



TETRA TECH

HOBBS OCD

SEP 20 2012

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January 27, 2012

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SEP 20 2012

RECEIVED

Mr. Geoffrey R. Leking
Environmental Engineer Specialist
Oil Conservation Division, District 1
1625 N. French Drive
Hobbs, NM 88240

Re: Work Plan for the OXY, USA, Inc., State AD Tank Battery Located in Section 22, Township 10 South, Range 32 East, Lea County, New Mexico.

Mr. Leking:

Tetra Tech, Inc. (Tetra Tech) was contacted by OXY, USA (OXY) to inspect and assess the State AD Tank Battery located in Section 22, Township 10 South, Range 32 East, Lea County, New Mexico. During the inspection there were spill areas associated with lightening strikes in 2009 along with historic asphaltic spill areas. The site location is shown on Figures 1 and 2. The tank battery is shown on Figure 3.

Groundwater

Neither the New Mexico State Engineers Well Reports nor the USGS reports showed any wells located within Section 22, which contains the site. During the drilling at the site in September 2011, groundwater was encountered and measured in an open bore hole at a depth of 53 feet below ground surface (bgs).

A risk-based evaluation was performed for the Site in accordance with the NMOCD Guidelines for Remediation of Leaks, Spills and Releases, dated August 13, 1993. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene and xylene). Based on the regional groundwater data, the proposed RRAL

Tetra Tech

1910 North Big Spring, Midland, TX 79705

Tel 432.682.4559

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*Reviewed w/ comments summarized
Geoffrey Leking
Env. Specialist, NMOCD-HOBBS
10/22/12*



for TPH is 1,000 mg/kg. See Appendix A for State Engineer Reports – Groundwater.

Soil Assessment and Analytical Results

On August 24, 2010, Tetra Tech personnel inspected and sampled the spill areas. A total of nineteen (19) trenches (T-1 through T-19) were excavated utilizing a backhoe to assess the impacted soils. Select samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8260B and chloride by EPA method SW846-9056. The results of the sampling are summarized in Table 1. The trench locations are shown on Figure 4.

Referring to Table 1, all of the submitted samples were below the RRAL for BTEX. TPH results exceeded the RRAL of 1,000 mg/L but were defined at a depth of 1 foot bgs for samples in T-1, T-3 through T-6, T-10, T-12 and T-19 and 1.5 feet bgs for samples T-7, T-8, and T-18. The RRAL for TPH was not defined in trenches T-9 and T-15 which were sampled to a depth of 2 feet bgs. Elevated chlorides concentrations were detected and not defined in all trenches with the exception of T-11, T-16 and T-19. Deeper samples could not be collected with a backhoe due to the dense underlying limestone formation.

In order to complete delineation at the site, Tetra Tech personnel were onsite September 19 through 21, 2011 to oversee the installation of soil boreholes utilizing an air-rotary drilling rig to define the extent of the TPH and chloride impacts. A total of twelve (12) boreholes (BH-1 through BH-12) were drilled with soil samples collected to maximum depths ranging from 5 to 50 feet bgs. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix B. The results of the sampling are summarized in Table 1. The borehole locations are shown on Figure 4. See Appendix C for boring logs.

Referring to Table 1, all of the submitted borehole samples were below the RRAL for TPH with the exception of BH-2 at 1 foot bgs, and BH-1 and BH-8 at 5 feet bgs. Furthermore, chloride concentrations were defined to less than 250 milligrams per kilograms (mg/kg) in all boreholes to a maximum depth of 30 feet bgs.



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Work Plan

Based on the assessment, OXY proposes to excavate the site as defined by depths highlighted in green on Table 1. These depths should be sufficient to remove all TPH concentrations above the representative RRALs. In addition, OXY proposes placement of 40 mil liners to depths of 4 feet bgs in those areas highlighted in orange on Figure 5. The liners will impede further vertical migration of the remainder of the chlorides remaining in the soils at the site. Tetra Tech personnel will oversee the excavation as defined in this work plan.

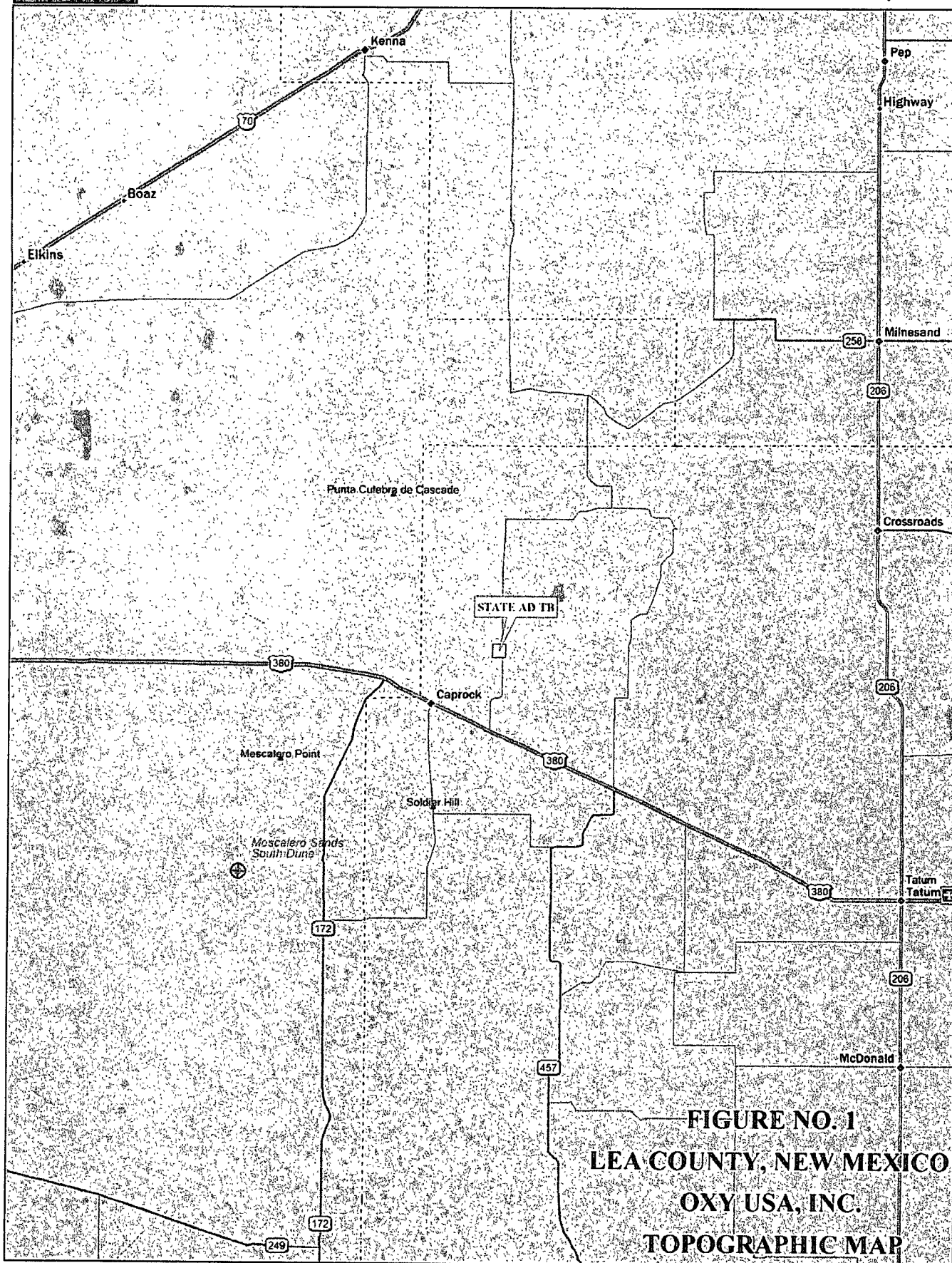
All excavated material will be transported offsite for proper disposal at an approved landfill. Once excavation is complete and the liners installed, the site will be backfilled to surface grade with clean material and reseeded. Upon completion of the field work, a closure report will be submitted to the NMOCD.

If you have any questions or require any additional information regarding this work plan proposal, please call me at (432) 682-4559.

Respectfully submitted,
TETRA TECH

Jeffrey Kindley, P.G.
Senior Project Manger

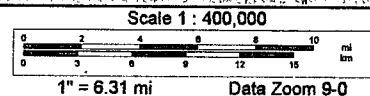
cc: Rick Passmore – GSHI
Dusty Wilson – OXY, USA

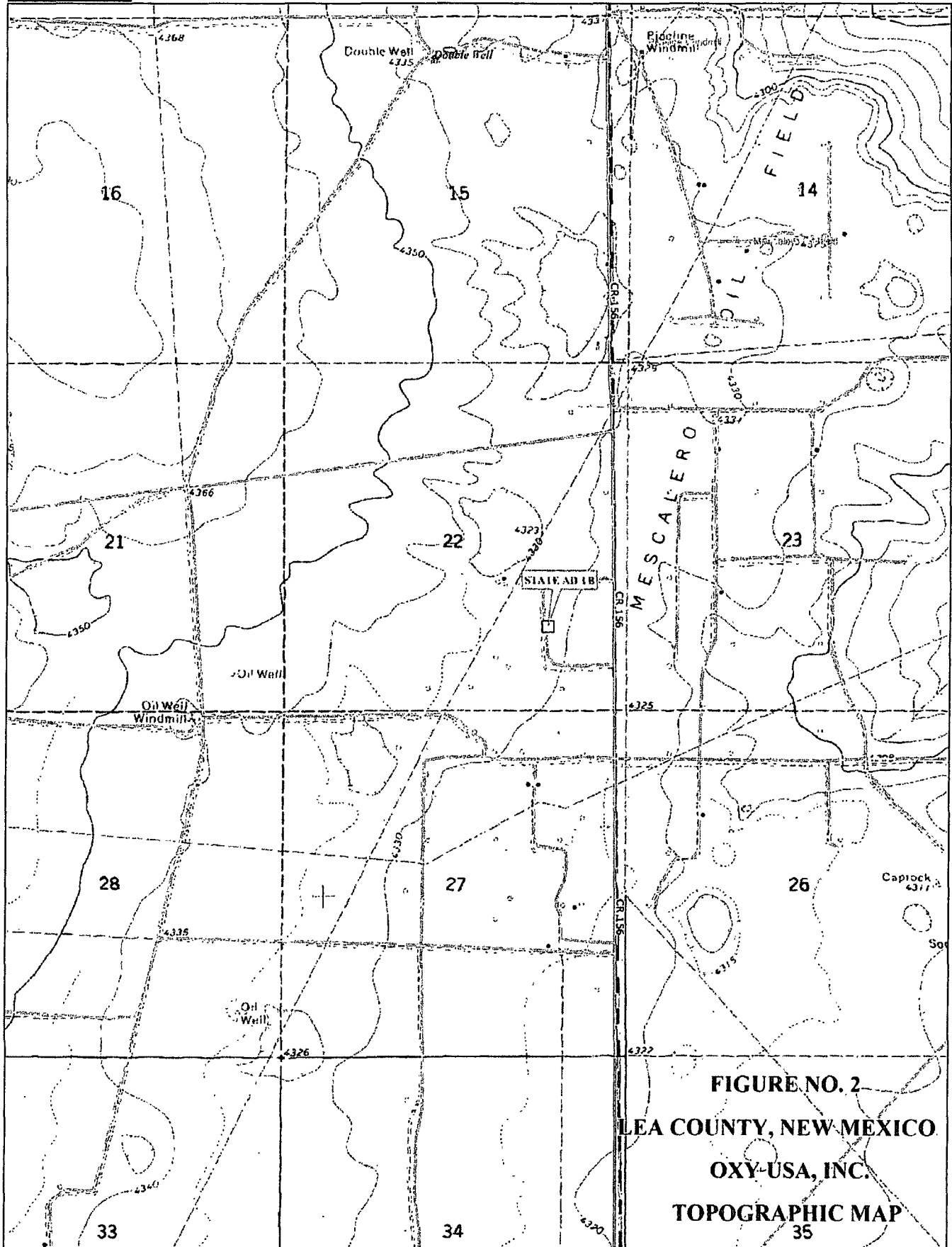


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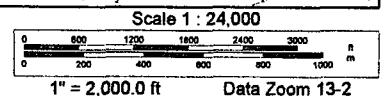


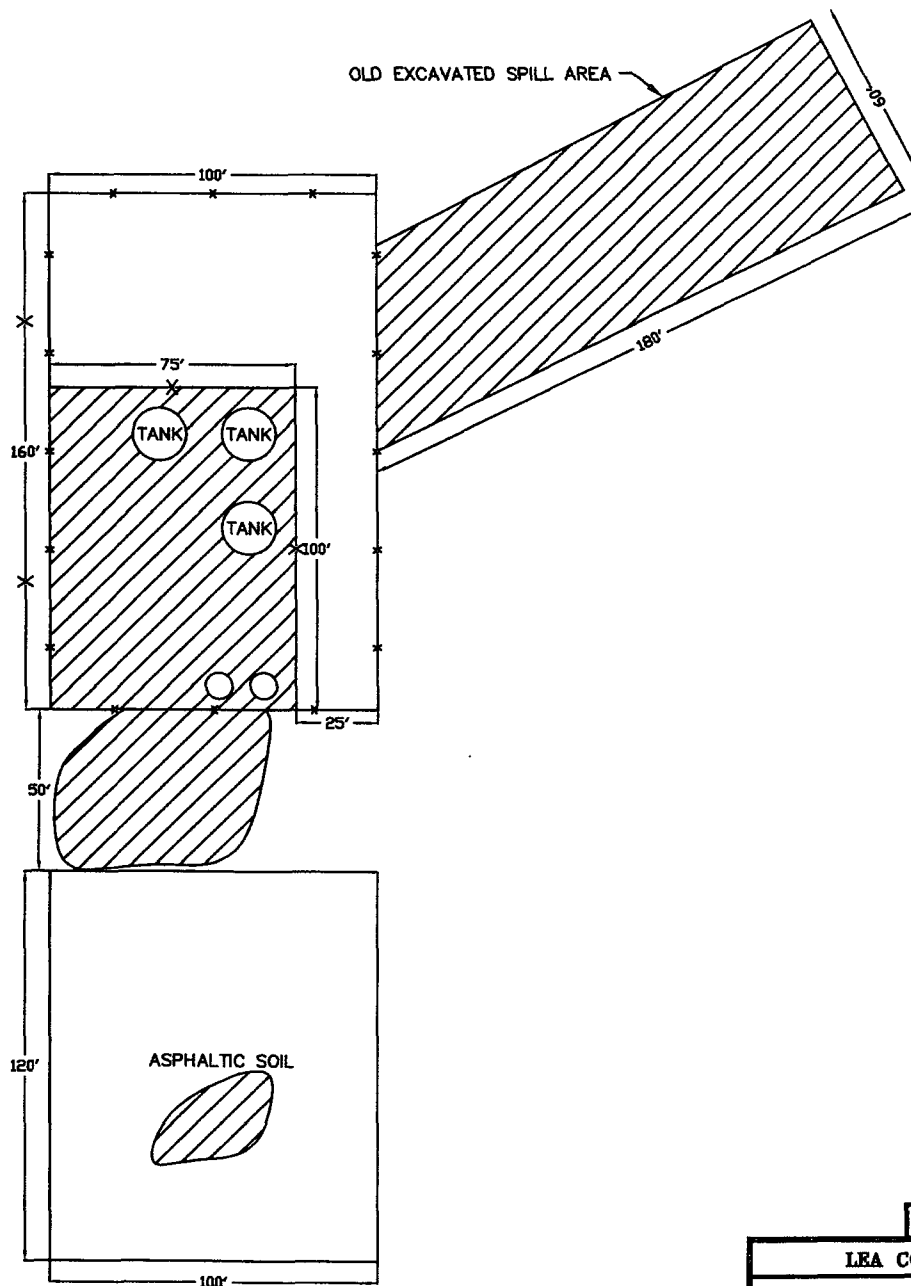


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SPILL AREA

NOT TO SCALE

DATE:
12/7/2011
DWN. BY:
IM
FILE:
H:\GLENDA\8400291
STATE AD TB

FIGURE NO. 3

LEA COUNTY, NEW MEXICO

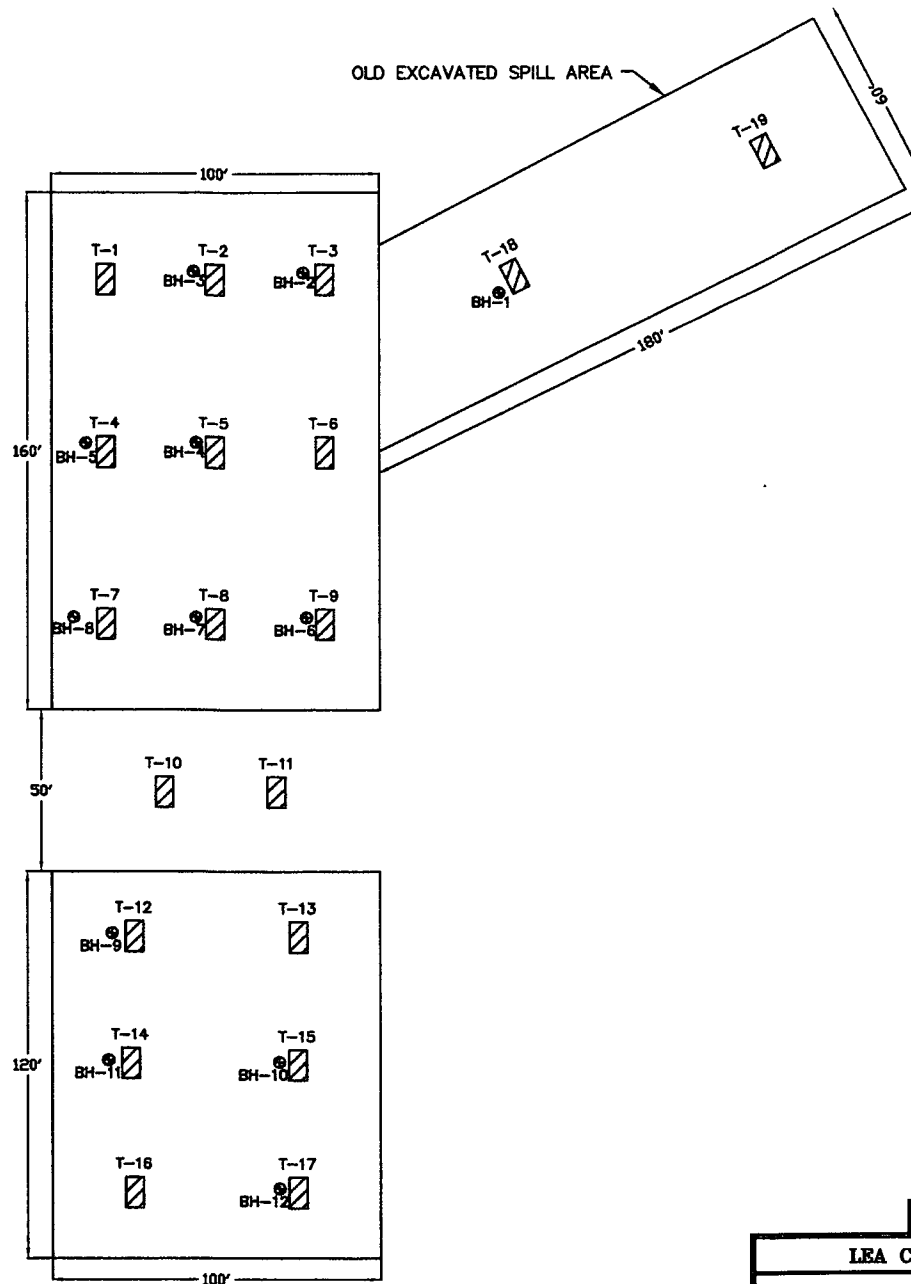
OXY USA

STATE AD TB
SITE IMPACT

TETRA TECH, INC.
MIDLAND, TEXAS

- SOIL BORE SAMPLE LOCATIONS
- ▨ SAMPLE TRENCHES

LEASE RD.



NOT TO SCALE

DATE:
12/7/2011
DWN. BY:
IM
FILE:
M:\GOLDEN\0400291
STATE AD TB

FIGURE NO. 4

LEA COUNTY, NEW MEXICO

OXY USA

STATE AD TB
TRENCH/BOREHOLE LOCATIONS

TETRA TECH, INC.
MIDLAND, TEXAS

TABLE

Table 1
OXY USA Inc.
State AD Tank Battery
LEA COUNTY, NEW MEXICO

[illegible]

Table 1
OXY USA Inc.
State AD Tank Battery
LEA COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth (ft)	Depth (BEB)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total					
T-5	08/24/10	0-1'		X		71.6	3,710.0	3,781.6					17,400
	"	1-1.5'		X		17.1	1,510.0	1,681.0					5,490
BH-4	09/20/11	0-1'		X		66.5	280	346.5					340
	"	3'		X		39.7	110	149.7					<200
	"	5'		X		<50.0	3.99	<50.0					84.1
	"	7'		X		-	-	-	-	-	-	-	576
	"	10'		X		-	-	-	-	-	-	-	<200
	"	15'		X		-	-	-	-	-	-	-	313
	"	20'		X		-	-	-	-	-	-	-	<200
T-6	08/24/10	0-1'		X		1.77	2,550	2,551.77					2,360
	"	1-1.5'		X		4.08	327	331.08					574
T-7	08/24/10	0-1'		X		498	10,500	10,998	ND	ND	0.174	0.206	2,860
	"	1-1.5'		X		1,050	8,260	9,310				0.193	3,060
BH-8	09/20/11	0-1'		X		11.3	444	455.3					1,970
	"	3'		X		68.0	701	769					2,970
	"	5'		X		102	946	1,048					3,050
	"	7'		X		<50.0	<2.00	<50.0	-	-	-	-	2,530
	"	10'		X		-	-	-	-	-	-	-	2,490
	"	15'		X		-	-	-	-	-	-	-	757
	"	20'		X		-	-	-	-	-	-	-	388
	"	25'		X		-	-	-	-	-	-	-	<200
T-8	08/24/10	0-1'		X		1.73	1,990	1,991.73	ND	ND	ND	ND	6,370
	"	1-1.5'		X		155	2,380	2,535	ND	ND	ND	ND	1,120
BH-7	09/20/11	0-1'		X		<50.0	<2.00	<50.0					2,150
	"	3'		X		<50.0	<2.00	<50.0					851
	"	5'		X		<50.0	<2.00	<50.0					1,150
	"	7'		X		-	-	-	-	-	-	-	582
	"	10'		X		-	-	-	-	-	-	-	<200
	"	15'		X		-	-	-	-	-	-	-	428
	"	20'		X		-	-	-	-	-	-	-	380
	"	25'		X		-	-	-	-	-	-	-	215

Table 1
OXY USA Inc.
State AD Tank Battery
LEA COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth (ft)	Depth (BEB)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total					
T-9	08/24/10	0-1'		X		2.17	1,200	1,202.17					1,850
	"	2'		X		23.80	1,240	1,263.80					2,490
BH-6	09/20/11	0-1'		X		11.3	139	150.3					1,550
	"	3'		X		3.54	96.8	100.34					1,830
	"	5'		X		<50.0	<2.00	<50.0					641
	"	7'		X		-	-	-	-	-	-	-	250
	"	10'		X		-	-	-	-	-	-	-	<200
	"	15'		X		-	-	-	-	-	-	-	<200
T-10	08/24/10	0-1'		X		4.7	2,380.0	2,384.7					462
	"	1-1.5'		X		4.16	149	153.16					339
T-11	08/24/10	0-1'		X		6.73	892	898.73					232
	"	1-1.5'		X		ND	203	203					97.2
T-12	08/24/10	0-1'		X		24.30	1,980	2,004.3					530
	"	1-1.5'		X		6.40	160	166.40					1,070
BH-9	09/20/11	0-1'		X		-	-	-	-	-	-	-	246
	"	3'		X		-	-	-	-	-	-	-	224
	"	5'		X		-	-	-	-	-	-	-	<200
	"	7'		X		-	-	-	-	-	-	-	224
	"	10'		X		-	-	-	-	-	-	-	215
T-13	08/24/10	0-1'		X		ND	422	422					457
	"	1-1.5'		X		ND	76.4	76.4	-	-	-	-	346

Table 1
OXY USA Inc.
State AD Tank Battery
LEA COUNTY, NEW MEXICO

[illegible]

Table 1
OXY USA Inc.
State AD Tank Battery
LEA COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth (ft)	Depth (BEB)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total					
T-18	08/24/10	0-1'		X		142	11,800	11,942	ND	ND	0.0687	ND	1,600
	"	1-1.5'		X		22.7	2,890	2,913	ND	ND	0.0252	0.0128	1,210
BH-1	09/19/11	0-1'		X		3.62	200	203.62					3,830
	"	3'		X		<50.0	<2.00	<50.0					242
	"	5'		X		24.8	1,810	1,834.80					<200
	"	7'		X		<50.0	<2.00	<50.0	-	-	-	-	846
	"	10'		X		-	-	-	-	-	-	-	453
	"	15'		X		-	-	-	-	-	-	-	546
	"	20'		X		-	-	-	-	-	-	-	843
	"	25'		X		-	-	-	-	-	-	-	878
	"	30'		X		-	-	-	-	-	-	-	599
	"	40'		X		-	-	-	-	-	-	-	230
	"	50'		X		-	-	-	-	-	-	-	<200
T-19	08/24/10	0-1'		X		ND	2,980	2,980	ND	ND	ND	ND	154
	"	1-1.5'		X		ND	254	254	-	-	-	-	81.9

-  Proposed excavaion depths
-  Proposed Liner Installation
- (--)
- ND Not Analyzed
- ND Not Detected
- BEB Below Excavation Bottom

APPENDIX A
STATE ENGINEER REPORTS-GROUNDWATER

Water Well Data
Average Depth to Groundwater (ft)
Oxy USA - State AD Tank Battery
Lea County, New Mexico

9 South			31 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

9 South			32 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

9 South			33 East		
6	54	5	4	3	2
7	8	9	10	11	12
18	17	16	15	14	40
19	20	21	22	23	30
30	29	54	28	49	27
31	32	33	34	30	35

10 South			31 East		
6	5	4	3	80	2
7	8	9	10	40	11
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

10 South			32 East		
6	5	4	3	2	1
7	8	175	9	10	11
18	39	17	16	15	50
19	20	63	21	22	23
30	29	28	27	26	25
31	60	32	33	34	35

10 South			33 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	22	17	16	34	15
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

88 New Mexico State Engineers Well Reports

105 USGS Well Reports

90 Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6)

Geology and Groundwater Resources of Eddy County, NM (Report 3)

34 NMOCD - Groundwater Data

123 Field water level

143 NMOCD Groundwater map well location



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	Sub	basin	Use	County	Q	Q	Q	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
RA 09482	STK	CH			3	1	4	25	10S	31E	618173	3697951*	66		
RA 09483	STK	CH			2	3	2	23	10S	31E	616731	3700138*	240		
RA 10249	DOM	CH			4	4	3	31	10S	31E	609915	3695827*	100		
RA 10567	STK	CH			3	3	3	03	10S	31E	614086	3703921*	102	80	22
RA 10568	STK	CH			3	4	3	10	10S	31E	614496	3702320*	285	245	40
RA 10571	DOM	CH			3	4	3	10	10S	31E	614496	3702320*	285	245	40

Average Depth to Water: **190 feet**

Minimum Depth: **80 feet**

Maximum Depth: **245 feet**

Record Count: 6

PLSS Search:

Township: 10S

Range: 31E

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	Sub	basin	Use	County	Q	Q	Q	Sec	Tws	Rng	X	Y	Depth	Depth	Water
					64	16	4						Well	Water	Column
RA 09484		DOM	LE		1	3	4	20	10S	32E	621396	3699404*	70		
RA 09485		DOM	LE		4	3	20	10S	32E	621093	3699299*	70			
RA 09486		DOM	LE		3	4	3	20	10S	32E	620992	3699198*	70		
RA 09487		STK	LE		3	3	4	18	10S	32E	619755	3700788*	60		
RA 09488		STK	LE		3	2	1	17	10S	32E	620965	3702010*	100		
RA 10569		STK	CH		1	4	1	08	10S	32E	620957	3703414*	198	175	23

Average Depth to Water: **175 feet**

Minimum Depth: **175 feet**

Maximum Depth: **175 feet**

Record Count: 6

PLSS Search:

Township: 10S

Range: 32E

*UTM location was derived from PLSS - see Help

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USGS Water Resources

Data Category:
 Ground Water

Geographic Area:
 United States

GO

News - updated November 2009

Ground-water levels for the Nation

Search Results -- 1 sites found

Search Criteria

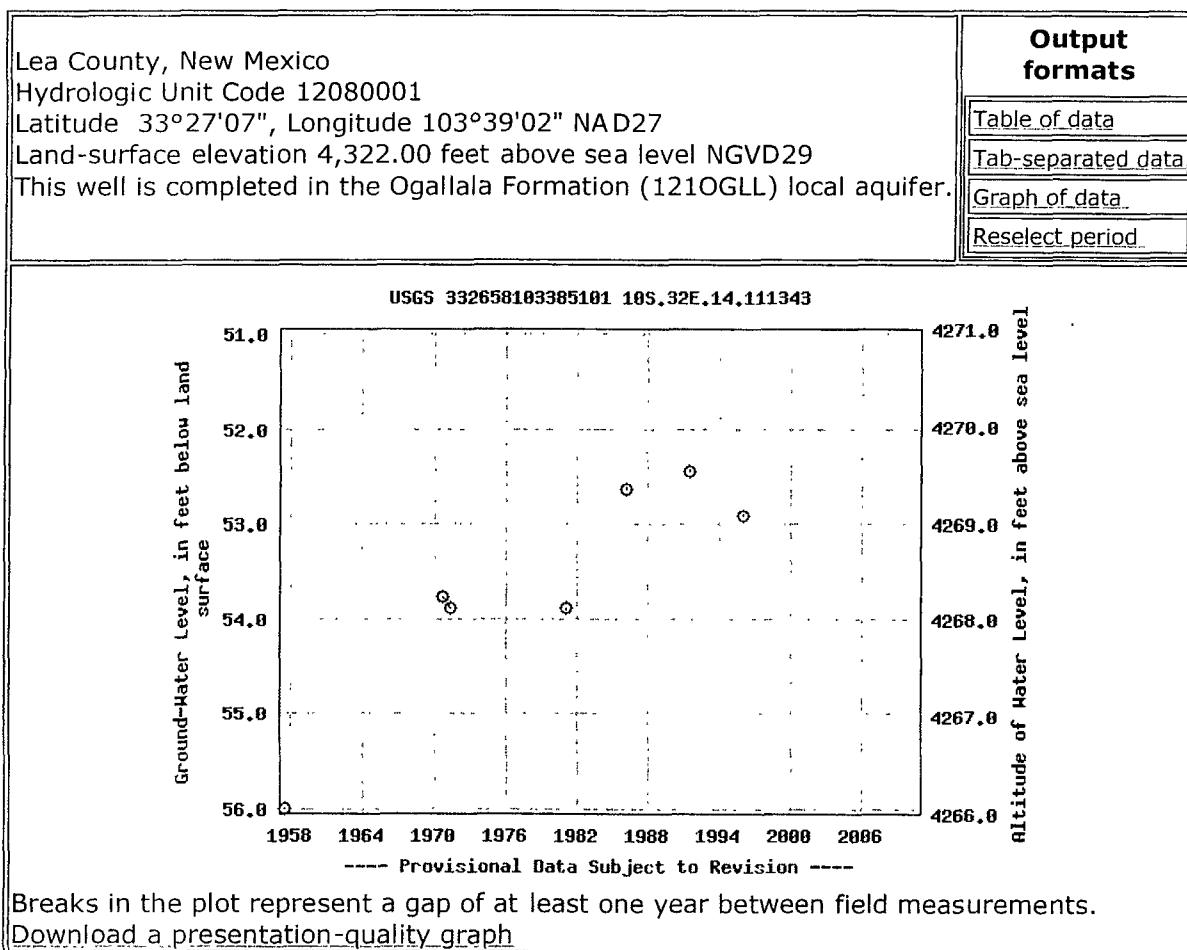
site_no list = • 332658103385101
 Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 332658103385101 10S.32E.14.111343

Available data for this site Ground-water: Field measurements

GO



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 United States



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Search Results -- 1 sites found

Search Criteria

site_no list = • 332402103420301
 Minimum number of levels = 1

[Save file of selected sites to local disk for future upload](#)

USGS 332402103420301 10S.32E.31.244242

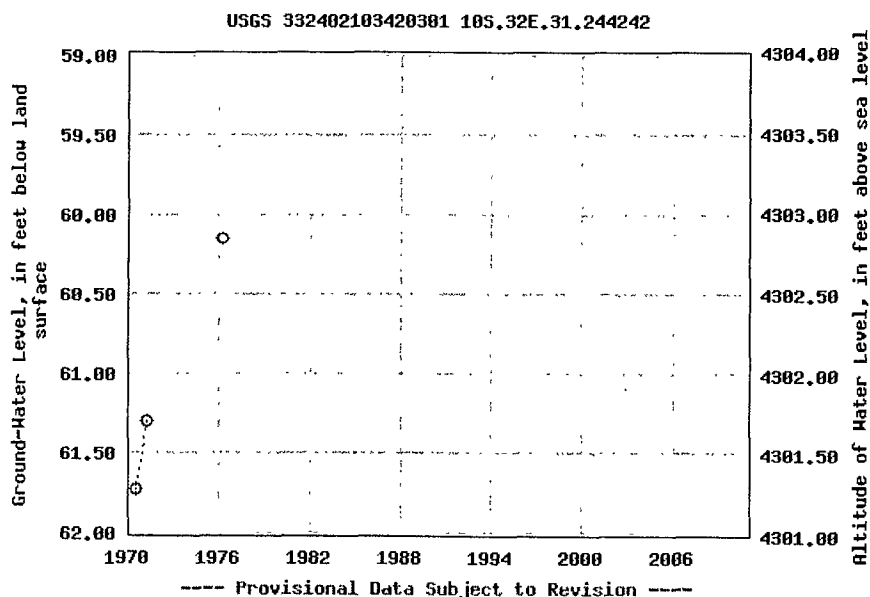
Available data for this site Ground-water: Field measurements



Lea County, New Mexico
 Hydrologic Unit Code 12080001
 Latitude 33°24'14", Longitude 103°42'14" NAD27
 Land-surface elevation 4,363.00 feet above sea level NGVD29
 The depth of the well is 105 feet below land surface.
 This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

[Table of data](#)
[Tab-separated data](#)
[Graph of data](#)
[Reselect period](#)



Breaks in the plot represent a gap of at least one year between field measurements.
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USGS Water Resources

Data Category:
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Geographic Area:
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Search Criteria

site_no list = • 332348103403501
 Minimum number of levels = 1

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USGS 332348103403501 10S.32E.33.324134

Available data for this site Ground-water: Field measurements



Lea County, New Mexico

Hydrologic Unit Code 12080001

Latitude 33°24'01", Longitude 103°40'47" NAD27

Land-surface elevation 4,342.00 feet above sea level NGVD29

The depth of the well is 95 feet below land surface.

This well is completed in the Ogallala Formation (121OGLL) local aquifer.

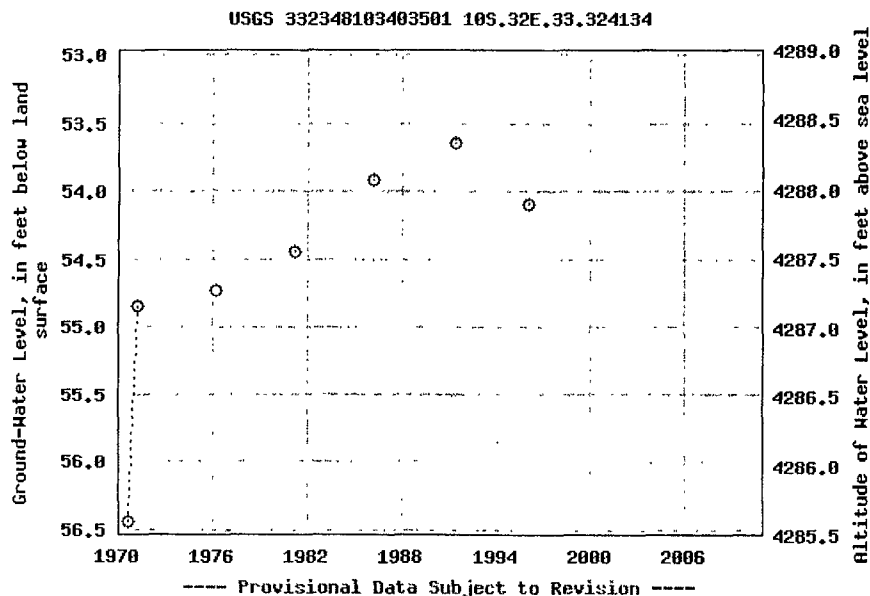
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Data Category:

Ground Water

Geographic Area:

United States



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Search Results -- 1 sites found

Search Criteria

site_no list = • 332439103373901
Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 332439103373901 10S.32E.25.31441

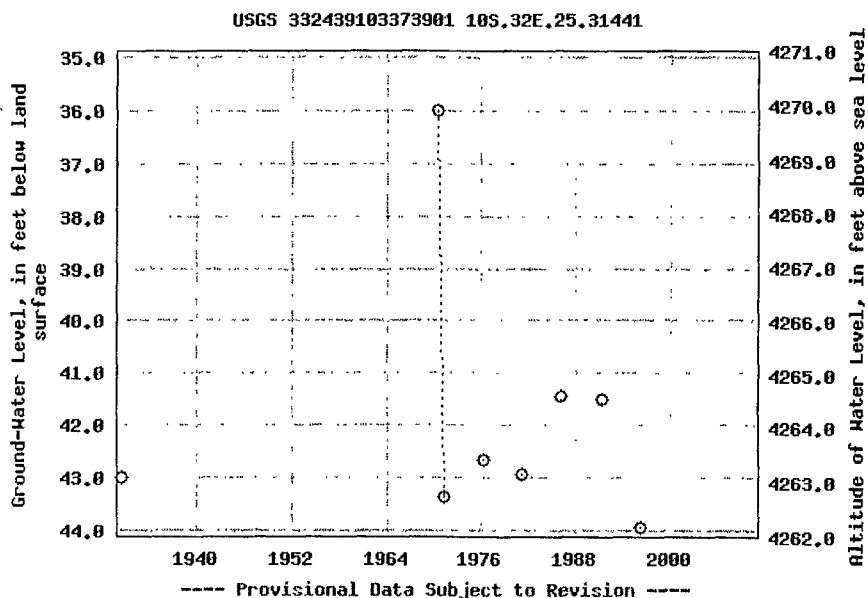
Available data for this site Ground-water: Field measurements



Lea County, New Mexico
Hydrologic Unit Code 12080001
Latitude 33°24'52", Longitude 103°37'51" NAD27
Land-surface elevation 4,306.00 feet above sea level NGVD29
The depth of the well is 63 feet below land surface.
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



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Geographic Area:
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Search Results -- 1 sites found

Search Criteria

site_no list = • 332511103415601
 Minimum number of levels = 1

[Save file of selected sites to local disk for future upload](#)

USGS 332511103415601 10S.32E.29.113212

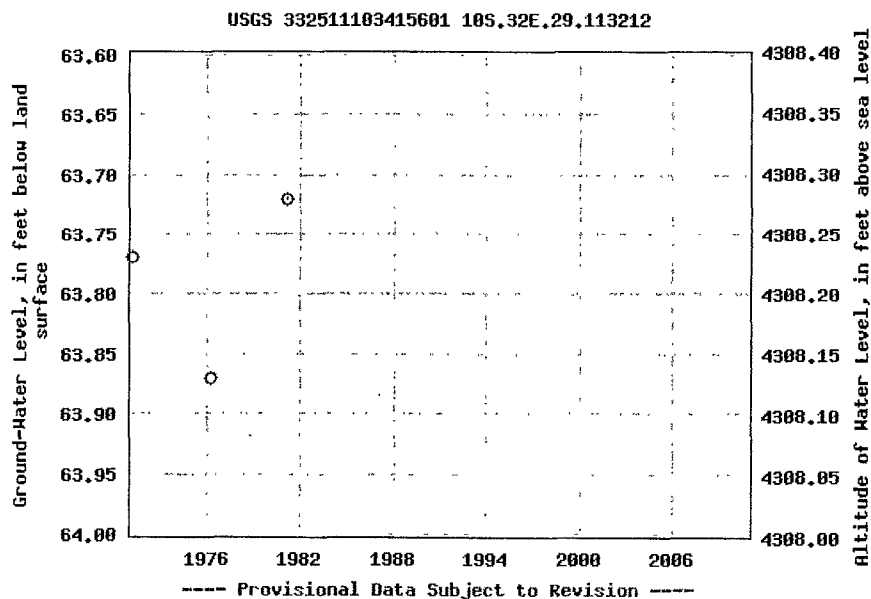
Available data for this site Ground-water: Field measurements

[GO](#)

Lea County, New Mexico
 Hydrologic Unit Code 12080001
 Latitude 33°25'21", Longitude 103°42'08" NAD27
 Land-surface elevation 4,372.00 feet above sea level NGVD29
 The depth of the well is 94 feet below land surface.
 This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

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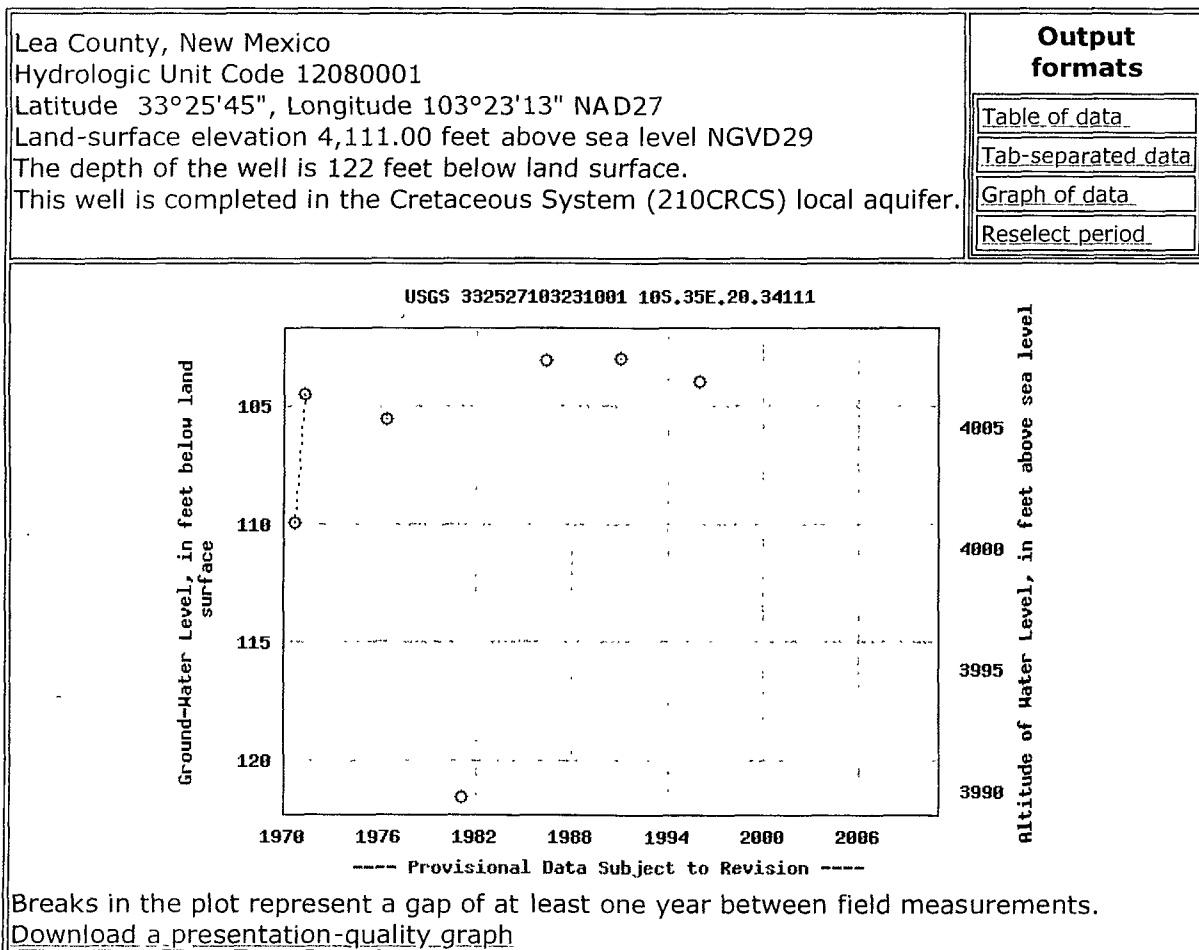
Search Criteria

site_no list = • 332527103231001
 Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 332527103231001 10S.35E.20.34111

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Search Criteria

site_no list = • 332526103413801

Minimum number of levels = 1

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USGS 332526103413801 10S.32E.20.342331

Available data for this site Ground-water: Field measurements

GO

Lea County, New Mexico
 Hydrologic Unit Code 12080001
 Latitude 33°25'35", Longitude 103°41'49" NAD27
 Land-surface elevation 4,363.00 feet above sea level NGVD29
 The depth of the well is 100 feet below land surface.
 This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

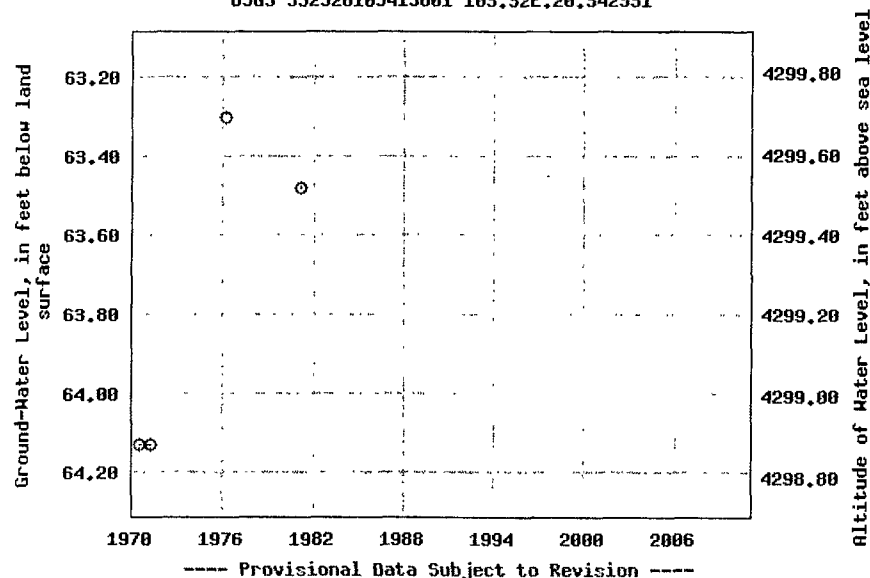
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[Tab-separated data](#)

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USGS 332526103413801 10S.32E.20.342331



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Search Criteria

site_no list = • 332524103414101
 Minimum number of levels = 1

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USGS 332524103414101 10S.32E.20.34321

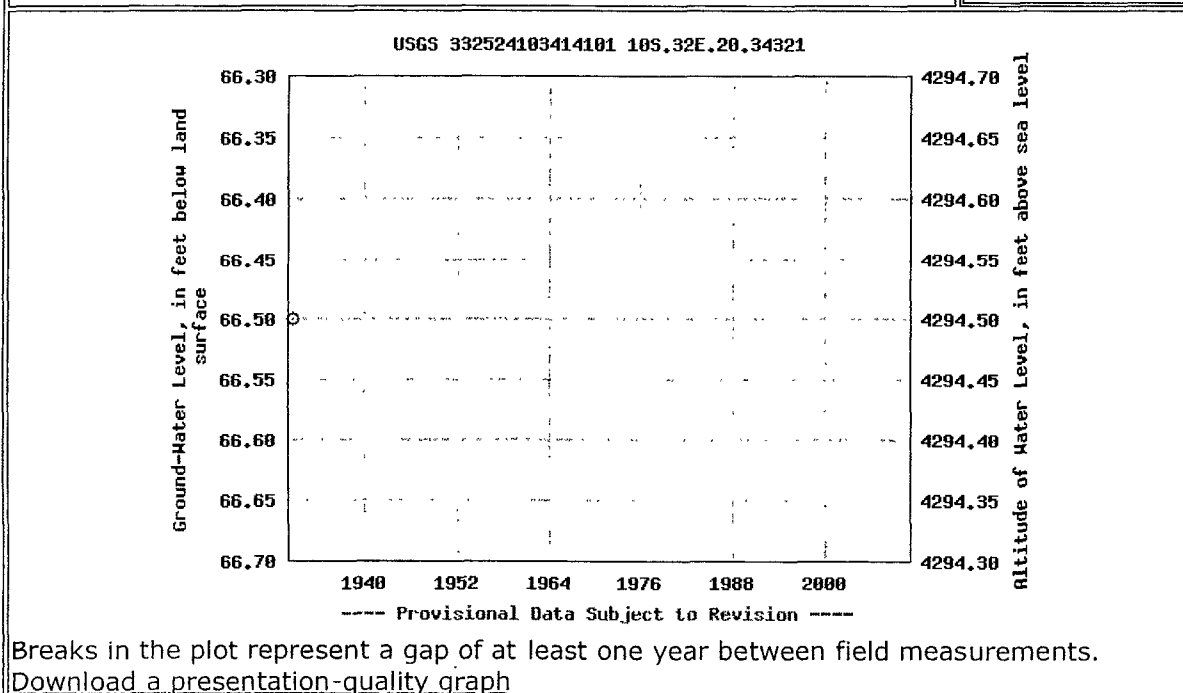
Available data for this site Ground-water: Field measurements



Lea County, New Mexico
 Hydrologic Unit Code 12080001
 Latitude 33°25'33", Longitude 103°41'52" NAD27
 Land-surface elevation 4,361.00 feet above sea level NGVD29
 The depth of the well is 110 feet below land surface.
 This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

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[Tab-separated data](#)
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Search Criteria

site_no list = • 332619103422901
Minimum number of levels = 1

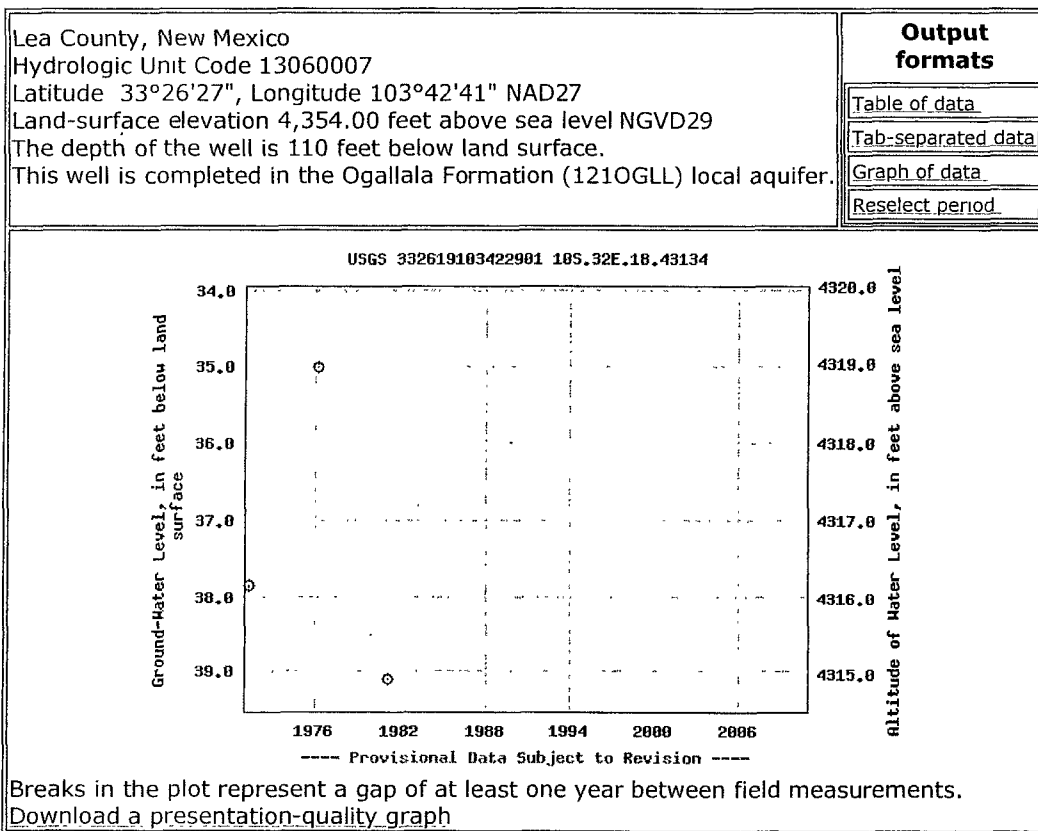
Save file of selected sites to local disk for future upload

USGS 332619103422901 10S.32E.18.43134

Available data for this site

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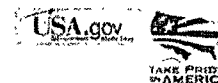
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U.S. Department of the Interior | U.S. Geological Survey

Title: Ground water for USA: Water Levels

URL: <http://waterdata.usgs.gov/nwis/gwlevels/>

Page Contact Information: [Water-Data Support Team](#)





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Search Results -- 1 sites found

Search Criteria

site_no list = • 332658103392902
Minimum number of levels = 1

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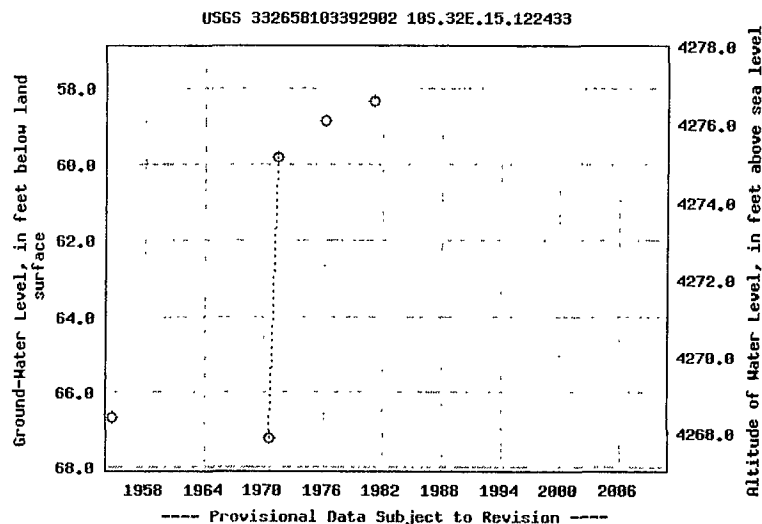
USGS 332658103392902 10S.32E.15.122433

Available data for this site ☐ Ground-water ☐ Field measurements

Lea County, New Mexico
Hydrologic Unit Code 12080001
Latitude 33°27'06", Longitude 103°39'39" NAD27
Land-surface elevation 4,335.00 feet above sea level NGVD29
The depth of the well is 125 feet below land surface.
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

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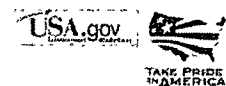
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Title: Ground water for USA: Water Levels

URL: [http://waterdata.usgs.gov/nwis/gwlevels?](http://waterdata.usgs.gov/nwis/gwlevels?site_no=332658103392902&)

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APPENDIX B

LABORATORY ANALYTICAL



6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1296
 200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
 5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
 6015 Harns Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
 E-Mail: lab@traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Aaron Hale
 Tetra Tech
 1910 N. Big Spring Street
 Midland, TX, 79705

Report Date: October 6, 2011

Work Order: 11092301



Project Name: Glenn Springs/State AD
 Project Number: 114-6400291

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
278074	BH-1 0-1'	soil	2011-09-19	00:00	2011-09-22
278075	BH-1 3'	soil	2011-09-19	00:00	2011-09-22
278076	BH-1 5'	soil	2011-09-19	00:00	2011-09-22
278077	BH-1 7'	soil	2011-09-19	00:00	2011-09-22
278078	BH-1 10'	soil	2011-09-19	00:00	2011-09-22
278086	BH-2 0-1'	soil	2011-09-19	00:00	2011-09-22
278087	BH-2 3'	soil	2011-09-19	00:00	2011-09-22
278088	BH-2 5'	soil	2011-09-19	00:00	2011-09-22
278093	BH-3 0-1'	soil	2011-09-19	00:00	2011-09-22
278094	BH-3 3'	soil	2011-09-19	00:00	2011-09-22
278095	BH-3 5'	soil	2011-09-19	00:00	2011-09-22
278096	BH-3 7'	soil	2011-09-19	00:00	2011-09-22
278097	BH-3 10'	soil	2011-09-19	00:00	2011-09-22
278098	BH-3 15'	soil	2011-09-19	00:00	2011-09-22
278103	BH-4 0-1'	soil	2011-09-20	00:00	2011-09-22
278104	BH-4 3'	soil	2011-09-20	00:00	2011-09-22
278105	BH-4 5'	soil	2011-09-20	00:00	2011-09-22
278106	BH-4 7'	soil	2011-09-20	00:00	2011-09-22
278107	BH-4 10'	soil	2011-09-20	00:00	2011-09-22

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
278108	BH-4 15'	soil	2011-09-20	00:00	2011-09-22
278109	BH-4 20'	soil	2011-09-20	00:00	2011-09-22
278113	BH-5 0-1'	soil	2011-09-20	00:00	2011-09-22
278114	BH-5 3'	soil	2011-09-20	00:00	2011-09-22
278115	BH-5 5'	soil	2011-09-20	00:00	2011-09-22
278116	BH-5 7'	soil	2011-09-20	00:00	2011-09-22
278117	BH-5 10'	soil	2011-09-20	00:00	2011-09-22
278118	BH-5 15'	soil	2011-09-20	00:00	2011-09-22
278119	BH-5 20'	soil	2011-09-20	00:00	2011-09-22
278123	BH-6 0-1'	soil	2011-09-20	00:00	2011-09-22
278124	BH-6 3'	soil	2011-09-20	00:00	2011-09-22
278125	BH-6 5'	soil	2011-09-20	00:00	2011-09-22
278126	BH-6 7'	soil	2011-09-20	00:00	2011-09-22
278127	BH-6 10'	soil	2011-09-20	00:00	2011-09-22
278128	BH-6 15'	soil	2011-09-20	00:00	2011-09-22
278133	BH-7 0-1'	soil	2011-09-20	00:00	2011-09-22
278134	BH-7 3'	soil	2011-09-20	00:00	2011-09-22
278135	BH-7 5'	soil	2011-09-20	00:00	2011-09-22
278136	BH-7 7'	soil	2011-09-20	00:00	2011-09-22
278137	BH-7 10'	soil	2011-09-20	00:00	2011-09-22
278138	BH-7 15'	soil	2011-09-20	00:00	2011-09-22
278143	BH-8 0-1'	soil	2011-09-20	00:00	2011-09-22
278144	BH-8 3'	soil	2011-09-20	00:00	2011-09-22
278145	BH-8 5'	soil	2011-09-20	00:00	2011-09-22
278146	BH-8 7'	soil	2011-09-20	00:00	2011-09-22
278147	BH-8 10'	soil	2011-09-20	00:00	2011-09-22
278148	BH-8 15'	soil	2011-09-20	00:00	2011-09-22
278149	BH-8 20'	soil	2011-09-20	00:00	2011-09-22
278150	BH-8 25'	soil	2011-09-20	00:00	2011-09-22
278153	BH-9 0-1'	soil	2011-09-20	00:00	2011-09-22
278154	BH-9 3'	soil	2011-09-20	00:00	2011-09-22
278155	BH-9 5'	soil	2011-09-20	00:00	2011-09-22
278156	BH-9 7'	soil	2011-09-20	00:00	2011-09-22
278157	BH-9 10'	soil	2011-09-20	00:00	2011-09-22
278163	BH-10 0-1'	soil	2011-09-21	00:00	2011-09-22
278164	BH-10 3'	soil	2011-09-21	00:00	2011-09-22
278165	BH-10 5'	soil	2011-09-21	00:00	2011-09-22
278166	BH-10 7'	soil	2011-09-21	00:00	2011-09-22
278167	BH-10 10'	soil	2011-09-21	00:00	2011-09-22
278168	BH-10 15'	soil	2011-09-21	00:00	2011-09-22
278169	BH-10 20'	soil	2011-09-21	00:00	2011-09-22
278170	BH-10 25'	soil	2011-09-21	00:00	2011-09-22
278171	BH-10 30'	soil	2011-09-21	00:00	2011-09-22
278174	BH-11 0-1'	soil	2011-09-21	00:00	2011-09-22
278175	BH-11 3'	soil	2011-09-21	00:00	2011-09-22
278176	BH-11 5'	soil	2011-09-21	00:00	2011-09-22

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
278177	BH-11 7'	soil	2011-09-21	00:00	2011-09-22
278178	BH-11 10'	soil	2011-09-21	00:00	2011-09-22
278186	BH-12 0-1'	soil	2011-09-21	00:00	2011-09-22
278187	BH-12 3'	soil	2011-09-21	00:00	2011-09-22
278188	BH-12 5'	soil	2011-09-21	00:00	2011-09-22
278189	BH-12 7'	soil	2011-09-21	00:00	2011-09-22
278190	BH-12 10'	soil	2011-09-21	00:00	2011-09-22
278191	BH-12 15'	soil	2011-09-21	00:00	2011-09-22
278192	BH-12 20'	soil	2011-09-21	00:00	2011-09-22
278193	BH-12 25'	soil	2011-09-21	00:00	2011-09-22

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 76 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.



Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

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Case Narrative

Samples for project Glenn Springs/State AD were received by TraceAnalysis, Inc. on 2011-09-22 and assigned to work order 11092301. Samples for work order 11092301 were received intact at a temperature of 1.0 C.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Chloride (Titration)	SM 4500-Cl B	72274	2011-09-29 at 09:22	85172	2011-09-30 at 15:18
Chloride (Titration)	SM 4500-Cl B	72274	2011-09-29 at 09:22	85173	2011-09-30 at 15:18
Chloride (Titration)	SM 4500-Cl B	72274	2011-09-29 at 09:22	85174	2011-09-30 at 15:20
Chloride (Titration)	SM 4500-Cl B	72274	2011-09-29 at 09:22	85175	2011-09-30 at 15:20
Chloride (Titration)	SM 4500-Cl B	72274	2011-09-29 at 09:22	85176	2011-09-30 at 15:21
Chloride (Titration)	SM 4500-Cl B	72274	2011-09-29 at 09:22	85177	2011-09-30 at 15:22
Chloride (Titration)	SM 4500-Cl B	72370	2011-10-03 at 09:30	85270	2011-10-04 at 16:23
Chloride (Titration)	SM 4500-Cl B	72370	2011-10-03 at 09:30	85271	2011-10-04 at 16:24
TPH DRO - NEW	S 8015 D	72249	2011-09-27 at 15:37	85087	2011-09-27 at 15:37
TPH DRO - NEW	S 8015 D	72250	2011-09-27 at 15:37	85088	2011-09-27 at 15:37
TPH DRO - NEW	S 8015 D	72332	2011-09-30 at 13:48	85197	2011-09-30 at 13:48
TPH GRO	S 8015 D	72241	2011-09-27 at 12:00	85075	2011-09-29 at 18:18
TPH GRO	S 8015 D	72266	2011-09-28 at 11:00	85117	2011-09-28 at 13:10
TPH GRO	S 8015 D	72291	2011-09-29 at 08:15	85151	2011-09-29 at 09:38
TPH GRO	S 8015 D	72329	2011-09-30 at 08:15	85193	2011-09-30 at 09:37

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 11092301 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: 278074 - BH-1 0-1'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85172 Date Analyzed: 2011-09-30 Analyzed By: AR
Prep Batch: 72274 Sample Preparation: 2011-09-29 Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			3830	mg/Kg	100	4.00

Sample: 278074 - BH-1 0-1'

Laboratory: Midland
Analysis: TPH DRO - NEW Analytical Method: S 8015 D Prep Method: N/A
QC Batch: 85087 Date Analyzed: 2011-09-27 Analyzed By: kg
Prep Batch: 72249 Sample Preparation: 2011-09-27 Prepared By: kg

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	Qr, Qs	1	200	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr		152	mg/Kg	1	100	152	67.5 - 147.1

Sample: 278074 - BH-1 0-1'

Laboratory: Midland
Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035
QC Batch: 85075 Date Analyzed: 2011-09-29 Analyzed By: AG
Prep Batch: 72241 Sample Preparation: 2011-09-27 Prepared By: AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	3.62	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.89	mg/Kg	1	2.00	94	30 - 134.6

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Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-Bromofluorobenzene (4-BFB)			1.82	mg/Kg	1	2.00	91	22.4 - 149

Sample: 278075 - BH-1 3'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85172 Date Analyzed: 2011-09-30 Analyzed By: AR
Prep Batch: 72274 Sample Preparation: 2011-09-29 Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			242	mg/Kg	50	4.00

Sample: 278075 - BH-1 3'

Laboratory: Midland
Analysis: TPH DRO - NEW Analytical Method: S 8015 D Prep Method: N/A
QC Batch: 85087 Date Analyzed: 2011-09-27 Analyzed By: kg
Prep Batch: 72249 Sample Preparation: 2011-09-27 Prepared By: kg

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	Qr, Qs	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			86.5	mg/Kg	1	100	86	67.5 - 147.1

Sample: 278075 - BH-1 3'

Laboratory: Midland
Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035
QC Batch: 85075 Date Analyzed: 2011-09-29 Analyzed By: AG
Prep Batch: 72241 Sample Preparation: 2011-09-27 Prepared By: AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	<2.00	mg/Kg	1	2.00

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Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.91	mg/Kg	1	2.00	96	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.88	mg/Kg	1	2.00	94	22.4 - 149

Sample: 278076 - BH-1 5'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85172 Date Analyzed: 2011-09-30 Analyzed By: AR
Prep Batch: 72274 Sample Preparation: 2011-09-29 Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride	u		<200	mg/Kg	50	4.00

Sample: 278076 - BH-1 5'

Laboratory: Midland
Analysis: TPH DRO - NEW Analytical Method: S 8015 D Prep Method: N/A
QC Batch: 85087 Date Analyzed: 2011-09-27 Analyzed By: kg
Prep Batch: 72249 Sample Preparation: 2011-09-27 Prepared By: kg

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	Qr, Qs	1	1810	mg/Kg	5	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr		318	mg/Kg	5	100	318	67.5 - 147.1

Sample: 278076 - BH-1 5'

Laboratory: Midland
Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035
QC Batch: 85075 Date Analyzed: 2011-09-29 Analyzed By: AG
Prep Batch: 72241 Sample Preparation: 2011-09-27 Prepared By: AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	24.8	mg/Kg	1	2.00

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Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.87	mg/Kg	1	2.00	94	30 - 134.6
4-Bromofluorobenzene (4-BFB)			2.19	mg/Kg	1	2.00	110	22.4 - 149

Sample: 278077 - BH-1 7'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85172 Date Analyzed: 2011-09-30 Analyzed By: AR
Prep Batch: 72274 Sample Preparation: 2011-09-29 Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			846	mg/Kg	50	4.00

Sample: 278077 - BH-1 7'

Laboratory: Midland
Analysis: TPH DRO - NEW Analytical Method: S 8015 D Prep Method: N/A
QC Batch: 85087 Date Analyzed: 2011-09-27 Analyzed By: kg
Prep Batch: 72249 Sample Preparation: 2011-09-27 Prepared By: kg

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	Qr, Qs, U	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			77.9	mg/Kg	1	100	78	67.5 - 147.1

Sample: 278077 - BH-1 7'

Laboratory: Midland
Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035
QC Batch: 85075 Date Analyzed: 2011-09-29 Analyzed By: AG
Prep Batch: 72241 Sample Preparation: 2011-09-27 Prepared By: AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	<2.00	mg/Kg	1	2.00

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Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.90	mg/Kg	1	2.00	95	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.88	mg/Kg	1	2.00	94	22.4 - 149

Sample: 278078 - BH-1 10'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85172 Date Analyzed: 2011-09-30 Analyzed By: AR
Prep Batch: 72274 Sample Preparation: 2011-09-29 Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			453	mg/Kg	50	4.00

Sample: 278086 - BH-2 0-1'

Laboratory: Midland
Analysis: TPH DRO - NEW Analytical Method: S 8015 D Prep Method: N/A
QC Batch: 85087 Date Analyzed: 2011-09-27 Analyzed By: kg
Prep Batch: 72249 Sample Preparation: 2011-09-27 Prepared By: kg

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	Qr, Qs	1	1010	mg/Kg	5	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr		182	mg/Kg	5	100	182	67.5 - 147.1

Sample: 278086 - BH-2 0-1'

Laboratory: Midland
Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035
QC Batch: 85075 Date Analyzed: 2011-09-29 Analyzed By: AG
Prep Batch: 72241 Sample Preparation: 2011-09-27 Prepared By: AG

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sample 278086 continued ...

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	66.4	mg/Kg	5	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			4.78	mg/Kg	5	5.00	96	30 - 134.6
4-Bromofluorobenzene (4-BFB)			5.07	mg/Kg	5	5.00	101	22.4 - 149

Sample: 278087 - BH-2 3'

Laboratory: Midland
Analysis: TPH DRO - NEW
QC Batch: 85087
Prep Batch: 72249

Analytical Method: S 8015 D
Date Analyzed: 2011-09-27
Sample Preparation: 2011-09-27

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

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	Qr, Qs	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			86.2	mg/Kg	1	100	86	67.5 - 147.1

Sample: 278087 - BH-2 3'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 85075
Prep Batch: 72241

Analytical Method: S 8015 D
Date Analyzed: 2011-09-29
Sample Preparation: 2011-09-27

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

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	13.9	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.90	mg/Kg	1	2.00	95	30 - 134.6

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sample continued ...

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-Bromofluorobenzene (4-BFB)			1.97	mg/Kg	1	2.00	98	22.4 - 149

Sample: 278088 - BH-2 5'

Laboratory: Midland

Analysis: TPH DRO - NEW

QC Batch: 85087

Prep Batch: 72249

Analytical Method: S 8015 D

Date Analyzed: 2011-09-27

Sample Preparation: 2011-09-27

Prep Method: N/A

Analyzed By: kg

Prepared By: kg

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	Qr, Qs, U	1	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			80.9	mg/Kg	1	100	81	67.5 - 147.1

Sample: 278088 - BH-2 5'

Laboratory: Midland

Analysis: TPH GRO

QC Batch: 85075

Prep Batch: 72241

Analytical Method: S 8015 D

Date Analyzed: 2011-09-29

Sample Preparation: 2011-09-27

Prep Method: S 5035

Analyzed By: AG

Prepared By: AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	<2.00	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.89	mg/Kg	1	2.00	94	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.88	mg/Kg	1	2.00	94	22.4 - 149

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Sample: 278093 - BH-3 0-1'

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	85173	Date Analyzed:	2011-09-30
Prep Batch:	72274	Sample Preparation:	2011-09-29
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			5350	mg/Kg	100	4.00

Sample: 278094 - BH-3 3'

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	85173	Date Analyzed:	2011-09-30
Prep Batch:	72274	Sample Preparation:	2011-09-29
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			3860	mg/Kg	100	4.00

Sample: 278095 - BH-3 5'

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	85173	Date Analyzed:	2011-09-30
Prep Batch:	72274	Sample Preparation:	2011-09-29
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			315	mg/Kg	50	4.00

Sample: 278096 - BH-3 7'

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	85173	Date Analyzed:	2011-09-30
Prep Batch:	72274	Sample Preparation:	2011-09-29
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

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Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			646	mg/Kg	50	4.00

Sample: 278097 - BH-3 10'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85173 Date Analyzed: 2011-09-30 Analyzed By: AR
Prep Batch: 72274 Sample Preparation: 2011-09-29 Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride	u		<200	mg/Kg	50	4.00

Sample: 278098 - BH-3 15'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85173 Date Analyzed: 2011-09-30 Analyzed By: AR
Prep Batch: 72274 Sample Preparation: 2011-09-29 Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride	u		<200	mg/Kg	50	4.00

Sample: 278103 - BH-4 0-1'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85173 Date Analyzed: 2011-09-30 Analyzed By: AR
Prep Batch: 72274 Sample Preparation: 2011-09-29 Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			340	mg/Kg	50	4.00

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Sample: 278103 - BH-4 0-1'

Laboratory: Midland

Analysis: TPH DRO - NEW

QC Batch: 85087

Prep Batch: 72249

Analytical Method: S 8015 D

Date Analyzed: 2011-09-27

Sample Preparation: 2011-09-27

Prep Method: N/A

Analyzed By: kg

Prepared By: kg

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	Qr,Qs	1	280	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			102	mg/Kg	1	100	102	67.5 - 147.1

Sample: 278103 - BH-4 0-1'

Laboratory: Midland

Analysis: TPH GRO

QC Batch: 85075

Prep Batch: 72241

Analytical Method: S 8015 D

Date Analyzed: 2011-09-29

Sample Preparation: 2011-09-27

Prep Method: S 5035

Analyzed By: AG

Prepared By: AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	66.5	mg/Kg	5	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			4.74	mg/Kg	5	5.00	95	30 - 134.6
4-Bromofluorobenzene (4-BFB)			5.09	mg/Kg	5	5.00	102	22.4 - 149

Sample: 278104 - BH-4 3'

Laboratory: Midland

Analysis: Chloride (Titration)

QC Batch: 85173

Prep Batch: 72274

Analytical Method: SM 4500-Cl B

Date Analyzed: 2011-09-30

Sample Preparation: 2011-09-29

Prep Method: N/A

Analyzed By: AR

Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride	u		<200	mg/Kg	50	4.00

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Sample: 278104 - BH-4 3'

Laboratory: Midland

Analysis: TPH DRO - NEW

QC Batch: 85088

Prep Batch: 72250

Analytical Method: S 8015 D

Date Analyzed: 2011-09-27

Sample Preparation: 2011-09-27

Prep Method: N/A

Analyzed By: kg

Prepared By: kg

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO		1	110	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			84.0	mg/Kg	1	100	84	67.5 - 147.1

Sample: 278104 - BH-4 3'

Laboratory: Midland

Analysis: TPH GRO

QC Batch: 85117

Prep Batch: 72266

Analytical Method: S 8015 D

Date Analyzed: 2011-09-28

Sample Preparation: 2011-09-28

Prep Method: S 5035

Analyzed By: AG

Prepared By: AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	39.7	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.90	mg/Kg	1	2.00	95	30 - 134.6
4-Bromofluorobenzene (4-BFB)			2.05	mg/Kg	1	2.00	102	22.4 - 149

Sample: 278105 - BH-4 5'

Laboratory: Midland

Analysis: Chloride (Titration)

QC Batch: 85173

Prep Batch: 72274

Analytical Method: SM 4500-Cl B

Date Analyzed: 2011-09-30

Sample Preparation: 2011-09-29

Prep Method: N/A

Analyzed By: AR

Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			841	mg/Kg	100	4.00

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Sample: 278105 - BH-4 5'

Laboratory:	Midland	Analytical Method:	S 8015 D	Prep Method:	N/A
Analysis:	TPH DRO - NEW	Date Analyzed:	2011-09-27	Analyzed By:	kg
QC Batch:	85088	Sample Preparation:	2011-09-27	Prepared By:	kg
Prep Batch:	72250				

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			77.5	mg/Kg	1	100	78	67.5 - 147.1

Sample: 278105 - BH-4 5'

Laboratory:	Midland	Analytical Method:	S 8015 D	Prep Method:	S 5035
Analysis:	TPH GRO	Date Analyzed:	2011-09-28	Analyzed By:	AG
QC Batch:	85117	Sample Preparation:	2011-09-28	Prepared By:	AG
Prep Batch:	72266				

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	3.99	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.89	mg/Kg	1	2.00	94	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.96	mg/Kg	1	2.00	98	22.4 - 149

Sample: 278106 - BH-4 7'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2011-09-30	Analyzed By:	AR
QC Batch:	85173	Sample Preparation:	2011-09-29	Prepared By:	AR
Prep Batch:	72274				

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			576	mg/Kg	50	4.00

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Sample: 278107 - BH-4 10'

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	85174	Date Analyzed:	2011-09-30
Prep Batch:	72274	Sample Preparation:	2011-09-29
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride	u		<200	mg/Kg	50	4.00

Sample: 278108 - BH-4 15'

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	85174	Date Analyzed:	2011-09-30
Prep Batch:	72274	Sample Preparation:	2011-09-29
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			313	mg/Kg	50	4.00

Sample: 278109 - BH-4 20'

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	85174	Date Analyzed:	2011-09-30
Prep Batch:	72274	Sample Preparation:	2011-09-29
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride	u		<200	mg/Kg	50	4.00

Sample: 278113 - BH-5 0-1'

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	85174	Date Analyzed:	2011-09-30
Prep Batch:	72274	Sample Preparation:	2011-09-29
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

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Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			987	mg/Kg	100	4.00

Sample: 278114 - BH-5 3'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85174 Date Analyzed: 2011-09-30 Analyzed By: AR
Prep Batch: 72274 Sample Preparation: 2011-09-29 Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			1660	mg/Kg	100	4.00

Sample: 278115 - BH-5 5'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85174 Date Analyzed: 2011-09-30 Analyzed By: AR
Prep Batch: 72274 Sample Preparation: 2011-09-29 Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			1010	mg/Kg	100	4.00

Sample: 278116 - BH-5 7'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85174 Date Analyzed: 2011-09-30 Analyzed By: AR
Prep Batch: 72274 Sample Preparation: 2011-09-29 Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			606	mg/Kg	50	4.00

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Sample: 278117 - BH-5 10'

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	85174	Date Analyzed:	2011-09-30
Prep Batch:	72274	Sample Preparation:	2011-09-29
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			670	mg/Kg	50	4.00

Sample: 278118 - BH-5 15'

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	85174	Date Analyzed:	2011-09-30
Prep Batch:	72274	Sample Preparation:	2011-09-29
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			386	mg/Kg	50	4.00

Sample: 278119 - BH-5 20'

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	85174	Date Analyzed:	2011-09-30
Prep Batch:	72274	Sample Preparation:	2011-09-29
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride	u		<200	mg/Kg	50	4.00

Sample: 278123 - BH-6 0-1'

Laboratory:	Midland		
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D
QC Batch:	85088	Date Analyzed:	2011-09-27
Prep Batch:	72250	Sample Preparation:	2011-09-27
		Prep Method:	N/A
		Analyzed By:	kg
		Prepared By:	kg

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Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO		1	139	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			126	mg/Kg	1	100	126	67.5 - 147.1

Sample: 278123 - BH-6 0-1'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 85117
Prep Batch: 72266

Analytical Method: S 8015 D
Date Analyzed: 2011-09-28
Sample Preparation: 2011-09-28

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

Parameter	Flag	Cert	RL					
			Result	Units	Dilution	RL		
GRO		1	11.3	mg/Kg	1	2.00		
Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.87	mg/Kg	1	2.00	94	30 - 134.6
4-Bromofluorobenzene (4-BFB)			2.00	mg/Kg	1	2.00	100	22.4 - 149

Sample: 278124 - BH-6 3'

Laboratory: Midland
Analysis: Chloride (Titration)
QC Batch: 85175
Prep Batch: 72274

Analytical Method: SM 4500-Cl B
Date Analyzed: 2011-09-30
Sample Preparation: 2011-09-29

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

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			1830	mg/Kg	100	4.00

Sample: 278124 - BH-6 3'

Laboratory: Midland
Analysis: TPH DRO - NEW
QC Batch: 85088
Prep Batch: 72250

Analytical Method: S 8015 D
Date Analyzed: 2011-09-27
Sample Preparation: 2011-09-27

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

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Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO		1	96.8	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			119	mg/Kg	1	100	119	67.5 - 147.1

Sample: 278124 - BH-6 3'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 85117
Prep Batch: 72266

Analytical Method: S 8015 D
Date Analyzed: 2011-09-28
Sample Preparation: 2011-09-28

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

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	3.54	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.91	mg/Kg	1	2.00	96	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.95	mg/Kg	1	2.00	98	22.4 - 149

Sample: 278125 - BH-6 5'

Laboratory: Midland
Analysis: Chloride (Titration)
QC Batch: 85175
Prep Batch: 72274

Analytical Method: SM 4500-Cl B
Date Analyzed: 2011-09-30
Sample Preparation: 2011-09-29

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

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			641	mg/Kg	50	4.00

Sample: 278125 - BH-6 5'

Laboratory: Midland
Analysis: TPH DRO - NEW
QC Batch: 85088
Prep Batch: 72250

Analytical Method: S 8015 D
Date Analyzed: 2011-09-27
Sample Preparation: 2011-09-27

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

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			80.4	mg/Kg	1	100	80	67.5 - 147.1

Sample: 278125 - BH-6 5'

Laboratory: Midland

Analysis: TPH GRO

QC Batch: 85117

Prep Batch: 72266

Analytical Method: S 8015 D

Date Analyzed: 2011-09-28

Sample Preparation: 2011-09-28

Prep Method: S 5035

Analyzed By: AG

Prepared By: AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	<2.00	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.89	mg/Kg	1	2.00	94	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.87	mg/Kg	1	2.00	94	22.4 - 149

Sample: 278126 - BH-6 7'

Laboratory: Midland

Analysis: Chloride (Titration)

QC Batch: 85175

Prep Batch: 72274

Analytical Method: SM 4500-Cl B

Date Analyzed: 2011-09-30

Sample Preparation: 2011-09-29

Prep Method: N/A

Analyzed By: AR

Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			250	mg/Kg	50	4.00

Sample: 278127 - BH-6 10'

Laboratory: Midland

Analysis: Chloride (Titration)

QC Batch: 85175

Prep Batch: 72274

Analytical Method: SM 4500-Cl B

Date Analyzed: 2011-09-30

Sample Preparation: 2011-09-29

Prep Method: N/A

Analyzed By: AR

Prepared By: AR

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Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride	u		<200	mg/Kg	50	4.00

Sample: 278128 - BH-6 15'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85175 Date Analyzed: 2011-09-30 Analyzed By: AR
Prep Batch: 72274 Sample Preparation: 2011-09-29 Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride	u		<200	mg/Kg	50	4.00

Sample: 278133 - BH-7 0-1'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85175 Date Analyzed: 2011-09-30 Analyzed By: AR
Prep Batch: 72274 Sample Preparation: 2011-09-29 Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			2150	mg/Kg	100	4.00

Sample: 278133 - BH-7 0-1'

Laboratory: Midland
Analysis: TPH DRO - NEW Analytical Method: S 8015 D Prep Method: N/A
QC Batch: 85088 Date Analyzed: 2011-09-27 Analyzed By: kg
Prep Batch: 72250 Sample Preparation: 2011-09-27 Prepared By: kg

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			97.8	mg/Kg	1	100	98	67.5 - 147.1

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Sample: 278133 - BH-7 0-1'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 85117
Prep Batch: 72266

Analytical Method: S 8015 D
Date Analyzed: 2011-09-28
Sample Preparation: 2011-09-28

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

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	<2.00	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.90	mg/Kg	1	2.00	95	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.86	mg/Kg	1	2.00	93	22.4 - 149

Sample: 278134 - BH-7 3'

Laboratory: Midland
Analysis: Chloride (Titration)
QC Batch: 85175
Prep Batch: 72274

Analytical Method: SM 4500-Cl B
Date Analyzed: 2011-09-30
Sample Preparation: 2011-09-29

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

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			851	mg/Kg	100	4.00

Sample: 278134 - BH-7 3'

Laboratory: Midland
Analysis: TPH DRO - NEW
QC Batch: 85088
Prep Batch: 72250

Analytical Method: S 8015 D
Date Analyzed: 2011-09-27
Sample Preparation: 2011-09-27

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

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			76.4	mg/Kg	1	100	76	67.5 - 147.1

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Sample: 278134 - BH-7 3'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 85117
Prep Batch: 72266

Analytical Method: S 8015 D
Date Analyzed: 2011-09-28
Sample Preparation: 2011-09-28

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

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	<2.00	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.88	mg/Kg	1	2.00	94	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.84	mg/Kg	1	2.00	92	22.4 - 149

Sample: 278135 - BH-7 5'

Laboratory: Midland
Analysis: Chloride (Titration)
QC Batch: 85175
Prep Batch: 72274

Analytical Method: SM 4500-Cl B
Date Analyzed: 2011-09-30
Sample Preparation: 2011-09-29

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

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			1150	mg/Kg	100	4.00

Sample: 278135 - BH-7 5'

Laboratory: Midland
Analysis: TPH DRO - NEW
QC Batch: 85088
Prep Batch: 72250

Analytical Method: S 8015 D
Date Analyzed: 2011-09-27
Sample Preparation: 2011-09-27

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

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			79.4	mg/Kg	1	100	79	67.5 - 147.1

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Sample: 278135 - BH-7 5'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 85117
Prep Batch: 72266

Analytical Method: S 8015 D
Date Analyzed: 2011-09-28
Sample Preparation: 2011-09-28

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

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	<2.00	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.89	mg/Kg	1	2.00	94	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.83	mg/Kg	1	2.00	92	22.4 - 149

Sample: 278136 - BH-7 7'

Laboratory: Midland
Analysis: Chloride (Titration)
QC Batch: 85175
Prep Batch: 72274

Analytical Method: SM 4500-Cl B
Date Analyzed: 2011-09-30
Sample Preparation: 2011-09-29

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

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			582	mg/Kg	50	4.00

Sample: 278137 - BH-7 10'

Laboratory: Midland
Analysis: Chloride (Titration)
QC Batch: 85175
Prep Batch: 72274

Analytical Method: SM 4500-Cl B
Date Analyzed: 2011-09-30
Sample Preparation: 2011-09-29

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

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride	u		<200	mg/Kg	50	4.00

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Sample: 278138 - BH-7 15'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85176 Date Analyzed: 2011-09-30 Analyzed By: AR
Prep Batch: 72274 Sample Preparation: 2011-09-29 Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			428	mg/Kg	50	4.00

Sample: 278143 - BH-8 0-1'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85176 Date Analyzed: 2011-09-30 Analyzed By: AR
Prep Batch: 72274 Sample Preparation: 2011-09-29 Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			1970	mg/Kg	100	4.00

Sample: 278143 - BH-8 0-1'

Laboratory: Midland
Analysis: TPH DRO - NEW Analytical Method: S 8015 D Prep Method: N/A
QC Batch: 85088 Date Analyzed: 2011-09-27 Analyzed By: kg
Prep Batch: 72250 Sample Preparation: 2011-09-27 Prepared By: kg

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO		1	444	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			119	mg/Kg	1	100	119	67.5 - 147.1

Sample: 278143 - BH-8 0-1'

Laboratory: Midland
Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035
QC Batch: 85117 Date Analyzed: 2011-09-28 Analyzed By: AG
Prep Batch: 72266 Sample Preparation: 2011-09-28 Prepared By: AG

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Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	11.3	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.90	mg/Kg	1	2.00	95	30 - 134.6
4-Bromofluorobenzene (4-BFB)			2.05	mg/Kg	1	2.00	102	22.4 - 149

Sample: 278144 - BH-8 3'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85176 Date Analyzed: 2011-09-30 Analyzed By: AR
Prep Batch: 72274 Sample Preparation: 2011-09-29 Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			2970	mg/Kg	100	4.00

Sample: 278144 - BH-8 3'

Laboratory: Midland
Analysis: TPH DRO - NEW Analytical Method: S 8015 D Prep Method: N/A
QC Batch: 85088 Date Analyzed: 2011-09-27 Analyzed By: kg
Prep Batch: 72250 Sample Preparation: 2011-09-27 Prepared By: kg

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO		1	701	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			99.3	mg/Kg	1	100	99	67.5 - 147.1

Sample: 278144 - BH-8 3'

Laboratory: Midland
Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035
QC Batch: 85117 Date Analyzed: 2011-09-28 Analyzed By: AG
Prep Batch: 72266 Sample Preparation: 2011-09-28 Prepared By: AG

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Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	68.0	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.88	mg/Kg	1	2.00	94	30 - 134.6
4-Bromofluorobenzene (4-BFB)			2.08	mg/Kg	1	2.00	104	22.4 - 149

Sample: 278145 - BH-8 5'

Laboratory: Midland

Analysis: Chloride (Titration)

QC Batch: 85176

Prep Batch: 72274

Analytical Method: SM 4500-Cl B

Date Analyzed: 2011-09-30

Sample Preparation: 2011-09-29

Prep Method: N/A

Analyzed By: AR

Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			3050	mg/Kg	100	4.00

Sample: 278145 - BH-8 5'

Laboratory: Midland

Analysis: TPH DRO - NEW

QC Batch: 85088

Prep Batch: 72250

Analytical Method: S 8015 D

Date Analyzed: 2011-09-27

Sample Preparation: 2011-09-27

Prep Method: N/A

Analyzed By: kg

Prepared By: kg

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO		1	946	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			107	mg/Kg	1	100	107	67.5 - 147.1

Sample: 278145 - BH-8 5'

Laboratory: Midland

Analysis: TPH GRO

QC Batch: 85117

Prep Batch: 72266

Analytical Method: S 8015 D

Date Analyzed: 2011-09-28

Sample Preparation: 2011-09-28

Prep Method: S 5035

Analyzed By: AG

Prepared By: AG

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Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	102	mg/Kg	5	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			4.72	mg/Kg	5	5.00	94	30 - 134.6
4-Bromofluorobenzene (4-BFB)			4.92	mg/Kg	5	5.00	98	22.4 - 149

Sample: 278146 - BH-8 7'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85176 Date Analyzed: 2011-09-30 Analyzed By: AR
Prep Batch: 72274 Sample Preparation: 2011-09-29 Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			2530	mg/Kg	100	4.00

Sample: 278146 - BH-8 7'

Laboratory: Midland
Analysis: TPH DRO - NEW Analytical Method: S 8015 D Prep Method: N/A
QC Batch: 85197 Date Analyzed: 2011-09-30 Analyzed By: kg
Prep Batch: 72332 Sample Preparation: 2011-09-30 Prepared By: kg

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			81.2	mg/Kg	1	100	81	67.5 - 147.1

Sample: 278146 - BH-8 7'

Laboratory: Midland
Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035
QC Batch: 85151 Date Analyzed: 2011-09-29 Analyzed By: AG
Prep Batch: 72291 Sample Preparation: 2011-09-29 Prepared By: AG

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Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	2.54	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.83	mg/Kg	1	2.00	92	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.79	mg/Kg	1	2.00	90	22.4 - 149

Sample: 278147 - BH-8 10'

Laboratory: Midland

Analysis: Chloride (Titration)

QC Batch: 85176

Prep Batch: 72274

Analytical Method: SM 4500-Cl B

Date Analyzed: 2011-09-30

Sample Preparation: 2011-09-29

Prep Method: N/A

Analyzed By: AR

Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			2490	mg/Kg	100	4.00

Sample: 278148 - BH-8 15'

Laboratory: Midland

Analysis: Chloride (Titration)

QC Batch: 85176

Prep Batch: 72274

Analytical Method: SM 4500-Cl B

Date Analyzed: 2011-09-30

Sample Preparation: 2011-09-29

Prep Method: N/A

Analyzed By: AR

Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			757	mg/Kg	50	4.00

Sample: 278149 - BH-8 20'

Laboratory: Midland

Analysis: Chloride (Titration)

QC Batch: 85176

Prep Batch: 72274

Analytical Method: SM 4500-Cl B

Date Analyzed: 2011-09-30

Sample Preparation: 2011-09-29

Prep Method: N/A

Analyzed By: AR

Prepared By: AR

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Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			388	mg/Kg	50	4.00

Sample: 278150 - BH-8 25'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85176 Date Analyzed: 2011-09-30 Analyzed By: AR
Prep Batch: 72274 Sample Preparation: 2011-09-29 Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride	u		<200	mg/Kg	50	4.00

Sample: 278153 - BH-9 0-1'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85176 Date Analyzed: 2011-09-30 Analyzed By: AR
Prep Batch: 72274 Sample Preparation: 2011-09-29 Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			246	mg/Kg	50	4.00

Sample: 278154 - BH-9 3'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85177 Date Analyzed: 2011-09-30 Analyzed By: AR
Prep Batch: 72274 Sample Preparation: 2011-09-29 Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			224	mg/Kg	50	4.00

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Sample: 278155 - BH-9 5'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2011-09-30	Analyzed By:	AR
QC Batch:	85177	Sample Preparation:	2011-09-29	Prepared By:	AR
Prep Batch:	72274				

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride	u		<200	mg/Kg	50	4.00

Sample: 278156 - BH-9 7'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2011-09-30	Analyzed By:	AR
QC Batch:	85177	Sample Preparation:	2011-09-29	Prepared By:	AR
Prep Batch:	72274				

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			224	mg/Kg	50	4.00

Sample: 278157 - BH-9 10'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2011-09-30	Analyzed By:	AR
QC Batch:	85177	Sample Preparation:	2011-09-29	Prepared By:	AR
Prep Batch:	72274				

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			215	mg/Kg	50	4.00

Sample: 278163 - BH-10 0-1'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2011-09-30	Analyzed By:	AR
QC Batch:	85177	Sample Preparation:	2011-09-29	Prepared By:	AR
Prep Batch:	72274				

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Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			7150	mg/Kg	100	4.00

Sample: 278163 - BH-10 0-1'

Laboratory: Midland
Analysis: TPH DRO - NEW Analytical Method: S 8015 D Prep Method: N/A
QC Batch: 85088 Date Analyzed: 2011-09-27 Analyzed By: kg
Prep Batch: 72250 Sample Preparation: 2011-09-27 Prepared By: kg

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO		1	217	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			89.8	mg/Kg	1	100	90	67.5 - 147.1

Sample: 278163 - BH-10 0-1'

Laboratory: Midland
Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035
QC Batch: 85117 Date Analyzed: 2011-09-28 Analyzed By: AG
Prep Batch: 72266 Sample Preparation: 2011-09-28 Prepared By: AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	33.6	mg/Kg	5	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			4.69	mg/Kg	5	5.00	94	30 - 134.6
4-Bromofluorobenzene (4-BFB)			4.60	mg/Kg	5	5.00	92	22.4 - 149

Sample: 278164 - BH-10 3'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85177 Date Analyzed: 2011-09-30 Analyzed By: AR
Prep Batch: 72274 Sample Preparation: 2011-09-29 Prepared By: AR

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Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			2770	mg/Kg	100	4.00

Sample: 278164 - BH-10 3'

Laboratory: Midland
Analysis: TPH DRO - NEW
QC Batch: 85088
Prep Batch: 72250

Analytical Method: S 8015 D
Date Analyzed: 2011-09-27
Sample Preparation: 2011-09-27

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

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO		1	90.6	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			96.9	mg/Kg	1	100	97	67.5 - 147.1

Sample: 278164 - BH-10 3'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 85117
Prep Batch: 72266

Analytical Method: S 8015 D
Date Analyzed: 2011-09-28
Sample Preparation: 2011-09-28

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

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	3.72	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.90	mg/Kg	1	2.00	95	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.85	mg/Kg	1	2.00	92	22.4 - 149

Sample: 278165 - BH-10 5'

Laboratory: Midland
Analysis: Chloride (Titration)
QC Batch: 85177
Prep Batch: 72274

Analytical Method: SM 4500-Cl B
Date Analyzed: 2011-09-30
Sample Preparation: 2011-09-29

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

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Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			4750	mg/Kg	100	4.00

Sample: 278165 - BH-10 5'

Laboratory: Midland
Analysis: TPH DRO - NEW
QC Batch: 85088
Prep Batch: 72250

Analytical Method: S 8015 D
Date Analyzed: 2011-09-27
Sample Preparation: 2011-09-27

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

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO		1	655	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			97.5	mg/Kg	1	100	98	67.5 - 147.1

Sample: 278165 - BH-10 5'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 85117
Prep Batch: 72266

Analytical Method: S 8015 D
Date Analyzed: 2011-09-28
Sample Preparation: 2011-09-28

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

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	57.8	mg/Kg	5	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			4.70	mg/Kg	5	5.00	94	30 - 134.6
4-Bromofluorobenzene (4-BFB)			4.94	mg/Kg	5	5.00	99	22.4 - 149

Sample: 278166 - BH-10 7'

Laboratory: Midland
Analysis: Chloride (Titration)
QC Batch: 85177
Prep Batch: 72274

Analytical Method: SM 4500-Cl B
Date Analyzed: 2011-09-30
Sample Preparation: 2011-09-29

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

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Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			1060	mg/Kg	50	4.00

Sample: 278166 - BH-10 7'

Laboratory: Midland
Analysis: TPH DRO - NEW Analytical Method: S 8015 D Prep Method: N/A
QC Batch: 85197 Date Analyzed: 2011-09-30 Analyzed By: kg
Prep Batch: 72332 Sample Preparation: 2011-09-30 Prepared By: kg

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO		1	202	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			87.4	mg/Kg	1	100	87	67.5 - 147.1

Sample: 278166 - BH-10 7'

Laboratory: Midland
Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035
QC Batch: 85193 Date Analyzed: 2011-09-30 Analyzed By: AG
Prep Batch: 72329 Sample Preparation: 2011-09-30 Prepared By: AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		1	4.85	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.87	mg/Kg	1	2.00	94	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.85	mg/Kg	1	2.00	92	22.4 - 149

Sample: 278167 - BH-10 10'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85270 Date Analyzed: 2011-10-04 Analyzed By: AR
Prep Batch: 72370 Sample Preparation: 2011-10-03 Prepared By: AR

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Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			412	mg/Kg	50	4.00

Sample: 278167 - BH-10 10'

Laboratory: Midland
Analysis: TPH DRO - NEW Analytical Method: S 8015 D Prep Method: N/A
QC Batch: 85197 Date Analyzed: 2011-09-30 Analyzed By: kg
Prep Batch: 72332 Sample Preparation: 2011-09-30 Prepared By: kg

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

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			78.8	mg/Kg	1	100	79	67.5 - 147.1

Sample: 278167 - BH-10 10'

Laboratory: Midland
Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035
QC Batch: 85193 Date Analyzed: 2011-09-30 Analyzed By: AG
Prep Batch: 72329 Sample Preparation: 2011-09-30 Prepared By: AG

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO		i	<2.00	mg/Kg	1	2.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.90	mg/Kg	1	2.00	95	30 - 134.6
4-Bromofluorobenzene (4-BFB)			1.84	mg/Kg	1	2.00	92	22.4 - 149

Sample: 278168 - BH-10 15'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85270 Date Analyzed: 2011-10-04 Analyzed By: AR
Prep Batch: 72370 Sample Preparation: 2011-10-03 Prepared By: AR

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Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			1620	mg/Kg	100	4.00

Sample: 278169 - BH-10 20'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85270 Date Analyzed: 2011-10-04 Analyzed By: AR
Prep Batch: 72370 Sample Preparation: 2011-10-03 Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			1580	mg/Kg	100	4.00

Sample: 278170 - BH-10 25'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85270 Date Analyzed: 2011-10-04 Analyzed By: AR
Prep Batch: 72370 Sample Preparation: 2011-10-03 Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			471	mg/Kg	50	4.00

Sample: 278171 - BH-10 30'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85270 Date Analyzed: 2011-10-04 Analyzed By: AR
Prep Batch: 72370 Sample Preparation: 2011-10-03 Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride	u		<200	mg/Kg	50	4.00

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Sample: 278174 - BH-11 0-1'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2011-10-04	Analyzed By:	AR
QC Batch:	85270	Sample Preparation:	2011-10-03	Prepared By:	AR
Prep Batch:	72370				

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			1150	mg/Kg	100	4.00

Sample: 278175 - BH-11 3'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2011-10-04	Analyzed By:	AR
QC Batch:	85270	Sample Preparation:	2011-10-03	Prepared By:	AR
Prep Batch:	72370				

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			392	mg/Kg	50	4.00

Sample: 278176 - BH-11 5'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2011-10-04	Analyzed By:	AR
QC Batch:	85270	Sample Preparation:	2011-10-03	Prepared By:	AR
Prep Batch:	72370				

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			392	mg/Kg	50	4.00

Sample: 278177 - BH-11 7'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2011-10-04	Analyzed By:	AR
QC Batch:	85270	Sample Preparation:	2011-10-03	Prepared By:	AR
Prep Batch:	72370				

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Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride	u		<200	mg/Kg	50	4.00

Sample: 278178 - BH-11 10'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85270 Date Analyzed: 2011-10-04 Analyzed By: AR
Prep Batch: 72370 Sample Preparation: 2011-10-03 Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			228	mg/Kg	50	4.00

Sample: 278186 - BH-12 0-1'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85271 Date Analyzed: 2011-10-04 Analyzed By: AR
Prep Batch: 72370 Sample Preparation: 2011-10-03 Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			1560	mg/Kg	100	4.00

Sample: 278187 - BH-12 3'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85271 Date Analyzed: 2011-10-04 Analyzed By: AR
Prep Batch: 72370 Sample Preparation: 2011-10-03 Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			1190	mg/Kg	100	4.00

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Sample: 278188 - BH-12 5'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2011-10-04	Analyzed By:	AR
QC Batch:	85271	Sample Preparation:	2011-10-03	Prepared By:	AR
Prep Batch:	72370				

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			564	mg/Kg	50	4.00

Sample: 278189 - BH-12 7'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2011-10-04	Analyzed By:	AR
QC Batch:	85271	Sample Preparation:	2011-10-03	Prepared By:	AR
Prep Batch:	72370				

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			1190	mg/Kg	100	4.00

Sample: 278190 - BH-12 10'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2011-10-04	Analyzed By:	AR
QC Batch:	85271	Sample Preparation:	2011-10-03	Prepared By:	AR
Prep Batch:	72370				

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			1710	mg/Kg	100	4.00

Sample: 278191 - BH-12 15'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2011-10-04	Analyzed By:	AR
QC Batch:	85271	Sample Preparation:	2011-10-03	Prepared By:	AR
Prep Batch:	72370				

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Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			1550	mg/Kg	100	4.00

Sample: 278192 - BH-12 20'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85271 Date Analyzed: 2011-10-04 Analyzed By: AR
Prep Batch: 72370 Sample Preparation: 2011-10-03 Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			667	mg/Kg	100	4.00

Sample: 278193 - BH-12 25'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 85271 Date Analyzed: 2011-10-04 Analyzed By: AR
Prep Batch: 72370 Sample Preparation: 2011-10-03 Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride	u		<200	mg/Kg	50	4.00

Method Blanks

Method Blank (1) QC Batch: 85075

QC Batch: 85075
Prep Batch: 72241

Date Analyzed: 2011-09-29
QC Preparation: 2011-09-27

Analyzed By: AG
Prepared By: AG

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	0.949	mg/Kg	2

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.86	mg/Kg	1	2.00	93	67.6 - 150
4-Bromofluorobenzene (4-BFB)			1.73	mg/Kg	1	2.00	86	52.4 - 130

Method Blank (1) QC Batch: 85087

QC Batch: 85087
Prep Batch: 72249

Date Analyzed: 2011-09-27
QC Preparation: 2011-09-27

Analyzed By: kg
Prepared By: kg

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		1	<14.5	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			85.3	mg/Kg	1	100	85	52.7 - 133.8

Method Blank (1) QC Batch: 85088

QC Batch: 85088
Prep Batch: 72250

Date Analyzed: 2011-09-27
QC Preparation: 2011-09-27

Analyzed By: kg
Prepared By: kg

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		1	<14.5	mg/Kg	50

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Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			90.1	mg/Kg	1	100	90	52.7 - 133.8

Method Blank (1) QC Batch: 85117

QC Batch: 85117
Prep Batch: 72266

Date Analyzed: 2011-09-28
QC Preparation: 2011-09-28

Analyzed By: AG
Prepared By: AG

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	0.963	mg/Kg	2

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.88	mg/Kg	1	2.00	94	67.6 - 150
4-Bromofluorobenzene (4-BFB)			1.69	mg/Kg	1	2.00	84	52.4 - 130

Method Blank (1) QC Batch: 85151

QC Batch: 85151
Prep Batch: 72291

Date Analyzed: 2011-09-29
QC Preparation: 2011-09-29

Analyzed By: AG
Prepared By: AG

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	0.988	mg/Kg	2

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.83	mg/Kg	1	2.00	92	67.6 - 150
4-Bromofluorobenzene (4-BFB)			1.64	mg/Kg	1	2.00	82	52.4 - 130

Method Blank (1) QC Batch: 85172

QC Batch: 85172
Prep Batch: 72274

Date Analyzed: 2011-09-30
QC Preparation: 2011-09-29

Analyzed By: AR
Prepared By: AR

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Parameter	Flag	Cert	MDL Result	Units	RL
Chloride			<3.85	mg/Kg	4

Method Blank (1) QC Batch: 85173

QC Batch: 85173 Date Analyzed: 2011-09-30 Analyzed By: AR
Prep Batch: 72274 QC Preparation: 2011-09-29 Prepared By: AR

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride			<3.85	mg/Kg	4

Method Blank (1) QC Batch: 85174

QC Batch: 85174 Date Analyzed: 2011-09-30 Analyzed By: AR
Prep Batch: 72274 QC Preparation: 2011-09-29 Prepared By: AR

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride			<3.85	mg/Kg	4

Method Blank (1) QC Batch: 85175

QC Batch: 85175 Date Analyzed: 2011-09-30 Analyzed By: AR
Prep Batch: 72274 QC Preparation: 2011-09-29 Prepared By: AR

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride			<3.85	mg/Kg	4

Method Blank (1) QC Batch: 85176

QC Batch: 85176 Date Analyzed: 2011-09-30 Analyzed By: AR
Prep Batch: 72274 QC Preparation: 2011-09-29 Prepared By: AR

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Parameter	Flag	Cert	MDL Result	Units	RL
Chloride			<3.85	mg/Kg	4

Method Blank (1) QC Batch: 85177

QC Batch: 85177 Date Analyzed: 2011-09-30 Analyzed By: AR
Prep Batch: 72274 QC Preparation: 2011-09-29 Prepared By: AR

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride			<3.85	mg/Kg	4

Method Blank (1) QC Batch: 85193

QC Batch: 85193 Date Analyzed: 2011-09-30 Analyzed By: AG
Prep Batch: 72329 QC Preparation: 2011-09-30 Prepared By: AG

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	0.914	mg/Kg	2

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.80	mg/Kg	1	2.00	90	67.6 - 150
4-Bromofluorobenzene (4-BFB)			1.57	mg/Kg	1	2.00	78	52.4 - 130

Method Blank (1) QC Batch: 85197

QC Batch: 85197 Date Analyzed: 2011-09-30 Analyzed By: kg
Prep Batch: 72332 QC Preparation: 2011-09-30 Prepared By: kg

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		1	<14.5	mg/Kg	50

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Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			107	mg/Kg	1	100	107	52.7 - 133.8

Method Blank (1) QC Batch: 85270

QC Batch: 85270 Date Analyzed: 2011-10-04 Analyzed By: AR
Prep Batch: 72370 QC Preparation: 2011-10-03 Prepared By: AR

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride			<3.85	mg/Kg	4

Method Blank (1) QC Batch: 85271

QC Batch: 85271 Date Analyzed: 2011-10-04 Analyzed By: AR
Prep Batch: 72370 QC Preparation: 2011-10-03 Prepared By: AR

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride			<3.85	mg/Kg	4

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 85075
Prep Batch: 72241

Date Analyzed: 2011-09-29
QC Preparation: 2011-09-27

Analyzed By: AG
Prepared By: AG

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	17.4	mg/Kg	1	20.0	<0.753	87	60.9 - 95.4

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	17.9	mg/Kg	1	20.0	<0.753	90	60.9 - 95.4	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)	1.88	1.90	mg/Kg	1	2.00	94	95	61.9 - 142
4-Bromofluorobenzene (4-BFB)	1.84	1.86	mg/Kg	1	2.00	92	93	56.2 - 132

Laboratory Control Spike (LCS-1)

QC Batch: 85087
Prep Batch: 72249

Date Analyzed: 2011-09-27
QC Preparation: 2011-09-27

Analyzed By: kg
Prepared By: kg

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	203	mg/Kg	1	250	<14.5	81	64.5 - 146.9

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	207	mg/Kg	1	250	<14.5	83	64.5 - 146.9	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
n-Tricosane	83.8	83.7	mg/Kg	1	100	84	84	65.3 - 135.8

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Laboratory Control Spike (LCS-1)

QC Batch: 85088
Prep Batch: 72250

Date Analyzed: 2011-09-27
QC Preparation: 2011-09-27

Analyzed By: kg
Prepared By: kg

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	216	mg/Kg	1	250	<14.5	86	64.5 - 146.9

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	208	mg/Kg	1	250	<14.5	83	64.5 - 146.9	4	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-Tricosane	85.4	86.5	mg/Kg	1	100	85	86	65.3 - 135.8

Laboratory Control Spike (LCS-1)

QC Batch: 85117
Prep Batch: 72266

Date Analyzed: 2011-09-28
QC Preparation: 2011-09-28

Analyzed By: AG
Prepared By: AG

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	18.0	mg/Kg	1	20.0	<0.753	90	60.9 - 95.4

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	18.1	mg/Kg	1	20.0	<0.753	90	60.9 - 95.4	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)	1.89	1.90	mg/Kg	1	2.00	94	95	61.9 - 142
4-Bromofluorobenzene (4-BFB)	1.81	1.82	mg/Kg	1	2.00	90	91	56.2 - 132

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Laboratory Control Spike (LCS-1)

QC Batch: 85151
Prep Batch: 72291

Date Analyzed: 2011-09-29
QC Preparation: 2011-09-29

Analyzed By: AG
Prepared By: AG

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	17.4	mg/Kg	1	20.0	<0.753	87	60.9 - 95.4

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	18.0	mg/Kg	1	20.0	<0.753	90	60.9 - 95.4	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)	1.86	1.86	mg/Kg	1	2.00	93	93	61.9 - 142
4-Bromofluorobenzene (4-BFB)	1.77	1.79	mg/Kg	1	2.00	88	90	56.2 - 132

Laboratory Control Spike (LCS-1)

QC Batch: 85172
Prep Batch: 72274

Date Analyzed: 2011-09-30
QC Preparation: 2011-09-29

Analyzed By: AR
Prepared By: AR

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			93.8	mg/Kg	1	100	<3.85	94	85 - 115

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			105	mg/Kg	1	100	<3.85	105	85 - 115	11	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: 85173
Prep Batch: 72274

Date Analyzed: 2011-09-30
QC Preparation: 2011-09-29

Analyzed By: AR
Prepared By: AR

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Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			96.9	mg/Kg	1	100	<3.85	97	85 - 115

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			104	mg/Kg	1	100	<3.85	104	85 - 115	7	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: 85174
Prep Batch: 72274

Date Analyzed: 2011-09-30
QC Preparation: 2011-09-29

Analyzed By: AR
Prepared By: AR

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			94.1	mg/Kg	1	100	<3.85	94	85 - 115

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			105	mg/Kg	1	100	<3.85	105	85 - 115	11	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: 85175
Prep Batch: 72274

Date Analyzed: 2011-09-30
QC Preparation: 2011-09-29

Analyzed By: AR
Prepared By: AR

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			95.9	mg/Kg	1	100	<3.85	96	85 - 115

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			104	mg/Kg	1	100	<3.85	104	85 - 115	8	20

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

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Laboratory Control Spike (LCS-1)

QC Batch: 85176
Prep Batch: 72274

Date Analyzed: 2011-09-30
QC Preparation: 2011-09-29

Analyzed By: AR
Prepared By: AR

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			94.6	mg/Kg	1	100	<3.85	95	85 - 115

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

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			106	mg/Kg	1	100	<3.85	106	85 - 115	11	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: 85177
Prep Batch: 72274

Date Analyzed: 2011-09-30
QC Preparation: 2011-09-29

Analyzed By: AR
Prepared By: AR

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			94.9	mg/Kg	1	100	<3.85	95	85 - 115

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

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			103	mg/Kg	1	100	<3.85	103	85 - 115	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: 85193
Prep Batch: 72329

Date Analyzed: 2011-09-30
QC Preparation: 2011-09-30

Analyzed By: AG
Prepared By: AG

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO			17.0	mg/Kg	1	20.0	<0.753	85	60.9 - 95.4

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

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Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	17.3	mg/Kg	1	20.0	<0.753	86	60.9 - 95.4	2	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.84	1.84	mg/Kg	1	2.00	92	92	61.9 - 142
4-Bromofluorobenzene (4-BFB)	1.70	1.75	mg/Kg	1	2.00	85	88	56.2 - 132

Laboratory Control Spike (LCS-1)

QC Batch: 85197
Prep Batch: 72332

Date Analyzed: 2011-09-30
QC Preparation: 2011-09-30

Analyzed By: kg
Prepared By: kg

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	243	mg/Kg	1	250	<14.5	97	64.5 - 146.9

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

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	248	mg/Kg	1	250	<14.5	99	64.5 - 146.9	2	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
n-Tricosane	108	113	mg/Kg	1	100	108	113	65.3 - 135.8

Laboratory Control Spike (LCS-1)

QC Batch: 85270
Prep Batch: 72370

Date Analyzed: 2011-10-04
QC Preparation: 2011-10-03

Analyzed By: AR
Prepared By: AR

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			95.1	mg/Kg	1	100	<3.85	95	85 - 115

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

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control spikes continued ...

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			105	mg/Kg	1	100	<3.85	105	85 - 115	10	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: 85271
Prep Batch: 72370

Date Analyzed: 2011-10-04
QC Preparation: 2011-10-03

Analyzed By: AR
Prepared By: AR

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			95.6	mg/Kg	1	100	<3.85	96	85 - 115

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

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			106	mg/Kg	1	100	<3.85	106	85 - 115	10	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: 278077

QC Batch: 85075
Prep Batch: 72241

Date Analyzed: 2011-09-29
QC Preparation: 2011-09-27

Analyzed By: AG
Prepared By: AG

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	18.0	mg/Kg	1	20.0	0.9676	85	61.8 - 114

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	18.4	mg/Kg	1	20.0	0.9676	92	61.8 - 114	2	20

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

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Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.87	1.86	mg/Kg	1	2	94	93	29.4 - 161.7
4-Bromofluorobenzene (4-BFB)	1.98	1.99	mg/Kg	1	2	99	100	37.3 - 162

Matrix Spike (MS-1) Spiked Sample: 278103

QC Batch: 85087
Prep Batch: 72249

Date Analyzed: 2011-09-27
QC Preparation: 2011-09-27

Analyzed By: kg
Prepared By: kg

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	464	mg/Kg	1	250	280	74	38.8 - 153.3

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	Qr, Qs	1	835	mg/Kg	1	250	280	222	38.8 - 153.3	57	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-Tricosane	97.0	112	mg/Kg	1	100	97	112	54.6 - 149.8

Matrix Spike (MS-1) Spiked Sample: 278104

QC Batch: 85088
Prep Batch: 72250

Date Analyzed: 2011-09-27
QC Preparation: 2011-09-27

Analyzed By: kg
Prepared By: kg

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	346	mg/Kg	1	250	110	94	38.8 - 153.3

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	337	mg/Kg	1	250	110	91	38.8 - 153.3	3	20

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

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matrix spikes continued ...

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	81.7	81.2	mg/Kg	1	100	82	81	54.6 - 149.8

Matrix Spike (MS-1) Spiked Sample: 278105

QC Batch: 85117
Prep Batch: 72266

Date Analyzed: 2011-09-28
QC Preparation: 2011-09-28

Analyzed By: AG
Prepared By: AG

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	17.8	mg/Kg	1	20.0	3.99	69	61.8 - 114

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	20.7	mg/Kg	1	20.0	3.99	84	61.8 - 114	15	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)	1.85	1.86	mg/Kg	1	2	92	93	29.4 - 161.7
4-Bromofluorobenzene (4-BFB)	2.01	2.01	mg/Kg	1	2	100	100	37.3 - 162

Matrix Spike (MS-1) Spiked Sample: 278550

QC Batch: 85151
Prep Batch: 72291

Date Analyzed: 2011-09-29
QC Preparation: 2011-09-29

Analyzed By: AG
Prepared By: AG

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	16.5	mg/Kg	1	20.0	<0.753	82	61.8 - 114

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	19.6	mg/Kg	1	20.0	<0.753	98	61.8 - 114	17	20

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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)	1.84	1.82	mg/Kg	1	2	92	91	29.4 - 161.7
4-Bromofluorobenzene (4-BFB)	1.90	1.92	mg/Kg	1	2	95	96	37.3 - 162

Matrix Spike (MS-1) Spiked Sample: 278078

QC Batch: 85172
Prep Batch: 72274

Date Analyzed: 2011-09-30
QC Preparation: 2011-09-29

Analyzed By: AR
Prepared By: AR

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			10400	mg/Kg	100	10000	453	99	79.4 - 120.6

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			11100	mg/Kg	100	10000	453	106	79.4 - 120.6	6	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: 278106

QC Batch: 85173
Prep Batch: 72274

Date Analyzed: 2011-09-30
QC Preparation: 2011-09-29

Analyzed By: AR
Prepared By: AR

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			10800	mg/Kg	100	10000	576	102	79.4 - 120.6

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			11300	mg/Kg	100	10000	576	107	79.4 - 120.6	4	20

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

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Matrix Spike (MS-1) Spiked Sample: 278119

QC Batch: 85174
Prep Batch: 72274

Date Analyzed: 2011-09-30
QC Preparation: 2011-09-29

Analyzed By: AR
Prepared By: AR

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			10400	mg/Kg	100	10000	<385	104	79.4 - 120.6

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			11000	mg/Kg	100	10000	<385	110	79.4 - 120.6	6	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: 278137

QC Batch: 85175
Prep Batch: 72274

Date Analyzed: 2011-09-30
QC Preparation: 2011-09-29

Analyzed By: AR
Prepared By: AR

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			10200	mg/Kg	100	10000	<385	102	79.4 - 120.6

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			11100	mg/Kg	100	10000	<385	111	79.4 - 120.6	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: 278153

QC Batch: 85176
Prep Batch: 72274

Date Analyzed: 2011-09-30
QC Preparation: 2011-09-29

Analyzed By: AR
Prepared By: AR

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			10400	mg/Kg	100	10000	<385	102	79.4 - 120.6

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

Report Date: October 6, 2011
114-6400291

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Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			11100	mg/Kg	100	10000	<385	108	79.4 - 120.6	6	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: 278166

QC Batch: 85177
Prep Batch: 72274

Date Analyzed: 2011-09-30
QC Preparation: 2011-09-29

Analyzed By: AR
Prepared By: AR

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			11000	mg/Kg	100	10000	1060	99	79.4 - 120.6

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			11700	mg/Kg	100	10000	1060	106	79.4 - 120.6	6	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: 278166

QC Batch: 85193
Prep Batch: 72329

Date Analyzed: 2011-09-30
QC Preparation: 2011-09-30

Analyzed By: AG
Prepared By: AG

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	24.0	mg/Kg	1	20.0	4.85	96	61.8 - 114

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	26.4	mg/Kg	1	20.0	4.85	108	61.8 - 114	10	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)	1.83	1.82	mg/Kg	1	2	92	91	29.4 - 161.7
4-Bromofluorobenzene (4-BFB)	1.98	1.96	mg/Kg	1	2	99	98	37.3 - 162

Report Date: October 6, 2011
114-6400291

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Matrix Spike (MS-1) Spiked Sample: 278703

QC Batch: 85197
Prep Batch: 72332

Date Analyzed: 2011-09-30
QC Preparation: 2011-09-30

Analyzed By: kg
Prepared By: kg

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	192	mg/Kg	1	250	<14.5	77	38.8 - 153.3

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	197	mg/Kg	1	250	<14.5	79	38.8 - 153.3	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-Tricosane	73.1	77.5	mg/Kg	1	100	73	78	54.6 - 149.8

Matrix Spike (MS-1) Spiked Sample: 278178

QC Batch: 85270
Prep Batch: 72370

Date Analyzed: 2011-10-04
QC Preparation: 2011-10-03

Analyzed By: AR
Prepared By: AR

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			10200	mg/Kg	100	10000	<385	100	79.4 - 120.6

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			10900	mg/Kg	100	10000	<385	107	79.4 - 120.6	7	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: 278362

QC Batch: 85271
Prep Batch: 72370

Date Analyzed: 2011-10-04
QC Preparation: 2011-10-03

Analyzed By: AR
Prepared By: AR

Report Date: October 6, 2011
114-6400291

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Glenn Springs/State AD

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Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			12100	mg/Kg	100	10000	2510	96	79.4 - 120.6

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			12800	mg/Kg	100	10000	2510	103	79.4 - 120.6	6	20

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

Calibration Standards

Standard (CCV-2)

QC Batch: 85075

Date Analyzed: 2011-09-29

Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.04	104	80 - 120	2011-09-29

Standard (CCV-3)

QC Batch: 85075

Date Analyzed: 2011-09-29

Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.04	104	80 - 120	2011-09-29

Standard (CCV-2)

QC Batch: 85087

Date Analyzed: 2011-09-27

Analyzed By: kg

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	208	83	80 - 120	2011-09-27

Standard (CCV-3)

QC Batch: 85087

Date Analyzed: 2011-09-27

Analyzed By: kg

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	206	82	80 - 120	2011-09-27

Report Date: October 6, 2011
114-6400291

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Standard (CCV-4)

QC Batch: 85087

Date Analyzed: 2011-09-27

Analyzed By: kg

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	212	85	80 - 120	2011-09-27

Standard (CCV-1)

QC Batch: 85088

Date Analyzed: 2011-09-27

Analyzed By: kg

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	214	86	80 - 120	2011-09-27

Standard (CCV-2)

QC Batch: 85088

Date Analyzed: 2011-09-27

Analyzed By: kg

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	211	84	80 - 120	2011-09-27

Standard (CCV-3)

QC Batch: 85088

Date Analyzed: 2011-09-27

Analyzed By: kg

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	223	89	80 - 120	2011-09-27

Standard (CCV-1)

QC Batch: 85117

Date Analyzed: 2011-09-28

Analyzed By: AG

Report Date: October 6, 2011
114-6400291

Work Order: 11092301
Glenn Springs/State AD

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Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.11	111	80 - 120	2011-09-28

Standard (CCV-2)

QC Batch: 85117

Date Analyzed: 2011-09-28

Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.06	106	80 - 120	2011-09-28

Standard (CCV-3)

QC Batch: 85117

Date Analyzed: 2011-09-28

Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.06	106	80 - 120	2011-09-28

Standard (CCV-2)

QC Batch: 85151

Date Analyzed: 2011-09-29

Analyzed By: AG

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.03	103	80 - 120	2011-09-29

Standard (CCV-3)

QC Batch: 85151

Date Analyzed: 2011-09-29

Analyzed By: AG

Report Date: October 6, 2011
114-6400291

Work Order: 11092301
Glenn Springs/State AD

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Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.02	102	80 - 120	2011-09-29

Standard (ICV-1)

QC Batch: 85172

Date Analyzed: 2011-09-30

Analyzed By: AR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	100	100	85 - 115	2011-09-30

Standard (CCV-1)

QC Batch: 85172

Date Analyzed: 2011-09-30

Analyzed By: AR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	99.7	100	85 - 115	2011-09-30

Standard (ICV-1)

QC Batch: 85173

Date Analyzed: 2011-09-30

Analyzed By: AR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	99.1	99	85 - 115	2011-09-30

Standard (CCV-1)

QC Batch: 85173

Date Analyzed: 2011-09-30

Analyzed By: AR

Appendix

Laboratory Certifications

	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704392-10-TX	Midland

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less than ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

W0#11092301

Analysis Request of Chain of Custody Record

PAGE: 1 OF: 13

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3946

 ANALYSIS REQUEST
 (Circle or Specify Method No.)
CLIENT NAME:
Glen SpringsSITE MANAGER:
Aaron HalePROJECT NO.:
114-6400291PROJECT NAME:
State AD ~~XXXX~~ KAO

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD				BTEX 8021B	TPH 8015 MOD	TX1005 (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
									HCL	HNO3	ICE	NONE																		
270074	9/19		S	X		BH-1 0-1'	1				X			✓												✓				
075						3'	1							✓												✓				
076						5'	1							✓												✓				
077						7'	1							✓												✓				
078						10'	1																		✓					
079						15' Hold	1																							
080						20'	1																							
081						25'	1																							
082						30'	1																							
083						40'	1																							

RELINQUISHED BY: (Signature)

Date: 9/21/11
Time: 1330

RECEIVED BY: (Signature)

Date: _____
Time: _____

SAMPLED BY: (Print & Initial)

Kim

Date: 9/20/11
Time: _____

RELINQUISHED BY: (Signature)

Date: 9/22/11
Time: 1545

RECEIVED BY: (Signature)

Date: _____
Time: _____

SAMPLE SHIPPED BY: (Circle)

FEDEX BUS
HAND DELIVERED UPS

AIRBILL #: _____

OTHER: _____

RELINQUISHED BY: (Signature)

Date: _____
Time: _____

RECEIVED BY: (Signature)

Date: _____
Time: _____

TETRA TECH CONTACT PERSON:

Results by:

RECEIVING LABORATORY:

TRACE

RECEIVED BY: (Signature)

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP: _____

CONTACT:

PHONE: _____

DATE: 9/22/11

TIME: 3:10pm

Aaron Hale

RUSH Charges

Authorized:

Yes No

SAMPLE CONDITION WHEN RECEIVED:

10C

REMARKS:

BH-1 @ T-18 * IF TPH is ≥ 100 ppm, run next sample below for TPH.

Not 11092301

Analysis Request of Chain of Custody Record

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TETRA TECH

1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

Cleary Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD ~~KAD~~ KAD

LAB I.D. NUMBER	DATE 2011	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF FILTERED (Y)	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015	PAH 8270	RCRA Metals	TCLP Metals	TCLP Volatile	TCLP Semi V	RCI	GC/MS Vol. 8	GC/MS Semi	PCB's 8080/60	Pest. 808/60	Chloride	Gamma Spec	Alpha Beta (/	PLM (Asbest	Major Anions	
278004	9/19		S	X		BH-1 50' Hold	1			X																			
085						60' ↓	1																						
086						BH-2 0-1'	1						✓																
087						3'	1						✓																
088						5'	1						✓																
089						7' Hold ↓	1																						
090						10'	1																						
091						15'	1																						
092						20' ↓	1																						
093						BH-3, 0-1'	1																	✓					

RELINQUISHED BY: (Signature)

Date: 9/21/11

Time: 12:30

RECEIVED BY: (Signature)

Date: _____

Time: _____

SAMPLED BY: (Print & Initial)

Kim

Date: 9/20/11

RELINQUISHED BY: (Signature)

Date: 9/22/11

Time: 15:05

RECEIVED BY: (Signature)

Date: _____

Time: _____

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #: _____

HAND DELIVERED

UPS

OTHER: _____

RECEIVING LABORATORY:

TRACE

RECEIVED BY: (Signature)

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP: _____

CONTACT:

PHONE: _____

DATE: 9/22/11

TIME: 3:10pm

TETRA TECH CONTACT PERSON:

Aaron Hale

Results by:

RUSH Charges
Authorized:

Yes No

SAMPLE CONDITION WHEN RECEIVED:

10C

REMARKS:

BH-2 @ T-3

BH-3 @ T-2

* IF TPH is ≥ 100 ppm, run next sample below for TPH

No # 1102301

Analysis Request of Chain of Custody Record

PAGE: 3 OF: 13

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3946

 ANALYSIS REQUEST
 (Circle or Specify Method No.)

 CLIENT NAME:
 Glen Springs

 SITE MANAGER:
 Aaron Hale

 PROJECT NO.:
 114-6400291

 PROJECT NAME:
 State AD

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION						NUMBER OF CONTAINERS	FILTERED (Y/N)	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015	PAH 8270	RCRA Metals	TCLP Metals	TCLP Volatiles	TCLP Semi Vol.	RCI	GC/MS Vol. 8	GC/MS Semi.	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (A)	PLM (Asbestos)	Major Anions	
278094	9/19		S		X	BH-3	3'									X															✓				
095							5'																								✓				
096							7'																								✓				
097							10'																								✓				
098							15'																								✓				
099							20'	Hold																											
100							25'																												
101							30'																												
102						40'																													
103	9/20		S			BH-4	0-1'											✓												✓					

RELINQUISHED BY: (Signature) Date: 9/21/11 Time: 1830

RECEIVED BY: (Signature) _____ Date: _____ Time: _____

SAMPLED BY: (Print & Initial) Kim Date: 9/20/11 Time: _____

RELINQUISHED BY: (Signature) Date: 9/22/11 Time: 1505

RECEIVED BY: (Signature) _____ Date: _____ Time: _____

SAMPLE SHIPPED BY: (Circle) FEDEX BUS AIRBILL #: _____ HAND DELIVERED UPS OTHER: _____

RELINQUISHED BY: (Signature) _____ Date: _____ Time: _____

RECEIVED BY: (Signature) _____ Date: _____ Time: _____

TETRA TECH CONTACT PERSON: _____ Results by: _____

RECEIVING LABORATORY: TRACE ADDRESS: _____ CITY: MIDLAND STATE: TX ZIP: _____ CONTACT: _____ PHONE: _____

RECEIVED BY: (Signature) DATE: 9/22/11 TIME: 3:10p

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 106

 REMARKS: BH-4 @ T-5 * IF TPH is ≥ 100 ppm, then run next lower sample for TPH

W0# 11092301

Analysis Request of Chain of Custody Record

PAGE: 4 OF: 13

**TETRA TECH**

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)CLIENT NAME:
*Glenn Springs*SITE MANAGER:
*Aaron Hale*PROJECT NO.:
*114-6400291*PROJECT NAME:
State AD

LAB I.D. NUMBER	DATE 2011	TIME	MATRIX	COMP	GRAB	SAMPLE IDENTIFICATION	NUMBER OF	FILTERED (Y)	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015	PAH 8270	RCRA Metals	TCLP Metals	TCLP Volatiles	TCLP Semi V	RCI	GC/MS Vol. 8	GC/MS Semi	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec	Alpha Beta (	PLM (Asbest	Major Anions	
278104	9/20		S	X		BH-4 3'	1				X			✓											✓					
105						5'	1							✓											✓					
106						7'	1																	✓						
107						10'	1																	✓						
108						15'	1																	✓						
109						20'	1																	✓						
110						25' Hold	1																	✓						
111						30'	1																		✓					
112					40'	1																								
113						BH-5 0-1'	1																		✓					

RELINQUISHED BY: (Signature)

Date: *9/20/11*
Time: *1830*

RECEIVED BY: (Signature)

Date: _____
Time: _____

SAMPLED BY: (Print & Initial)

*Kim*Date: *9/20/11*
Time: _____

RELINQUISHED BY: (Signature)

Date: *9/22/11*
Time: *1505*

RECEIVED BY: (Signature)

Date: _____
Time: _____

SAMPLE SHIPPED BY: (Circle)

FEDEX ☒ BUS ☐
HAND DELIVERED ☒ UPS ☐AIRBILL #: _____
OTHER: _____

RELINQUISHED BY: (Signature)

Date: _____
Time: _____

RECEIVED BY: (Signature)

Date: _____
Time: _____

TETRA TECH CONTACT PERSON:

Aaron Hale

Results by:

RUSH Charges
Authorized:

Yes No

RECEIVING LABORATORY:

TRACE

ADDRESS:

CITY: *MIDLAND* STATE: *TX* ZIP: _____

CONTACT:

PHONE: _____

RECEIVED BY: (Signature)

*9/22/11*DATE: *9/22/11* TIME: *3:10 pm*

SAMPLE CONDITION WHEN RECEIVED:

10°C

REMARKS:

*BH-5 @ T-4** IF TPH is ≥ 100 ppm, then run next lower sample for TPH.

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

WO # 11092301

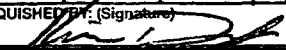
Analysis Request of Chain of Custody Record

PAGE: 5 OF: 13

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3946

 ANALYSIS REQUEST
 (Circle or Specify Method No.)
CLIENT NAME:
Glenn SpringsSITE MANAGER:
Aaron HalePROJECT NO.:
114-6400291PROJECT NAME:
State AD

LAB I.D. NUMBER	DATE 2011	TIME	MATRIX	COMP	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS FILTERED (Y/N)	PRESERVATIVE METHOD				BTEX 8021B	TPH 8015 MOD. (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/824	GC/MS Semi. Vol. 8270/825	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
								HCL	HNO3	ICE	NONE																	
278114	9/20		S	X		BH-5 3'	1			X																		
115						5'	1																					
116						7'	1																					
117						10'	1																					
118						15'	1																					
119						20'	1																					
120						25' Hold	1																					
121						30'	1																					
122						40'	1																					
123						BH-6 0-1'	1																					

RELINQUISHED BY: (Signature)  Date: 9/20/11 Time: 1:30

RECEIVED BY: (Signature) _____ Date: _____ Time: _____

SAMPLED BY: (Print & Initial) Kim Date: 9/20/11 Time: _____

RELINQUISHED BY: (Signature)  Date: 9/22/11 Time: 1:30

RECEIVED BY: (Signature) _____ Date: _____ Time: _____

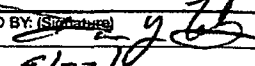
SAMPLE SHIPPED BY: (Circle) FEDEX BUS AIRBILL #: _____
HAND DELIVERED UPS OTHER: _____

RELINQUISHED BY: (Signature) _____ Date: _____ Time: _____

RECEIVED BY: (Signature) _____ Date: _____ Time: _____

TETRA TECH CONTACT PERSON: _____ Results by: _____

RECEIVING LABORATORY: TRACE ADDRESS: _____ CITY: MIDLAND STATE: TX ZIP: _____ CONTACT: _____ PHONE: _____

RECEIVED BY: (Signature)  DATE: 9/22/11 TIME: 3:10 PM

RUSH Charges Authorized: _____ Yes No

SAMPLE CONDITION WHEN RECEIVED:
100REMARKS:
BH-6 @ T-9 * IF TPH is ≥ 100 ppm, then run next lower depth for TPH

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

W0#11092301

Analysis Request of Chain of Custody Record

PAGE: 6 OF: 13

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3946

CLIENT NAME:

Glen Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD

LAB I.D.
NUMBERDATE
2011

TIME

MATRIX
COMP
GRAB

SAMPLE IDENTIFICATION

NUMBER OF CONTAINERS

FILTERED (Y/N)

PRESERVATIVE
METHOD

HCL

HNO3

ICE

NONE

BTX 8021B

TPH 8015 MOD (Ext. to C35)

PAH 8270

RCRA Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC-MS Vol. 8240/8260/624

GC-MS Semi. Vol. 8270/625

PCB's 8080/608

Pest. 808/608

Chloride

Gamma Spec.

Alpha Beta (Air)

PLM (Asbestos)

Major Anions/Cations, pH, TDS

RELINQUISHED BY: (Signature)

Date: 9/21/11
Time: 12:30

RECEIVED BY: (Signature)

Date: _____
Time: _____

SAMPLED BY: (Print & Initial)

Kim

Date: 9/20/11
Time: _____

RELINQUISHED BY: (Signature)

Date: 9/22/11
Time: 15:02

RECEIVED BY: (Signature)

Date: _____
Time: _____

SAMPLE SHIPPED BY: (Circle)

FEDEX
HAND DELIVEREDBUS
UPSAIRBILL #: _____
OTHER: _____

RECEIVING LABORATORY:

TRACE

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP: _____

CONTACT:

PHONE: _____

RECEIVED BY: (Signature)

Date: 9/22/11

Time: 3:10pm

TETRA TECH CONTACT PERSON:

Aaron Hale

Results by:

RUSH Charges
Authorized:
Yes No

SAMPLE CONDITION WHEN RECEIVED:

1°C

REMARKS:

BH-7 @ T-8

IF TPH is ≥ 100 ppm or greater, run next highest TPH sample depth. For TPH

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

W0#11092301

Analysis Request of Chain of Custody Record

PAGE: 7 OF: 13

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3946

 ANALYSIS REQUEST
 (Circle or Specify Method No.)
CLIENT NAME:
Green SpringsSITE MANAGER:
Aaron HalePROJECT NO.:
114-6400291PROJECT NAME:
State AD

LAB I.D. NUMBER	DATE 2011	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS FILTERED (Y/N)	PRESERVATIVE METHOD				BTEX 8021B	TPH 8015 MOD	PAH 8270	TX1005 (Ext. to C35)	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
								HCL	HNO3	ICE	NONE																		
278134	9/20		S	X		BH-7 3'	1			X			✓												✓				
135						5'	1						✓												✓				
136						7'	1																		✓				
137						10'	1																		✓				
138						15'	1																		✓				
139						20' Hold	1																						
140						25'	1																						
141						30'	1																						
142						40'	1																						
143						BH-8 0-1	1						✓												✓				

RELINQUISHED BY: (Signature) *[Signature]* Date: 9/21/11 Time: 1830RECEIVED BY: (Signature) *[Signature]* Date: _____ Time: _____

SAMPLED BY: (Print & Initial) Kim Date: 9/20/11

RELINQUISHED BY: (Signature) *[Signature]* Date: 9/22/11 Time: 1505RECEIVED BY: (Signature) *[Signature]* Date: _____ Time: _____SAMPLE SHIPPED BY: (Circle) FEDEX ☒ BUS ☐ AIRBILL #: _____RELINQUISHED BY: (Signature) *[Signature]* Date: _____ Time: _____RECEIVED BY: (Signature) *[Signature]* Date: _____ Time: _____OTHER: ☒ HAND DELIVERED ☐ UPS
 RECEIVING LABORATORY: TRACE
 ADDRESS: _____
 CITY: MIDLAND STATE: TX ZIP: _____
 CONTACT: _____ PHONE: _____

 RECEIVED BY: (Signature) *[Signature]*
 DATE: 9/22/11 TIME: 3:10 pm

 TETRA TECH CONTACT PERSON: Aaron Hale
 Results by: _____
 RUSH Charges Authorized: Yes No

 SAMPLE CONDITION WHEN RECEIVED: 10C
 REMARKS: BH-8 @ T-7

IF TPH ≥ 100 ppm, run next TPH together. Sample below for TPH

WO#1107301

Analysis Request of Chain of Custody Record

PAGE: 8 OF: 13

**TETRA TECH**1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

Glean Springs

SITE MANAGER:

Aaron Hole

PROJECT NO.:

114-640 0291

PROJECT NAME:

State AD

LAB I.D. NUMBER	DATE 2011	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF FILTERED (Y)	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015	PAH 8270	RCRA Metals	TCLP Metals	TCLP Volatiles	TCLP Semi V	RCI	GC/MS Vol. 8	GC/MS Semi	PCB's 8080/	Pest. 808/608	Chloride	Gamma Spec	Alpha Beta (	PLM (Asbest	Major Anion	
278144	9/20		S	X		BH-8 3'	1			X			✓											✓					
145						5'	1						✓											✓					
146						7'	1																✓						
147						10'	1																✓						
148						15'	1																✓						
149						20'	1																✓						
150						25'	1																✓						
151						30' Hold	1																						
152						40' ↓	1																						
153						BH-9 0-1'	1																	✓					

RELINQUISHED BY: (Signature)

Date: 9/20/11

Time: 1:30

RECEIVED BY: (Signature)

Date:

Time:

SAMPLED BY: (Print & Initial)

Kim

Date: 9/20/11

Time:

RELINQUISHED BY: (Signature)

Date: 9/22/11

Time: 1:50

RECEIVED BY: (Signature)

Date:

Time:

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

TETRA TECH CONTACT PERSON:

Aaron Hole

OTHER:

Results by:

RECEIVING LABORATORY:

TRACE

RECEIVED BY: (Signature)

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP:

CONTACT:

PHONE:

DATE: 9/22/11

TIME: 3:10 pm

SAMPLE CONDITION WHEN RECEIVED:

10C

REMARKS:

BH-9 @ T-12 IF TPH ≥ 100ppm, run next sample depth for TPH

RUSH Charges
Authorized:
Yes No

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

W0 # 11092301

Analysis Request of Chain of Custody Record

PAGE: 9 OF: 13

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3946

CLIENT NAME:

Glean Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD

LAB I.D.
NUMBERDATE
2011

TIME

MATRIX

COMP

GRAB

SAMPLE IDENTIFICATION

NUMBER OF CONTAINERS

FILTERED (Y/N)

HCL

HNO3

ICE

NONE

PRESERVATIVE
METHOD
 BTEX 8021B
 TPH 8015 MOD. TX1005 (Ext. to C35)
 PAH 8270

RCRA Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Metals Ag As Ba Cd Vr Pd Hg Se

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8240/8260/824

GC/MS Semi. Vol. 8270/625

PCB's 8080/608

Pest. 808/608

Chloride

Gamma Spec.

Alpha Beta (Air)

PLM (Asbestos)

Major Anions/Cations, pH, TDS

278154

9/20

S

X

BH-9 3'

1

X

155

5'

1

156

7'

1

157

10'

1

158

15'

Hold

1

159

20'

1

160

25'

1

161

30'

1

162

40'

1

163

9/21

BH-10 0-1'

1

RELINQUISHED BY: (Signature)

Date: 9/21/11

Time: 1830

RECEIVED BY: (Signature)

Date: 9/22/11

Time: 3:10 pm

SAMPLED BY: (Print & Initial)

Kim

Date: 9/21/11

RELINQUISHED BY: (Signature)

Date: 9/22/11

Time: 1505

RECEIVED BY: (Signature)

Date: 9/22/11

Time: 3:10 pm

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #:

RELINQUISHED BY: (Signature)

Date: 9/22/11

Time: 1505

RECEIVED BY: (Signature)

Date: 9/22/11

Time: 3:10 pm

TETRA TECH CONTACT PERSON:

Aaron Hale

Results by:

RUSH Charges

Authorized:

Yes No

RECEIVING LABORATORY:

TRACE

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP:

CONTACT:

PHONE:

RECEIVED BY: (Signature)

SAMPLE CONDITION WHEN RECEIVED:

1st C

REMARKS:

BH-10 @ T-15

IF TPH is ≥ 100 ppm, then run next lower depth for TPH

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

W0 # 11092301

Analysis Request of Chain of Custody Record

PAGE: 10 OF: 13

**TETRA TECH**

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3948

CLIENT NAME:

Glen Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD

LAB I.D.
NUMBERDATE
2011

TIME

MATRIX

COMP

GRAB

SAMPLE IDENTIFICATION

NUMBER OF CONTAINERS

FILTERED (Y/N)

HCL

HNO3

IOE

NONE

PRESERVATIVE
METHOD

BTX 8021B

TPH 8015 MOD. TX1005 (Ext. to C35)

PAH 8270

RCRA Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8240/8260/824

GC/MS Semi. Vol. 8270/625

PCB's 8080/608

Pest. 808/608

Chloride

Gamma Spec.

Alpha Beta (Air)

PLM (Asbestos)

Major Anions/Cations, pH, TDS

RELINQUISHED BY: (Signature)

Date:

9/21/11

Time:

1830

RECEIVED BY: (Signature)

Date:

Time:

SAMPLED BY: (Print & Initial)

KGM

Date:

9/21/11

Time:

RELINQUISHED BY: (Signature)

Date:

9/22/11

Time:

1505

RECEIVED BY: (Signature)

Date:

Time:

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #:

HAND DELIVERED

UPS

OTHER:

RECEIVING LABORATORY:

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP:

CONTACT:

PHONE:

RECEIVED BY: (Signature)

DATE:

9/22/11

TIME:

3:10pm

TETRA TECH CONTACT PERSON:

Aaron Hale

Results by:

RUSH Charges

Authorized:

Yes

No

SAMPLE CONDITION WHEN RECEIVED:

10C

REMARKS:

* ZF TPH ≥ 100ppm, run next sample depth for TPH

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

No # 11092301

Analysis Request of Chain of Custody Record

PAGE: 11 OF: 13

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3948

 ANALYSIS REQUEST
 (Circle or Specify Method No.)

CLIENT NAME:

Glenn Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD

LAB I.D.
NUMBERDATE
2011

TIME

MATRIX
COMP.
GRAB

SAMPLE IDENTIFICATION

NUMBER OF CONTAINERS

FILTERED (Y/N)

PRESERVATIVE
METHOD

HCL

HNO3

ICE

NONE

BTEX 8021B

TPH 8015 MOD. TX1005 [Ext. to C35]

PAH 8270

RCRA Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8240/8260/624

GC/MS Semi. Vol. 8270/625

PCB's 8080/608

Pest. 808/608

Chloride

Gamma Spec.

Alpha Beta (Air)

PLM (Asbestos)

Major Anions/Cations, pH, TDS

270174

9/21

S

X

BH-11 0-1'

1

X

175

176

177

178

179

180

181

182

183

3'

5'

7'

10'

15'

20'

25'

30'

40'

Hold

RELINQUISHED BY: (Signature)

Date:

9/21/11

Time:

1830

RECEIVED BY: (Signature)

Date:

Time:

SAMPLED BY: (Print & Initial)

Kim

Date:

9/21/11

Time:

RELINQUISHED BY: (Signature)

Date:

9/22/11

Time:

1505

RECEIVED BY: (Signature)

Date:

Time:

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

TETRA TECH CONTACT PERSON:

Aaron Hale

OTHER: Results by:

RECEIVING LABORATORY:

TRACE

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP:

CONTACT:

PHONE:

RECEIVED BY: (Signature)

DATE:

9/22/11

TIME:

3:10 pm

RUSH Charges

Authorized:

Yes

No

SAMPLE CONDITION WHEN RECEIVED:

1°C

REMARKS:

BH-11 @ T-14

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

W0#11092301

Analysis Request of Chain of Custody Record

PAGE: 12 OF: 13



TETRA TECH

1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

Glenn Springs

SITE MANAGER:

Arion Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP	GRAB	SAMPLE IDENTIFICATION	NUMBER OF	FILTERED (Y	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015	PAH 8270	RCRA Metals	TCLP Metals	TCLP Volatile	TCLP Semi V	RCI	GC-MS Vol. 8	GC-MS Semi	PCB's 8080/0	Pest. 808/60	Chloride	Gamma Spec	Alpha Beta (	PLM (Asbest	Major Anions							
278184	9/21		S	X		BH-11 50' H&H	1				X																									
185						55' ↓	1																													
186						BH-12 0-1'	1																		✓											
187						3'	1																		✓											
188						5'	1																		✓											
189						7'	1																		✓											
190						10'	1																		✓											
191						15'	1																		✓											
192						20'	1																		✓											
193						25'	1																		✓											

RELINQUISHED BY: (Signature)

Date: 9/21/11

RECEIVED BY: (Signature)

Date:

SAMPLED BY: (Print & Initial)

Kim

Date: 9/21/11

RELINQUISHED BY: (Signature)

Date: 9/22/11

RECEIVED BY: (Signature)

Date:

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #:

RELINQUISHED BY: (Signature)

Date:

RECEIVED BY: (Signature)

Date:

HAND DELIVERED

UPS

OTHER:

RECEIVING LABORATORY:

TRACE

RECEIVED BY: (Signature)

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP:

CONTACT:

PHONE:

DATE:

9/22/11

TIME:

3:15 pm

TETRA TECH CONTACT PERSON:

Arion Hale

Results by:

RUSH Charges

Authorized:

Yes No

SAMPLE CONDITION WHEN RECEIVED:

10C

REMARKS:

BH-12 @ T-17



6701 Aberdeen Avenue, Suite 9 Lubbuck, Texas 79424 806•378•1296 806•794•1296 FAX 806•794•1296
200 East Sunset Road, Suite E El Paso, Texas 79922 915•585•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260 817•201•5260
E-Mail: lab@traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Aaron Hale
Tetra Tech
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: October 13, 2011

Work Order: 11092301



Project Name: Glenn Springs/State AD
Project Number: 114-6400291

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
278079	BH-1 15'	soil	2011-09-19	00:00	2011-09-22
278080	BH-1 20'	soil	2011-09-19	00:00	2011-09-22
278123	BH-6 0-1'	soil	2011-09-20	00:00	2011-09-22
278139	BH-7 20'	soil	2011-09-20	00:00	2011-09-22
278140	BH-7 25'	soil	2011-09-20	00:00	2011-09-22

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
Dr. Michael Abel, Project Manager

Report Contents

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Sample 278079 (BH-1 15')	4
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Sample 278139 (BH-7 20')	4
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QC Batch 85501 - Method Blank (1)	6
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Case Narrative

Samples for project Glenn Springs/State AD were received by TraceAnalysis, Inc. on 2011-09-22 and assigned to work order 11092301. Samples for work order 11092301 were received intact at a temperature of 1.0 C.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Chloride (Titration)	SM 4500-Cl B	72582	2011-10-12 at 11:01	85501	2011-10-12 at 15:53

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 11092301 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.

Report Date: October 13, 2011
114-6400291

Work Order: 11092301
Glenn Springs/State AD

Page Number: 4 of 9

Analytical Report

Sample: 278079 - BH-1 15'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2011-10-12	Analyzed By:	AR
QC Batch:	85501	Sample Preparation:	2011-10-12	Prepared By:	AR
Prep Batch:	72582				

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			546	mg/Kg	50	4.00

Sample: 278080 - BH-1 20'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2011-10-12	Analyzed By:	AR
QC Batch:	85501	Sample Preparation:	2011-10-12	Prepared By:	AR
Prep Batch:	72582				

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			843	mg/Kg	50	4.00

Sample: 278123 - BH-6 0-1'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2011-10-12	Analyzed By:	AR
QC Batch:	85501	Sample Preparation:	2011-10-12	Prepared By:	AR
Prep Batch:	72582				

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			1550	mg/Kg	100	4.00

Report Date: October 13, 2011
114-6400291

Work Order: 11092301
Glenn Springs/State AD

Page Number: 5 of 9

Sample: 278139 - BH-7 20'

Laboratory: Midland

Analysis: Chloride (Titration)

QC Batch: 85501

Prep Batch: 72582

Analytical Method: SM 4500-Cl B

Date Analyzed: 2011-10-12

Sample Preparation: 2011-10-12

Prep Method: N/A

Analyzed By: AR

Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			380	mg/Kg	50	4.00

Sample: 278140 - BH-7 25'

Laboratory: Midland

Analysis: Chloride (Titration)

QC Batch: 85501

Prep Batch: 72582

Analytical Method: SM 4500-Cl B

Date Analyzed: 2011-10-12

Sample Preparation: 2011-10-12

Prep Method: N/A

Analyzed By: AR

Prepared By: AR

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			215	mg/Kg	50	4.00

Report Date: October 13, 2011
114-6400291

Work Order: 11092301
Glenn Springs/State AD

Page Number: 6 of 9

Method Blanks

Method Blank (1) QC Batch: 85501

QC Batch: 85501
Prep Batch: 72582

Date Analyzed: 2011-10-12
QC Preparation: 2011-10-12

Analyzed By: AR
Prepared By: AR

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride			<3.85	mg/Kg	4

Report Date: October 13, 2011
114-6400291

Work Order: 11092301
Glenn Springs/State AD

Page Number: 7 of 9

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 85501
Prep Batch: 72582

Date Analyzed: 2011-10-12
QC Preparation: 2011-10-12

Analyzed By: AR
Prepared By: AR

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			96.2	mg/Kg	1	100	<3.85	96	85 - 115

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			104	mg/Kg	1	100	<3.85	104	85 - 115	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: 278140

QC Batch: 85501
Prep Batch: 72582

Date Analyzed: 2011-10-12
QC Preparation: 2011-10-12

Analyzed By: AR
Prepared By: AR

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			10400	mg/Kg	100	10000	<385	102	79.4 - 120.6

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			10800	mg/Kg	100	10000	<385	106	79.4 - 120.6	4	20

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

Report Date: October 13, 2011
114-6400291

Work Order: 11092301
Glenn Springs/State AD

Page Number: 8 of 9

Calibration Standards

Standard (ICV-1)

QC Batch: 85501

Date Analyzed: 2011-10-12

Analyzed By: AR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	100	100	85 - 115	2011-10-12

Standard (CCV-1)

QC Batch: 85501

Date Analyzed: 2011-10-12

Analyzed By: AR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	99.9	100	85 - 115	2011-10-12

Appendix

Laboratory Certifications

	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704392-10-TX	Midland

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

W0#11092301

Analysis Request of Chain of Custody Record

PAGE: 1 OF: 13

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3946

CLIENT NAME:

Glen Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD ~~XXXX~~ KAD

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	PRESERVATIVE METHOD				BTX 8021B	TPH 8015 MOD	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
								FILTERED (Y/N)	HCL	HNO3	ICE	NONE																
279074	9/19		S	X		BH-1 0-1'	1				X			✓										✓				
075						3'	1							✓										✓				
076						5'	1							✓										✓				
077						7'	1							✓										✓				
078						10'	1																	✓				
079						15' Hold	1																					
080						20'	1																					
081						25'	1																					
082						30'	1																					
083						40'	1																					

RELINQUISHED BY: (Signature)

Date: 9/21/11

Time: 1:30

RECEIVED BY: (Signature)

Date: _____

Time: _____

SAMPLED BY: (Print & Initial)

Kim

Date: 9/20/11

Time: _____

RELINQUISHED BY: (Signature)

Date: 9/22/11

Time: 1:45

RECEIVED BY: (Signature)

Date: _____

Time: _____

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #:

HAND DELIVERED

UPS

OTHER: _____

RECEIVING LABORATORY:

TRACE

RECEIVED BY: (Signature)

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP: _____

CONTACT:

PHONE: _____

DATE: 9/22/11

TIME: 3:10 pm

TETRA TECH CONTACT PERSON:

Aaron Hale

Results by:

RUSH Charges

Authorized:

Yes

No

SAMPLE CONDITION WHEN RECEIVED:

1°C

REMARKS:

BH-1 @ T-18 * IF TPH is ≥ 100 ppm, run next sample below for TPH.

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

No # 11092301

Analysis Request of Chain of Custody Record

PAGE: 2 OF: 13

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3946

 ANALYSIS REQUEST
 (Circle or Specify Method No.)

CLIENT NAME:

Green Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD ~~XXXX~~ KAD

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD				BTX 8021B	TPH 8015 MOD.	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/824	GC/MS Semi. Vol. 8270/825	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
									HCL	HNO3	ICE	NONE																	
278004	9/19		S	X		BH-1 50' Hold	1				X																		
085						60' ↓	1																						
086						BH-2 0-1'	1																						
087						3'	1																						
088						5'	1																						
089						7' Hold	1																						
090						10'	1																						
091						15'	1																						
092						20' ↓	1																						
093						BH-3 0-1'	1																						

RELINQUISHED BY: (Signature)

Date: 9/21/11

Time: 1830

RECEIVED BY: (Signature)

Date: _____

Time: _____

SAMPLED BY: (Print & Initial)

Kim

Date: 9/20/11

Time: _____

RELINQUISHED BY: (Signature)

Date: 9/22/11

Time: 1505

RECEIVED BY: (Signature)

Date: _____

Time: _____

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #:

HAND DELIVERED

UPS

OTHER:

RECEIVING LABORATORY:

TRACE

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP: _____

CONTACT:

PHONE: _____

RECEIVED BY: (Signature)

272

DATE: 9/22/11

TIME: 3:10pm

TETRA TECH CONTACT PERSON:

Aaron Hale

Results by:

RUSH Charges

Authorized:

Yes

No

SAMPLE CONDITION WHEN RECEIVED:

10C

REMARKS:

BH-2 @ T-3

BH-3 @ T-2

* IF TPH is ≥ 100 ppm, run next sample below for TPH

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

No # 1102301

Analysis Request of Chain of Custody Record

PAGE: 3 OF: 13

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3946

CLIENT NAME:

Glen Springs

SITE MANAGER:

Aaron Hole

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS FILTERED (Y/N)	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015	PAH 8270	RCRA Metals	TCLP Metals	TCLP Volatiles	TCLP Semi Vol	RCI	GC/MS Vol. 8	GC/MS Semi.	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (A)	PLM (Asbestos)	Major Anions
278094	9/19		S		X	BH-3 3'	1			X														✓				
095						5'	1																	✓				
096						7'	1																✓					
097						10'	1																✓					
098						15'	1																✓					
099						20' Hold	1																					
100						25'	1																					
101						30'	1																					
102					40'	1																						
103	9/20					BH-4 0-1'	1						✓											✓				

RELINQUISHED BY: (Signature)

Date: 9/21/11

Time: 1830

RECEIVED BY: (Signature)

Date: _____

Time: _____

SAMPLED BY: (Print & Initial)

Kim

Date: 9/22/11

Time: _____

RELINQUISHED BY: (Signature)

Date: 9/22/11

Time: 1505

RECEIVED BY: (Signature)

Date: _____

Time: _____

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #: _____

HAND DELIVERED

UPS

OTHER: _____

RELINQUISHED BY: (Signature)

Date: _____

Time: _____

RECEIVED BY: (Signature)

Date: _____

Time: _____

TETRA TECH CONTACT PERSON:

Results by:

RECEIVING LABORATORY:

TRACE

RECEIVED BY: (Signature)

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP: _____

CONTACT:

PHONE: _____

DATE: 9/22/11

TIME: 3:10pm

Aaron Hole

RUSH Charges

Authorized:

Yes

No

SAMPLE CONDITION WHEN RECEIVED:

10L

REMARKS:

BH-4 @ T-5 * IF TPH is 2 100 ppm, then run next lower sample for TPH

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

W0# 11092301

Analysis Request of Chain of Custody Record

PAGE: 4 OF: 13

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3946

 ANALYSIS REQUEST
 (Circle or Specify Method No.)

 CLIENT NAME:
 Glenn Springs

 SITE MANAGER:
 Aaron Hale

 PROJECT NO.:
 114-6400291

 PROJECT NAME:
 State AD

LAB I.D. NUMBER	DATE 2011	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF FILTERED (Y)	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015	PAH 8270	RCRA Metals	TCLP Metals	TCLP Volatile	TCLP Semi V	RCI	GC-MS Vol. & E	GC-MS Semi	PCB's 8080/60	Pest. 808/60	Chloride	Gamma Spec	Alpha Beta (I	PLM (Asbest	Major Anions	
278104	9/20		S	X		BH-4 3'	1			X			✓											✓					
105						5'	1						✓											✓					
106						7'	1																✓						
107						10'	1																✓						
108						15'	1																✓						
109						20'	1																✓						
110						25' Hold	1																						
111						30'	1																						
112					40'	1																							
113						BH-5, 0-1'	1																	✓					

 RELINQUISHED BY: (Signature) *[Signature]* Date: 9/21/11 Time: 1830

 RECEIVED BY: (Signature) *[Signature]* Date: Time:

SAMPLED BY: (Print & Initial) Kim Date: 9/20/11 Time:

 RELINQUISHED BY: (Signature) *[Signature]* Date: 9/22/11 Time: 1505

 RECEIVED BY: (Signature) *[Signature]* Date: Time:

SAMPLE SHIPPED BY: (Circle) FEDEX BUS AIRBILL #: OTHER:

 RELINQUISHED BY: (Signature) *[Signature]* Date: Time:

 RECEIVED BY: (Signature) *[Signature]* Date: Time:

TETRA TECH CONTACT PERSON: Results by:

RECEIVING LABORATORY: TRACE ADDRESS:

 RECEIVED BY: (Signature) *[Signature]* Date: 9/22/11 Time: 3:10 pm

HAND DELIVERED UPS OTHER:

CITY: MIDLAND STATE: TX ZIP: CONTACT: PHONE:

DATE: 9/22/11 TIME: 3:10 pm

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 10C

REMARKS: BH-5 @ T-4 * IF TPH is > 100 ppm, then run next lower sample for TPH.

WO # 11092301

Analysis Request of Chain of Custody Record

PAGE: 5 OF: 13

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3946

 ANALYSIS REQUEST
 (Circle or Specify Method No.)
CLIENT NAME: Glenn SpringsSITE MANAGER: Aaron HulePROJECT NO.: 114-6400291PROJECT NAME: State AD

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD				BTEX 8021B	TPH 8015 MOD.	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/824	GC/MS Semi. Vol. 8270/825	PCB's 8080/808	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
									HCL	HNO3	ICE	NONE																	
278114	9/20		S	X		BH-5 3'	1				X																		
115						5'	1																						
116						7'	1																						
117						10'	1																						
118						15'	1																						
119						20'	1																						
120						25'	1																						
121						30'	1																						
122						40'	1																						
123						BH-6 0-1'	1																						

RELINQUISHED BY: (Signature) [Signature] Date: 9/21/11 Time: 1830RECEIVED BY: (Signature) [Signature] Date: 9/22/11 Time: 1505SAMPLED BY: (Print & Initial) Kim Date: 9/20/11 Time: 1505RELINQUISHED BY: (Signature) [Signature] Date: 9/22/11 Time: 1505RECEIVED BY: (Signature) [Signature] Date: 9/22/11 Time: 1505SAMPLE SHIPPED BY: (Circle) HAND DELIVERED FEDEX BUS UPS AIRBILL #: RELINQUISHED BY: (Signature) [Signature] Date: 9/22/11 Time: 1505RECEIVED BY: (Signature) [Signature] Date: 9/22/11 Time: 1505TETRA TECH CONTACT PERSON: Aaron Hule Results by: RECEIVING LABORATORY: TRACE ADDRESS: MIDLAND CITY: TX STATE: TX ZIP: PHONE: RECEIVED BY: (Signature) [Signature] DATE: 9/22/11 TIME: 3:10pmRUSH Charges Authorized: Yes NoSAMPLE CONDITION WHEN RECEIVED: 10LREMARKS: BH-6 @ T-9 * IF TPH is 3 100 ppm, then run next lower depth for TPH

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

W0#11092301

Analysis Request of Chain of Custody Record

PAGE: 6 OF: 13

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3946

CLIENT NAME:

Glen Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION		NUMBER OF	FILTERED (Y)	HCL	HNO3	ICE	NONE		BTEX 8021B	TPH 8015	PAH 8270	RCRA Metals	TCLP Metals	TCLP Volatile	TCLP Semi V	RCI	GC/MS Vol. 8	GC/MS Semi	PCB's 8080/0	Pest. 808/603	Chloride	Gamma Spec	Alpha Beta (/	PLM (Asbest	Major Anions			
278124	9/20		S		X	BH-6	3'	1				X				✓										✓								
125							5'	1								✓										✓								
126							7'	1																				✓						
127							10'	1																				✓						
128							15'	1																				✓						
129							20'	1																										
130							25'	1																										
131							30'	1																										
132		40'	1																															
133						BH-7	0-1'	1								✓										✓								

RELINQUISHED BY: (Signature)

Date: 9/21/11

Time: 1:30

RECEIVED BY: (Signature)

Date:

Time:

SAMPLED BY: (Print & Initial)

Kim

Date: 9/20/11

Time:

RELINQUISHED BY: (Signature)

Date: 9/21/11

Time: 1:50

RECEIVED BY: (Signature)

Date:

Time:

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

HAND DELIVERED

UPS

OTHER:

TETRA TECH CONTACT PERSON:

Results by:

RECEIVING LABORATORY:

TRACE

RECEIVED BY: (Signature)

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP:

CONTACT:

PHONE:

DATE: 9/22/11

TIME: 3:10pm

Aaron Hale

RUSH Charges

Authorized:

Yes No

SAMPLE CONDITION WHEN RECEIVED:

1°C

REMARKS:

BH-7 @ T-8

IF TPH is ≥ 100 ppm or greater, run methylene blue sample depth for TPH

W0#11092301

Analysis Request of Chain of Custody Record

PAGE: 7 OF: 13

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3946

 ANALYSIS REQUEST
 (Circle or Specify Method No.)

CLIENT NAME:

Green Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD

LAB I.D. NUMBER	DATE 2011	TIME	MATRIX	COMP	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS FILTERED (Y/N)	PRESERVATIVE METHOD				BTEX 8021B	TPH 8015 MOD (Ext. to C95)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
								HCL	HNO3	ICE	NONE																	
278134	9/20		S	X		BH-7 3'	1			X			✓											✓				
135						5'	1						✓											✓				
136						7'	1																	✓				
137						10'	1																	✓				
138						15'	1																	✓				
139						20' Hold	1																					
140						25'	1																					
141						30'	1																					
142						40'	1																					
143						BH-8 0-1	1						✓											✓				

RELINQUISHED BY: (Signature)

Date: 9/21/11

Time: 1830

RECEIVED BY: (Signature)

Date:

Time:

SAMPLED BY: (Print & Initial)

Kim

Date: 9/20/11

Time:

RELINQUISHED BY: (Signature)

Date: 9/22/11

Time: 1525

RECEIVED BY: (Signature)

Date:

Time:

SAMPLE SHIPPED BY: (Circle)

 FEDEX
 HAND DELIVERED

 BUS
 UPS

AIRBILL #:

OTHER:

RECEIVING LABORATORY:

TRACE

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP:

CONTACT:

PHONE:

RECEIVED BY: (Signature)

DATE: 9/22/11

TIME: 3:10 pm

TETRA TECH CONTACT PERSON:

Aaron Hale

Results by:

RUSH Charges

Authorized:

Yes No

SAMPLE CONDITION WHEN RECEIVED:

10C

REMARKS:

BH-8 @ T-7

IF TPH ≥ 100 ppm, run next TPH depth. Sample below for TPH

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

WO#11092301

Analysis Request of Chain of Custody Record

PAGE: 8 OF: 13

**TETRA TECH**1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

Glen Springs

SITE MANAGER:

Aaron Hule

PROJECT NO.:

114-640 0291

PROJECT NAME:

State AD

LAB I.D. NUMBER	DATE 2011	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS FILTERED (Y/N)	PRESERVATIVE METHOD				BTX 8021B	TPH 8015 MOD. (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/824	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
								HCL	HNO3	ICE	NONE																	
278/44	9/20		S	X		BH-8 3'	1			X			✓											✓				
145						5'	1						✓											✓				
146						7'	1																	✓				
147						10'	1																	✓				
148						15'	1																	✓				
149						20'	1																	✓				
150						25'	1																	✓				
151						30' Hold	1																					
152						40' ↓	1																					
153						BH-9 0-1'	1						✓											✓				

RELINQUISHED BY: (Signature)

Date: 9/21/11

Time: 1830

RECEIVED BY: (Signature)

Date:

Time:

SAMPLED BY: (Print & Initial)

Kim

Date: 9/20/11

Time:

RELINQUISHED BY: (Signature)

Date: 9/22/11

Time: 1505

RECEIVED BY: (Signature)

Date:

Time:

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #:

OTHER:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

TETRA TECH CONTACT PERSON:

Results by:

RECEIVING LABORATORY:

TRACE

RECEIVED BY: (Signature)

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP:

CONTACT:

PHONE:

DATE: 9/22/11

TIME: 3:10 pm

Aaron Hule

RUSH Charges

Authorized:

Yes

No

SAMPLE CONDITION WHEN RECEIVED:

REMARKS:

BH-9 @ T-12

IF TPH ≥ 100ppm, run next sample depth for TPH

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

WO # 11092301

Analysis Request of Chain of Custody Record



TETRA TECH

1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

PAGE: 9 OF: 13

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

Glen Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF	FILTERED N	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015	PAH 8270	RCRA Metals	TCLP Metals	TCLP Volatili	TCLP Semi	RCI	GC/MS Vol.	GC/MS Semi	PCB's 8080/0	Pest. 808/60	Chloride	Gamma Sp	Alpha Beta	PLM (Asbes	Major Anion	
278154	9/20		S		X	BH-9 3'	1				X															✓				
155						5'	1																		✓					
156						7'	1																	✓						
157						10'	1																	✓						
158						15' Hold	1																		✓					
159						20'	1																							
160						25'	1																							
161						30'	1																							
162						40'	1																							
163	9/21					BH-10 0-1'	1							✓											✓					

RELINQUISHED BY: (Signature)

[Signature]

Date: 9/21/11

Time: 1830

RECEIVED BY: (Signature)

Date:

Time:

SAMPLED BY: (Print & Initial)

Kim

Date: 9/21/11

Time:

RELINQUISHED BY: (Signature)

[Signature]

Date: 9/22/11

Time: 1505

RECEIVED BY: (Signature)

Date:

Time:

SAMPLE SHIPPED BY: (Circle)

FEDEX BUS

HAND DELIVERED UPS

AIRBILL #:

OTHER:

RECEIVING LABORATORY:

TRACE

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP:

CONTACT:

PHONE:

RECEIVED BY: (Signature)

[Signature]

DATE: 9/22/11

TIME: 3:10 pm

TETRA TECH CONTACT PERSON:

Aaron Hale

Results by:

RUSH Charges

Authorized:

Yes No

SAMPLE CONDITION WHEN RECEIVED:

1/8

REMARKS:

BH-10 @ T-15

IF TPH is ≥ 100 ppm, then run next lower depth for TPH

W0 # 11092301

Analysis Request of Chain of Custody Record

PAGE: 10 OF: 13

**TETRA TECH**

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3948

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

Glen Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS FILTERED (Y/N)	HCL	HNO3	ICE	NONE	PRESERVATIVE METHOD	BTEX 8021B	TPH 8015 MOD. (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vt Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/824	GC/MS Semi. Vol. 8270/825	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS	
278164	9/21		S	X		BH-10 3'	1							✓												✓				
165						5'	1							✓												✓				
166						7'	1																		✓					
167						10'	1																		✓					
168						15'	1																		✓					
169						20'	1																		✓					
170						25'	1																		✓					
171						30'	1																		✓					
172						40'	1																							
173						50'	1																							

RELINQUISHED BY: (Signature)

Date: 9/21/11

Time: 1830

RECEIVED BY: (Signature)

Date:

Time:

SAMPLED BY: (Print & Initial)

Kim

Date: 9/21/11

Time:

RELINQUISHED BY: (Signature)

Date: 9/22/11

Time: 1505

RECEIVED BY: (Signature)

Date:

Time:

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

HAND DELIVERED

UPS

OTHER:

RECEIVING LABORATORY:

TETRA

RECEIVED BY: (Signature)

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP:

CONTACT:

PHONE:

DATE: 9/22/11

TIME: 3:10pm

TETRA TECH CONTACT PERSON:

Aaron Hale

Results by:

RUSH Charges

Authorized:

Yes No

SAMPLE CONDITION WHEN RECEIVED:

10C

REMARKS:

* IF TPH ≥ 100ppm, run next sample depth for TPH

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

120# 11092301

Analysis Request of Chain of Custody Record

PAGE: 11 OF: 13



TETRA TECH

1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

Glenn Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	PRESERVATIVE METHOD				BTEX 8021B	TPH 8015 MOD. TX1005 (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 809/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
								FILTERED (Y/N)	HCL	HNO3	ICE	NONE																
270174	9/21		S	X		BH-11 0-1'	1				X																	
175						3'	1																					
176						5'	1																					
177						7'	1																					
178						10'	1																					
179						15'	1																					
180						20'	1																					
181						25'	1																					
182						30'	1																					
183						40'	1																					

RELINQUISHED BY: (Signature)

Date:

9/21/11

Time:

1830

RECEIVED BY: (Signature)

Date:

Time:

SAMPLED BY: (Print & Initial)

Kim

Date:

9/21/11

RELINQUISHED BY: (Signature)

Date:

9/22/11

Time:

1505

RECEIVED BY: (Signature)

Date:

Time:

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

HAND DELIVERED

UPS

OTHER:

TETRA TECH CONTACT PERSON:

Results by:

RECEIVING LABORATORY:

TRACE

RECEIVED BY: (Signature)

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP:

CONTACT:

PHONE:

DATE:

9/22/11

TIME:

3:10 pm

Aaron Hale

RUSH Charges

Authorized:

Yes No

SAMPLE CONDITION WHEN RECEIVED:

REMARKS:

1°C

BH-11 @ T-14

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

NO#11092301

Analysis Request of Chain of Custody Record

PAGE: 12 OF: 13



TETRA TECH

1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME: Glenn Springs SITE MANAGER: Aaron Hale

PROJECT NO.: 114-6400291 PROJECT NAME: State AD

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP	GRAB	SAMPLE IDENTIFICATION	NUMBER OF	FILTERED N	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015	PAH 8270	RCRA Metals	TCLP Metals	TCLP Volatiles	TCLP Semi	RCI	GC/MS Vol.	GC/MS Sem	PCB's 8080	Pest. 808/6/6	Chloride	Gamma Spc	Alpha Beta	PLM (Asbes	Major Anion
278184	9/21		S	X		BH-11 50' H&H	1				X																		
185						55' ↓	1																						
186						BH-12 0-1'	1																		✓				
187						3'	1																		✓				
188						5'	1																		✓				
189						7'	1																		✓				
190						10'	1																		✓				
191						15'	1																		✓				
192						20'	1																		✓				
193						25'	1																		✓				

RELINQUISHED BY: (Signature) [Signature] Date: 9/21/11 Time: 1830
RELINQUISHED BY: (Signature) [Signature] Date: 9/22/11 Time: 1525
RELINQUISHED BY: (Signature) [Signature] Date: _____ Time: _____

RECEIVED BY: (Signature) _____ Date: _____ Time: _____
RECEIVED BY: (Signature) _____ Date: _____ Time: _____
RECEIVED BY: (Signature) _____ Date: _____ Time: _____

SAMPLED BY: (Print & Initial) Kim Date: 9/21/11 Time: _____
SAMPLE SHIPPED BY: (Circle) FEDEX BUS AIRBILL #: _____
HAND DELIVERED UPS OTHER: _____
TETRA TECH CONTACT PERSON: _____ Results by: _____
RUSH Charges Authorized: Yes No

RECEIVING LABORATORY: TRACE RECEIVED BY: (Signature) [Signature]
ADDRESS: MIDLAND CITY: TX STATE: TX ZIP: _____
CONTACT: _____ PHONE: _____ DATE: 9/22/11 TIME: 3:10 pm

SAMPLE CONDITION WHEN RECEIVED: 10C REMARKS: BH-12 @ T-17

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

W0#11092301

Analysis Request of Chain of Custody Record

PAGE: 1 OF: 13

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3946

CLIENT NAME:

Gilem Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD ~~XXXX~~ KAO

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD				BTEX 8021B	TPH 8015 MOD	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
									HCL	HNO3	ICE	NONE																	
278074	9/19		S	X		BH-1 0-1'	1				X																		
075						3'	1																						
076						5'	1																						
077						7'	1																						
078						10'	1																						
079						15' Hold	1																						
080						20'	1																						
081						25'	1																						
082						30'	1																						
083						40'	1																						

RELINQUISHED BY: (Signature)

Date: 9/21/11
Time: 1:30

RECEIVED BY: (Signature)

Date: _____
Time: _____

SAMPLED BY: (Print & Initial)

Kim

Date: 9/21/11
Time: _____

RELINQUISHED BY: (Signature)

Date: 9/21/11
Time: 1:55

RECEIVED BY: (Signature)

Date: _____
Time: _____

SAMPLE SHIPPED BY: (Circle)

FEDEX BUS
HAND DELIVERED UPSAIRBILL #: _____
OTHER: _____

RELINQUISHED BY: (Signature)

Date: _____
Time: _____

RECEIVED BY: (Signature)

Date: _____
Time: _____

TETRA TECH CONTACT PERSON

Aaron Hale

Results by:

RUSH Charges
Authorized.

Yes No

RECEIVING LABORATORY:

TRACE

RECEIVED BY: (Signature)

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP: _____

CONTACT:

PHONE: _____

DATE: 9/22/11

TIME: 3:10pm

SAMPLE CONDITION WHEN RECEIVED:

1°C

REMARKS:

BH-1 @ T-18 * IF TPH is 2100 ppm, run next sample below in TPH.

10/6 EP (L)

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

WO # 11092301

Analysis Request of Chain of Custody Record



TETRA TECH

1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

PAGE: 5 OF: 13

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:
Glenn Springs

SITE MANAGER:
Araron Hule

PROJECT NO.:
114-6400291

PROJECT NAME:
State AD

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD				BTEX 8021B	TPH 8015 MOD. TX1005 (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. B240/B260/B24	GC/MS Semi. Vol. B270/B25	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
									HCL	HNO3	ICE	NONE																	
278114	9/20		S	X		BH-5 3'	1				X																		
115						5'	1																						
116						7'	1																						
117						10'	1																						
118						15'	1																						
119						20'	1																						
120						25' Hold	1																						
121						30'	1																						
122						40'	1																						
123						BH-6 0-1'	1																						

RELINQUISHED BY: (Signature) [Signature] Date: 9/21/11 Time: 18:30

RELINQUISHED BY: (Signature) [Signature] Date: 9/22/11 Time: 15:25

RELINQUISHED BY: (Signature) [Signature] Date: _____ Time: _____

RECEIVED BY: (Signature) _____ Date: _____ Time: _____

RECEIVED BY: (Signature) _____ Date: _____ Time: _____

RECEIVED BY: (Signature) _____ Date: _____ Time: _____

SAMPLED BY: (Print & Initial) Kim Date: 9/20/11 Time: _____

SAMPLE SHIPPED BY: (Circle) FEDEX BUS AIRBILL #: _____
HAND DELIVERED UPS OTHER: _____

TETRA TECH CONTACT PERSON: _____ Results by: _____

RECEIVING LABORATORY: TRACE

ADDRESS: _____ CITY: MIDLAND STATE: TX ZIP: _____

CONTACT: _____ PHONE: _____ DATE: 9/22/11 TIME: 3:10pm

RECEIVED BY: (Signature) [Signature] Date: 9/22/11 Time: 3:10pm

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED:
10L

REMARKS:
BH-6 @ T-9 * IF TPA is 2 100 ppm, then run next lower depth for TPA

W0#11092301

Analysis Request of Chain of Custody Record

PAGE: 7 OF: 13

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3946

 ANALYSIS REQUEST
 (Circle or Specify Method No.)

 CLIENT NAME:
 Glen Springs

 SITE MANAGER:
 Aaron Hale

 PROJECT NO.:
 114-6400291

 PROJECT NAME:
 State AD

LAB I.D. NUMBER	DATE 2011	TIME	MATRIX	COMP	GRAB	SAMPLE IDENTIFICATION	NUMBER OF FILTERED (Y/N)	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015	PAH 8270	RCRA Metals	TCLP Metals	TCLP Volatiles	TCLP Semi V	RCI	GC/MS Vol. 8	GC/MS Semi	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec	Alpha Beta (A	PLM (Asbest	Major Anions	
278134	9/20		S	X		BH-7 3'	1			X		✓	✓											✓					
135						5'	1					✓	✓											✓					
136						7'	1																	✓					
137						10'	1																	✓					
138						15'	1																	✓					
139						20'	1																	✓					
140						25'	1																	✓					
141						30'	1																	✓					
142						40'	1																	✓					
143						BH-8 0-1	1					✓												✓					

 RELINQUISHED BY: (Signature) *[Signature]* Date: 9/21/11 Time: 1830

RECEIVED BY: (Signature) _____ Date: _____ Time: _____

SAMPLED BY: (Print & Initial) Kim Date: 9/20/11 Time: _____

 RELINQUISHED BY: (Signature) *[Signature]* Date: 9/22/11 Time: 1525

RECEIVED BY: (Signature) _____ Date: _____ Time: _____

 SAMPLE SHIPPED BY: (Circle) FEDEX BUS AIRBILL #: _____
 HAND DELIVERED UPS OTHER: _____

 RELINQUISHED BY: (Signature) *[Signature]* Date: _____ Time: _____

 RECEIVED BY: (Signature) *[Signature]* Date: _____ Time: _____

TETRA TECH CONTACT PERSON: _____ Results by: _____

RECEIVING LABORATORY: TRACE ADDRESS: _____ CITY: MIDLAND STATE: TX ZIP: _____ PHONE: _____

 RECEIVED BY: (Signature) *[Signature]* DATE: 9/22/11 TIME: 3:10 pm

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 10C

REMARKS: BH-8 C T-7 IF TPH > 100 ppm, run next TPH depth. Sample below for TPH

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.



6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1296
200 East Sunset Road, Suite E El Paso, Texas 79922 888•585•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Aaron Hale
Tetra Tech
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: October 19, 2011

Work Order: 11092301



Project Name: Glenn Springs/State AD
Project Number: 114-6400291

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
278081	BH-1 25'	soil	2011-09-19	00:00	2011-09-22
278082	BH-1 30'	soil	2011-09-19	00:00	2011-09-22

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 8 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

Report Contents

Case Narrative	3
Analytical Report	4
Sample 278081 (BH-1 25')	4
Sample 278082 (BH-1 30')	4
Method Blanks	5
QC Batch 85656 - Method Blank (1)	5
Laboratory Control Spikes	6
QC Batch 85656 - LCS (1)	6
QC Batch 85656 - MS (1)	6
Calibration Standards	7
QC Batch 85656 - ICV (1)	7
QC Batch 85656 - CCV (1)	7
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Laboratory Certifications	8
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Attachments	8

Case Narrative

Samples for project Glenn Springs/State AD were received by TraceAnalysis, Inc. on 2011-09-22 and assigned to work order 11092301. Samples for work order 11092301 were received intact at a temperature of 1.0 C.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Chloride (Titration)	SM 4500-Cl B	72683	2011-10-17 at 10:03	85656	2011-10-18 at 14:22

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 11092301 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.

Report Date: October 19, 2011
114-6400291

Work Order: 11092301
Glenn Springs/State AD

Page Number: 4 of 8

Analytical Report

Sample: 278081 - BH-1 25'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2011-10-18	Analyzed By:	AR
QC Batch:	85656	Sample Preparation:	2011-10-17	Prepared By:	AR
Prep Batch:	72683				

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			878	mg/Kg	50	4.00

Sample: 278082 - BH-1 30'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2011-10-18	Analyzed By:	AR
QC Batch:	85656	Sample Preparation:	2011-10-17	Prepared By:	AR
Prep Batch:	72683				

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			599	mg/Kg	50	4.00

Report Date: October 19, 2011
114-6400291

Work Order: 11092301
Glenn Springs/State AD

Page Number: 5 of 8

Method Blanks

Method Blank (1) QC Batch: 85656

QC Batch: 85656
Prep Batch: 72683

Date Analyzed: 2011-10-18
QC Preparation: 2011-10-17

Analyzed By: AR
Prepared By: AR

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride			<3.85	mg/Kg	4

Report Date: October 19, 2011
114-6400291

Work Order: 11092301
Glenn Springs/State AD

Page Number: 6 of 8

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 85656
Prep Batch: 72683

Date Analyzed: 2011-10-18
QC Preparation: 2011-10-17

Analyzed By: AR
Prepared By: AR

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			96.1	mg/Kg	1	100	<3.85	96	85 - 115

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			105	mg/Kg	1	100	<3.85	105	85 - 115	9	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: 279843

QC Batch: 85656
Prep Batch: 72683

Date Analyzed: 2011-10-18
QC Preparation: 2011-10-17

Analyzed By: AR
Prepared By: AR

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			10000	mg/Kg	100	10000	<385	100	79.4 - 120.6

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			10700	mg/Kg	100	10000	<385	107	79.4 - 120.6	7	20

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

Calibration Standards

Standard (ICV-1)

QC Batch: 85656

Date Analyzed: 2011-10-18

Analyzed By: AR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	101	101	85 - 115	2011-10-18

Standard (CCV-1)

QC Batch: 85656

Date Analyzed: 2011-10-18

Analyzed By: AR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	98.9	99	85 - 115	2011-10-18

Appendix

Laboratory Certifications

	Certifying	Certification	Laboratory
C	Authority	Number	Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less than ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

W0#11092301

Analysis Request of Chain of Custody Record

PAGE: 1 OF: 13

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3946

 ANALYSIS REQUEST
 (Circle or Specify Method No.)

CLIENT NAME:

Glen Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6100291

PROJECT NAME:

State AD ~~XXXX~~ KAO

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD				BTEX 8021B	TPH 8015 MOD	TX1005 (Ext. to C05)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
									HCL	HNO3	ICE	NONE																		
270074	9/19		S	X		BH-1 0-1'	1				X			✓												✓				
075						3'	1							✓												✓				
076						5'	1							✓												✓				
077						7'	1							✓												✓				
078						10'	1																			✓				
079						15' Hold	1																							
080						20'	1																							
081						25'	1																							
082						30'	1																							
083						40'	1																							

RELINQUISHED BY: (Signature)

Date:

9/21/11

Time:

1330

RECEIVED BY: (Signature)

Date:

Time:

SAMPLED BY: (Print & Initial)

Kim

Date:

9/21/11

RELINQUISHED BY: (Signature)

Date:

9/22/11

Time:

1505

RECEIVED BY: (Signature)

Date:

Time:

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

HAND DELIVERED

UPS

OTHER:

RECEIVING LABORATORY:

TRACE

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP:

CONTACT:

PHONE:

RECEIVED BY: (Signature)

DATE:

9/22/11

TIME:

3:10 pm

TETRA TECH CONTACT PERSON:

Aaron Hale

Results by:

RUSH Charges Authorized:

Yes

No

SAMPLE CONDITION WHEN RECEIVED:

1°C

REMARKS:

BH-1 @ T-18 * IF TPH is ≥ 100 ppm, run next sample below for TPH.

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

No# 11092301

Analysis Request of Chain of Custody Record

PAGE: 2 OF: 13

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3946

 ANALYSIS REQUEST
 (Circle or Specify Method No.)

CLIENT NAME:

Glenn Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD ~~XXXX~~ KAD

LAB I.D. NUMBER	DATE 2011	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION			NUMBER OF FILTERED (Y/N)	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015	PAH 8270	RCRA Metals	TCLP Metals	TCLP Volatiles	TCLP Semi V	RCI	GC-MS Vol. 8	GC-MS Semi	PCB's 8080/60	Pest. 808/60	Chloride	Gamma Spec	Alpha Beta (I	PLM (Asbest	Major Anions
278004	9/19		S	X	BH-1	50'	Hold	1				X																		
085						60'	↓	1																						
086					BH-2	0-1'		1							✓															
087						3'		1							✓															
088						5'		1							✓															
089						7'	Hold	1																						
090						10'		1																						
091						15'		1																						
092						20'	↓	1																						
093					BH-3	0-1'		1																	✓					

RELINQUISHED BY: (Signature)

Date:

9/21/11

Time:

1830

RECEIVED BY: (Signature)

Date:

Time:

SAMPLED BY: (Print & Initial)

Kim

Date:

9/20/11

RELINQUISHED BY: (Signature)

Date:

9/22/11

Time:

1505

RECEIVED BY: (Signature)

Date:

Time:

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #:

HAND DELIVERED

UPS

OTHER:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

TETRA TECH CONTACT PERSON:

Results by:

RECEIVING LABORATORY:

TRACE

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP:

CONTACT:

PHONE:

RECEIVED BY: (Signature)

DATE:

9/22/11

TIME: 3:10pm

Aaron Hale

RUSH Charges

Authorized:

Yes No

SAMPLE CONDITION WHEN RECEIVED:

10C

REMARKS:

BH-2 @ T-3

BH-3 @ T-2

* IF TPH is ≥ 100 ppm, run next sample below for TPH

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

No # 110A2301

Analysis Request of Chain of Custody Record

PAGE: 3 OF: 13

**TETRA TECH**1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

CLIENT NAME:

Glen Springs

SITE MANAGER:

Aaron Hole

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD

LAB I.D.
NUMBERDATE
2011TIME
SMATRIX
COMP
GRAB

SAMPLE IDENTIFICATION

NUMBER OF CONTAINERS

FILTERED (Y/N)

HCL

HNO3

ICE

NONE

PRESERVATIVE
METHOD

BTX 8021B

TPH 8015 MOD. TX1005 (Ext. to C35)

PAH 8270

RCRA Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Metals Ag As Ba Cd Vr Pd Hg Se

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC.MS Vol. 8240/8260/624

GC.MS Semi. Vol. 8270/625

PCB's 8080/608

Pest. 808/608

Chloride

Gamma Spec.

Alpha Beta (Air)

PLM (Asbestos)

Major Anions/Cations, pH, TDS

ANALYSIS REQUEST
(Circle or Specify Method No.)

RELINQUISHED BY: (Signature)	Date: 9/22/11	Time: 1830	RECEIVED BY: (Signature)	Date: 9/22/11	Time: 3:10 PM
RELINQUISHED BY: (Signature)	Date: 9/22/11	Time: 1505	RECEIVED BY: (Signature)	Date: 9/22/11	Time: 3:10 PM
RELINQUISHED BY: (Signature)	Date: 9/22/11	Time: 1505	RECEIVED BY: (Signature)	Date: 9/22/11	Time: 3:10 PM

RECEIVING LABORATORY: TRACE

ADDRESS: MIDLAND STATE TX ZIP: PHONE: DATE: 9/22/11 TIME: 3:10 PM

SAMPLE CONDITION WHEN RECEIVED: REMARKS: BH-4 @ T-5 * IF TPH is 2 100 ppm, then run next two sample for TPH

RECEIVED BY: (Print & Initial) Kim Date: 9/22/11

SAMPLE SHIPPED BY: (Circle) AIRBILL #:

FEDEX BUS UPS OTHER: RESULTS by: AUTHORIZED: Yes No

W0# 11092301

Analysis Request of Chain of Custody Record

PAGE: 4 OF: 13

**TETRA TECH**

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

Glenn Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS FILTERED (Y/N)	PRESERVATIVE METHOD				BTEX 8021B	TPH 8015 MOD (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/824	GC/MS Semi. Vol. 8270/825	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
								HCL	HNO3	ICE	NONE																	
270104	9/20		S	X		BH-4 3'	1			X		✓											✓					
105						5'	1					✓											✓					
106						7'	1																✓					
107						10'	1																✓					
108						15'	1																✓					
109						20'	1																✓					
110						25' Hold	1																					
111						30'	1																					
112						40'	1																					
113						BH-5 0-1'	1																✓					

RELINQUISHED BY: (Signature)

Date: 9/20/11

Time: 1830

RECEIVED BY: (Signature)

Date: _____

Time: _____

SAMPLED BY: (Print & Initial)

Kim

Date: 9/20/11

Time: _____

RELINQUISHED BY: (Signature)

Date: 9/22/11

Time: 1505

RECEIVED BY: (Signature)

Date: _____

Time: _____

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #:

RELINQUISHED BY: (Signature)

Date: _____

Time: _____

RECEIVED BY: (Signature)

Date: _____

Time: _____

TETRA TECH CONTACT PERSON:

Aaron Hale

Results by:

RUSH Charges
Authorized:

Yes No

RECEIVING LABORATORY:

ADDRESS: TRACE

CITY: MIDLAND STATE: TX ZIP: _____

CONTACT: _____ PHONE: _____

RECEIVED BY: (Signature)

Date: 9/22/11

Time: 3:10 pm

SAMPLE CONDITION WHEN RECEIVED:

10C

REMARKS:

BH-5 @ T-4

* IF TPH is ≥ 100 ppm, then run next lower sample for TPH.

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

WO # 11092301

Analysis Request of Chain of Custody Record

PAGE: 5 OF: 13

**TETRA TECH**

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

Glenn Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF	FILTERED (Y)	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015	PAH 8270	RCRA Metals	TCLP Metals	TCLP Volatiles	TCLP Semi V	RCI	GC/MS Vol. 8	GC/MS Semi	PCB's 8080/60	Pest. 808/60	Chloride	Gamma Spec	Alpha Beta (	PLM (Asbest	Major Anions						
278114	9/20		S	X		BH-5 3'	1				X														✓										
115						5'	1																		✓										
116						7'	1																				✓								
117						10'	1																				✓								
118						15'	1																				✓								
119						20'	1																					✓							
120						25'	1																												
121						30'	1																												
122	40'	1																																	
123						BH-6 0-1'	1						✓																						

RELINQUISHED BY: (Signature)

Date:

9/21/11

Time:

1830

RECEIVED BY: (Signature)

Date:

Time:

SAMPLED BY: (Print & Initial)

Kim

Date:

9/20/11

RELINQUISHED BY: (Signature)

Date:

9/22/11

Time:

1505

RECEIVED BY: (Signature)

Date:

Time:

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

TETRA TECH CONTACT PERSON:

Aaron Hale

Results by:

RECEIVING LABORATORY:

TRACE

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP:

CONTACT:

PHONE:

RECEIVED BY: (Signature)

DATE:

9/22/11

TIME:

3:10pm

SAMPLE CONDITION WHEN RECEIVED:

10L

REMARKS:

BH-6 @ T-9

* IF TPH is ≥ 100 ppm, then run next lower depth for TPH

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

W0#11092301

Analysis Request of Chain of Custody Record

PAGE: 6 OF: 13

**TETRA TECH**

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3946

CLIENT NAME:

Glen Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD

LAB I.D. NUMBER	DATE 2011	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF	FILTERED (Y)	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015	PAH 8270	RCRA Metals	TCLP Metals	TCLP Volatiles	TCLP Semi V	RCI	GC/MS Vol. 8	GC/MS Semi	PCB's 8080/	Pest. 809/60	Chloride	Gamma Spe	Alpha Beta (	PLM (Asbest	Major Anion	
278124	9/20		S		X	BH-6 3'	1				X			✓											✓					
125						5'	1							✓											✓					
126						7'	1																	✓						
127						10'	1																	✓						
128						15'	1																	✓						
129						20'	1																							
130						25'	1																							
131						30'	1																							
132					40'	1																								
133						BH-7 0-1'	1							✓											✓					

RELINQUISHED BY: (Signature)

Date: 9/21/11

Time: 1830

RECEIVED BY: (Signature)

Date: _____

Time: _____

SAMPLED BY: (Print & Initial)

Kim

Date: 9/20/11

Time: _____

RELINQUISHED BY: (Signature)

Date: 9/22/11

Time: 1500

RECEIVED BY: (Signature)

Date: _____

Time: _____

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #: _____

HAND DELIVERED

UPS

OTHER: _____

RELINQUISHED BY: (Signature)

Date: _____

Time: _____

RECEIVED BY: (Signature)

Date: _____

Time: _____

TETRA TECH CONTACT PERSON:

Results by:

RECEIVING LABORATORY:

TRACE

RECEIVED BY: (Signature)

ADDRESS:

CITY: MIDLAND STATE: TX ZIP: _____

CONTACT: _____ PHONE: _____ DATE: 9/22/11 TIME: 3:00pm

SAMPLE CONDITION WHEN RECEIVED:

1°C

REMARKS:

BH-7 @ T-8

35 TPH @ 100 ppm or greater, run north to south at 10' sample depth For TPH

Aaron Hale

RUSH Charges

Authorized:

Yes No

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

W0#11092301

Analysis Request of Chain of Custody Record

PAGE: 7 OF: 13

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3946

 ANALYSIS REQUEST
 (Circle or Specify Method No.)
CLIENT NAME:
Green SpringsSITE MANAGER:
Aaron HalePROJECT NO.:
114-6400291PROJECT NAME:
State AD

LAB I.D. NUMBER	DATE 2011	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF FILTERED (Y)	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015	PAH 8270	RCRA Metals	TCLP Metals	TCLP Volatile	TCLP Semi V	FCI	GC/MS Vol. 8	GC/MS Semi	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec	Alpha Beta (	PLM (Asbest	Major Anions	
278134	9/20		S		X	BH-7 3'	1			X			✓											✓					
135						5'	1						✓											✓					
136						7'	1																✓						
137						10'	1																✓						
138						15'	1																✓						
139						20'	1																						
140						25'	1																						
141						30'	1																						
142					40'	1																							
143						BH-8 0-1	1						✓											✓					

RELINQUISHED BY: (Signature) *[Signature]* Date: 9/21/11 Time: 1830RECEIVED BY: (Signature) *[Signature]* Date: Time:

SAMPLED BY: (Print & Initial) Kim Date: 9/20/11 Time:

RELINQUISHED BY: (Signature) *[Signature]* Date: 9/22/11 Time: 1505RECEIVED BY: (Signature) *[Signature]* Date: Time:SAMPLE SHIPPED BY: (Circle) FEDEX ☒ BUS ☐ AIRBILL #: RELINQUISHED BY: (Signature) *[Signature]* Date: Time:RECEIVED BY: (Signature) *[Signature]* Date: Time:HAND DELIVERED ☒ UPS ☐ OTHER: RECEIVING LABORATORY: TRACE ADDRESS: MIDLAND STATE: TX ZIP: RECEIVED BY: (Signature) *[Signature]* DATE: 9/22/11 TIME: 3:10 pmTETRA TECH CONTACT PERSON: Aaron Hale Results by: CONTACT: PHONE:

DATE: 9/22/11 TIME: 3:10 pm

RUSH Charges Authorized: Yes ☐ No ☐

SAMPLE CONDITION WHEN RECEIVED: 10C

REMARKS: BH-8 @ T-7 IF TPH ≥ 100 ppm, run next TPH sample below for TPH

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

W0#11017301

Analysis Request of Chain of Custody Record

PAGE: 8 OF: 13

**TETRA TECH**

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

Glen Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-640 0291

PROJECT NAME:

State AD

LAB I.D. NUMBER	DATE 2011	TIME	MATRIX	COMP	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS FILTERED (Y/N)	PRESERVATIVE METHOD				BTEX 8021B	TPH 8015 MOD. TX1005 (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
								HCL	HNO3	ICE	NONE																	
278144	9/20		S	X		BH-8 3'	1			X			✓										✓					
145						5'	1						✓										✓					
146						7'	1																✓					
147						10'	1																✓					
148						15'	1																✓					
149						20'	1																✓					
150						25'	1																✓					
151						30' Hold	1																					
152						40' ↓	1																					
153						BH-9 0-1'	1						✓										✓					

RELINQUISHED BY: (Signature)

Date:

9/21/11

Time:

1830

RECEIVED BY: (Signature)

Date:

Time:

SAMPLED BY: (Print & Initial)

Kim

Date:

9/20/11

RELINQUISHED BY: (Signature)

Date:

9/22/11

Time:

1505

RECEIVED BY: (Signature)

Date:

Time:

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

TETRA TECH CONTACT PERSON:

Aaron Hale

Results by:

RUSH Charges

Authorized:

Yes

No

RECEIVING LABORATORY:

TRACE

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP:

CONTACT:

PHONE:

RECEIVED BY: (Signature)

DATE:

9/22/11

TIME:

3:10 pm

SAMPLE CONDITION WHEN RECEIVED:

10C

REMARKS:

BH-9 @ T-12

IF TPH ≥ 100ppm, run next sample depth for TPH

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

W0 # 11092301

Analysis Request of Chain of Custody Record

PAGE: 9 OF: 13

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3946

 ANALYSIS REQUEST
 (Circle or Specify Method No.)

CLIENT NAME:

Clean Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD

LAB I.D.
NUMBER

DATE

TIME

MATRIX

COMP

GRAB

SAMPLE IDENTIFICATION

NUMBER OF CONTAINERS

FILTERED (Y/N)

HCL

HNO3

ICE

NONE

PRESERVATIVE
METHOD
 BTEX 8021B
 TPH 8015 MOD. TX1005 (Ext. to C35)
 PAH 8270

RCRA Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8240/8260/824

GC/MS Semi. Vol. 8270/625

PCB's 8080/608

Pest. 808/608

Chloride

Gamma Spec.

Alpha Beta (Air)

PLM (Asbestos)

Major Anions/Cations, pH, TDS

278154

9/20

S

X

BH-9 3'

1

155

5'

1

156

7'

1

157

10'

1

158

15' Hold

1

159

20'

1

160

25'

1

161

30'

1

162

40'

1

163

9/21

BH-10 0-1'

1

RELINQUISHED BY: (Signature)

Date: 9/21/11

Time: 1830

RECEIVED BY: (Signature)

Date: 9/22/11

Time: 3:10 pm

SAMPLED BY: (Print & Initial)

Kim

Date: 9/21/11

Time: 9/21/11

RELINQUISHED BY: (Signature)

Date: 9/22/11

Time: 1505

RECEIVED BY: (Signature)

Date: 9/22/11

Time: 3:10 pm

SAMPLE SHIPPED BY: (Circle)

FEDEX BUS

HAND DELIVERED UPS

AIRBILL #: _____

OTHER: _____

RELINQUISHED BY: (Signature)

Date: 9/22/11

Time: 3:10 pm

RECEIVED BY: (Signature)

Date: 9/22/11

Time: 3:10 pm

TETRA TECH CONTACT PERSON:

Aaron Hale

Results by:

RUSH Charges

Authorized:

Yes No

RECEIVING LABORATORY:

TRACE

RECEIVED BY: (Signature)

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP: _____

CONTACT:

PHONE: _____

DATE: 9/22/11

TIME: 3:10 pm

SAMPLE CONDITION WHEN RECEIVED:

1st C

REMARKS:

BH-10 @ T-15

IF TPH is ≥ 100 ppm, then run next lower depth for TPH

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

W0 # 11092301

Analysis Request of Chain of Custody Record

PAGE: 10 OF: 13

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3946

 ANALYSIS REQUEST
 (Circle or Specify Method No.)

CLIENT NAME:

Glen Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

Stake AD

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF FILTERED (Y/N)	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015	PAH 8270	RCRA Metals	TCLP Metals	TCLP Volatile	TCLP Semi V	RCI	GC/MS Vol. 8	GC/MS Semi	PCB's 8080/	Pest. 808/80	Chloride	Gamma Spec	Alpha Beta (	PLM (Asbestos	Major Anion	
270164	9/21		S		X	BH-10 3'	1			X			✓											✓					
165						5'	1						✓											✓					
166						7'	1																✓						
167						10'	1																✓						
168						15'	1																✓						
169						20'	1																✓						
170						25'	1																✓						
171						30'	1																✓						
172						40'	1																						
173					50'	Hold ↓	1																						

RELINQUISHED BY: (Signature)

Date: 9/21/11
Time: 1830

RECEIVED BY: (Signature)

Date: _____
Time: _____

SAMPLED BY: (Print & Initial)

Kim

Date: 9/21/11
Time: _____

RELINQUISHED BY: (Signature)

Date: 9/22/11
Time: 1505

RECEIVED BY: (Signature)

Date: _____
Time: _____

SAMPLE SHIPPED BY: (Circle)

FEDEX BUS
HAND DELIVERED UPS

AIRBILL #: _____

OTHER: _____

RELINQUISHED BY: (Signature)

Date: _____
Time: _____

RECEIVED BY: (Signature)

Date: _____
Time: _____

TETRA TECH CONTACT PERSON:

Aaron Hale

Results by:

RUSH Charges
Authorized:

Yes No

RECEIVING LABORATORY:

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP: _____

CONTACT:

PHONE: _____

RECEIVED BY: (Signature)

DATE: 9/22/11

TIME: 3:10pm

SAMPLE CONDITION WHEN RECEIVED:

10C

REMARKS:

* IF TPH ≥ 100ppm, run next sample depth for TPH

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

W0#11092301

Analysis Request of Chain of Custody Record

PAGE: 11 OF: 13



TETRA TECH

1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:
Glenn Springs

SITE MANAGER:
Avon Hale

PROJECT NO.:
114-6400291

PROJECT NAME:
State AD

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF FILTERED (L)	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015	PAH 8270	RCRA Metals	TCLP Metals	TCLP Volatili	TCLP Semi	RCI	GC/MS Vol.	GC/MS Sem	PCB's 8080.	Pest. 808/6/	Chloride	Gamma Sp	Alpha Beta	PLM (Asbes	Major Anion	
278174	2011 9/21		S		X	BH-11 0-1'	1			X															✓				
175						3'	1																	✓					
176					5'	1																	✓						
177					7'	1																	✓						
178					10'	1																	✓						
179					15'	1	Hold																						
180					20'	1																							
181					25'	1																							
182					30'	1																							
183				40'	1																								

RELINQUISHED BY: (Signature) [Signature]

Date: 9/21/11
Time: 1830

RECEIVED BY: (Signature) _____

Date: _____
Time: _____

SAMPLED BY: (Print & Initial) Kim

Date: 9/21/11
Time: _____

RELINQUISHED BY: (Signature) [Signature]

Date: 9/22/11
Time: 1505

RECEIVED BY: (Signature) _____

Date: _____
Time: _____

SAMPLE SHIPPED BY: (Circle)

FEDEX ☒ BUS ☐
HAND DELIVERED ☒ UPS ☐

AIRBILL #: _____

OTHER: _____

RECEIVING LABORATORY: TRACE

ADDRESS: _____

CITY: MIDLAND

STATE: TX

ZIP: _____

CONTACT: _____

PHONE: _____

RECEIVED BY: (Signature) [Signature]

DATE: 9/22/11

TIME: 3:10pm

TETRA TECH CONTACT PERSON: Avon Hale

Results by:

RUSH Charges
Authorized:

Yes No

SAMPLE CONDITION WHEN RECEIVED:

10C

REMARKS:

BH-11 @ T-14

NO# 11092301

Analysis Request of Chain of Custody Record

PAGE: 12 OF: 13



TETRA TECH

1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

Glen Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP	GRAB	SAMPLE IDENTIFICATION	NUMBER OF FILTERED	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015	PAH 8270	RCRA Metal	TCLP Metal	TCLP Volatile	TCLP Semi	RCI	GC/MS Vol.	GC/MS Semi	PCB's 8080/	Pest. 808/608	Chloride	Gamma Spec	Alpha Beta	PLM (Asbes	Major Anion
278184	9/21		S	X		BH-11 50' H&H	1			X																		
185						55' ↓	1																					
186						BH-12 0-1'	1																	✓				
187						3'	1																	✓				
188						5'	1																	✓				
189						7'	1																	✓				
190						10'	1																	✓				
191						15'	1																	✓				
192						20'	1																	✓				
193						25'	1																	✓				

RELINQUISHED BY: (Signature)

Date: 9/21/11

RECEIVED BY: (Signature)

Date:

SAMPLED BY: (Print & Initial)

Kim

Date: 9/21/11

RELINQUISHED BY: (Signature)

Date: 9/22/11

RECEIVED BY: (Signature)

Date:

SAMPLE SHIPPED BY: (Circle)

FEDEX

AIRBILL #:

RELINQUISHED BY: (Signature)

Date: 1525

RECEIVED BY: (Signature)

Date:

HAND DELIVERED

OTHER:

RECEIVING LABORATORY:

TRACE

RECEIVED BY: (Signature)

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP:

DATE: 9/22/11

CONTACT:

PHONE:

TIME: 3:10 pm

TETRA TECH CONTACT PERSON:

Aaron Hale

Results by:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED:

10C

REMARKS:

BH-12 @ T-17

W0#11092301

Analysis Request of Chain of Custody Record

PAGE: 1 OF: 13

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3946

 ANALYSIS REQUEST
 (Circle or Specify Method No.)

CLIENT NAME:

Glen Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6100291

PROJECT NAME:

State AD ~~XXXX~~ K40

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION					NUMBER OF	FILTERED (Y)	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015	PAH 8270	RCRA Metals	TCLP Metals	TCLP Volatiles	TCLP Semi	RCI	GC.MS Vol.	GC.MS Semi	PCB's 8080/	Pest. 808/60	Chloride	Gamma Spec	Alpha Beta	PLM (Asbes	Major Anion			
278074	9/19		S	X		BH-1	0-1'				1				X		✓	✓	✓										✓							
075							3'				1						✓	✓	✓										✓							
076							5'			1						✓	✓	✓													✓					
077							7'			1						✓	✓	✓													✓					
078							10'			1						✓	✓	✓													✓					
079							15'	Hold		1																										
080							20'			1																										
081							25'			1																										
082							30'			1																										
083		40'			1																															

RELINQUISHED BY: (Signature)

Date: 9/21/11

Time: 1330

RECEIVED BY: (Signature)

Date: _____

Time: _____

SAMPLED BY: (Print & Initial)

Kim

Date: 9/21/11

Time: _____

RELINQUISHED BY: (Signature)

Date: 9/22/11

Time: 1545

RECEIVED BY: (Signature)

Date: _____

Time: _____

SAMPLE SHIPPED BY: (Circle)

FEDEX BUS

AIRBILL #: _____

RELINQUISHED BY: (Signature)

Date: _____

Time: _____

RECEIVED BY: (Signature)

Date: _____

Time: _____

HAND DELIVERED UPS

OTHER: _____

RECEIVING LABORATORY:

TRACE

RECEIVED BY: (Signature)

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP: _____

CONTACT:

PHONE: _____

DATE: 9/22/11

TIME: 3:10pm

TETRA TECH CONTACT PERSON:

Aaron Hale

Results by:

RUSH Charges

Authorized

Yes No

SAMPLE CONDITION WHEN RECEIVED:

1°C

REMARKS:

BH-1 @ T-18 * IF TPH is ≥ 100 ppm, run next sample below in TPH.

10/6 EP

11

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

WO # 11092301

Analysis Request of Chain of Custody Record

PAGE: 5 OF: 13

**TETRA TECH**

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3946

CLIENT NAME:

Glenn Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD				BTX 8021R	TPH 8015 MOD. TX1005 (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8060/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
									HCL	HNO3	ICE	NONE																	
278114	9/20		S	X		BH-5 3'	1				X																		
115						5'	1																						
116						7'	1																						
117						10'	1																						
118						15'	1																						
119						20'	1																						
120						25' Hold	1																						
121						30'	1																						
122						40'	1																						
123						BH-6 0-1'	1																						

RELINQUISHED BY: (Signature)

Date: 9/21/11

Time: 18:30

RECEIVED BY: (Signature)

Date: _____

Time: _____

SAMPLED BY: (Print & Initial)

Kim

Date: 9/20/11

Time: _____

RELINQUISHED BY: (Signature)

Date: 9/22/11

Time: 15:05

RECEIVED BY: (Signature)

Date: _____

Time: _____

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #:

RELINQUISHED BY: (Signature)

Date: _____

Time: _____

RECEIVED BY: (Signature)

Date: _____

Time: _____

TETRA TECH CONTACT PERSON:

Aaron Hale

Results by:

RUSH Charges

Authorized:

Yes No

RECEIVING LABORATORY:

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP: _____

CONTACT:

PHONE: _____

RECEIVED BY: (Signature)

Date: 9/22/11

Time: 3:10 PM

SAMPLE CONDITION WHEN RECEIVED:

106

REMARKS:

BH-6 @ T-9 * IF T-9 is 2 100 ppm, then run next lower depth for T-9

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

W0#11092301

Analysis Request of Chain of Custody Record

PAGE: 7 OF: 13

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3946

 ANALYSIS REQUEST
 (Circle or Specify Method No.)

CLIENT NAME:

Glean Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD

LAB I.D. NUMBER	DATE 2011	TIME	MATRIX	COMP	GRAB	SAMPLE IDENTIFICATION	NUMBER OF FILTERED (Y)	HCL	HNO3	ICE	NONE	BTX 8021B	TPH 8015	PAH 8270	RCRA Metals	TCLP Metals	TCLP Volatili	TCLP Semi	RCI	GC/MS Vol.	GC/MS Sem	PCB's 8080	Pest. 808/60	Chloride	Gamma Spe	Alpha Beta	PLM (Asbes	Major Anion	
278134	9/20		S		X	BH-7 3'	1			X			✓	✓										✓					
135						5'	1						✓											✓					
136						7'	1																	✓					
137						10'	1																	✓					
138						15'	1																	✓					
139						20'	1																	✓					
140						25'	1																	✓					
141						30'	1																	✓					
142						40'	1																	✓					
143						BH-8 0-1	1						✓											✓					

RELINQUISHED BY: (Signature)

Date: 9/21/11
Time: 1830

RECEIVED BY: (Signature)

Date: _____
Time: _____

SAMPLED BY: (Print & Initial)

Kim

Date: 9/20/11
Time: _____

RELINQUISHED BY: (Signature)

Date: 9/22/11
Time: 1545

RECEIVED BY: (Signature)

Date: _____
Time: _____

SAMPLE SHIPPED BY: (Circle)

FEDEX
HAND DELIVEREDBUS
UPS

AIRBILL #: _____

OTHER: _____

RELINQUISHED BY: (Signature)

Date: _____
Time: _____

RECEIVED BY: (Signature)

Date: _____
Time: _____

TETRA TECH CONTACT PERSON:

Aaron Hale

Results by:

RUSH Charges
Authorized:
Yes No

RECEIVING LABORATORY:

TRACE

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP: _____

CONTACT:

PHONE: _____

DATE: 9/22/11

TIME: 3:10 pm

SAMPLE CONDITION WHEN RECEIVED:

10C

REMARKS:

BH-8 @ T-7

IF TPH 3 loc ppm, run next TPH depth Sample below for TPH

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

Analysis Request of Chain of Custody Record



TETRA TECH

1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

PAGE: 1 OF: 1

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

Green Lake

SITE MANAGER:

Anna Hale

PROJECT NO.:

14-01002-1

PROJECT NAME:

State AD

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GT/AG	SAMPLE IDENTIFICATION	NUMBER OF	FILTERED (Y)	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015	PAH 8270	RCRA Metals	TCLP Metals	TCLP Volatiles	TCLP Semi V	RCI	GC/MS Vol. 8	GC/MS Semi	PCIS's 8080/00	Post. 8080/00	(Chloride)	Gamma Spec	Alpha Beta H	PLM (Asbest)	Major Anions	
14-01002-1	9/19		2	X		341 CH	1				X			✓											✓					
2	1		1	1		3	1							✓											✓					
3	1					5	1							✓											✓					
4						7	1							✓											✓					
5						12	1																		✓					
6						15	1																		✓					
7						25	1																		✓					
8						30	1																		(X)					
9						10	1																		(X)					
10						10	1																							

RELINQUISHED BY: (Signature) <i>[Signature]</i>	Date: <i>9/19/11</i>	RECEIVED BY: (Signature) <i>[Signature]</i>	Date: <i>9/19/11</i>	SAMPLED BY: (Print & Initial) <i>R.H.</i>	Date: <i>9/19/11</i>
RELINQUISHED BY: (Signature) <i>[Signature]</i>	Date: <i>9/19/11</i>	RECEIVED BY: (Signature) <i>[Signature]</i>	Date: <i>9/19/11</i>	SAMPLE SHIPPED BY: (Circle)	AIRBILL #
RELINQUISHED BY: (Signature) <i>[Signature]</i>	Date: <i>9/19/11</i>	RECEIVED BY: (Signature) <i>[Signature]</i>	Date: <i>9/19/11</i>	FEDEX ☐ BUS ☐	OTHER: ☐
RECEIVING LABORATORY: <i>Tetra Tech</i>	ADDRESS: <i>1910 N. Big Spring St.</i>	CITY: <i>Midland</i>	STATE: <i>TX</i>	ZIP: <i>79705</i>	CONTACT: <i>[Signature]</i>
REMARKS: <i>BA-1 & T-10 * TP 124 in 2 h. ppm. run for sample. 2.15 (for T-10)</i>			TETRA TECH CONTACT PERSON: <i>Anna Hale</i>		
SAMPLE CONDITION WHEN RECEIVED: <i>12</i>			RESULTS BY: <i>[Signature]</i>		
			RUSH CHARGE AUTHORIZED: ☐		

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

OCT 13 2011 EP



6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1296
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5802 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6915 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Aaron Hale
Tetra Tech
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: October 24, 2011

Work Order: 11092301



Project Name: Glenn Springs/State AD
Project Number: 114-6400291

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
278083	BH-1 40'	soil	2011-09-19	00:00	2011-09-22
278084	BH-1 50'	soil	2011-09-19	00:00	2011-09-22

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 8 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

Report Contents

Case Narrative	3
Analytical Report	4
Sample 278083 (BH-1 40')	4
Sample 278084 (BH-1 50')	4
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QC Batch 85746 - Method Blank (1)	5
Laboratory Control Spikes	6
QC Batch 85746 - LCS (1)	6
QC Batch 85746 - MS (1)	6
Calibration Standards	7
QC Batch 85746 - ICV (1)	7
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Laboratory Certifications	8
Standard Flags	8
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Case Narrative

Samples for project Glenn Springs/State AD were received by TraceAnalysis, Inc. on 2011-09-22 and assigned to work order 11092301. Samples for work order 11092301 were received intact at a temperature of 1.0 C.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Chloride (Titration)	SM 4500-Cl B	72788	2011-10-20 at 09:30	85746	2011-10-20 at 15:31

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 11092301 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.

Report Date: October 24, 2011
114-6400291

Work Order: 11092301
Glenn Springs/State AD

Page Number: 4 of 8

Analytical Report

Sample: 278083 - BH-1 40'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2011-10-20	Analyzed By:	AR
QC Batch:	85746	Sample Preparation:	2011-10-20	Prepared By:	AR
Prep Batch:	72788				

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			230	mg/Kg	50	4.00

Sample: 278084 - BH-1 50'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2011-10-20	Analyzed By:	AR
QC Batch:	85746	Sample Preparation:	2011-10-20	Prepared By:	AR
Prep Batch:	72788				

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride	U		<200	mg/Kg	50	4.00

Report Date: October 24, 2011
114-6400291

Work Order: 11092301
Glenn Springs/State AD

Page Number: 5 of 8

Method Blanks

Method Blank (1) QC Batch: 85746

QC Batch: 85746
Prep Batch: 72788

Date Analyzed: 2011-10-20
QC Preparation: 2011-10-20

Analyzed By: AR
Prepared By: AR

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride			<3.85	mg/Kg	4

Report Date: October 24, 2011
114-6400291

Work Order: 11092301
Glenn Springs/State AD

Page Number: 6 of 8

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 85746
Prep Batch: 72788

Date Analyzed: 2011-10-20
QC Preparation: 2011-10-20

Analyzed By: AR
Prepared By: AR

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			96.3	mg/Kg	1	100	<3.85	96	85 - 115

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			103	mg/Kg	1	100	<3.85	103	85 - 115	7	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: 280149

QC Batch: 85746
Prep Batch: 72788

Date Analyzed: 2011-10-20
QC Preparation: 2011-10-20

Analyzed By: AR
Prepared By: AR

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			9800	mg/Kg	100	10000	<385	98	79.4 - 120.6

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			10300	mg/Kg	100	10000	<385	103	79.4 - 120.6	5	20

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

Report Date: October 24, 2011
114-6400291

Work Order: 11092301
Glenn Springs/State AD

Page Number: 7 of 8

Calibration Standards

Standard (ICV-1)

QC Batch: 85746

Date Analyzed: 2011-10-20

Analyzed By: AR

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	99.0	99	85 - 115	2011-10-20

Standard (CCV-1)

QC Batch: 85746

Date Analyzed: 2011-10-20

Analyzed By: AR

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	101	101	85 - 115	2011-10-20

Appendix

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less than ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

W0#11092301

Analysis Request of Chain of Custody Record

PAGE: 1 OF: 13

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3946

 ANALYSIS REQUEST
 (Circle or Specify Method No.)

 CLIENT NAME:
 Glen Springs

 SITE MANAGER:
 Aaron Hale

 PROJECT NO.:
 114-6100291

 PROJECT NAME:
 State AD ~~XXXX~~ KAO

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION		NUMBER OF	FILTERED (Y)	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015	PAH 8270	RCRA Metals	TCLP Metals	TCLP Volatile	TCLP Semi V	RCI	GC/MS Vol. 8	GC/MS Semi	PCB's 8080/	Pest. 808/80	Chloride	Gamma Spec	Alpha Beta (4	PLM (Asbest	Major Anion			
278074	9/19		S	X	BH-1	0-1'		1				X			✓											✓							
075						3'		1							✓											✓							
076		5'					1									✓											✓						
077		7'					1										✓										✓						
078		10'					1																				✓						
079		15'				Hold		1																									
080		20'						1																									
081		25'						1																									
082		30'						1																									
083	40'			1																													

 RELINQUISHED BY: (Signature) *[Signature]* Date: 9/21/11 Time: 1:30

RECEIVED BY: (Signature) _____ Date: _____ Time: _____

SAMPLED BY: (Print & Initial) Kim Date: 9/20/11 Time: _____

 RELINQUISHED BY: (Signature) *[Signature]* Date: 9/22/11 Time: 15:05

RECEIVED BY: (Signature) _____ Date: _____ Time: _____

SAMPLE SHIPPED BY: (Circle) FEDEX BUS AIRBILL #: _____ HAND DELIVERED UPS OTHER: _____

RELINQUISHED BY: (Signature) _____ Date: _____ Time: _____

RECEIVED BY: (Signature) _____ Date: _____ Time: _____

TETRA TECH CONTACT PERSON: Aaron Hale Results by: _____

RECEIVING LABORATORY: TRACE ADDRESS: _____ CITY: MIDLAND STATE: TX ZIP: _____ CONTACT: _____ PHONE: _____

 RECEIVED BY: (Signature) *[Signature]* DATE: 9/22/11 TIME: 3:10 PM

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 1°C

REMARKS: BH-1 @ T-18 * IF TPH is ≥ 100 ppm, run next sample below for TPH.

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

No# 11092301

Analysis Request of Chain of Custody Record

PAGE: 2 OF: 13

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3946

 ANALYSIS REQUEST
 (Circle or Specify Method No.)

CLIENT NAME:

Cherry Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD ~~XXXX~~ KAD

LAB I.D. NUMBER	DATE 2011	TIME	MATRIX	COMP	GRAB	SAMPLE IDENTIFICATION			NUMBER OF	FILTERED (Y)	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015	PAH 8270	RCRA Metals	TCLP Metals	TCLP Volatiles	TCLP Semi V	RCI	GC/MS Vol. 8	GC/MS Semi	PCB's 8080/60	Pest. 808/60	Chloride	Gamma Spec	Alpha Beta (a	PLM (Asbest	Major Anion
278004	9/19		S	X	BH-1	50'	Hold	1					X																		
085						60'	↓	1																							
086					BH-2	0-1'		1								✓															
087						3'		1								✓															
088						5'		1								✓															
089						7'	Hold	1																							
090						10'	↓	1																							
091						15'		1																							
092						20'	↓	1																							
093					BH-3	0-1'		1																		✓					

RELINQUISHED BY: (Signature)

Date: 9/21/11

Time: 1830

RECEIVED BY: (Signature)

Date:

Time:

SAMPLED BY: (Print & Initial)

Kim

Date: 9/20/11

Time:

RELINQUISHED BY: (Signature)

Date: 9/22/11

Time: 1505

RECEIVED BY: (Signature)

Date:

Time:

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

TETRA TECH CONTACT PERSON:

Aaron Hale

Results by:

RUSH Charges

Authorized:

Yes No

RECEIVING LABORATORY:

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP:

CONTACT:

PHONE:

RECEIVED BY: (Signature)

Date: 9/22/11

Time: 3:10pm

SAMPLE CONDITION WHEN RECEIVED:

10C

REMARKS:

BH-2 @ T-3

BH-3 @ T-2

* IF TPH is 2 100 ppm, run next sample below for TPH

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

No # 1012301

Analysis Request of Chain of Custody Record

PAGE: 3 OF: 13

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3946

CLIENT NAME:

Glen Springs

SITE MANAGER:

Aaron Hole

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP	GRAB	SAMPLE IDENTIFICATION	NUMBER OF	FILTERED (Y)	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015	PAH 8270	RCRA Metal	TCLP Metal	TCLP Volatili	TCLP Semi	RCI	GC.MS Vol.	GC.MS Sem	PCB's 8060/	Pest. 808/60	Chloride	Gamma Spe	Alpha Beta	PLM (Asbes	Major Anion				
278094	9/19		S		X	BH-3 3'	1				X														✓								
095						5'	1																	✓									
096					7'	1																	✓										
097					10'	1																	✓										
098					15'	1																	✓										
099					20'	1																											
					25'	1																											
100							30'	1																									
101						40'	1																										
102																																	
103	9/20					BH-4 0-1'	1							✓											✓								

RELINQUISHED BY: (Signature)

Date:

9/21/11

Time:

1830

RECEIVED BY: (Signature)

Date:

Time:

SAMPLED BY: (Print & Initial)

Kim

Date:

9/22/11

Time:

RELINQUISHED BY: (Signature)

Date:

9/22/11

Time:

1505

RECEIVED BY: (Signature)

Date:

Time:

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #:

HAND DELIVERED

UPS

OTHER:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

TETRA TECH CONTACT PERSON:

Results by:

RECEIVING LABORATORY:

TRACE

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP:

CONTACT:

PHONE:

DATE:

9/22/11

TIME:

3:10pm

Aaron Hole

RUSH Charges

Authorized:

Yes

No

SAMPLE CONDITION WHEN RECEIVED:

106

REMARKS:

BH-4 @ T-5

* IF TPH is 2100 ppm, then run next lower sample for TPH

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

W0# 11092301

Analysis Request of Chain of Custody Record

PAGE: 4 OF: 13

**TETRA TECH**

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

Glenn Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD

LAB I.D. NUMBER	DATE 2011	TIME	MATRIX	COMP	GRAB	SAMPLE IDENTIFICATION	NUMBER OF FILTERED (Y)	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015	PAH 8270	RCRA Metals	TCLP Metals	TCLP Volatile	TCLP Semi V	RCI	GC-MS Vol. 8	GC-MS Semi	PCB's 8080/80	Pest. 808/80	Chloride	Gamma Spec	Alpha Beta (	PLM (Asbest	Major Anions	
278104	9/20		S	X		BH-4 3'	1			X			✓											✓					
105						5'	1						✓											✓					
106						7'	1																✓						
107						10'	1																✓						
108						15'	1																✓						
109						20'	1																✓						
110						25' Hold	1																						
111						30'	1																						
112					40'	1																							
113						BH-5 0-1'	1																✓						

RELINQUISHED BY: (Signature)

Date:

9/20/11

Time:

1830

RECEIVED BY: (Signature)

Date:

Time:

SAMPLED BY: (Print & Initial)

Kim

Date:

9/20/11

Time:

RELINQUISHED BY: (Signature)

Date:

9/22/11

Time:

1505

RECEIVED BY: (Signature)

Date:

Time:

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #:

HAND DELIVERED

UPS

OTHER:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

TETRA TECH CONTACT PERSON:

Aaron Hale

Results by:

RECEIVING LABORATORY:

TRACE

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP:

CONTACT:

PHONE:

DATE:

9/22/11

TIME:

3:10 pm

SAMPLE CONDITION WHEN RECEIVED:

10C

REMARKS:

BH-5 @ T-4

* IF TPH is ≥ 100 ppm, then run next lower sample for TPH.

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

WO # 11092301

Analysis Request of Chain of Custody Record

PAGE: 5 OF: 13

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3946

CLIENT NAME:

Glenn Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD

LAB I.D. NUMBER	DATE 2011	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF FILTERED (Y)	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015	PAH 8270	RCRA Metals	TCLP Metals	TCLP Volatile	TCLP Semi V	RCI	GC-MS Vol. 8	GC-MS Semi	PCB's 8080/60	Pest. 808/60	Chloride	Gamma Spec	Alpha Beta (/	PLM (Asbest	Major Anions
278114	9/20		S		X	BH-5 3'	1			X														✓				
115						5'	1																	✓				
116						7'	1										✓											
117						10'	1									✓												
118						15'	1									✓												
119						20'	1									✓												
120						25'	1																					
121						30'	1																					
122						40'	1																					
123						BH-6 0-1'	1					✓																

RELINQUISHED BY: (Signature)

Date: 9/21/11
Time: 1830

RECEIVED BY: (Signature)

Date: _____
Time: _____

SAMPLED BY: (Print & Initial)

Kim

Date: 9/20/11
Time: _____

RELINQUISHED BY: (Signature)

Date: 9/22/11
Time: 1505

RECEIVED BY: (Signature)

Date: _____
Time: _____

SAMPLE SHIPPED BY: (Circle)

FEDEX BUS
HAND DELIVERED UPS

AIRBILL #: _____

OTHER: _____

RELINQUISHED BY: (Signature)

Date: _____
Time: _____

RECEIVED BY: (Signature)

Date: _____
Time: _____

TETRA TECH CONTACT PERSON:

Aaron Hale

Results by:

RUSH Charges
Authorized:
Yes No

RECEIVING LABORATORY:

TRACE

ADDRESS:

CITY: MIDLAND STATE: TX ZIP: _____

CONTACT: _____ PHONE: _____

RECEIVED BY: (Signature)

DATE: 9/22/11 TIME: 3:10pm

SAMPLE CONDITION WHEN RECEIVED:

10L

REMARKS:

BH-6 @ T-9 * IF TPH is 3 100 ppm, then run next lower depth for TPH

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

W0#11092301

Analysis Request of Chain of Custody Record

PAGE: 6 OF: 13

**TETRA TECH**

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3946

CLIENT NAME:

Glen Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD

LAB I.D. NUMBER	DATE 2011	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF FILTERED (Y)	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015	PAH 8270	RCRA Metals	TCLP Metals	TCLP Volatiles	TCLP Semi V	RCI	GC/MS Vol. &	GC/MS Semi	PCB's 8080/	Pest. 809/80	Chloride	Gamma Spec	Alpha Beta (	PLM (Asbest	Major Anion	
278124	9/20		S		X	BH-6 3'	1			X			✓											✓					
125						5'	1						✓											✓					
126						7'	1																✓						
127						10'	1																✓						
128						15'	1																✓						
129						20'	1																						
130						25'	1																						
131						30'	1																						
132						40'	1																						
133						BH-7 0-1'	1						✓											✓					

RELINQUISHED BY: (Signature)

Date: 9/21/11

Time: 1830

RECEIVED BY: (Signature)

Date: _____

Time: _____

SAMPLED BY: (Print & Initial)

Kim

Date: 9/20/11

Time: _____

RELINQUISHED BY: (Signature)

Date: 9/21/11

Time: 1505

RECEIVED BY: (Signature)

Date: _____

Time: _____

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #: _____

HAND DELIVERED

UPS

OTHER: _____

RECEIVING LABORATORY:

TRACE

RECEIVED BY: (Signature)

ADDRESS:

CITY:

MIDLAND

STATE: TX

ZIP: _____

CONTACT:

PHONE: _____

DATE: 9/22/11

TIME: 3:00pm

TETRA TECH CONTACT PERSON:

Aaron Hale

Results by:

RUSH Charges

Authorized:

Yes No

SAMPLE CONDITION WHEN RECEIVED:

1°C

REMARKS:

BH-7 @ T-8

IF TPH is ≥ 100 ppm or greater, run methylene blue sample depth for TPH

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

W0#11092301

Analysis Request of Chain of Custody Record

PAGE: 7 OF: 13

**TETRA TECH**

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

Glen Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF	FILTERED (Y)	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015	PAH 8270	RCRA Metals	TCLP Metals	TCLP Volatiles	TCLP Semi V	RCI	GC/MS Vol. &	GC/MS Semi	PCB's 8080/0	Pest. 808/600	Chloride	Gamma Spec	Alpha Beta (	PLM (Asbest	Major Anions	
278134	9/20		S		X	BH-7 3'	1				X			✓											✓					
135						5'	1							✓											✓					
136						7'	1																	✓						
137						10'	1																	✓						
138						15'	1																	✓						
139						20'	1																							
140						25'	1																							
141						30'	1																							
142					40'	1																								
143						BH-8 0-1	1							✓											✓					

RELINQUISHED BY: (Signature)

Date: 9/21/11
Time: 1830

RECEIVED BY: (Signature)

Date: _____
Time: _____

SAMPLED BY: (Print & Initial)

Kim

Date: 9/21/11
Time: _____

RELINQUISHED BY: (Signature)

Date: 9/22/11
Time: 1505

RECEIVED BY: (Signature)

Date: _____
Time: _____

SAMPLE SHIPPED BY: (Circle)

FEDEX
HAND DELIVEREDBUS
UPSAIRBILL #: _____
OTHER: _____

RELINQUISHED BY: (Signature)

Date: _____
Time: _____

RECEIVED BY: (Signature)

Date: _____
Time: _____

TETRA TECH CONTACT PERSON:

Aaron Hale

Results by:

RECEIVING LABORATORY:

TRACE

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP: _____

CONTACT:

PHONE: _____

DATE: 9/22/11

TIME: 3:10 pm

SAMPLE CONDITION WHEN RECEIVED:

10C

REMARKS:

BH-8 @ T-7

IF TPH ≥ 100 ppm, run next TPH sample below for TPH

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

W0#11097301

Analysis Request of Chain of Custody Record

PAGE: 8 OF: 13

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3946

 ANALYSIS REQUEST
 (Circle or Specify Method No.)

CLIENT NAME:

Glean Springs

SITE MANAGER:

Aaron Hule

PROJECT NO.:

114-640 0291

PROJECT NAME:

State AD

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD				BTX 8021 B	TPH 8015 MOD. (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
									HCL	HNO3	ICE	NONE																	
278144	9/20		S	X		BH-8 3'	1				X			✓										✓					
145						5'	1							✓										✓					
146						7'	1																	✓					
147						10'	1																	✓					
148						15'	1																	✓					
149						20'	1																	✓					
150						25'	1																	✓					
151						30' Hold	1																						
152						40' ↓	1																						
153						BH-9 0-1'	1							✓										✓					

RELINQUISHED BY: (Signature)

Date: 9/21/11

Time: 1830

RECEIVED BY: (Signature)

Date: _____

Time: _____

SAMPLED BY: (Print & Initial)

Kim

Date: 9/20/11

Time: _____

RELINQUISHED BY: (Signature)

Date: 9/22/11

Time: 1505

RECEIVED BY: (Signature)

Date: _____

Time: _____

SAMPLE SHIPPED BY: (Circle)

FEDEX BUS
HAND DELIVERED UPS

AIRBILL #: _____

OTHER: _____

RELINQUISHED BY: (Signature)

Date: _____

Time: _____

RECEIVED BY: (Signature)

Date: _____

Time: _____

TETRA TECH CONTACT PERSON:

Aaron Hule

Results by:

RUSH Charges Authorized:

Yes No

RECEIVING LABORATORY:

TRACE

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP: _____

CONTACT:

PHONE: _____

DATE: 9/22/11

TIME: 3:10 pm

SAMPLE CONDITION WHEN RECEIVED:

10C

REMARKS:

BH-9 @ T-12 IF TPH ≥ 100ppm, run next sample depth for TPH

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

WD # 11092301

Analysis Request of Chain of Custody Record

PAGE: 9 OF: 13

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3946

 ANALYSIS REQUEST
 (Circle or Specify Method No.)

CLIENT NAME:

Glen Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD

LAB I.D.
NUMBER

DATE

TIME

MATRIX

COMP

GRAB

SAMPLE IDENTIFICATION

 NUMBER OF CONTAINERS
 FILTERED (Y/N)
PRESERVATIVE
METHOD

HCL

HNO3

ICE

NONE

BTX 8021B

TPH 8015 MOD TX1005 (Ext. to C35)

PAH 8270

RCRA Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Metals Ag As Ba Cd Vr Pd Hg Se

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8240/8260/824

GC/MS Semi. Vol. 8270/825

PCB's 8080/808

Pest. 808/608

Chloride

Gamma Spec.

Alpha Beta (Air)

PLM (Asbestos)

Major Anions/Cations, pH, TDS

278154

9/20

S

X

BH-9 3'

1

155

5'

1

156

7'

1

157

10'

1

158

15'

Hold

1

159

20'

1

160

25'

1

161

30'

1

162

40'

1

163

9/21

BH-10 0-1'

1

RELINQUISHED BY: (Signature)

Date: 9/21/11

Time: 1830

RECEIVED BY: (Signature)

Date: _____

Time: _____

SAMPLED BY: (Print & Initial)

Kim

Date: 9/21/11

Time: _____

RELINQUISHED BY: (Signature)

Wo # 11092301

Analysis Request of Chain of Custody Record

PAGE: 10 OF: 13

**TETRA TECH**

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3946

CLIENT NAME:

Glen Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS FILTERED (Y/N)	PRESERVATIVE METHOD				BTEX 8021B	TPH 8015 MOD (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vt Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/824	GC/MS Semi. Vol. 8270/825	PCB's 8080/808	Pest. 808/808	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
								HCL	HNO3	ICE	NONE																	
278164	9/21		S	X		BH-10 3'	1			X			✓											✓				
165						5'	1						✓											✓				
166						7'	1																	✓				
167						10'	1																	✓				
168						15'	1																	✓				
169						20'	1																	✓				
170						25'	1																	✓				
171						30'	1																	✓				
172						40'	1																					
173						50'	1																					

RELINQUISHED BY: (Signature)

Date: 9/21/11
Time: 1830

RECEIVED BY: (Signature)

Date: _____
Time: _____

SAMPLED BY: (Print & Initial)

KCM

Date: 9/21/11
Time: _____

RELINQUISHED BY: (Signature)

Date: 9/22/11
Time: 1505

RECEIVED BY: (Signature)

Date: _____
Time: _____

SAMPLE SHIPPED BY: (Circle)

FEDEX BUS
HAND DELIVERED UPSAIRBILL #: _____
OTHER: _____

RELINQUISHED BY: (Signature)

Date: _____
Time: _____

RECEIVED BY: (Signature)

Date: _____
Time: _____

TETRA TECH CONTACT PERSON:

Aaron Hale

Results by:

RUSH Charges
Authorized:

Yes No

RECEIVING LABORATORY:

TETRA

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP: _____

CONTACT:

PHONE: _____

RECEIVED BY: (Signature)

DATE: 9/22/11

TIME: 3:10pm

SAMPLE CONDITION WHEN RECEIVED:

10C

REMARKS:

* IF TPH ≥ 100ppm, run next sample depth for TPH

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

120# 11092301

Analysis Request of Chain of Custody Record

PAGE: 11 OF: 13

**TETRA TECH**
 1910 N. Big Spring St.
 Midland, Texas 79705
 (432) 682-4559 • Fax (432) 682-3946

 ANALYSIS REQUEST
 (Circle or Specify Method No.)

CLIENT NAME:

Glenn Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP	GRAB	SAMPLE IDENTIFICATION	NUMBER OF FILTERED (Y/N)	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015	PAH 8270	RCRA Metals	TCLP Metals	TCLP Volatiles	TCLP Semi	RCI	GC/MS Vol. 1	GC/MS Semi	PCB's 8080/	Pest. 808/608	Chloride	Gamma Spec	Alpha Beta (	PLM (Asbest	Major Anion		
278174	9/21		S		X	BH-11 0-1'	1			X															✓					
175						3'	1																		✓					
176						5'	1																		✓					
177						7'	1																		✓					
178						10'	1																			✓				
179						15'	1																							
180						20'	1																							
181						25'	1																							
182						30'	1																							
183					40'	1																								

RELINQUISHED BY: (Signature)

Date:

9/21/11

Time:

1830

RECEIVED BY: (Signature)

Date:

Time:

SAMPLED BY: (Print & Initial)

Kim

Date:

9/21/11

Time:

RELINQUISHED BY: (Signature)

Date:

9/22/11

Time:

1505

RECEIVED BY: (Signature)

Date:

Time:

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

TETRA TECH CONTACT PERSON:

Aaron Hale

OTHER:

Results by:

RUSH Charges
Authorized:

Yes No

RECEIVING LABORATORY:

TRACE

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP:

CONTACT:

PHONE:

RECEIVED BY: (Signature)

DATE:

9/22/11

TIME:

3:10pm

SAMPLE CONDITION WHEN RECEIVED:

1°C

REMARKS:

BH-11 @ T-14

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

NO# 11092301

Analysis Request of Chain of Custody Record

PAGE: 12 OF: 13

**TETRA TECH**

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

Glen Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP	GRAB	SAMPLE IDENTIFICATION	NUMBER OF	FILTERED (Y)	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015	PAH 8270	RCRA Metal	TCLP Metal	TCLP Volatil	TCLP Semi	RCI	GC/MS Vol.	GC/MS Sem	PCB's 8080	Pest. 808/60	Chloride	Gamma Spe	Alpha Beta	PLM (Asbes	Major Anion	
278184	9/21		S	X		BH-11 50' H6W	1				X																			
185						55' ↓	1																							
186						BH-12 0-1'	1																		✓					
187						3'	1																		✓					
188						5'	1																		✓					
189						7'	1																		✓					
190						10'	1																		✓					
191						15'	1																		✓					
192						20'	1																		✓					
193						25'	1																		✓					

RELINQUISHED BY: (Signature)

Date:

9/21/11

Time:

1030

RECEIVED BY: (Signature)

Date:

Time:

SAMPLED BY: (Print & Initial)

Kim

Date:

9/21/11

RELINQUISHED BY: (Signature)

Date:

9/22/11

Time:

1525

RECEIVED BY: (Signature)

Date:

Time:

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #:

RELINQUISHED BY: (Signature)

Date:

Time:

RECEIVED BY: (Signature)

Date:

Time:

HAND DELIVERED

UPS

OTHER:

RECEIVING LABORATORY:

TRACE

RECEIVED BY: (Signature)

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP:

CONTACT:

PHONE:

DATE:

9/22/11

TIME:

3:10 pm

TETRA TECH CONTACT PERSON:

Aaron Hale

Results by:

RUSH Charges

Authorized:

Yes

No

SAMPLE CONDITION WHEN RECEIVED:

10C

REMARKS:

BH-12 @ T-17

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

W0#11092301

Analysis Request of Chain of Custody Record

PAGE: 1

OF: 13

**TETRA TECH**

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

Gilem Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD ~~XXXX~~ KAO

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS FILTERED (Y/N)	PRESERVATIVE METHOD				BTEX 8021B	TPH 8015 MOD. (Ext. to C35)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Vr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
								HCL	HNO3	ICE	NONE																	
278074	9/19		S	X		BH-1 0-1'	1			X																		
075						3'	1																					
076						5'	1																					
077						7'	1																					
078						10'	1																					
079						15' Hold	1																					
080						20'	1																					
081						25'	1																					
082						30'	1																					
083						40'	1																					

RELINQUISHED BY: (Signature)

Date: 9/21/11

Time: 1330

RECEIVED BY: (Signature)

Date: _____

Time: _____

SAMPLED BY: (Print & Initial)

Kim

Date: 9/21/11

Time: _____

RELINQUISHED BY: (Signature)

Date: 9/22/11

Time: 1545

RECEIVED BY: (Signature)

Date: _____

Time: _____

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #:

HAND DELIVERED

UPS

OTHER: _____

RELINQUISHED BY: (Signature)

Date: _____

Time: _____

RECEIVED BY: (Signature)

Date: _____

Time: _____

TETRA TECH CONTACT PERSON:

Results by:

RECEIVING LABORATORY:

TRACE

RECEIVED BY: (Signature)

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP: _____

CONTACT:

PHONE: _____

DATE: 9/22/11

TIME: 3:10pm

Aaron Hale

RUSH Charges
Authorized:

Yes

No

SAMPLE CONDITION WHEN RECEIVED:

1°C

REMARKS:

BH-1 @ T-18 * IF TPH is 2100 ppm, run next sample below in TPH.

10/6 EP

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

WO # 11092301

Analysis Request of Chain of Custody Record

PAGE: 5 OF: 13

**TETRA TECH**

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

Glenn Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF	FILTERED (Y	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015	PAH 8270	RCRA Metals	TCLP Metals	TCLP Volatiles	TCLP Semi V	RCI	GC/MS Vol. 8	GC/MS Semi	PCB's 8080/0	Pest. 808/608	Chloride	Gamma Spec	Alpha Beta (	PLM (Asbest	Major Anions	
278114	9/20		S	X		BH-5 3'	1				X															✓				
115						5'	1																			✓				
116						7'	1																			✓				
117						10'	1																			✓				
118						15'	1																			✓				
119						20'	1																			✓				
120						25' Hold	1																							
121						30'	1																							
122						40'	1																							
123						BH-6 0-1'	1						✓																	

RELINQUISHED BY: (Signature)

Date: 9/21/11

Time: 1:30

RECEIVED BY: (Signature)

Date: 9/22/11

Time: 3:10pm

SAMPLED BY: (Print & Initial)

Kim

Date: 9/20/11

RELINQUISHED BY: (Signature)

Date: 9/22/11

Time: 1:30

RECEIVED BY: (Signature)

Date: 9/22/11

Time: 3:10pm

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #:

HAND DELIVERED

UPS

OTHER:

RECEIVING LABORATORY:

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP:

CONTACT:

PHONE:

RECEIVED BY: (Signature)

Date: 9/22/11

Time: 3:10pm

TETRA TECH CONTACT PERSON:

Aaron Hale

Results by:

RUSH Charges

Authorized:

Yes

No

SAMPLE CONDITION WHEN RECEIVED:

106

REMARKS:

BH-6 @ T-9

* DETPH is 2 100 ppm, then run next lower depth for TPH

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

W0#11092301

Analysis Request of Chain of Custody Record

PAGE: 7 OF: 13



TETRA TECH

1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

Glen Springs

SITE MANAGER:

Aaron Hale

PROJECT NO.:

114-6400291

PROJECT NAME:

State AD

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	PRESERVATIVE METHOD					BTX 8021B	TPH 8015 MOD	PAH 8270	ROHA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
								Filtered (Y/N)	HCL	HNO3	ICE	NONE																	
278134	9/20		S	X		BH-7 3'	1				X																		
135						5'	1																						
136						7'	1																						
137						10'	1																						
138						15'	1																						
139						20' Hold	1																						
140						25'	1																						
141						30'	1																						
142						40'	1																						
143						BH-8 0-1	1																						

RELINQUISHED BY: (Signature)

Date: 9/21/11

Time: 1830

RECEIVED BY: (Signature)

Date: _____

Time: _____

SAMPLED BY: (Print & Initial)

Kim

Date: 9/20/11

Time: _____

RELINQUISHED BY: (Signature)

Date: 9/22/11

Time: 1505

RECEIVED BY: (Signature)

Date: _____

Time: _____

SAMPLE SHIPPED BY: (Circle)

FEDEX ☒ BUS ☐

AIRBILL #: _____

HAND DELIVERED ☒ UPS ☐

OTHER: _____

RECEIVING LABORATORY:

TRACE

RECEIVED BY: (Signature)

ADDRESS:

CITY: MIDLAND

STATE: TX

ZIP: _____

CONTACT:

PHONE: _____

DATE: 9/22/11

TIME: 3:10 pm

TETRA TECH CONTACT PERSON:

Aaron Hale

Results by:

RUSH Charges

Authorized:

Yes No

SAMPLE CONDITION WHEN RECEIVED:

10C

REMARKS:

BH-8 C T-7

IF TPH ≥ 100 ppm, run next TPH depth. Sample below for TPH

Analysis Request of Chain of Custody Record



TETRA TECH

1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

PAGE: 1 OF: 1

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

SITE MANAGER:

PROJECT NO.:

PROJECT NAME:

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP	GRAB	SAMPLE IDENTIFICATION	NUMBER OF	FILTERED (Y	HCL	HNO3	ICE	NONE	BTEX 8021B	TPH 8015	PAH 8270	RCRA Metal	TCLP Metal	TCLP Volatili	TCLP Semi	RCI	GC.MS Vol.	GC.MS Semi	PCB's 8080/	Pest. 808/60	(Chloride)	Gamma Spe	Alpha Beta	PLM (Asbes	Major Anion				
1014	10/11		0		X	BAH 101																											
1015						5'																											
1016						6'																											
1017						7'																											
1018						10'																											
1019						10'																											
1020						20'																											
1021						45'																											
1022						30'																											
1023						40'																											

RELINQUISHED BY: (Signature)	Date: 10/11/11	RECEIVED BY: (Signature)	Date: 10/11/11	SAMPLED BY: (Print & Initial)	Date: 10/11/11
RELINQUISHED BY: (Signature)	Date: 10/11/11	RECEIVED BY: (Signature)	Date: 10/11/11	SAMPLE SHIPPED BY: (Circle)	AIRBILL #: 1111
RELINQUISHED BY: (Signature)	Date: 10/11/11	RECEIVED BY: (Signature)	Date: 10/11/11	FEDEX	BUS
				HAND DELIVERED	UPS
RECEIVING LABORATORY:	Tetra Tech			TETRA TECH CONTACT PERSON:	
ADDRESS:	1910 N. Big Spring St.			Results by:	
CITY:	STATE:	ZIP:	DATE:	RUSH Charges Authorized:	
CONTACT:	PHONE:	TIME:	TIME:	Yes No	

SAMPLE CONDITION WHEN RECEIVED: REMARKS: BAH 113 T-18 * IF 11/11/11 2:00 pm, 10/11/11 2:00 pm, 10/11/11 2:00 pm

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

OCT 19 2011

OCT 13 2011

Analysis Request of Chain of Custody Record

PAGE: 2 OF: 13



TETRA TECH

1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

SITE MANAGER:

PROJECT NO.:

PROJECT NAME:

LAB I.D.
NUMBER

DATE

TIME

MATRIX
COMP
GRAB

SAMPLE IDENTIFICATION

NUMBER OF CONTAINERS

PRESERVATIVE
METHOD

FILTERED (Y/N)

HCL

HNO3

ICE

NONE

BTEX 8021P

TPH 8015 MOD. TX1005 (Ext. to C35)

PAH 8270

RCRA Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8240/8260/624

GC/MS Semi. Vol. 8270/625

PCB's 8080/608

Pest. 809/608

Chloride

Gamma Spec.

Alpha Beta (Air)

PLM (Asbestos)

Major Anions/Cations, pH, TDS

RELINQUISHED BY: (Signature)

Date: 7/11/01
Time: 1:00

RECEIVED BY: (Signature)

Date: 7/11/01
Time: 1:00

SAMPLED BY: (Print & Initial)

Date: 7/11/01
Time: 1:00

RELINQUISHED BY: (Signature)

Date: 7/11/01
Time: 1:00

RECEIVED BY: (Signature)

Date: 7/11/01
Time: 1:00

SAMPLE SHIPPED BY: (Circle)

FEDEX ☐ BUS ☐
HAND DELIVERED ☐ UPS ☐

AIRBILL #:

OTHER:

RELINQUISHED BY: (Signature)

Date: 7/11/01
Time: 1:00

RECEIVED BY: (Signature)

Date: 7/11/01
Time: 1:00

TETRA TECH CONTACT PERSON:

Results by:

RECEIVING LABORATORY:

ADDRESS:

CITY:

STATE:

ZIP:

CONTACT:

PHONE:

RECEIVED BY: (Signature)

DATE: 7/11/01

TIME: 1:00

SAMPLE CONDITION WHEN RECEIVED:

REMARKS:

RECEIVED 7/11/01 * IF PH 2 is present, it is not to be used for TDS

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

APPENDIX C BORING LOGS

Soil Boring Log

Boring/Well: BH-1 @ T-18
Project Number: 114-6401027A
Client: Glenn Springs
Site: State AD Tank Battery (Removed)
County: Eddy County

Date Installed: 9/19/2011
Total Depth: 60
GPS: 33.42826 103.65571

DEPTH (Ft)	Field Chloride	SAMPLE DESCRIPTION
0-1'	-	Siliceous limestone rock
3'	1.01 ppt	Siliceous limestone rock
5'	-	Asphaltic material
7'	856 ppm	Soft sandy caliche mix
10'	547 ppm	Soft silty caliche
15'	788 ppm	Medium dense sand
20'	975 ppm	Medium dense sand
25'	1.13 ppt	Sandstone - fine grain well sorted
30'	843 ppm	Sandstone - fine grain well sorted
40'	537 ppm	Sandstone - fine grain well sorted
50'	188 ppm	Loose reddish-brown sand - damp
60'	253 ppm	Loose reddish-brown sand - damp

Total Depth is 60 feet Groundwater was potentially encountered

OL Over Load reading
- Not Analyzed

Soil Boring Log

Boring/Well: BH-2 @ T-3
Project Number: 114-6401027A
Client: Glenn Springs
Site: State AD Tank Battery (Removed)
County: Eddy County

Date Installed: 9/19/2011
Total Depth: 20
GPS: 33.42815 103.65584

DEPTH (Ft)	Field Chloride	SAMPLE DESCRIPTION
0-1'	-	Heavy stained material - Hard siliceous limestone rock
3'		Heavy stained material - Hard siliceous limestone rock
5'		Silty caliche mix
7'		Silty caliche mix
10'		Silty caliche mix
15'		Medium dense tan sand
20'		Medium dense tan sand

Total Depth is 20 feet Groundwater was not encountered

OL Over Load reading
- Not Analyzed

Soil Boring Log

Boring/Well: BH-3 @ T-2
Project Number: 114-6401027A
Client: Glenn Springs
Site: State AD Tank Battery (Removed)
County: Eddy County

Date Installed: 9/19/2011
Total Depth: 40
GPS: 33.42814 103.65599

DEPTH (Ft)	Field Chloride	SAMPLE DESCRIPTION
0-1'	-	Heavy stained sandy clay and rock mix
3'	-	Heavy stained sandy clay and rock mix
5'	697 ppm	Silty caliche - hard rock
7'	915 ppm	Sandy caliche mix
10'	497 ppm	Sandy caliche mix
15'	346 ppm	Dense sandstone
20'	405 ppm	Dense sandstone
25'	248 ppm	Dense sandstone
30'	226 ppm	Loosely consolidated sandstone
40'	-	Loosely consolidated sandstone

Total Depth is 40 feet Groundwater was not encountered

OL Over Load reading
- Not Analyzed

Soil Boring Log

Boring/Well: BH-4 @ T-5
Project Number: 114-6401027A
Client: Glenn Springs
Site: State AD Tank Battery (Removed)
County: Eddy County

Date Installed: 9/20/2011
Total Depth: 40
GPS: 33.42800 103.65592

DEPTH (Ft)	Field Chloride	SAMPLE DESCRIPTION
0-1'	-	Stained caliche pad material
3'	-	Hard siliceous limestone
5'	3.47 ppt	Hard siliceous limestone
7'	1.61 ppt	Hard siliceous limestone
10'	989 ppm	Hard siliceous limestone
15'	648 ppm	Hard siliceous limestone
20'	480 ppm	Medium dense sandy caliche mix
25'	181 ppm	Medium dense sandstone
30'	115 ppm	Medium dense sandstone
40'	-	Medium dense sandstone

Total Depth is 40 feet Groundwater was not encountered

OL Over Load reading
- Not Analyzed

Soil Boring Log

Boring/Well: BH-5 @ T-4
Project Number: 114-6401027A
Client: Glenn Springs
Site: State AD Tank Battery (Removed)
County: Eddy County

Date Installed: 9/20/2011
Total Depth: 40
GPS: 33.42799 103.65609

DEPTH (Ft)	Field Chloride	SAMPLE DESCRIPTION
0-1'	-	Stained caliche pad material
3'	OL	Stained caliche pad material
5'	-	Silty caliche mix - heavy odor
7'	-	Hard siliceous limestone
10'	961 ppm	Sandstone
15'	780 ppm	Medium dense sandstone
20'	467 ppm	Medium dense sandy caliche mix
25'	422 ppm	Medium dense sandstone
30'	215 ppm	Medium dense sandstone
40'	218 ppm	Medium dense sandstone

Total Depth is 40 feet Groundwater was not encountered

OL Over Load reading
- Not Analyzed

Soil Boring Log

Boring/Well: BH-6 @ T-9
Project Number: 114-6401027A
Client: Glenn Springs
Site: State AD Tank Battery (Removed)
County: Eddy County

Date Installed: 9/20/2011
Total Depth: 40
GPS: 33.42791 103.65582

DEPTH (Ft)	Field Chloride	SAMPLE DESCRIPTION
0-1'	-	Stained caliche pad material
3'	-	Stained caliche pad material
5'	1.21 ppt	Silty caliche mix
7'	-	Hard siliceous limestone
10'	-	Hard siliceous limestone
15'	581 ppm	Medium dense sandstone
20'	267 ppm	Medium dense sandstone
25'	346 ppm	Medium dense sandy caliche mix
30'	198 ppm	Medium dense sandstone
40'	122 ppm	Medium dense sandstone

Total Depth is 40 feet Groundwater was not encountered

OL Over Load reading
- Not Analyzed

Soil Boring Log

Boring/Well: BH-7 @ T-8
Project Number: 114-6401027A
Client: Glenn Springs
Site: State AD Tank Battery (Removed)
County: Eddy County

Date Installed: 9/20/2011
Total Depth: 40
GPS: 33.42792 103.65593

DEPTH (Ft)	Field Chloride	SAMPLE DESCRIPTION
0-1'	-	Stained caliche pad material
3'	1.01 ppt	Stained caliche pad material
5'	984 ppm	Silty caliche mix
7'	853 ppm	Hard siliceous limestone - Silty caliche powder before rock
10'	487 ppm	Hard siliceous limestone
15'	564 ppm	Hard siliceous limestone
20'	507 ppm	Medium dense silty caliche
25'	441 ppm	Loosely consolidated sandstone
30'	283 ppm	Loosely consolidated sandstone
40'	176 ppm	Loosely consolidated sandstone

Total Depth is 40 feet Groundwater was not encountered

OL Over Load reading
- Not Analyzed

Soil Boring Log

Boring/Well: BH-8 @ T-7
Project Number: 114-6401027A
Client: Glenn Springs
Site: State AD Tank Battery (Removed)
County: Eddy County

Date Installed: 9/20/2011
Total Depth: 40
GPS: 33.42793 103.65606

DEPTH (Ft)	Field Chloride	SAMPLE DESCRIPTION
0-1'	-	Sandy gravel mix at surface
3'	-	Dense sandstone
5'	-	Dense sandstone
7'	-	Dense sandstone
10'	2.23 ppt	Medium dense sandstone - less consolidated
15'	1.89 ppt	Medium dense sandstone - less consolidated
20'	896 ppm	Medium dense sandstone - less consolidated
25'	437 ppm	Loosely consolidated sandstone
30'	215 ppm	Loosely consolidated sandstone
40'	133 ppm	Loosely consolidated sandstone

Total Depth is 40 feet Groundwater was not encountered

OL Over Load reading
- Not Analyzed

Soil Boring Log

Boring/Well: BH-9 @ T-12
Project Number: 114-6401027A
Client: Glenn Springs
Site: State AD Tank Battery (Removed)
County: Eddy County

Date Installed: 9/20/2011
Total Depth: 40
GPS: 33.42777 103.65597

DEPTH (Ft)	Field Chloride	SAMPLE DESCRIPTION
0-1'	-	Hard siliceous limestone
3'	-	Hard siliceous limestone
5'	327 ppm	Very Dense sandstone
7'	418 ppm	Very Dense sandstone
10'	272 ppm	Very Dense sandstone
15'	490 ppm	Medium dense sandstone
20'	291 ppm	Medium dense sandstone
25'	635 ppm	Medium dense sandstone
30'	313 ppm	Loosely consolidated sandstone
40'	296 ppm	Loosely consolidated sandstone
50'		Loose sand - Not Collected
60'		Loose sand - Not Collected

Total Depth is 60 feet Groundwater was encountered at 53'

OL Over Load reading
- Not Analyzed

Soil Boring Log

Boring/Well: BH-10 @ T-15
Project Number: 114-6401027A
Client: Glenn Springs
Site: State AD Tank Battery (Removed)
County: Eddy County

Date Installed: 9/21/2011
Total Depth: 50
GPS: 33.42765 103.65582

DEPTH (Ft)	Field Chloride	SAMPLE DESCRIPTION
0-1'	-	Asphaltic material
3'	-	Hard siliceous limestone
5'	3.20 ppt	Very Dense sandstone
7'	-	Hard siliceous limestone
10'	497 ppm	Hard siliceous limestone
15'	1.53 ppy	Medium dense silty caliche
20'	1.51 ppt	Medium dense silty caliche
25'	635 ppm	Tan loose sand
30'	387 ppm	Tan loose sand
40'	196 ppm	Tan loose sand
50'	261 ppm	Brown loose sand - damp

Total Depth is 50 feet Groundwater was not encountered

OL Over Load reading
- Not Analyzed

Soil Boring Log

Boring/Well: BH-11 @ T-14
Project Number: 114-6401027A
Client: Glenn Springs
Site: State AD Tank Battery (Removed)
County: Eddy County

Date Installed: 9/21/2011
Total Depth: 55
GPS: 33.42765 103.65582

DEPTH (Ft)	Field Chloride	SAMPLE DESCRIPTION
0-1'	-	Asphaltic material
3'	-	Stained rocky sandy caliche
5'	567 ppm	Very Dense sandstone
7'	634 ppm	Very Dense sandstone
10'	415 ppm	Very Dense sandstone
15'	847 ppm	Medium dense sandstone
20'	830 ppm	Tan silty sand well sorted
25'	1.01 ppt	Tan silty sand well sorted
30'	830 ppm	Loose sand
40'	697 ppm	Loose sand
50'	362 ppm	Loose sand
55'	196 ppm	Loose sand - damp

Total Depth is 55 feet Groundwater was potentially encountered

OL Over Load reading
- Not Analyzed

Soil Boring Log

Boring/Well: BH-12 @ T-17
Project Number: 114-6401027A
Client: Glenn Springs
Site: State AD Tank Battery (Removed)
County: Eddy County

Date Installed: 9/21/2011
Total Depth: 40
GPS: 33.42750 103.65578

DEPTH (Ft)	Field Chloride	SAMPLE DESCRIPTION
0-1'	-	Asphaltic material
3'	-	Stained rocky sandy caliche
5'	891 ppm	Dense silty caliche mix
7'	1.23 ppt	Dense silty caliche mix
10'	1.67 ppt	Soft silty caliche powder
15'	1.21 ppt	Medium dense sandstone
20'	806 ppm	Medium dense sandstone
25'	272 ppm	Loose very fine grain silty sand
30'	164 ppm	Loose very fine grain silty sand
40'	-	Loose very fine grain silty sand

Total Depth is 40 feet Groundwater was not encountered

OL Over Load reading
- Not Analyzed