (LCS-1)

QC Batch: 37552
Prep Batch: 32551

Date Analyzed: 2007-05-26
QC Preparation: 2007-05-25

Analyzed By: TG
Prepared By: TG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	218	mg/Kg	1	250	<10.7	87	64.1 - 124

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	212	mg/Kg	1	250	<10.7	85	64.1 - 124	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	223	220	mg/Kg	1	150	149	147	62.5 - 164

Laboratory Control Spike (LCS-1)

QC Batch: 37553
Prep Batch: 32551

Date Analyzed: 2007-05-26
QC Preparation: 2007-05-25

Analyzed By: TG
Prepared By: TG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	220	mg/Kg	1	250	<10.7	88	64.1 - 124

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

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Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	218	mg/Kg	1	250	<10.7	87	64.1 - 124	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	228	228	mg/Kg	1	150	152	152	62.5 - 164

Laboratory Control Spike (LCS-1)

QC Batch: 37618
Prep Batch: 32598

Date Analyzed: 2007-05-29
QC Preparation: 2007-05-29

Analyzed By: KB
Prepared By: KB

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.925	mg/Kg	1	1.00	<0.00333	92	76.3 - 117
Toluene	0.905	mg/Kg	1	1.00	<0.00372	90	77.3 - 114
Ethylbenzene	0.862	mg/Kg	1	1.00	<0.00206	86	75.4 - 115
Xylene	2.57	mg/Kg	1	3.00	<0.00259	86	73.2 - 112

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.972	mg/Kg	1	1.00	<0.00333	97	76.3 - 117	5	20
Toluene	0.950	mg/Kg	1	1.00	<0.00372	95	77.3 - 114	5	20
Ethylbenzene	0.907	mg/Kg	1	1.00	<0.00206	91	75.4 - 115	5	20
Xylene	2.70	mg/Kg	1	3.00	<0.00259	90	73.2 - 112	5	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.856	0.927	mg/Kg	1	1.00	86	93	74.5 - 113
4-Bromofluorobenzene (4-BFB)	0.762	0.822	mg/Kg	1	1.00	76	82	68.3 - 110

Laboratory Control Spike (LCS-1)

QC Batch: 37678
Prep Batch: 32609

Date Analyzed: 2007-05-30
QC Preparation: 2007-05-29

Analyzed By: TG
Prepared By: TG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	257	mg/Kg	1	250	<10.7	103	64.1 - 124

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	224	mg/Kg	1	250	<10.7	90	64.1 - 124	14	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

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Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	211	201	mg/Kg	1	150	141	134	62.5 - 164

Laboratory Control Spike (LCS-1)

QC Batch: 38249
Prep Batch: 33114

Date Analyzed: 2007-06-15
QC Preparation: 2007-06-15

Analyzed By: ER
Prepared By: ER

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	12.1	mg/Kg	1	12.5	<0.140	97	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	12.5	mg/Kg	1	12.5	<0.140	100	90 - 110	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 38310
Prep Batch: 33169

Date Analyzed: 2007-06-18
QC Preparation: 2007-06-18

Analyzed By: ER
Prepared By: ER

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	12.9	mg/Kg	1	12.5	<0.140	103	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	23.7	mg/Kg	1	12.5	<0.140	95	90 - 110	59	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 125541

QC Batch: 37541
Prep Batch: 32545

Date Analyzed: 2007-05-25
QC Preparation: 2007-05-25

Analyzed By: MT
Prepared By: MT

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.768	mg/Kg	1	1.00	<0.00333	77	39.6 - 141
Toluene	0.798	mg/Kg	1	1.00	<0.00372	80	45.4 - 138
Ethylbenzene	0.840	mg/Kg	1	1.00	<0.00206	84	48 - 141
Xylene	2.53	mg/Kg	1	3.00	<0.00259	84	45.3 - 142

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.772	mg/Kg	1	1.00	<0.00333	77	39.6 - 141	0	20
Toluene	0.801	mg/Kg	1	1.00	<0.00372	80	45.4 - 138	0	20
Ethylbenzene	0.845	mg/Kg	1	1.00	<0.00206	84	48 - 141	1	20
Xylene	2.54	mg/Kg	1	3.00	<0.00259	85	45.3 - 142	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.942	0.922	mg/Kg	1	1	94	92	51.5 - 138
4-Bromofluorobenzene (4-BFB)	0.925	0.902	mg/Kg	1	1	92	90	52.2 - 139

Matrix Spike (MS-1) Spiked Sample: 125541

QC Batch: 37543
Prep Batch: 32545

Date Analyzed: 2007-05-25
QC Preparation: 2007-05-25

Analyzed By: MT
Prepared By: MT

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	7.98	mg/Kg	1	10.0	<0.459	80	40.7 - 157

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	7.63	mg/Kg	1	10.0	<0.459	76	40.7 - 157	4	19.6

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.845	0.730	mg/Kg	1	1	84	73	34.9 - 155
4-Bromofluorobenzene (4-BFB)	0.941	0.832	mg/Kg	1	1	94	83	58.5 - 153

Matrix Spike (MS-1) Spiked Sample: 125578

QC Batch: 37548
Prep Batch: 32548

Date Analyzed: 2007-05-25
QC Preparation: 2007-05-25

Analyzed By: MT
Prepared By: MT

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.906	mg/Kg	1	1.00	<0.00333	91	39.6 - 141
Toluene	0.928	mg/Kg	1	1.00	<0.00372	93	45.4 - 138
Ethylbenzene	0.924	mg/Kg	1	1.00	<0.00206	92	48 - 141
Xylene	2.77	mg/Kg	1	3.00	<0.00259	92	45.3 - 142

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.878	mg/Kg	1	1.00	<0.00333	88	39.6 - 141	3	20
Toluene	0.892	mg/Kg	1	1.00	<0.00372	89	45.4 - 138	4	20

continued ...

matrix spikes continued ...

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Ethylbenzene	0.895	mg/Kg	1	1.00	<0.00206	90	48 - 141	3	20
Xylene	2.68	mg/Kg	1	3.00	<0.00259	89	45.3 - 142	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.11	1.02	mg/Kg	1	1	111	102	51.5 - 138
4-Bromofluorobenzene (4-BFB)	1.04	0.964	mg/Kg	1	1	104	96	52.2 - 139

Matrix Spike (MS-1) Spiked Sample: 125578

QC Batch: 37549
Prep Batch: 32548

Date Analyzed: 2007-05-25
QC Preparation: 2007-05-25

Analyzed By: MT
Prepared By: MT

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	8.80	mg/Kg	1	10.0	<0.459	88	40.7 - 157

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	8.99	mg/Kg	1	10.0	<0.459	90	40.7 - 157	2	19.6

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.02	1.06	mg/Kg	1	1	102	106	34.9 - 155
4-Bromofluorobenzene (4-BFB)	1.13	1.12	mg/Kg	1	1	113	112	58.5 - 153

Matrix Spike (MS-1) Spiked Sample: 125536

QC Batch: 37552
Prep Batch: 32551

Date Analyzed: 2007-05-26
QC Preparation: 2007-05-25

Analyzed By: TG
Prepared By: TG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	313	mg/Kg	1	250	68.7	98	47.5 - 127

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	302	mg/Kg	1	250	68.7	93	47.5 - 127	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	213	225	mg/Kg	1	150	142	150	62.5 - 164

Matrix Spike (MS-1) Spiked Sample: 125555

QC Batch: 37553
Prep Batch: 32551

Date Analyzed: 2007-05-26
QC Preparation: 2007-05-25

Analyzed By: TG
Prepared By: TG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	200	mg/Kg	1	250	<10.7	80	47.5 - 127

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	205	mg/Kg	1	250	<10.7	82	47.5 - 127	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	220	217	mg/Kg	1	150	147	145	62.5 - 164

Matrix Spike (MS-1) Spiked Sample: 125620

QC Batch: 37618
Prep Batch: 32598

Date Analyzed: 2007-05-29
QC Preparation: 2007-05-29

Analyzed By: KB
Prepared By: KB

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.756	mg/Kg	1	1.00	<0.00333	76	39.6 - 141
Toluene	0.777	mg/Kg	1	1.00	<0.00372	78	45.4 - 138
Ethylbenzene	0.796	mg/Kg	1	1.00	<0.00206	80	48 - 141
Xylene	2.40	mg/Kg	1	3.00	<0.00259	80	45.3 - 142

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.774	mg/Kg	1	1.00	<0.00333	77	39.6 - 141	2	20
Toluene	0.798	mg/Kg	1	1.00	<0.00372	80	45.4 - 138	3	20
Ethylbenzene	0.817	mg/Kg	1	1.00	<0.00206	82	48 - 141	3	20
Xylene	2.47	mg/Kg	1	3.00	<0.00259	82	45.3 - 142	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.842	0.875	mg/Kg	1	1	84	88	51.5 - 138
4-Bromofluorobenzene (4-BFB)	0.799	0.846	mg/Kg	1	1	80	85	52.2 - 139

Matrix Spike (MS-1) Spiked Sample: 125591

QC Batch: 37678
Prep Batch: 32609

Date Analyzed: 2007-05-30
QC Preparation: 2007-05-29

Analyzed By: TG
Prepared By: TG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	¹⁴ 502	mg/Kg	1	250	118	201	47.5 - 127

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	¹⁵ 470	mg/Kg	1	250	118	141	47.5 - 127	7	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	221	228	mg/Kg	1	150	147	152	62.5 - 164

Matrix Spike (MS-1) Spiked Sample: 125550

QC Batch: 38249
Prep Batch: 33114

Date Analyzed: 2007-06-15
QC Preparation: 2007-06-15

Analyzed By: ER
Prepared By: ER

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	¹⁶ 325	mg/Kg	5	62.5	152.539	276	75.6 - 117

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	¹⁷ 426	mg/Kg	5	62.5	152.539	438	75.6 - 117	27	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 125576

QC Batch: 38310
Prep Batch: 33169

Date Analyzed: 2007-06-18
QC Preparation: 2007-06-18

Analyzed By: ER
Prepared By: ER

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	¹⁸ 990	mg/Kg	50	625	141.128	136	75.6 - 117

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	915	mg/Kg	50	625	141.128	80	75.6 - 117	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

¹⁴Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

¹⁵Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

¹⁶Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

¹⁷Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

¹⁸Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

Standard (ICV-1)

QC Batch: 37541

Date Analyzed: 2007-05-25

Analyzed By: MT

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0996	100	85 - 115	2007-05-25
Toluene		mg/Kg	0.100	0.0980	98	85 - 115	2007-05-25
Ethylbenzene		mg/Kg	0.100	0.0979	98	85 - 115	2007-05-25
Xylene		mg/Kg	0.300	0.293	98	85 - 115	2007-05-25

Standard (CCV-1)

QC Batch: 37541

Date Analyzed: 2007-05-25

Analyzed By: MT

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0984	98	85 - 115	2007-05-25
Toluene		mg/Kg	0.100	0.0970	97	85 - 115	2007-05-25
Ethylbenzene		mg/Kg	0.100	0.0944	94	85 - 115	2007-05-25
Xylene		mg/Kg	0.300	0.282	94	85 - 115	2007-05-25

Standard (ICV-1)

QC Batch: 37543

Date Analyzed: 2007-05-25

Analyzed By: MT

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.886	89	85 - 115	2007-05-25

Standard (CCV-1)

QC Batch: 37543

Date Analyzed: 2007-05-25

Analyzed By: MT

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.901	90	85 - 115	2007-05-25

Standard (ICV-1)

QC Batch: 37548

Date Analyzed: 2007-05-25

Analyzed By: MT

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0946	95	85 - 115	2007-05-25
Toluene		mg/Kg	0.100	0.0945	94	85 - 115	2007-05-25

continued ...

standard continued ...

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ethylbenzene		mg/Kg	0.100	0.0896	90	85 - 115	2007-05-25
Xylene		mg/Kg	0.300	0.270	90	85 - 115	2007-05-25

Standard (CCV-1)

QC Batch: 37548

Date Analyzed: 2007-05-25

Analyzed By: MT

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0966	97	85 - 115	2007-05-25
Toluene		mg/Kg	0.100	0.0968	97	85 - 115	2007-05-25
Ethylbenzene		mg/Kg	0.100	0.0874	87	85 - 115	2007-05-25
Xylene		mg/Kg	0.300	0.272	91	85 - 115	2007-05-25

Standard (ICV-1)

QC Batch: 37549

Date Analyzed: 2007-05-25

Analyzed By: MT

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.922	92	85 - 115	2007-05-25

Standard (CCV-1)

QC Batch: 37549

Date Analyzed: 2007-05-25

Analyzed By: MT

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.02	102	85 - 115	2007-05-25

Standard (ICV-1)

QC Batch: 37552

Date Analyzed: 2007-05-26

Analyzed By: TG

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	258	103	85 - 115	2007-05-26

Standard (CCV-1)

QC Batch: 37552

Date Analyzed: 2007-05-26

Analyzed By: TG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	239	96	85 - 115	2007-05-26

Standard (CCV-2)

QC Batch: 37552

Date Analyzed: 2007-05-26

Analyzed By: TG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	217	87	85 - 115	2007-05-26

Standard (ICV-1)

QC Batch: 37553

Date Analyzed: 2007-05-26

Analyzed By: TG

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	212	85	85 - 115	2007-05-26

Standard (CCV-1)

QC Batch: 37553

Date Analyzed: 2007-05-26

Analyzed By: TG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	222	89	85 - 115	2007-05-26

Standard (ICV-1)

QC Batch: 37618

Date Analyzed: 2007-05-29

Analyzed By: KB

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0936	94	85 - 115	2007-05-29
Toluene		mg/Kg	0.100	0.0922	92	85 - 115	2007-05-29
Ethylbenzene		mg/Kg	0.100	0.0887	89	85 - 115	2007-05-29
Xylene		mg/Kg	0.300	0.265	88	85 - 115	2007-05-29

Standard (CCV-1)

QC Batch: 37618

Date Analyzed: 2007-05-29

Analyzed By: KB

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0927	93	85 - 115	2007-05-29
Toluene		mg/Kg	0.100	0.0902	90	85 - 115	2007-05-29
Ethylbenzene		mg/Kg	0.100	0.0875	88	85 - 115	2007-05-29
Xylene		mg/Kg	0.300	0.264	88	85 - 115	2007-05-29

Standard (CCV-1)

QC Batch: 37678

Date Analyzed: 2007-05-30

Analyzed By: TG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	274	110	85 - 115	2007-05-30

Standard (CCV-2)

QC Batch: 37678

Date Analyzed: 2007-05-30

Analyzed By: TG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	248	99	85 - 115	2007-05-30

Standard (ICV-1)

QC Batch: 38249

Date Analyzed: 2007-06-15

Analyzed By: ER

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	11.9	95	90 - 110	2007-06-15

Standard (CCV-1)

QC Batch: 38249

Date Analyzed: 2007-06-15

Analyzed By: ER

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	13.5	108	90 - 110	2007-06-15

Standard (ICV-1)

QC Batch: 38310

Date Analyzed: 2007-06-18

Analyzed By: ER

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Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.9	103	90 - 110	2007-06-18

Standard (CCV-1)

QC Batch: 38310

Date Analyzed: 2007-06-18

Analyzed By: ER

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.9	103	90 - 110	2007-06-18

TraceAnalysis, Inc.

email: lab@traceanalysis.com

Company Name: *BBC International* Phone #: *(505) 397-6388*
 Address: *1524 W. Macleod Hobbs NM 88240* Fax #: *(505) 397-0597*
 Contact Person: *Jeff Thompson* E-mail:

Invoice to: *(If different from above)*
 Project #:

Project Name: *# 2 State L Battery*
 Project Location (including state): *Brownsville New Mexico*
 Sampler Signature: *[Signature]*

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX			PRESERVATIVE METHOD						SAMPLING		
				WATER	SOIL	AIR	SLUDGE	HCl	HNO ₃	H ₂ SO ₄	NaOH	ICE	NONE	DATE	TIME
12341	SB401	1	4 oz	✓								✓		5/21	1:00
42	3	1	4 oz	✓								✓		5/21	1:02
43	5	1	4 oz	✓								✓		5/21	1:08
44	20	1	4 oz	✓								✓		5/21	1:34
45	35	1	4 oz	✓								✓		5/21	2:06
46	SB501	1	4 oz	✓								✓		5/21	2:50
47	3	1	4 oz	✓								✓		5/21	2:53
48	5	1	4 oz	✓								✓		5/21	2:55
49	10	1	4 oz	✓								✓		5/21	3:00
50	20	1	4 oz	✓								✓		5/21	3:16

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
<i>[Signature]</i>	<i>5/21/07</i>	<i>11:30 AM</i>			
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:
			<i>[Signature]</i>	<i>5/28/07</i>	<i>11:40 AM</i>

Submittal of samples constitutes agreement to terms and conditions listed on reverse side of C. O. C.

LAB Order ID #

7052525

Page 1 of 2

5002 Basin Street, Suite A1
 Midland, Texas 79703
 Tel (432) 689-5301
 Fax (432) 689-5313
 1 (800) 378-1296

200 East Sunset Rd., Suite E
 El Paso, Texas 79922
 Tel (915) 585-3443
 Fax (915) 585-4944
 1 (888) 585-3443

6015 Harris Pkwy., Suite 110
 Ft. Worth, Texas 76132
 Tel (817) 201-5260

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 80218 / 602 / 3260B / 624	✓	TPH 418.1 / TX1005 / TX1005 EXT(C25)	✓	TPH 8015 GRO / DRO /	✓	PAH 3270C / 525	✓	Total Metals Ag As Ba Cd Cr Pb Se Hg 60108/200.7	✓	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	✓	TCLP Volatiles	✓	TCLP Semi Volatiles	✓	TCLP Pesticides	✓	RCI	✓	GC/MS Vol. 8260B / 624	✓	GC/MS Semi. Vol. 3270C / 625	✓	PCBs 8082 / 608	✓	Pesticides 8081A / 608	✓	BOD, TSS, pH	✓	Moisture Content	✓	Turn Around Time if different from standard	
--------------------------------	---	--------------------------------------	---	----------------------	---	-----------------	---	--	---	-------------------------------------	---	----------------	---	---------------------	---	-----------------	---	-----	---	------------------------	---	------------------------------	---	-----------------	---	------------------------	---	--------------	---	------------------	---	---	--

REMARKS:

LAB USE ONLY

Initial: *[Signature]*
 Headspace: *Y/N*
 Temp: *4°C*
 Log-In Review: *[Signature]*

Carrier # *B-3 / 3040606915*

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

6015 Harris Pkwy., Suite 110
Ft. Worth, Texas 76132
Tel (817) 201-5260

Company Name:

BCA Integration

Address: (Street, City, Zip)

Fax #: (505) 397 0397

Contact Person:

Signature: Chad Dawson

Invoice to:

(If different from above)

Project #:	
------------	--

Project Name:

#2 Tale L Badling

Sampler Signature:

Project Location (including state):

Buckeye New Service

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX				PRESERVATIVE METHOD					SAMPLING		
				WATER	SOIL	AIR	SLUDGE	HCl	HNO ₃	H ₂ SO ₄	NaOH	ICE	NONE	DATE	TIME
12351	SB6@1'	1	4 oz	✓								✓		5/21	3:43
52	3'	1	4 oz	✓								✓		5/21	3:44
53	5'	1	4 oz	✓								✓		5/21	3:46
54	15'	1	4 oz	✓								✓		5/21	4:08
55	25'	1	4 oz	✓								✓		5/21	4:30

ANALYSIS REQUEST
(Circle or Specify Method No.)

	Hold	Turn Around Time if different from standard
MTBE 8021B / 602 / 8260B / 624		
BTEX 8021B / 602 / 8260B / 624		
TPH 418.1 / TX1005 / TX1005 Ext(C35)		
TPH 8015 GRO / DRO /		
PAH 8270C / 625		
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7		
TCLP Metals Ag As Ba Cd Cr Pb Se Hg		
TCLP Volatiles		
TCLP Semi Volatiles		
TCLP Pesticides		
RCI		
GC/MS Vol. 8260B / 624		
GC/MS Semi. Vol. 8270C / 625		
PCBs 8082 / 608		
Pesticides 8081A / 608		
BOD, TSS, pH		
Moisture Content		
C/A Ratio		

LAB USE ONLY

<input type="checkbox"/>	Dry Weight Basis Required
<input type="checkbox"/>	TRRP Report Required
<input type="checkbox"/>	Check If Special Reporting Limits Are Needed

Time:

Received by:

Relinquished by:

Time:

Received by:

Relinquished by:

Time:

Received at Laboratory by:

Relinquished by:

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

ORIGINAL COPY

Carrier # B-5 / 3540 000 596

APPENDIX III

INVENTORY OF WATER WELLS

STATE L-2 TANK BATTERY

August 2007

Chesapeake Operating, Inc.
Hobbs, NM

Prepared by:
BBC International, Inc.

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 17S Range: 36E Sections: 17,18,19,20,30

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) _____ (Last) _____ ☐ Non-Domestic ☐ Domestic
☒ All

POD / Surface Data Report

Avg Depth to Water Report

Water Column Report

[Clear Form](#)

iWATERS Menu

Help

WATER COLUMN REPORT 07/25/2007

```
(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)
```

(quarters are biggest to smallest)										Depth	Depth	Water
POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y	Well	Water	Column
L 04602	17S	36E	17	3	4	2				115	45	7
L 04602 APPRO	17S	36E	17	4	3	2				115	45	7
L 04171 APPRO	17S	36E	18	1	4					128	128	
L 04171	17S	36E	18	1	4					128	128	
L 05407	17S	36E	19	1	4					108	49	5
L 10681	17S	36E	19	4	1					120	40	8
L 05361	17S	36E	20							123	90	3
L 09342	17S	36E	20							138	60	7
L 04599 APPRO	17S	36E	20	1	2					128	38	9
L 04599	17S	36E	20	1	2					128	38	9
L 05181	17S	36E	20	1	4					125	75	5
L 04549 APPRO	17S	36E	20	2	1					121	48	7
L 04549	17S	36E	20	2	1					121	48	7
L 07862	17S	36E	20	3	4					110	58	5
L 04601	17S	36E	30							125	50	7
L 07792	17S	36E	30	4						225		

Record Count: 16

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 17S Range: 35E Sections: 13,24,25

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) _____ (Last) _____ ☐ Non-Domestic ☐ Domestic
☒ All

POD / Surface Data Report

Avg Depth to Water Report

Water Column Report

Clear Form

iWATERS Menu

Help

WATER COLUMN REPORT 07/25/2007

```
(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)
```

(quarters are biggest to smallest)										Depth	Depth	Water
POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y	Well	Water	Column
L 04503 APPRO	17S	35E	24	2						90	43	4
L 04503	17S	35E	24	2						90	43	4
L 04875	17S	35E	25	2	1	1				130	71	5
L 08124	17S	35E	25	4	4	4				125	58	6

Record Count: 4

APPENDIX IV

DRILLING LOGS

STATE L-2 TANK BATTERY

August 2007

**Chesapeake Operating, Inc.
Hobbs, NM**

**Prepared by:
BBC International, Inc.**

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

1. OWNER OF WELL

Name: Chesapeake Operating Work Phone: _____
Contact: _____ Home Phone: _____
Address: P.O. Box 190
City: Hobbs State: NM Zip: 88241

2. LOCATION OF WELL (A, B, C, or D required, E or F if known)

A. 1/4 1/4 1/4 Section: 19 Township: 17S Range: 36E N.M.P.M.
in Lea County.

B. X = _____ feet, Y = _____ feet, N.M. Coordinate System
_____ Zone in the _____ Grant.
U.S.G.S. Quad Map _____

C. Latitude: 32 d 49 m 31.5 s Longitude: 103 d 23 m 45.0 s

D. East _____ (m), North _____ (m), UTM Zone 13, NAD _____ (27 or 83)

E. Tract No. _____, Map No. _____ of the _____ Hydrographic Survey

F. Lot No. _____, Block No. _____ of Unit/Tract _____ of the
_____ Subdivision recorded in _____ County.

G. Other: #2 State L Tank Battery

H. Give State Engineer File Number if existing well: _____

I. On land owned by (required): Darr Angell, P.O. Box 190, Lovington, NM 88260

3. DRILLING CONTRACTOR

License Number: WD-1456
Name: White Drilling Company, Inc. Work Phone: 325-893-2950
Agent: John W. White Home Phone: 325-893-2950
Mailing Address: P.O. Box 906
City: Clyde State: TX Zip: 79510

4. DRILLING RECORD SB-1

Drilling began: 5/01/07; Completed: 5/01/07; Type tools: Air Rotary;
Size of hole: 6 1/8 in.; Total depth of well: 50.0 ft.;
Completed well is: Shallow (shallow, artesian);
Depth to water upon completion of well: 40.80 ft.

File Number: _____ Trn Number: _____

Form: wr-20 page 1 of 4

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA: SB-1

Depth in Feet		Thickness	Description of water-bearing formation	Estimated Yield (GPM)
From	To	in feet		
40.0	50.0	10.0	Light brown sand & sandstone.	
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
2.0	Sch. 40	4.0	0.0	35.0	35.0			
2.0	.020	4.0	35.0	50.0	15.0		35.0	50.0
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole	Sacks	Cubic Feet	Method of Placement
From	To	Diameter	of mud	of Cement	
50.0	10.0	6 1/8	12.0		Bentonite Pellets
10.0	0.0	6 1/8	5.0	19.97	cement
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

8. PLUGGING RECORD

Plugging Contractor: _____
Address: _____
Plugging Method: _____
Date Well Plugged: _____

Plugging approved by: _____
State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1	_____	_____	_____
2	_____	_____	_____
3	_____	_____	_____
4	_____	_____	_____
5	_____	_____	_____

File Number: _____

Form: wr-20

page 2 of 4

Trn Number: _____

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

9. LOG OF HOLE: SB-1

[illegible]

File Number: Trn Number:

Form: wr-20

page 3 of 4

File Number: _____


NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

10. ADDITIONAL STATEMENTS OR EXPLANATIONS: SB-1

Chlorides present in soil.

Temporary well set to measure groundwater for 24 hours, pull and plugged.

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.



Drizler

7/10/07

(mm/dd/year)

=====

FOR STATE ENGINEER USE ONLY

Quad _____; FWL _____; FSL _____; Use _____; Location No. _____

File Number: _____

Form: wr-20

page 4 of 4

Trn Number: _____

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

1. OWNER OF WELL

Name: Chesapeake Operating Work Phone: _____
Contact: _____ Home Phone: _____
Address: P.O. Box 190
City: Hobbs State: NM Zip: 88241

2. LOCATION OF WELL (A,B,C, or D required, E or F if known)

A. 1/4 1/4 1/4 Section: 19 Township: 17S Range: 36E N.M.P.M.
in Lea County.

B. X = _____ feet, Y = _____ feet, N.M. Coordinate System
Zone in the _____ Grant.
U.S.G.S. Quad Map _____

C. Latitude: 32 d 49 m 33.1 s Longitude: 103 d 23 m 43.3 s

D. East _____ (m), North _____ (m), UTM Zone 13, NAD _____ (27 or 83)

E. Tract No. _____, Map No. _____ of the _____ Hydrographic Survey

F. Lot No. _____, Block No. _____ of Unit/Tract _____ of the
_____ Subdivision recorded in _____ County.

G. Other: #2 State L Tank Battery

H. Give State Engineer File Number if existing well: _____

I. On land owned by (required): Darr Angell, P.O. Box 190, Lovington, NM 88260

3. DRILLING CONTRACTOR

License Number: WD-1456
Name: White Drilling Company, Inc. Work Phone: 325-893-2950
Agent: John W. White Home Phone: 325-893-2950
Mailing Address: P.O. Box 906
City: Clyde State: TX Zip: 79510

4. DRILLING RECORD SB-2

Drilling began: 5/03/07; Completed: 5/03/07; Type tools: Air Rotary;
Size of hole: 6 1/8 in.; Total depth of well: 38.0 ft.;
Completed well is: Shallow (shallow, artesian);
Depth to water upon completion of well: Dry ft.

File Number: _____ Trn Number: _____

Form: wr-20 page 1 of 4

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA: SB-2

Depth in Feet		Thickness	Description of	Estimated Yield
From	To	in feet	water-bearing formation	(GPM)
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole	Sacks	Cubic Feet	Method of Placement
From	To	Diameter	of mud	of Cement	
38.0	10.0	6 1/8	8.0		Bentonite Pellets
10.0	0.0	6 1/8	5.0	19.97	cement
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

8. PLUGGING RECORD

Plugging Contractor: _____
Address: _____
Plugging Method: _____
Date Well Plugged: _____

Plugging approved by: _____
State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1	_____	_____	_____
2	_____	_____	_____
3	_____	_____	_____
4	_____	_____	_____
5	_____	_____	_____

File Number: _____

Form: wr-20

page 2 of 4

Trn Number: _____

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

9. LOG OF HOLE: SB-2

[illegible]

File Number:

Form: wr-20

page 3 of 4

Trn Number:

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

1. OWNER OF WELL

Name: Chesapeake Operating Work Phone: _____
Contact: _____ Home Phone: _____
Address: P.O. Box 190
City: Hobbs State: NM Zip: 88241

2. LOCATION OF WELL (A, B, C, or D required, E or F if known)

A. 1/4 1/4 1/4 Section: 19 Township: 17S Range: 36E N.M.P.M.
in Lea County.

B. X = _____ feet, Y = _____ feet, N.M. Coordinate System
Zone in the _____ Grant.
U.S.G.S. Quad Map _____

C. Latitude: 32 d 49 m 32.9 s Longitude: 103 d 23 m 42.9 s

D. East _____ (m), North _____ (m), UTM Zone 13, NAD _____ (27 or 83)

E. Tract No. _____, Map No. _____ of the _____ Hydrographic Survey

F. Lot No. _____, Block No. _____ of Unit/Tract _____ of the
_____ Subdivision recorded in _____ County.

G. Other: #2 State L Tank Battery

H. Give State Engineer File Number if existing well: _____

I. On land owned by (required): Darr Angell, P.O. Box 190, Lovington, NM 88260

3. DRILLING CONTRACTOR

License Number: WD-1456
Name: White Drilling Company, Inc. Work Phone: 325-893-2950
Agent: John W. White Home Phone: 325-893-2950
Mailing Address: P.O. Box 906
City: Clyde State: TX Zip: 79510

4. DRILLING RECORD SB-3

Drilling began: 5/03/07; Completed: 5/03/07; Type tools: Air Rotary;
Size of hole: 6 1/8 in.; Total depth of well: 35.0 ft.;
Completed well is: Shallow (shallow, artesian);
Depth to water upon completion of well: Dry ft.

File Number: _____ Trn Number: _____

Form: wr-20 page 1 of 4

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA: SB-3

Depth in Feet		Thickness	Description of	Estimated Yield
From	To	in feet	water-bearing formation	(GPM)
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole	Sacks	Cubic Feet	Method of Placement
From	To	Diameter	of mud	of Cement	
35.0	10.0	6 1/8	7.0		Bentonite Pellets
10.0	0.0	6 1/8	4.5	19.97	cement
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

8. PLUGGING RECORD

Plugging Contractor: _____
Address: _____
Plugging Method: _____
Date Well Plugged: _____

Plugging approved by: _____
State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1	_____	_____	_____
2	_____	_____	_____
3	_____	_____	_____
4	_____	_____	_____
5	_____	_____	_____

File Number: _____

Form: wr-20

page 2 of 4

Trn Number: _____

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

9. LOG OF HOLE: SB-3

[illegible]

File Number:

Form: wr-20

page 3 of 4

Trn Number:

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

1. OWNER OF WELL

Name: Chesapeake Operating Work Phone: _____
Contact: _____ Home Phone: _____
Address: P.O. Box 190
City: Hobbs State: NM Zip: 88241

2. LOCATION OF WELL (A,B,C, or D required, E or F if known)

A. 1/4 1/4 1/4 Section: 19 Township: 17S Range: 36E N.M.P.M.
in Lea County.

B. X = _____ feet, Y = _____ feet, N.M. Coordinate System
_____ Zone in the _____ Grant.
U.S.G.S. Quad Map _____

C. Latitude: 32 d 49 m 32.0 s Longitude: 103 d 23 m 43.7 s

D. East _____ (m), North _____ (m), UTM Zone 13, NAD _____ (27 or 83)

E. Tract No. _____, Map No. _____ of the _____ Hydrographic Survey

F. Lot No. _____, Block No. _____ of Unit/Tract _____ of the
_____ Subdivision recorded in _____ County.

G. Other: #2 State L Tank Battery

H. Give State Engineer File Number if existing well: _____

I. On land owned by (required): Darr Angell, P.O. Box 190, Lovington, NM 88260

3. DRILLING CONTRACTOR

License Number: WD-1456
Name: White Drilling Company, Inc. Work Phone: 325-893-2950
Agent: John W. White Home Phone: 325-893-2950
Mailing Address: P.O. Box 906
City: Clyde State: TX Zip: 79510

4. DRILLING RECORD SB-4

Drilling began: 5/21/07; Completed: 5/21/07; Type tools: Air Rotary;
Size of hole: 6 1/8 in.; Total depth of well: 35.0 ft.;
Completed well is: Shallow (shallow, artesian);
Depth to water upon completion of well: Dry ft.

File Number: _____

Trn Number: _____

Form: wr-20

page 1 of 4

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA: SB-4

Depth in Feet		Thickness	Description of	Estimated Yield
From	To	in feet	water-bearing formation	(GPM)
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

6. RECORD OF CASING

Diameter	Pounds	Threads	Depth in Feet		Length	Type of Shoe	Perforations	
(inches)	per ft.	per in.	Top	Bottom	(feet)		From	To
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole	Sacks	Cubic Feet	Method of Placement
From	To	Diameter	of mud	of Cement	
35.0	10.0	6 1/8	8.0		Bentonite Pellets
10.0	0.0	6 1/8	4.0	19.97	cement
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

8. PLUGGING RECORD

Plugging Contractor: _____
Address: _____
Plugging Method: _____
Date Well Plugged: _____

Plugging approved by: _____
State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1	_____	_____	_____
2	_____	_____	_____
3	_____	_____	_____
4	_____	_____	_____
5	_____	_____	_____

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NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

9. LOG OF HOLE: SB-4

[illegible]

File Number: Trn Number:

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File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

1. OWNER OF WELL

Name: Chesapeake Operating Work Phone: _____
Contact: _____ Home Phone: _____
Address: P.O. Box 190
City: Hobbs State: NM Zip: 88241

2. LOCATION OF WELL (A, B, C, or D required, E or F if known)

A. 1/4 1/4 1/4 Section: 19 Township: 17S Range: 36E N.M.P.M.
in Lea County.

B. X = _____ feet, Y = _____ feet, N.M. Coordinate System
Zone in the _____ Grant.
U.S.G.S. Quad Map _____

C. Latitude: 32 d 49 m 32.8 s Longitude: 103 d 23 m 45.0 s

D. East _____ (m), North _____ (m), UTM Zone 13, NAD _____ (27 or 83)

E. Tract No. _____, Map No. _____ of the _____ Hydrographic Survey

F. Lot No. _____, Block No. _____ of Unit/Tract _____ of the
_____ Subdivision recorded in _____ County.

G. Other: #2 State L Tank Battery

H. Give State Engineer File Number if existing well: _____

I. On land owned by (required): Darr Angell, P.O. Box 190, Lovington, NM 88260

3. DRILLING CONTRACTOR

License Number: WD-1456
Name: White Drilling Company, Inc. Work Phone: 325-893-2950
Agent: John W. White Home Phone: 325-893-2950
Mailing Address: P.O. Box 906
City: Clyde State: TX Zip: 79510

4. DRILLING RECORD SB-5

Drilling began: 5/21/07; Completed: 5/21/07; Type tools: Air Rotary;
Size of hole: 6 1/8 in.; Total depth of well: 20.0 ft.;
Completed well is: Shallow (shallow, artesian);
Depth to water upon completion of well: Dry ft.

File Number: _____ Trn Number: _____

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File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA: SB-5

Depth in Feet		Thickness	Description of	Estimated Yield
From	To	in feet	water-bearing formation	(GPM)
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole	Sacks	Cubic Feet	Method of Placement
From	To	Diameter	of mud	of Cement	
20.0	10.0	6 1/8	4.0		Bentonite Pellets
10.0	0.0	6 1/8	4.0	19.97	cement
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

8. PLUGGING RECORD

Plugging Contractor: _____
Address: _____
Plugging Method: _____
Date Well Plugged: _____

Plugging approved by: _____
State Engineer Representative

No.	Depth in Feet	Cubic Feet of Cement
	Top Bottom	
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
5	_____	_____

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NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

1. OWNER OF WELL

Name: Chesapeake Operating Work Phone: _____
Contact: _____ Home Phone: _____
Address: P.O. Box 190
City: Hobbs State: NM Zip: 88241

2. LOCATION OF WELL (A, B, C, or D required, E or F if known)

A. 1/4 1/4 1/4 Section: 19 Township: 17S Range: 36E N.M.P.M.
in Lea County.

B. X = _____ feet, Y = _____ feet, N.M. Coordinate System
Zone in the _____ Grant.
U.S.G.S. Quad Map _____

C. Latitude: 32 d 49 m 35.0 s Longitude: 103 d 23 m 38.4 s

D. East _____ (m), North _____ (m), UTM Zone 13, NAD _____ (27 or 83)

E. Tract No. _____, Map No. _____ of the _____ Hydrographic Survey

F. Lot No. _____, Block No. _____ of Unit/Tract _____ of the
_____ Subdivision recorded in _____ County.

G. Other: #2 State L Tank Battery

H. Give State Engineer File Number if existing well: _____

I. On land owned by (required): Darr Angell, P.O. Box 190, Lovington, NM 88260

3. DRILLING CONTRACTOR

License Number: WD-1456
Name: White Drilling Company, Inc. Work Phone: 325-893-2950
Agent: John W. White Home Phone: 325-893-2950
Mailing Address: P.O. Box 906
City: Clyde State: TX Zip: 79510

4. DRILLING RECORD SB-6

Drilling began: 5/21/07; Completed: 5/21/07; Type tools: Air Rotary;
Size of hole: 6 1/8 in.; Total depth of well: 25.0 ft.;
Completed well is: Shallow (shallow, artesian);
Depth to water upon completion of well: Dry ft.

File Number: _____
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Trn Number: _____

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA: SB-6

Depth in Feet		Thickness	Description of	Estimated Yield
From	To	in feet	water-bearing formation	(GPM)
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole	Sacks	Cubic Feet	Method of Placement
From	To	Diameter	of mud	of Cement	
25.0	10.0	6 1/8	5.0		Bentonite Pellets
10.0	0.0	6 1/8	4.0	19.97	cement
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

8. PLUGGING RECORD

Plugging Contractor: _____
Address: _____
Plugging Method: _____
Date Well Plugged: _____

Plugging approved by: _____
State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1	_____	_____	_____
2	_____	_____	_____
3	_____	_____	_____
4	_____	_____	_____
5	_____	_____	_____

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TABLES

TABLE 1
SUMMARY SOIL ANALYTICAL DATA
TABLE 2
SUMMARY GROUND WATER ANALYTICAL DATA

STATE L-2 TANK BATTERY

August 2007

Chesapeake Operating, Inc.
Hobbs, NM

Prepared by:
BBC International, Inc.

**Table 1. Soil Laboratory Analytical Results Summary
State L-2 Tank Battery**

		Sample	SB1 @ 1'	SB1 @ 3'	SB1 @ 5'	SB1 @ 30'	SB1 @ 50'
Analyte	Method	Date					
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene	S 8021B	05/01/07	<0.0100	<0.100	0.256	<0.100	<0.0100
Toluene	S 8021B	05/01/07	<0.0100	<0.100	<0.200	<0.100	<0.0100
Ethylbenzene	S 8021B	05/01/07	0.0346	0.560	5.35	1.38	<0.0100
Total Xylenes	S 8021B	05/01/07	0.0463	1.16	6.50	2.94	<0.0100
Chloride	EPA 300.0	05/01/07	198	987	380	10.0	138
GRO	S 8015B	05/01/07	3.27	183	392	273	2.37
DRO	Mod. 8015B	05/01/07	<50.0	840	614	3150	<50.0

		Sample	SB2 @ 1'	SB2 @ 3'	SB2 @ 5'	SB2 @ 20'	SB2 @ 39'
Analyte	Method	Date					
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene	S 8021B	05/03/07	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Toluene	S 8021B	05/03/07	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Ethylbenzene	S 8021B	05/03/07	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Total Xylenes	S 8021B	05/03/07	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Chloride	EPA 300.0	05/03/07	729	454	565	243	254
GRO	S 8015B	05/03/07	<1.00	<1.00	<1.00	<1.00	<1.00
DRO	Mod. 8015B	05/03/07	<50.0	<50.0	<50.0	<50.0	<50.0

		Sample	SB3 @ 1'	SB3 @ 3'	SB3 @ 5'	SB3 @ 20'	SB3 @ 35'
Analyte	Method	Date					
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene	S 8021B	05/03/07	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Toluene	S 8021B	05/03/07	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Ethylbenzene	S 8021B	05/03/07	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Total Xylenes	S 8021B	05/03/07	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Chloride	EPA 300.0	05/03/07	194	337	1600	477	117
GRO	S 8015B	05/03/07	<1.00	<1.00	<1.00	<1.00	<1.00
DRO	Mod. 8015B	05/03/07	<50.0	<50.0	<50.0	<50.0	<50.0

		Sample	SB4 @ 1'	SB4 @ 3'	SB4 @ 5'	SB4 @ 20'	SB4 @ 35'
Analyte	Method	Date					
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene	S 8021B	05/21/07	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Toluene	S 8021B	05/21/07	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Ethylbenzene	S 8021B	05/21/07	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Total Xylenes	S 8021B	05/21/07	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Chloride	EPA 300.0	05/21/07	5040	1830	3970	386	342
GRO	S 8015B	05/21/07	<1.00	<1.00	<1.00	<1.00	<1.00
DRO	Mod. 8015B	05/21/07	<50.0	<50.0	<50.0	<50.0	<50.0

**Table 1. Soil Laboratory Analytical Results Summary
State L-2 Tank Battery**

		Sample	SB5 @ 1'	SB5 @ 3'	SB5 @ 5'	SB5 @ 10'	SB5 @ 20'
Analyte	Method	Date					
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene	S 8021B	05/21/07	4.70	1.03	<0.0100	<0.0100	<0.0100
Toluene	S 8021B	05/21/07	21.3	4.58	0.0124	<0.0100	<0.0100
Ethylbenzene	S 8021B	05/21/07	13.3	4.65	0.0214	0.0250	<0.0100
Total Xylenes	S 8021B	05/21/07	42.9	13.4	0.148	0.118	<0.0100
Chloride	EPA 300.0	05/21/07	2320	1920	2180	833	152
GRO	S 8015B	05/21/07	1700	868	17.0	17.7	3.12
DRO	Mod. 8015B	05/21/07	9530	1150	<50.0	66.1	<50.0

		Sample	SB6 @ 1'	SB6 @ 3'	SB6 @ 5'	SB6 @ 15'	SB6 @ 25'
Analyte	Method	Date					
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene	S 8021B	05/21/07	<0.200	<0.200	<0.0100	<0.0100	<0.0100
Toluene	S 8021B	05/21/07	<0.200	0.761	<0.0100	<0.0100	<0.0100
Ethylbenzene	S 8021B	05/21/07	1.70	1.43	<0.0100	<0.0100	<0.0100
Total Xylenes	S 8021B	05/21/07	3.29	3.37	0.0345	<0.0100	<0.0100
Chloride	EPA 300.0	05/21/07	1680	1230	317	1270	125
GRO	S 8015B	05/21/07	216	224	6.92	<1.00	<1.00
DRO	Mod. 8015B	05/21/07	241	116	<50.0	<50.0	<50.0

**Table 2. Groundwater Laboratory Analytical Results Summary
State L-2 Tank Battery**

		Sample	Temporary MW (SB1)
Analyte	Method	Date	
			mg/L
Benzene	S 8021B	05/03/07	0.126
Toluene	S 8021B	05/03/07	0.00930
Ethylbenzene	S 8021B	05/03/07	0.0575
Total Xylenes	S 8021B	05/03/07	0.0891
Chloride	EPA 300.0	05/03/07	601
GRO	S 8015B	05/03/07	0.968
DRO	Mod. 8015B	05/03/07	<5.00