



August 30, 2010

Mr. Mike Bratcher
Environmental Engineer Specialist
Oil Conservation Division, District 2
1301 West Grand Avenue
Artesia, NM 88210

**Re: Assessment Report and Work Plan for the Basic Energy Services, Inc.,
Belco Saltwater Disposal #1, Unit E, Section 20, Township 23 South, Range
28 East, Eddy County, New Mexico.**

Mr. Bratcher:

Tetra Tech Inc. (Tetra Tech) was contacted by Basic Energy Services, Inc. (Basic) to assess a release of produced water which occurred at the Belco SWD #1, located in Unit E, Section 20, Township 23 South, Range 28 East, Eddy County, New Mexico (Site). The spill site coordinates are N 32.29171°, W 104.11609°. The site location is shown on Figures 1 and 2.

Background

According to the State of New Mexico C-141 Initial Report, approximately 1,000 barrels of produced water was released on July 16, 2009, when lightening struck a tank and caught the tank battery on fire. A total of 850 barrels of fluids were recovered. The initial C-141 is enclosed in Appendix A.

Hydrology

According to *The New Mexico State Engineers Well Reports*, twelve domestic/irrigation/stock tank wells are located within the same section as the site. The listed wells, located in Section 21, ranged in reported depth from 6 to 69 feet below ground surface (bgs). Two temporary monitor wells were installed at the site with groundwater encountered at approximately 19 feet bgs. No additional water wells were located within the Section. The well reports are shown in Appendix B.

According to the New Mexico Water and Infrastructure Data System (NM WAIDS), one well located in Section 21 had a chloride concentration initially of 316 milligrams per liter (mg/L) in 1953, which tested 1,750 mg/L chlorides in 1985.

Tetra Tech

1910 North Big Spring, Midland, TX 79705

Tel 432.682.4559

Fax 432.682.3946

www.tetrattech.com

Regulatory

A risk-based evaluation was performed for the Site in accordance with the New Mexico Oil Conservation Division (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 upon the depth to groundwater, the proposed RRAL for TPH is 100 mg/kg.

Soil Assessment and Results

On September 10, 2009, Tetra Tech personnel inspected the site and installed a total of eight (8) auger holes (AH-1 to AH-8) to assess the extent of the spill area. The spill area is shown on the attached Figure 3. The auger holes were advanced to depths ranging from 1.5 feet to 9.5 feet bgs. Select samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B, and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The results of the sampling are summarized in Table 1.

Referring to Table 1, all of the samples analyzed were below the RRAL for both BTEX and TPH. Chloride concentrations were above background levels (approximately 3,000 to 3,500 mg/Kg) in auger holes AH-2, AH-3, AH-6, and AH-8. The elevated chloride concentrations ranged from 4,280 mg/Kg in AH-2 (0.5 to 1.0') to 11,700 mg/Kg in AH-3 (0-0.5').

In order to further delineate the chloride concentrations at the site, Tetra Tech personnel were onsite November 24, 2009, to install 14 backhoe trenches (T-1 to T-14) at the facility. The trenches were placed adjacent to and named in accordance with the auger holes. In addition, several of the trenches (T-8 through T-11) were installed south of the original auger holes, while T-12 through T-14 were installed on the former tank pad. Each of the trenches was extended from 4 to 10 feet bgs and samples were collected every two feet and submitted for analysis of chlorides. Referring to Table 1, the chlorides remained above background levels to the maximum depth of excavation in trenches T-4, T-5, and T-7. In addition, a background trench was installed and sampled for chlorides at the site. Chloride concentrations for the background trench ranged from 1,580 to 3,660 mg/Kg.

In order to complete delineation and further evaluate the horizontal extent of chloride impacts to the site, Tetra Tech personnel were onsite March 25, 2010, to drill eight boreholes (BH-1 to BH-8) at the location. The borehole locations can be found on Figure 4. The boreholes were extended to a maximum depth of 18 to 22 feet bgs, whereby groundwater was encountered. Samples were collected with a split spoon sampler and were submitted to the laboratory for analysis of chlorides. Referring to Table 1, the chlorides decreased with depth in all the borings with the exception of BH-2 (at AH-4) which increased with depth (5,870 mg/Kg at 20 feet bgs).

Groundwater Assessment and Results

On June 17, 2010, Tetra Tech personnel were onsite to oversee the installation of two temporary monitor wells at the site. The first well TMW-1 was installed in the vicinity of the initial release source, while TMW-2 was drilled as a background monitor well. See Figure 6 for well locations. The two wells were drilled to a depth of 30 feet bgs with 20 feet of 0.02 inch slotted casing installed at the base of the well. A 10 foot long blank casing was installed in the remaining depth of the boring. The wells were then gravel packed to 8 feet bgs with a 2 foot bentonite clay layer installed above the sand to prevent infiltration of rain and surface water. Upon completion of the two wells, Tetra Tech personnel were onsite June 21 and July 22, 2010 to remove three well casing volumes from the monitor well and collect groundwater samples. The groundwater samples were submitted to Trace Analysis, Inc (Trace) of Midland, Texas for major anions/cations (EPA Methods SM2320B, S6010C, and S6010B), chloride/sulfates (EPA Method E300.0), and TDS (EPA Method SM2540C) Groundwater was measured at a depth of approximately 15 feet bgs in the two wells.

The background monitor well TMW-2 confirmed that the groundwater quality in this area is poor. The chloride concentration in TMW-2 ranges from 4,140 milligrams per liter (mg/L) to 5,710 mg/L and TDS from 16,100 mg/L to 19,400 mg/L. The source well, TMW-1, has chloride concentrations ranging from 26,800 mg/L to 32,800 mg/L and TDS from 37,000 mg/L to 54,800 mg/L. See Table 2 for analytical results. Radial Diagrams utilizing the June and July sampling data are included in Appendix D. The Radial Diagram for TMW-1 indicates the groundwater is impacted from brine, while the radial diagram from TMW-2 appears to be natural with elevated chlorides.

Work Plan

Basic proposes to excavate and remove chloride impacted soils as outlined in Figure 5. Referring to Figure 5, soils will be excavated to a maximum depth of 1 foot bgs in the vicinity of trenches T-2, T-6, and T-8, while 2 feet of soil will be removed around trench T-5. Areas adjacent to trench T-3 and boreholes BH-7 and BH-8 will be excavated to a maximum depth of 4 feet bgs, while trenches T-4 and T-7 along with borehole BH-6 will be excavated to a depth of 10 feet bgs. Upon completion of the excavation, the area around trench T-4 will be lined with a 40-mil poly liner in order to impede further migration of the remaining chlorides in the soils. The installed poly liner will measure approximately 40 feet by 40 feet and will be installed at a depth of 4 feet bgs after backfilling. Upon completion of the liner, the site will be backfilled with clean soils and brought up to surface grade. Excavated impacted soils will be transported offsite for proper disposal.

While the regional groundwater appears to be non potable, groundwater in the vicinity of TMW-1 appears to be impacted with chlorides from operations at the tank battery. For delineation purposes, Basic would like to place a third down-gradient monitor well to the east/northeast of TMW-1. The well will be constructed according to EPA and industry standards and developed by either hand bailing or pumping with an electric submersible pump to remove fine grained sediment disturbed during drilling and to ensure collection of representative groundwater samples. Water removed from any monitor well will be stored in 55-gallon drums located onsite. Once the monitor well is

completed all three wells will be properly purged and sampled with clean, dedicated, polyethylene bailers and disposable lines. Groundwater samples will be submitted to a laboratory for analysis of major anions/cations. A survey of the three wells will be completed in order to determine the groundwater gradient at the site.

Once the soil and groundwater activities are completed, a report detailing the findings and recommendations will be submitted to the NMOCD. If you require any additional information or have any questions or comments concerning this work plan, please call at (432) 682-4559.

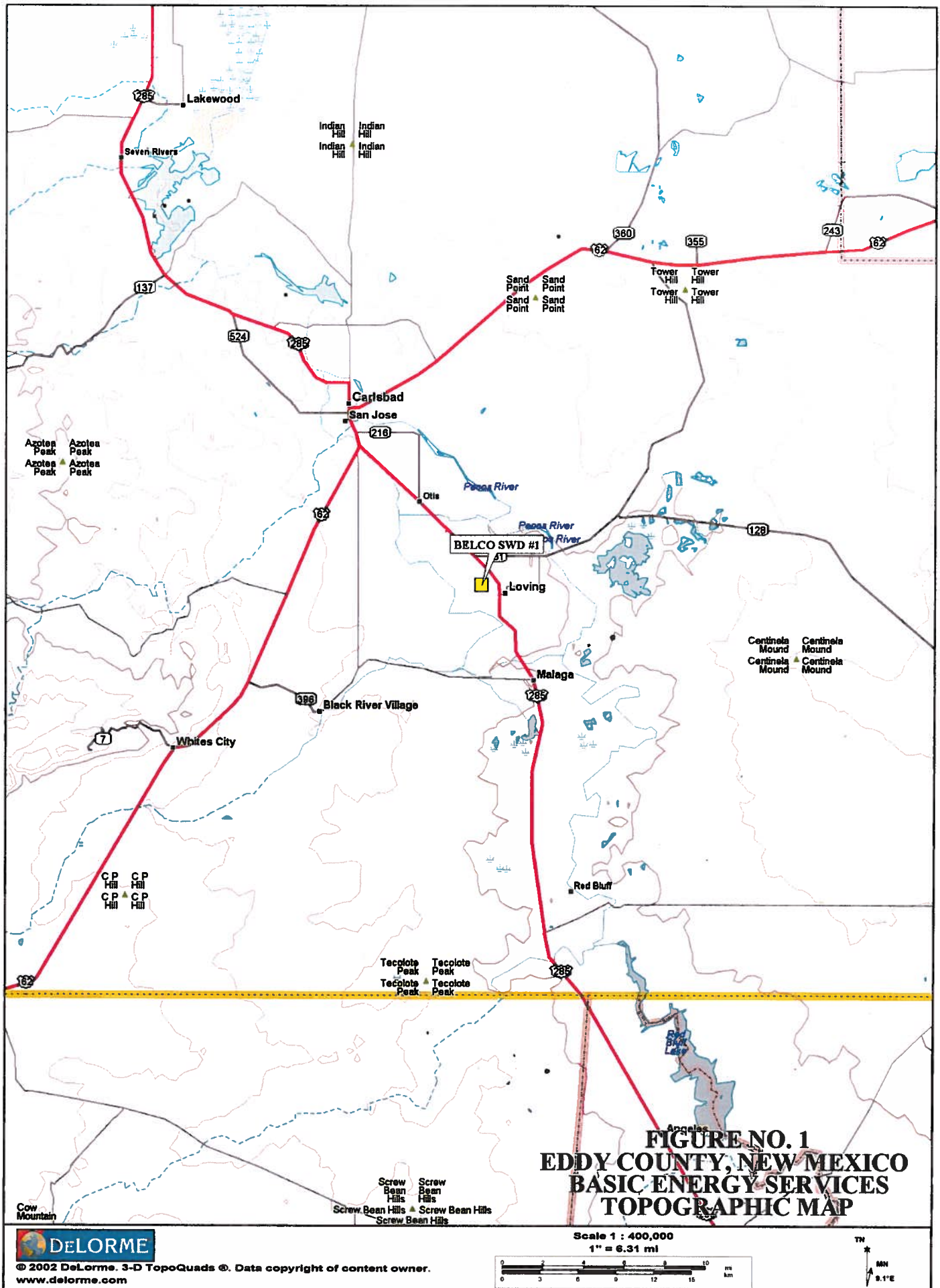


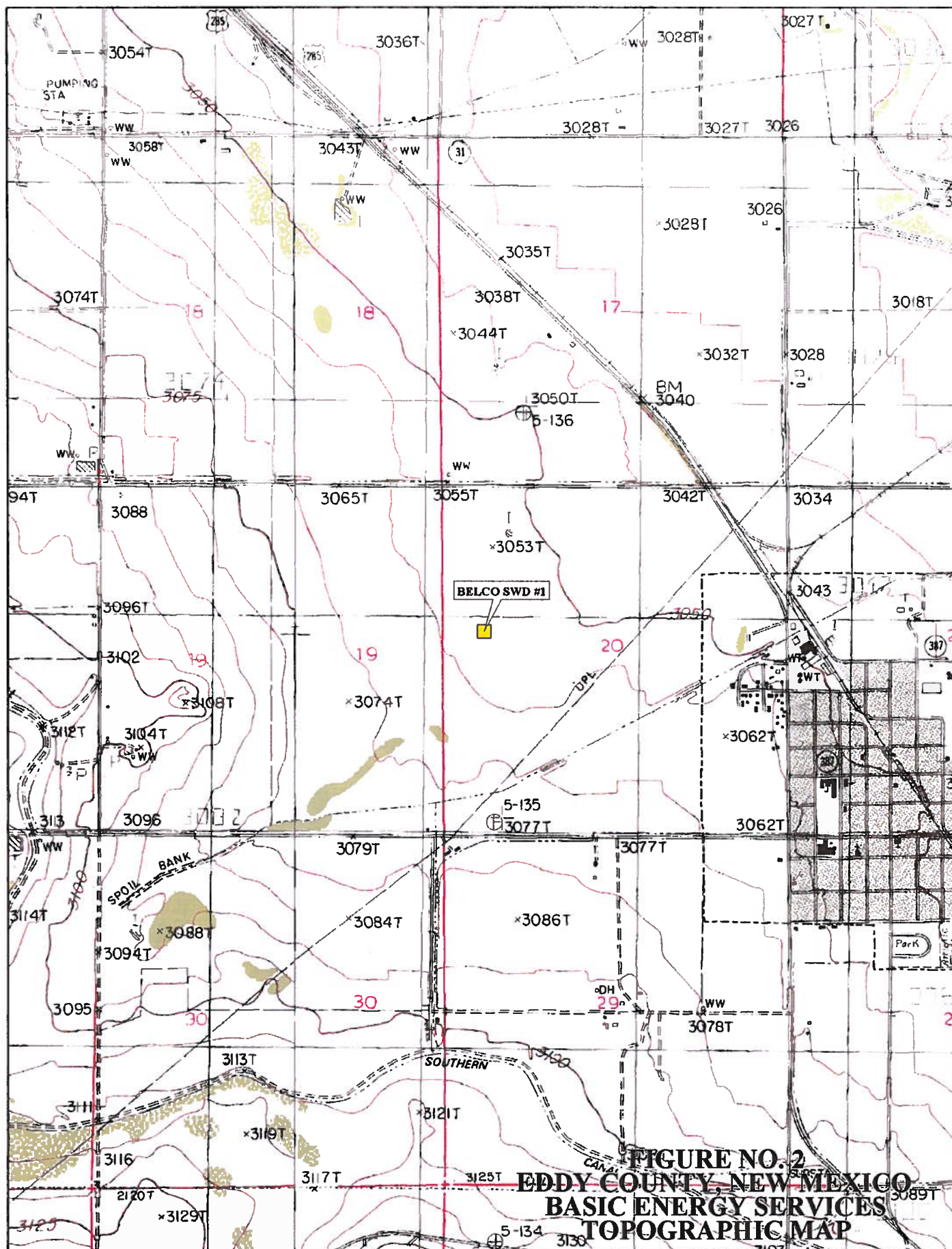
Respectfully submitted,
TETRA TECH


Jeff Kindley, P.G.
Senior Project Manager

cc: Lyn Sockwell – Basic Energy Services, Inc.

FIGURES





© 2002 DeLorme, 3-D TopoQuads ©. Data copyright of content owner.
www.delorme.com

Scale 1 : 24,000

1" = 2000 ft



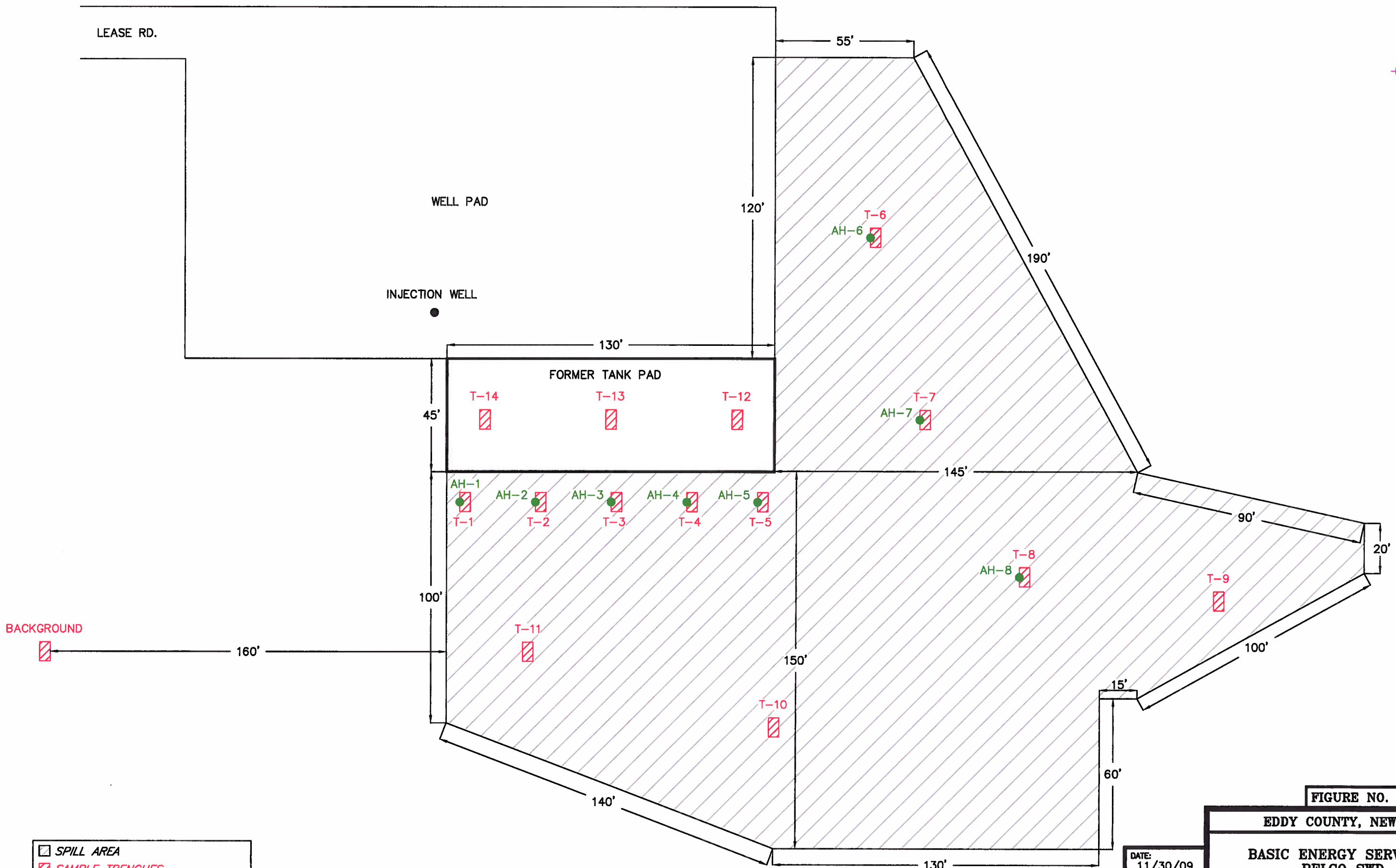


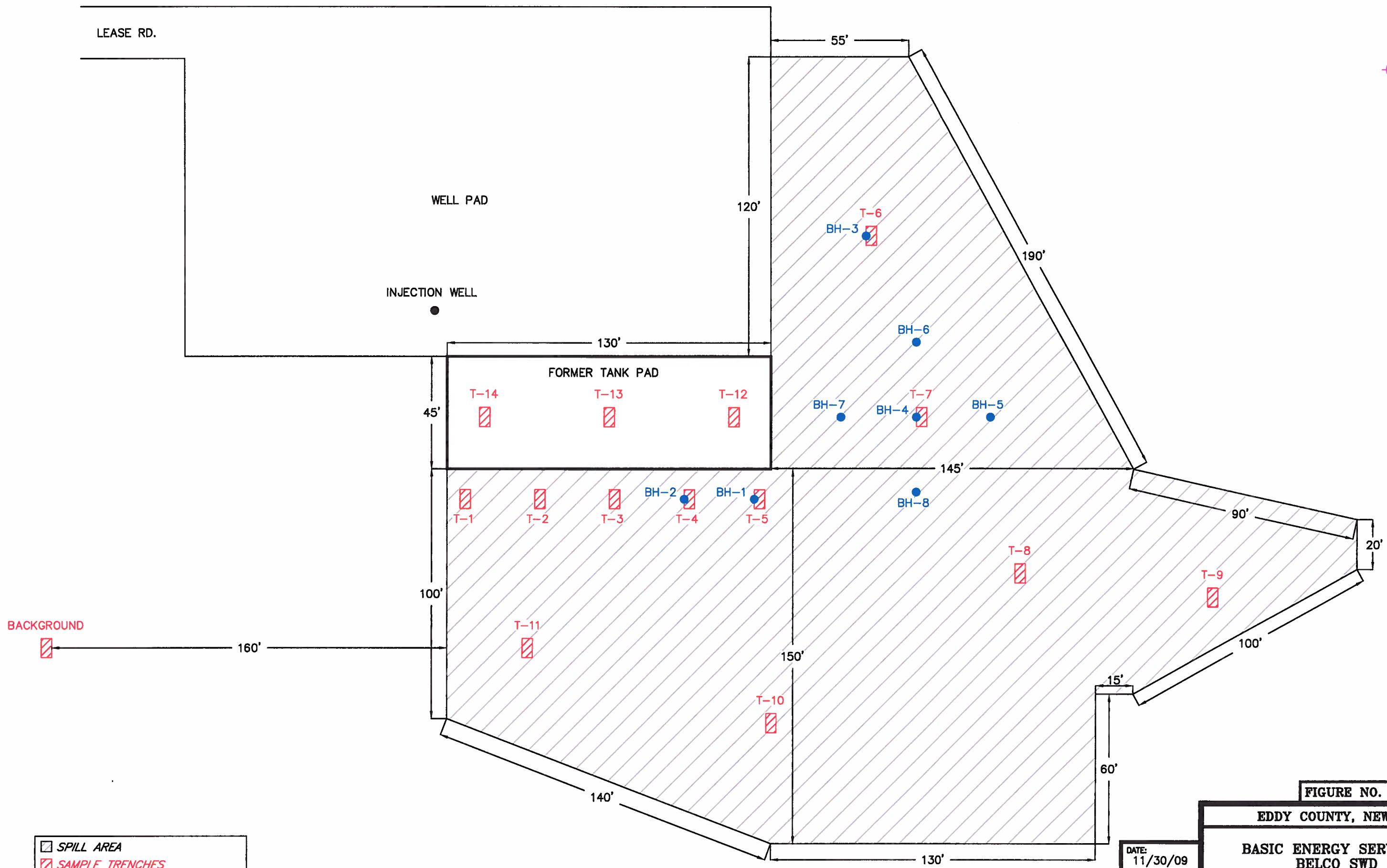
FIGURE NO. 3

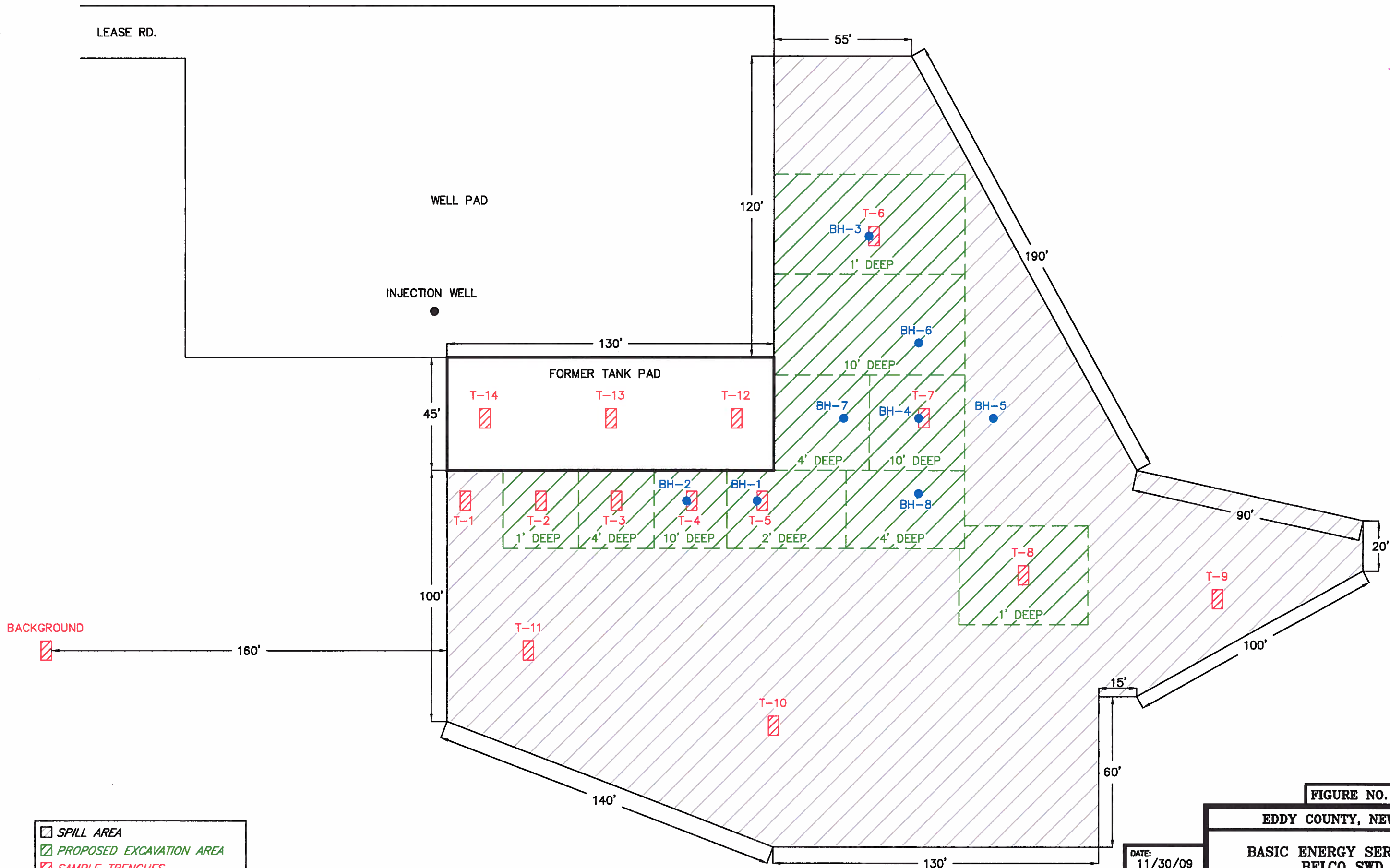
EDDY COUNTY, NEW MEXICO

BASIC ENERGY SERVICES, LP
BELCO SWD #1

TETRA TECH, INC.
MIDLAND, TEXAS

DATE:
11/30/09
DWN. BY:
JJ
FILE:
C:\BASIC\8400290\
BELCO SWD #1





- SPILL AREA
- PROPOSED EXCAVATION AREA
- SAMPLE TRENCHES
- BORE HOLE SAMPLE LOCATIONS

DATE:
11/30/09

DWN. BY:
JJ

FILE:
C:\BASIC\8400290\BELCO SWD #1

FIGURE NO. 5
EDDY COUNTY, NEW MEXICO
BASIC ENERGY SERVICES, LP BELCO SWD #1
TETRA TECH, INC. MIDLAND, TEXAS

TABLES

Table 1

[illegible]

Table 1

[illegible]

Table 1

[illegible]

Table 1

[illegible]

Table 1
Basic Energy Services
Belco SWD #1
Eddy County, New Mexico

Sample ID	Date Sampled	Sample Depth (ft)	TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
			DRO	GRO	Total					
T-14	11/24/2009	2	-	-	-	-	-	-	-	1,400
	11/24/2009	4	-	-	-	-	-	-	-	1,240
BH-5	3/25/2010	2'	-	-	-	-	-	-	-	713
	3/25/2010	4'	-	-	-	-	-	-	-	501
	3/25/2010	6'	-	-	-	-	-	-	-	899
	3/25/2010	8'	-	-	-	-	-	-	-	1740
	3/25/2010	10'	-	-	-	-	-	-	-	2750
	3/25/2010	15'	-	-	-	-	-	-	-	1220
BH-6	3/25/2010	2'	-	-	-	-	-	-	-	8990
	3/25/2010	4'	-	-	-	-	-	-	-	9550
	3/25/2010	6'	-	-	-	-	-	-	-	4490
	3/25/2010	8'	-	-	-	-	-	-	-	4310
	3/25/2010	10'	-	-	-	-	-	-	-	4230
	3/25/2010	15'	-	-	-	-	-	-	-	2910
BH-7	3/25/2010	2'	-	-	-	-	-	-	-	8510
	3/25/2010	4'	-	-	-	-	-	-	-	5010
	3/25/2010	6'	-	-	-	-	-	-	-	3060
	3/25/2010	8'	-	-	-	-	-	-	-	2740
	3/25/2010	10'	-	-	-	-	-	-	-	4370
	3/25/2010	15'	-	-	-	-	-	-	-	2270
BH-8	3/25/2010	2'	-	-	-	-	-	-	-	2110
	3/25/2010	4'	-	-	-	-	-	-	-	5480
	3/25/2010	6'	-	-	-	-	-	-	-	3970
	3/25/2010	8'	-	-	-	-	-	-	-	3730
	3/25/2010	10'	-	-	-	-	-	-	-	2760
	3/25/2010	15'	-	-	-	-	-	-	-	964

Table 1
Basic Energy Services
Belco SWD #1
Eddy County, New Mexico

Sample ID	Date Sampled	Sample Depth (ft)	TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
			DRO	GRO	Total					
Background	11/24/2009	2	-	-	-	-	-	-	-	3,510
	11/24/2009	4	-	-	-	-	-	-	-	3,660
	11/24/2009	6	-	-	-	-	-	-	-	2,090
	11/24/2009	8	-	-	-	-	-	-	-	3,010
	11/24/2009	10	-	-	-	-	-	-	-	1,580

(-) Not Analyzed
 _____ Liner Installation

 Proposed Excavation Depths

Table 2
Unit Petroleum Company
Groundwater Analytical Results
Belco SWD #1
Eddy County, New Mexico

Monitor Well	Date Sampled	Dissolved Calcium (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Sodium (mg/L)	Dissolved Potassium (mg/L)	Hydroxide Alkalinity (mg/L)	Carbonate Alkalinity (mg/L)	Bicarbonate Alkalinity (mg/L)	Total Alkalinity (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	TDS (mg/L)	Hardness (mg/L)	pH
TMW-1	06/21/10	2,270	2370	8,450	33.3	<1.00	<1.00	137	137	2,640	26,800	37,000	15,400	6.92
	07/22/10	3,310	4930	9,550	92.8	<1.00	<1.00	150	150	2,990	32,800	54,800	28,600	6.92
TMW-2	06/21/10	914	970	1,730	13.0	<1.00	<1.00	155	155	2,780	4,140	16,100	6,280	7.31
	07/22/10	1,090	1090	2,090	7.41	<1.00	<1.00	181	181	3,030	5,710	19,400	7,220	7.37

APPENDIX A

INITIAL C-141

JUL 27 2009

District I
1625 N French Dr, Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S St Francis Dr, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

30-015-25141

Release Notification and Corrective Action

NMLB0922331732

246368

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Basic Energy Service	Contact	Terry Hanway
Address	PO Box 1747 CARLSBAD 88291	Telephone No.	575-234-1778
Facility Name	Belco #1	Facility Type	Salt Water Disposal
Surface Owner	Mineral Owner	Lease No.	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	20	23S	28E	660 FEET	FNL	2200	FWL	Eddy

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release	lighting strike on tank	Volume of Release	1000 bbl	Volume Recovered	850 bbl
Source of Release	fire burnt down tank	Date and Hour of Occurrence	9 PM	Date and Hour of Discovery	9 PM
Was Immediate Notice Given?	☒ Yes ☐ No ☐ Not Required	If YES, To Whom?	OCD by Phone		
By Whom?	Rolando Ortiz	Date and Hour	July 16 7:00 AM		
Was a Watercourse Reached?	☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	N/A		

If a Watercourse was Impacted, Describe Fully.*

N/A

Describe Cause of Problem and Remedial Action Taken.* lighting strike to gun barrel - tanks caught fire
burning then releasing plume from tanks - all liquid was picked up
affected soil was removed and taken to CRE

Describe Area Affected and Cleanup Action Taken.* All area was cleaned and soil removed
approx. 250 ft by 275 ft area was cleaned

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

OIL CONSERVATION DIVISION

Signature: Terry Hanway	Signed By: <i>M. L. Brumby</i>	
Printed Name: Terry Hanway	Approved by District Supervisor.	
Title: yard Supt	Approval Date: AUG 11 2009	Expiration Date:
E-mail Address:	Conditions of Approval:	Attached ☒
Date: 7-23-09	Phone:	

* Attach Additional Sheets If Necessary

REMEDIATION per OCD Rules and
Guidelines. SUBMIT REMEDIATION
PROPOSAL BY: 9/11/2009

2AP-327

sally.phillips@basicenergyservices.com

APPENDIX B

WATER WELL REPORTS

Water Well Data
Average Depth to Groundwater (ft)
Basic - Belco SWD Facility
Eddy County, New Mexico

22 South			27 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

22 South			28 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

22 South			29 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

23 South			27 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

23 South			28 East			
6	16.5	5	4	3	2	1
7	26.5	8	9	10	11	12
18	17	16	15	14	13	12
63	19	20	21	22	23	24
30	29	28	27	26	25	24
31	32	33	34	35	36	35

23 South			29 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

24 South			27 East			
6	5	4	3	2	1	
7	8	26	9	10	11	12
18	17	43	16	15	14	13
34						31
19	20	21	22	23	24	
			70			
30	29	28	27	26	25	
31	32	33	34	35	36	

24 South			28 East							
6	70	5	30	4	30	3	2	55	1	60
7		8	50	9		10	11		12	
						17	20		73	
18		17		16		15	14		13	
		42		29		18	52		34	
19		20		21		22	23		24	
		48								
30		29		28		27	26		25	
31		32		33		34	35		36	

24 South			29 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

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 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
C 00327	IRR	ED	3	2	4	21	23S	28E	585974	3572728*	212			
C 00539	DOM	ED	3	3	3	21	23S	28E	584767	3572308*	28	6	22	
C 00544	DOM	ED	3	3	1	21	23S	28E	584762	3573120*	27			
C 00577	DOM	ED	3	1	3	21	23S	28E	584764	3572714*	200			
C 00578	DOM	ED	3	1	3	21	23S	28E	584764	3572714*	28	18	10	
C 00643	DOM	ED	3	1	3	21	23S	28E	584764	3572714*	76	10	66	
C 00650	DOM	ED	1	3	3	21	23S	28E	584767	3572508*	32	12	20	
C 00664	DOM	ED	1	4	3	21	23S	28E	585170	3572513*	100			
C 00706	DOM	ED		1	3	21	23S	28E	584865	3572815*	35	10	25	
C 00716	DOM	ED	4	3	3	21	23S	28E	584967	3572308*	140	69	71	
C 01885	STK	ED		2	2	21	23S	28E	586070	3573640*	104	35	69	
C 02848	COM	ED	3	3	1	21	23S	28E	584762	3573120*	130			
Average Depth to Water:												22 feet		
Minimum Depth:												6 feet		
Maximum Depth:												69 feet		

Record Count: 12

PLSS Search:

Section(s): 21

Township: 23S

Range: 28E

*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.

NM WAIDS

[DATA](#)[MAPS](#)[HOME](#)[SCALE](#)[CORROSION](#)

General Information About: Sample 13590

Section/ Township/Range	21 / 23 S / 28 E	Lat/Long	32.29 / -104.0921
Elevation	3052	Depth	159
Date Collected	7/16/1953	Chlorides	316
Collector / Point of Collection	USG / DP	Use	Irrigation Water
Formation	OAL	TDS	0

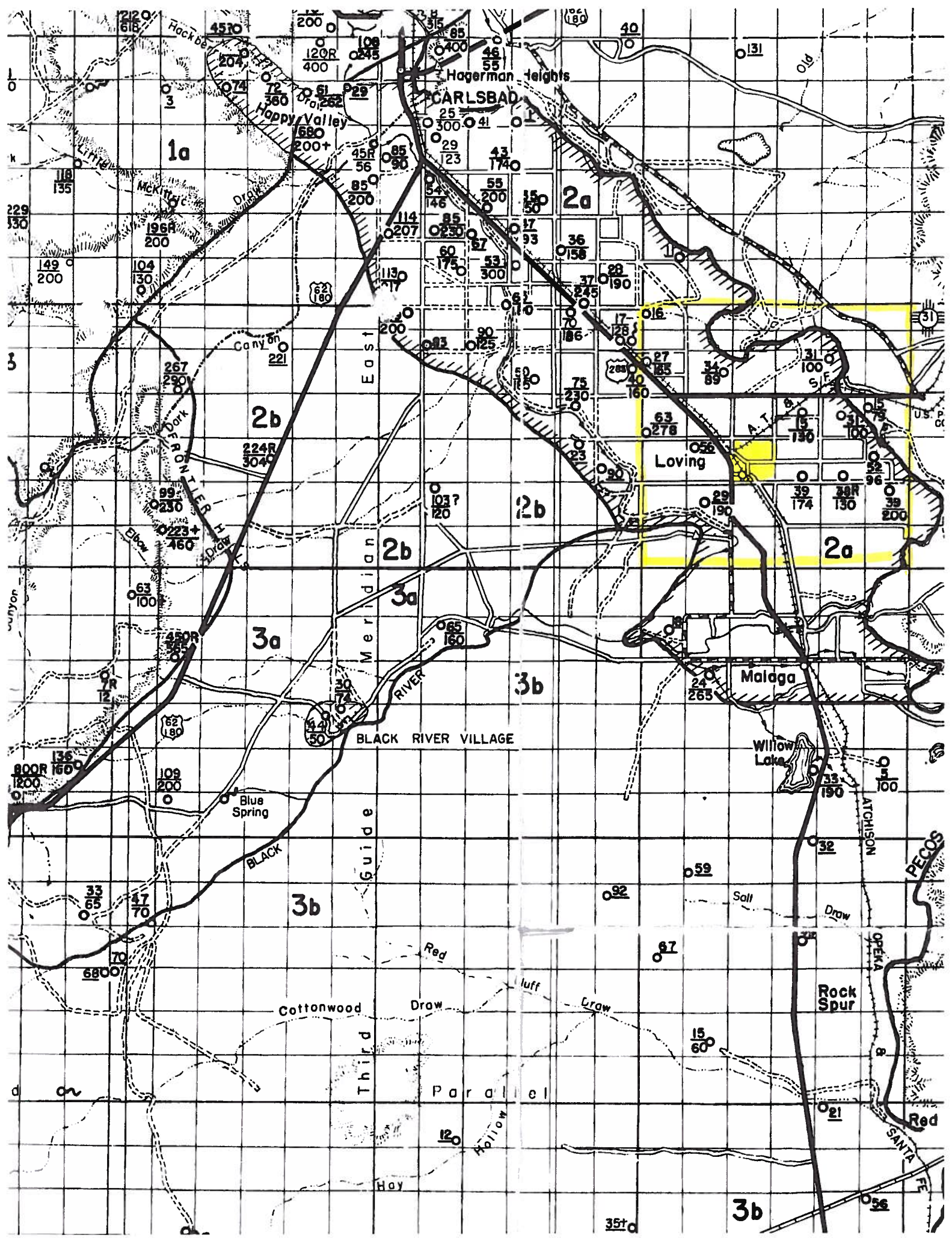


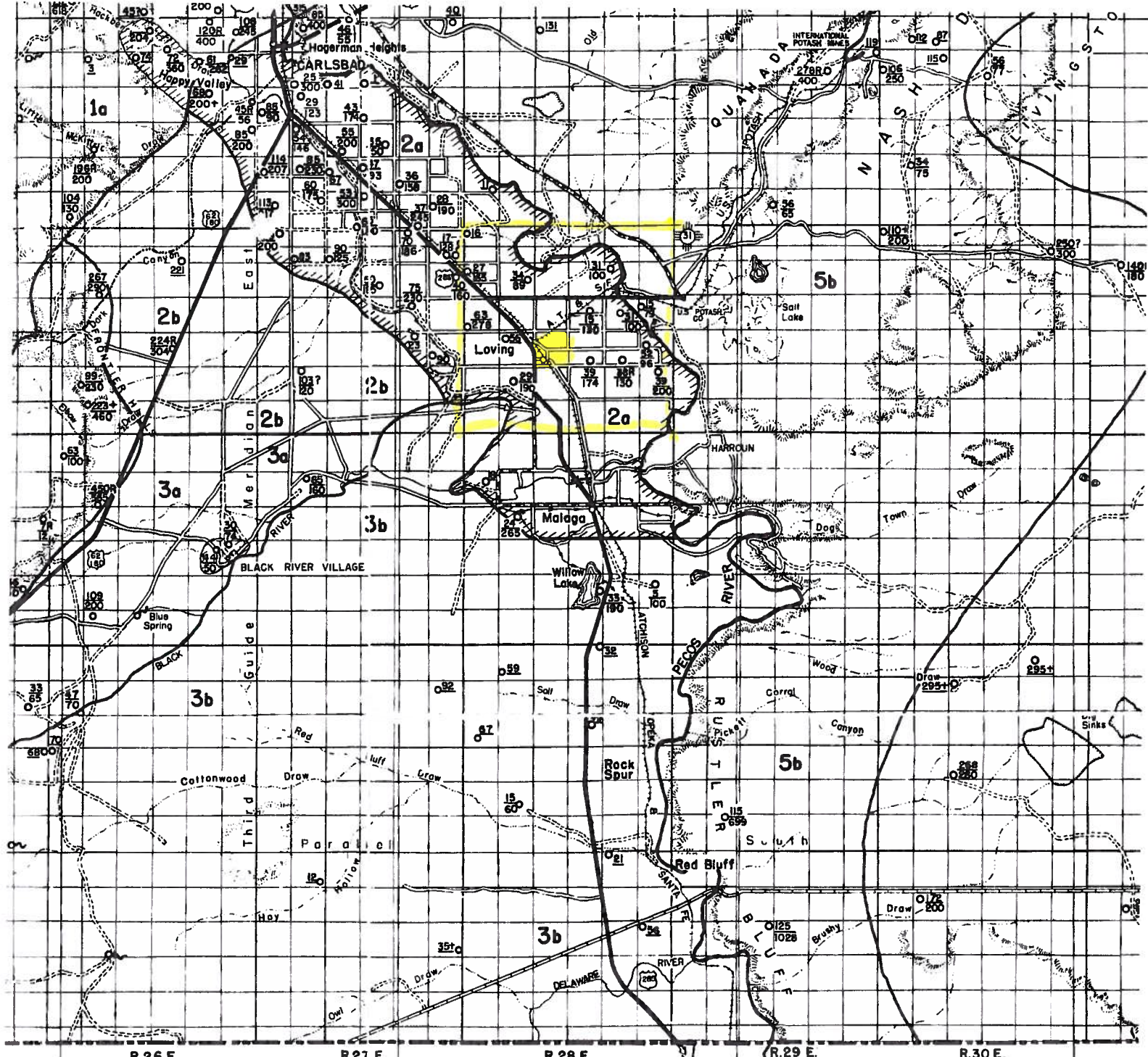
NM WAIDS

[DATA](#)[MAPS](#)[HOME](#)[SCALE](#)[CORROSION](#)

General Information About: Sample 10356			
Section/ Township/Range	21 / 23 S / 28 E	Lat/Long	32.29 / -104.0921
Elevation	3024	Depth	0
Date Collected	9/4/1985	Chlorides	1750
Collector / Point of Collection	SEO / DP	Use	Domestic
Formation	OAL	TDS	0





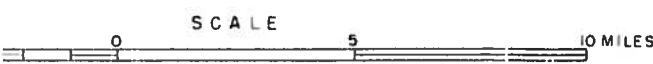


C O U N T Y R E E V E S C O . L O V I N G

X A S

AVAILABILITY OF GROUND WATER

COUNTY, NEW MEXICO



Note: Most well depths are reported.
measured except those followe
are reported. Measurements n



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	Use	County	Q Q Q						X	Depth Depth Water			
	basin			64	16	4	Sec	Tws	Rng		Y	Well	Water	Column
C 00048		IRR	ED	3	3	1	23	23S	28E	587992	3573155*	182	75	107
C 00058		IRR	ED	3	4	3	06	23S	28E	581920	3577137*	185	20	165
C 00058 S		EXP	ED	3	3	3	06	23S	28E	581526	3577131*	202		
C 00058 S		IRR	ED	3	3	3	06	23S	28E	581526	3577131*	202		
C 00063		IRR	ED	1	3	1	07	23S	28E	581526	3576521*	130		
C 00072		IRR	ED	3	3	1	15	23S	28E	586364	3574760*	120	54	66
C 00094 A		IRR	ED	3	4	2	22	23S	28E	587588	3573151*	166	40	126
C 00094 AS		IRR	ED	1	3	2	22	23S	28E	587183	3573346*	165	48	117
C 00128		DOM	ED	2	4	4	15	23S	28E	587783	3574162*	57		
C 00136		IRR	ED	3	1	2	25	23S	28E	590426	3571967*	200	42	158
C 00136 A		DOM	ED	4	4	4	25	23S	28E	591037	3570753*	100	60	40
C 00136 A		IRR	ED	4	4	4	25	23S	28E	591037	3570753*	100	60	40
C 00136 S		IRR	ED	1	1	2	25	23S	28E	590426	3572167*	122	45	77
C 00154		IRR	ED	3	4	2	23	23S	28E	589207	3573171*	196	38	158
C 00211		DOM	ED	4	3	3	15	23S	28E	586570	3573949*	89	48	41
C 00235		STK	ED		2	2	15	23S	28E	587676	3575280*	160		
C 00269		IRR	ED	4	4	2	15	23S	28E	587778	3574773*	240	35	205
C 00289		IRR	ED	1	1	1	05	23S	28E	583128	3578563*		33	
C 00309		IRR	ED	1	3	1	08	23S	28E	583129	3576544*	165	16	149
C 00311		DOM	ED	2	4	1	16	23S	28E	585355	3574947*	163	55	108
C 00313		IRR	ED	3	3	3	17	23S	28E	583136	3573915*	250	75	175
C 00318		DOM	ED	2	4	4	34	23S	28E	587811	3569298*	150		
C 00321		DOM	ED		4	2	15	23S	28E	587679	3574874*	120		
C 00326		IRR	ED	3	3	3	10	23S	28E	586358	3575572*	130	19	111
C 00327		IRR	ED	3	2	4	21	23S	28E	585974	3572728*	212		
C 00333		IRR	ED	3	1	2	18	23S	28E	582325	3575118*	147		
C 00340		DOM	ED		1	1	27	23S	28E	586483	3572022*	117	18	99
C 00443		MUL	ED	4	2	4	22	23S	28E	587790	3572745*	65		
C 00443 RPR		MUL	ED	4	2	4	22	23S	28E	587790	3572745*	171	160	11

*UTM location was derived from PLSS - see Help

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

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

(In feet)

POD Number	Sub	Use	County	Q Q Q					Tws	Rng	X	Depth Depth Water		
	basin			64	16	4	Sec	Y				Well	Water	Column
C 00453		DOM	ED	2	2	4	22	23S	28E	587790	3572945*	65		
C 00475		IRR	ED	2	1	3	25	23S	28E	589822	3571347*	144	38	106
C 00481		DOM	ED	3	2	1	33	23S	28E	585182	3570283*	225	190	35
C 00500		IRR	ED	4	3	1	24	23S	28E	589811	3573176*	130		
C 00504		IRR	ED	3	1	4	08	23S	28E	583939	3575949*	230	40	190
C 00512		IRR	ED	4	1	1	11	23S	28E	588167	3576806*	175	15	160
C 00512 S		IRR	ED	4	1	1	11	23S	28E	588167	3576806*	100		
C 00519		DOM	ED	2	1	1	28	23S	28E	584970	3572100*	250		
C 00520		DOM	ED	1	1	3	16	23S	28E	584754	3574538*	115	33	82
C 00521		STK	ED	1	1	3	16	23S	28E	584754	3574538*	218	33	185
C 00539		DOM	ED	3	3	3	21	23S	28E	584767	3572308*	28	6	22
C 00544		DOM	ED	3	3	1	21	23S	28E	584762	3573120*	27		
C 00577		DOM	ED	3	1	3	21	23S	28E	584764	3572714*	200		
C 00578		DOM	ED	3	1	3	21	23S	28E	584764	3572714*	28	18	10
C 00608		DOM	ED	3	3	1	11	23S	28E	587970	3576401*	200		
C 00616		IRR	ED	1	3	1	14	23S	28E	587982	3574978*	120	30	90
C 00641		DOM	ED	2	2	1	27	23S	28E	586986	3572126*	115	40	75
C 00643		DOM	ED	3	1	3	21	23S	28E	584764	3572714*	76	10	66
C 00650		DOM	ED	1	3	3	21	23S	28E	584767	3572508*	32	12	20
C 00664		DOM	ED	1	4	3	21	23S	28E	585170	3572513*	100		
C 00677		DOM	ED	4	4	3	35	23S	28E	588625	3569105*	250	30	220
C 00678		DOM	ED	1	1	2	15	23S	28E	587170	3575375*	150		
C 00706		DOM	ED		1	3	21	23S	28E	584865	3572815*	35	10	25
C 00708		DOM	ED	2	2	4	30	23S	28E	582952	3571279*	260	8	252
C 00716		DOM	ED	4	3	3	21	23S	28E	584967	3572308*	140	69	71
C 00793		EXP	ED				08	23S	28E	583834	3576237*	200		
C 00800		DOM	ED		4	2	09	23S	28E	586050	3576479*	200	30	170
C 00851		DOM	ED			3	17	23S	28E	583438	3574217*	200	50	150
C 00868		IRR	ED	4	3	1	24	23S	28E	589811	3573176*	190		
C 00869		IRR	ED	3	3	4	22	23S	28E	587188	3572335*	360		
C 00911		DOM	ED	1	2	4	20	23S	28E	584359	3572911*	218	60	158
C 00958		DOM	ED	2	1	2	06	23S	28E	582517	3578554*			

*UTM location was derived from PLSS - see Help

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

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

(In feet)

POD Number	Sub		Q Q Q						X	Depth Depth Water				
	basin	Use	County	64	16	4	Sec	Tws		Rng	Y	Well	WaterColumn	
C 01102		STK	ED	1	2	23	23S	28E	588901	3573672*	100	12	88	
C 01108		DOM	ED	3	2	1	23	23S	28E	588395	3573566*	60	35	25
C 01214		EXP	ED	1	2	3	13	23S	28E	590010	3574597*	70	20	50
C 01215		EXP	ED	4	2	3	13	23S	28E	590210	3574397*	104	15	89
C 01216		EXP	ED	4	1	1	13	23S	28E	589801	3575205*	60	45	15
C 01217		COM	ED	1	1	3	13	23S	28E	589606	3574593*	87	50	37
C 01217		IND	ED	1	1	3	13	23S	28E	589606	3574593*	87	50	37
C 01240		STK	ED	1	3	34	23S	28E	586494	3569592*	125	25	100	
C 01253		IRR	ED	1	3	1	22	23S	28E	586375	3573338*	179	50	129
C 01336		DOM	ED	2	1	1	22	23S	28E	586572	3573744*	190	30	160
C 01443		STK	ED	2	1	25	23S	28E	590123	3572064*	50	27	23	
C 01472		IRR	ED	2	3	2	28	23S	28E	585778	3571704*	162	10	152
C 01477		IRR	ED	1	3	3	19	23S	28E	581532	3572484*	127	10	117
C 01487		DOM	ED	3	4	1	22	23S	28E	586779	3573142*	150	38	112
C 01487		IRR	ED	3	4	1	22	23S	28E	586779	3573142*	150	38	112
C 01634		DOM	ED	2	4	06	23S	28E	582825	3577653*	185	85	100	
C 01648		STK	ED	2	3	29	23S	28E	583667	3571184*	65	15	50	
C 01699		DOM	ED	2	4	06	23S	28E	582825	3577653*	90	65	25	
C 01779		DOM	ED	3	1	1	08	23S	28E	583128	3576749*	178	50	128
C 01779		PRO	ED	3	1	1	08	23S	28E	583128	3576749*	178	50	128
C 01789		STK	ED	3	2	1	23	23S	28E	588395	3573566*	140		
C 01816		DOM	ED	1	3	1	23	23S	28E	587992	3573355*	200	40	160
C 01870		DOM	ED	1	3	22	23S	28E	586478	3572834*	105	48	57	
C 01872		DOM	ED	2	1	22	23S	28E	586878	3573649*	68	48	20	
C 01885		STK	ED	2	2	21	23S	28E	586070	3573640*	104	35	69	
C 01936 1		PRO	ED	3	2	31	23S	28E	582449	3569964*	160			
C 01938		DOM	ED	2	4	28	23S	28E	586085	3571205*	80	3	77	
C 01992		PRO	ED	3	4	1	19	23S	28E	581929	3573094*	232	45	187
C 01993		PRO	ED	2	3	06	23S	28E	582020	3577643*	164	45	119	
C 02037		PRO	ED	2	3	29	23S	28E	583667	3571184*	260			
C 02064		DOM	ED	4	3	06	23S	28E	582021	3577238*	90	50	40	
C 02141		DOM	ED	4	4	06	23S	28E	582826	3577249*	65	36	29	

*UTM location was derived from PLSS - see Help

(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						X	Depth Depth Water			
				64	16	4	Sec	Tws	Rng		Y	Well	WaterColumn	
C 02180		DOM	ED			3	18	23S	28E	581831	3574198*	140	80	60
C 02189		PRO	ED	1	1	3	14	23S	28E	587985	3574572*	48	29	19
C 02243		DOM	XX	4	4	4	06	23S	28E	582925	3577148*	160	40	120
C 02322		DOM	ED				05	23S	28E	583832	3577858*	280		
C 02503		DOM	ED		4	2	15	23S	28E	587679	3574874*	70	12	58
C 02511		DOM	ED	1	2	1	06	23S	28E	581916	3578550*	60	35	25
C 02599		DOM	ED	2	2	1	27	23S	28E	586986	3572126*	150		
C 02697		MUL	ED		1	3	18	23S	28E	581629	3574401*	220	42	178
C 02702			ED			2	12	23S	28E	590707	3576732*	38	20	18
C 02703			ED			2	13	23S	28E	590715	3575108*	150		
C 02796		MON	ED		2	3	22	23S	28E	586882	3572838*	200		
C 02845		EXP	ED	3	4	1	07	23S	28E	581920	3576327*	220		
C 02846		COM	ED	4	1	1	07	23S	28E	581726	3576726*	150	50	100
C 02846		IRR	ED	4	1	1	07	23S	28E	581726	3576726*	150	50	100
C 02846 S		COM	ED	4	4	4	07	23S	28E	582926	3575527*	150	40	110
C 02846 S		IRR	ED	4	4	4	07	23S	28E	582926	3575527*	150	40	110
C 02847		COM	ED	2	1	4	22	23S	28E	587386	3572941*	80		
C 02848		COM	ED	3	3	1	21	23S	28E	584762	3573120*	130		
C 02849		COM	ED	2	1	4	22	23S	28E	587386	3572941*	60		
C 02883		EXP	ED	1	3	3	06	23S	28E	581526	3577331*	202		
C 02883		STK	ED	1	3	3	06	23S	28E	581526	3577331*	202		
C 02912		DOM	ED	3	3	1	08	23S	28E	583129	3576344*	150		
C 02927		EXP	ED		2	4	25	23S	28E	590935	3571260*	140		
C 02928		PUB	ED		2	1	14	23S	28E	588486	3575290*	30		
C 02943		DOM	ED	2	1	1	06	23S	28E	581725	3578546*	69	43	26
C 03001 EXPLORE		EXP	ED	1	1	4	25	23S	28E	590430	3571355*	140		
C 03082		DOM	ED	1	3	3	18	23S	28E	581529	3574096*	220	217	3
C 03146		STK	ED	1	1	3	24	23S	28E	589613	3572970*	82	36	46
C 03175		DOM	ED	1	2	2	27	23S	28E	587595	3572134*	150		
C 03216		DOM	ED	4	3	1	06	23S	28E	581726	3577942*	250		
C 03432		DOM	ED	1	2	2	27	23S	28E	587506	3572173	115	75	40

*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.

Average Depth to Water: 43 feet

Minimum Depth: 3 feet

Maximum Depth: 217 feet

Record Count: 124

PLSS Search:

Township: 23S

Range: 28E

TABLE 1. RECORDS OF WELLS IN EDDY COUNTY, NEW MEXICO. (Continued)

LOCATION NUMBER	OWNER OR NAME	DATE COM- PLETED	TOPOGRAPHIC SITUATION	ALTITUDE ABOVE SEA LEVEL (feet)	DEPTH OF WELL (feet)	DIAMETER OF WELL (inches)	PRINCIPAL WATER-BEARING BED	
							CHARACTER OF MATERIAL	GEOLOGIC UNIT
23.27.5.333	Jack Williams	1949	Orchard Park Terrace	3,183	—	20	Alluvium	Quaternary
6.212	Ashbury Bros.	—	do.	3,188	200	8½	do.	do.
6.213	do.	1947	do.	3,195	190	12	do.	do.
10.143	—	—	Cass draw	3,105	—	—	do.	do.
10.413	W. B. Rodgers	—	Orchard Park Terrace	3,108	185	—	do.	do.
12.233	Bird Bros.	—	do.	3,070	160	18	do.	do.
14.124	A. M. Hoose	—	do.	3,102	230	16	do.	do.
23.211	—	—	do.	3,120	—	12	do.	do.
24.313	—	—	do.	3,125	—	18	do.	do.
24.342	—	—	do.	3,125	—	18	do.	do.
24.343	—	—	do.	3,130	—	—	do.	do.
29.120	—	—	do.	3,190	120 (?)	5	do.	do.
23.28.6.131	—	—	North side Cass Draw	3,045	—	—	do.	do.
7.113	G. Brantly	—	Orchard Park Terrace	3,052	165	—	do.	do.

See explanation at beginning of table.

LOCATION NUMBER	WATER LEVEL		YIELD (g.p.m.)	METHOD OF LIFT	USE OF WATER	REMARKS
	BELOW LAND SURFACE (feet)	DATE OF MEASUREMENT				
23.27.5.333	82.7	Sept. 20, 1949	—	N	I	Driller: A. M. Brennenstool. Cased to 130 ft. Cased to 165 ft. Driller: J. Donahue. See analysis, Table 3.
6.212	109.2	Feb. 6, 1947	—	T	I	
6.213	123.2	Jan. 14, 1948	—	T	I	
10.143	9.6	Oct. 15, 1947	—	N	I	Abandoned (?)
10.413	50.4	Sept. 30, 1947	600 R.	T	I	
12.233	39.9	Oct. 9, 1947	1,800 R.	T	I	
14.124	74.8	Oct. 15, 1947	500 R.	N	I	
23.211	22.8	Nov. 10, 1947	—	N	I	
24.313	90.3	Sept. 30, 1947	—	N	I	
24.342	93.4	do.	—	N	I	
24.343	90.0	do.	—	N	I (?)	
29.120	103	Dec. 22, 1948	—	W	S	
23.28.6.131	16.5	Jan. 12, 1948	—	T	I	
7.113	26.6	do.	—	T	I	

See explanation at beginning of table.

TABLE 1. RECORDS OF WELLS IN EDDY COUNTY, NEW MEXICO. (Continued)

LOCATION NUMBER	OWNER OR NAME	DATE COM- PLETED	TOPOGRAPHIC SITUATION	ALTITUDE ABOVE SEA LEVEL (feet)	DEPTH OF WELL (feet)	DIAMETER OF WELL (inches)	PRINCIPAL WATER-BEARING BED	
							CHARACTER OF MATERIAL	GEOLOGIC UNIT
23.28.7.333	—	—	Orchard Park Terrace	3,060	—	—	Alluvium	Quaternary
8.421	E. D. Rosson	—	do.	3,023	89	12	do.	do.
11.114	Bonny Yarbro	1946	Lakewood Terrace	3,003	100	16	do.	do.
13.131	U. S. Potash Co.	1950	do.	2,980	79	18	do.	do.
13.131a	do.	1950	do.	2,980	40	8	do.	do.
13.142	do.	1950	do.	2,976	45	8	do.	do.
14.144	Buford Yarbro	—	Orchard Park Terrace	3,005	100	—	do.	do.
15.323	do.	—	do.	3,005	145	—	do.	do.
15.411	—	—	do.	2,998	130	—	do.	do.
18.222	Carter	1947	do.	3,038	—	—	do.	do.
18.223	Purdue	—	do.	3,045	—	—	do.	do.
18.333	L. T. Lewis	—	do.	3,086	278	16	Alluvium and limestone (?)	Quaternary and Rustler (?)
20.144	Carter	—	do.	3,060	—	—	Alluvium	Quaternary
22.333	J. L. Seal	—	do.	3,030	150	16	do.	do.

See explanation at beginning of table.

LOCATION NUMBER	WATER LEVEL		YIELD (g.p.m.)	METHOD OF LIFT	USE OF WATER	REMARKS
	BELOW LAND SURFACE (feet)	DATE OF MEASUREMENT				
23.28.7.333	44.5	Aug. 12, 1948	—	T	I	
8.421	34.0	Sept. 24, 1947	—	T	I	
11.114	30.5	do.	250	T	I	Depth to water measured while pump- ing. Driller: Joe Howard.
13.131	14.8	May 1, 1950	1,200 R.	T	In	Redbeds at 78 ft. Cased to 32 ft.
13.131a	14.5	do.	—	N	T	Cased to 40 ft.
13.142	9.8	do.	—	N	T	Cased to 43 ft.
14.144	31.3	Sept. 23, 1947	—	T	D, S, & I	
15.323	21.1	Sept. 19, 1947	1,500 R.	T	I	Cased to 127 ft.
15.411	14.5	Jan. 12, 1948	800 ¹	T	I	
18.222	26.4	do.	—	T	I	
18.223	75.4	Sept. 24, 1947	—	T	I	Depth to water measured while pumping.
18.333	63.0	Jan. 13, 1948	1,000 R.	T	I	Cased to 195 ft.
20.144	56.1	do.	500 ²	T	I	See analysis, Table 3.
22.333	45.6	do.	—	T	I	Cased to 102 ft.

See explanation at beginning of table.

¹ Measured Sept. 23, 1947.² Measured Sept. 25, 1947.

TABLE 1. RECORDS OF WELLS IN EDDY COUNTY, NEW MEXICO. (Continued)

LOCATION NUMBER	OWNER OR NAME	DATE COM- PLETED	TOPOGRAPHIC SITUATION	ALTITUDE ABOVE SEA LEVEL (feet)	DEPTH OF WELL (feet)	DIAMETER OF WELL (inches)	PRINCIPAL WATER-BEARING BED	
							CHARACTER OF MATERIAL	GEOLOGIC UNIT
23.28.22.433	J. Joyce	—	Orchard Park Terrace	3,031	174	—	Alluvium	Quaternary
23.133	Donaldson	—	Hillside	3,020	—	—	do.	do.
23.433	S. F. Williams	—	East slope	3,008	130	16	do.	do.
24.134	B. Yarbrow	—	do.	2,992	96	—	do.	do.
25.213	Ray Howard	—	do.	2,990	200	18	do.	do.
29.144	Kelly-Polk	—	Orchard Park Terrace	3,100	190	18	do.	do.
29.411	—	—	do.	3,101	—	14	do.	do.
23.30.2.440	James Bros.	—	E. trending spur	3,250	300	5	Redbeds	Dockum or Rustler
6.110	do.	—	Closed depression	3,000	200	12 (?)	do.	Rustler
6.420	Nash well	—	do.	2,980	—	—	Alluvium	Quaternary
21.122	Indian well	—	Valley	3,165	—	12	Redbeds	Rustler
23.31.7.220	James Head- quarters	1900 (?)	Rolling	3,310	180	12	do.	Dockum

See explanation at beginning of table.

LOCATION NUMBER	WATER LEVEL		YIELD (g.p.m.)	METHOD OF LIFT	USE OF WATER	REMARKS
	BELOW LAND SURFACE (feet)	DATE OF MEASUREMENT				
23.28.22.433	38.5	Feb. 8, 1947	1,200	T	I	See analysis, Table 3.
23.133	52.4	Sept. 22, 1947	—	T	I	
23.433	38	—	1,100 ¹	T	I	
24.134	52.3	Sept. 22, 1947	1,200	T	I	
25.213	39.1	Sept. 23, 1947	1,000 R.	T	I	Depth to water measured while pump- ing. See analysis, Table 3.
29.144	28.7	Sept. 25, 1947	—	N	N	
29.411	20.7	Jan. 13, 1948	—	N	I	
23.30.2.440	250.0	Dec. 22, 1948	—	W & G	S	See analysis, Table 3.
6.110	110.0	do.	—	W	S	
6.420	—	—	—	W	S	
21.122	—	—	3	W & G	S	
23.31.7.220	140	—	10 E.	W	S	See analysis, Table 3. Two wells here.

See explanation at beginning of table.

¹ Measured Sept. 23, 1947.

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Water Samples for Township 23 South Range 28 East

Instructions:

The number represents the number of water samples of certain well. Click the number if you want to download the data.

55 records are available.

	# of samples	S	T	R	Formation	Date	Chlorides (mg/L)	Location (qtr/qtr)
☐	1 sample	05	23S	28E	OAL	4/9/1953	731	23S.28E.05.111444
☐	1 sample	06	23S	28E	OAL	9/5/1985	2250	23S.28E.06.34331
☐	1 sample	07	23S	28E	OAL	7/16/1953	639	23S.28E.07.33333
☐	1 sample	07	23S	28E	OAL	9/20/1954	1120	23S.28E.07.11333
☐	1 sample	07	23S	28E	OAL	5/14/1981	1660	23S.28E.07.11331
☐	1 sample	08	23S	28E	OAL	7/17/1953	1001	23S.28E.08.13111
☐	1 sample	08	23S	28E	OAL	5/14/1981	1400	23S.28E.08.13111
☐	1 sample	10	23S	28E	OAL	7/16/1953	1001	23S.28E.10.333423
☐	1 sample	10	23S	28E	OAL	5/14/1981	1310	23S.28E.10.333423
☐	1 sample	10	23S	28E	OAL	8/23/1985	1570	23S.28E.10.333423
☐	1 sample	11	23S	28E	OAL	4/16/1953	1243	23S.28E.11.114421
☐	1 sample	13	23S	28E	null	3/27/1967	131000	23S.28E.13.22222
☐	1 sample	15	23S	28E	OAL	7/16/1953	1079	23S.28E.15.433131
☐	1 sample	15	23S	28E	OAL	4/17/1953	1132	23S.28E.15.32111A
☐	1 sample	15	23S	28E	OAL	5/27/1981	2020	23S.28E.15.32111
☐	1 sample	17	23S	28E	OAL	3/3/1953	89	23S.28E.17.33333
☐	1 sample	18	23S	28E	OAL	9/24/1954	102	23S.28E.18.333332
☐	1 sample	18	23S	28E	OAL	7/16/1953	103	23S.28E.18.33330
☐	1 sample	18	23S	28E	OAL	2/1/1953	628	23S.28E.18.221242
☐	1 sample	18	23S	28E	OAL	7/8/1987	1158	23S.28E.18.221242
☐	1 sample	18	23S	28E	OAL	7/14/1993	1410	23S.28E.18.221242
☐	1 sample	18	23S	28E	OAL	9/3/1997	1570	23S.28E.18.221242
☐	1 sample	18	23S	28E	OAL	5/18/1981	1950	23S.28E.18.221242
☐	1 sample	20	23S	28E	OAL	7/16/1953	245	23S.28E.20.232433
☐	1 sample	20	23S	28E	OAL	9/7/1954	725	23S.28E.20.144444
☐	1 sample	20	23S	28E	OAL	9/5/1985	1080	23S.28E.20.232433
☐	1 sample	20	23S	28E	OAL	12/16/1946	1620	23S.28E.20.144444
☐	1 sample	21	23S	28E	OAL	7/16/1953	316	23S.28E.21.13342
☐	1 sample	21	23S	28E	OAL	9/4/1985	1750	23S.28E.21.22223
☐	1 sample	22	23S	28E	null	9/5/1997	454	23S.28E.22.24344
☐	1 sample	22	23S	28E	OAL	4/11/1949	1470	23S.28E.22.433432
☐	1 sample	22	23S	28E	OAL	5/19/1981	1720	23S.28E.22.333343
☐	1 sample	22	23S	28E	OAL	7/16/1953	2407	23S.28E.22.333343

☐	1 sample	23	23S	28E	OAL	4/11/1949	715	23S.28E.23.133111
☐	1 sample	23	23S	28E	OAL	7/19/1948	720	23S.28E.23.133111
☐	1 sample	23	23S	28E	OAL	9/29/1953	760	23S.28E.23.133111
☐	1 sample	23	23S	28E	OAL	7/16/1953	792	23S.28E.23.133111
☐	1 sample	23	23S	28E	OAL	3/20/1953	859	23S.28E.23.43334
☐	1 sample	23	23S	28E	OAL	5/18/1981	1620	23S.28E.23.33344
☐	1 sample	23	23S	28E	OAL	5/18/1981	3670	23S.28E.23.133111
☐	1 sample	24	23S	28E	OAL	3/5/1953	664	23S.28E.24.13434
☐	1 sample	25	23S	28E	OAL	7/16/1953	1328	23S.28E.25.213131
☐	1 sample	25	23S	28E	OAL	9/5/1985	1950	23S.28E.25.213131
☐	1 sample	25	23S	28E	OAL	5/19/1981	2080	23S.28E.25.21132
☐	1 sample	29	23S	28E	OAL	7/6/1953	1775	23S.28E.29.24333
☐	1 sample	31	23S	28E	null	2/3/1993	600	23S.28E.31.23142
☐	1 sample	31	23S	28E	OAL	11/1/1954	400	23S.28E.31.23142
☐	1 sample	31	23S	28E	OAL	2/11/1988	417	23S.28E.31.23142
☐	1 sample	31	23S	28E	OAL	7/22/1997	430	23S.28E.31.23142
☐	1 sample	31	23S	28E	OAL	3/24/1992	560	23S.28E.31.23142
☐	1 sample	33	23S	28E	OAL	3/17/1955	794	23S.28E.33.123432
☐	1 sample	33	23S	28E	OAL	8/6/1987	2026	23S.28E.33.123432
☐	1 sample	33	23S	28E	OAL	3/24/1992	4690	23S.28E.33.123432
☐	1 sample	34	23S	28E	OAL	8/6/1987	4002	23S.28E.34.31200
☐	1 sample	34	23S	28E	OAL	9/4/1997	4170	23S.28E.34.31200

☐ SELECT/DESELECT ALL

APPENDIX C

LABORATORY ANALYTICAL



6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
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 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

Certifications

WBENC: 237019

HUB: 1752439743100-86536
NCTRCA WFWB38444Y0909

DBE: VN 20657

NELAP Certifications

Lubbock: T104704219-08-TX
LELAP-02003
Kansas E-10317

El Paso: T104704221-08-TX
LELAP-02002

Midland: T104704392-08-TX

Analytical and Quality Control Report

Ike Tavarez
Tetra Tech
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: September 16, 2009

Work Order: 9091427



Project Location: Eddy Co., NM
Project Name: Belco SWD #1
Project Number: 114-6400290

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
209826	AH-1 0-.5'	soil	2009-09-10	00:00	2009-09-14
209827	AH-1 .5-1'	soil	2009-09-10	00:00	2009-09-14
209828	AH-2 0-.5'	soil	2009-09-10	00:00	2009-09-14
209829	AH-2 .5-1'	soil	2009-09-10	00:00	2009-09-14
209830	AH-3 0-.5'	soil	2009-09-10	00:00	2009-09-14
209831	AH-3 .5-1'	soil	2009-09-10	00:00	2009-09-14
209832	AH-4 0-.5'	soil	2009-09-10	00:00	2009-09-14
209833	AH-4 .5-1'	soil	2009-09-10	00:00	2009-09-14
209834	AH-5 0-.5'	soil	2009-09-10	00:00	2009-09-14
209835	AH-5 .5-1'	soil	2009-09-10	00:00	2009-09-14

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
209836	AH-6 0-.5'	soil	2009-09-10	00:00	2009-09-14
209837	AH-6 .5-1'	soil	2009-09-10	00:00	2009-09-14
209838	AH-7 1-1.5'	soil	2009-09-10	00:00	2009-09-14
209839	AH-7 1.5'-2'	soil	2009-09-10	00:00	2009-09-14
209840	AH-8 0-.5'	soil	2009-09-10	00:00	2009-09-14
209841	AH-8 .5-1'	soil	2009-09-10	00:00	2009-09-14

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 25 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

Standard Flags

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

Case Narrative

Samples for project Belco SWD #1 were received by TraceAnalysis, Inc. on 2009-09-14 and assigned to work order 9091427. Samples for work order 9091427 were received intact at a temperature of 7.0 deg. C.

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

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	54277	2009-09-15 at 15:30	63586	2009-09-15 at 09:20
Chloride (Titration)	SM 4500-Cl B	54261	2009-09-15 at 08:32	63593	2009-09-16 at 10:10
Chloride (Titration)	SM 4500-Cl B	54262	2009-09-15 at 09:33	63594	2009-09-16 at 10:11
TPH DRO	Mod. 8015B	54247	2009-09-14 at 11:27	63544	2009-09-14 at 11:27
TPH GRO	S 8015B	54277	2009-09-15 at 15:30	63587	2009-09-15 at 09:47

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 9091427 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: September 16, 2009
114-6400290

Work Order: 9091427
Belco SWD #1

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Eddy Co., NM

Analytical Report

Sample: 209826 - AH-1 0-.5'

Laboratory: Midland
Analysis: BTEX
QC Batch: 63586
Prep Batch: 54277

Analytical Method: S 8021B
Date Analyzed: 2009-09-15
Sample Preparation: 2009-09-15

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

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.09	mg/Kg	1	2.00	104	84.4 - 111.2
4-Bromofluorobenzene (4-BFB)		2.09	mg/Kg	1	2.00	104	43.1 - 128.4

Sample: 209826 - AH-1 0-.5'

Laboratory: Midland
Analysis: Chloride (Titration)
QC Batch: 63593
Prep Batch: 54261

Analytical Method: SM 4500-Cl B
Date Analyzed: 2009-09-16
Sample Preparation: 2009-09-15

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

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2650	mg/Kg	100	4.00

Sample: 209826 - AH-1 0-.5'

Laboratory: Midland
Analysis: TPH DRO
QC Batch: 63544
Prep Batch: 54247

Analytical Method: Mod. 8015B
Date Analyzed: 2009-09-14
Sample Preparation: 2009-09-14

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

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

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Belco SWD #1

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Eddy Co., NM

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		122	mg/Kg	1	100	122	13.2 - 219.3

Sample: 209826 - AH-1 0-.5'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 63587
Prep Batch: 54277

Analytical Method: S 8015B
Date Analyzed: 2009-09-15
Sample Preparation: 2009-09-15

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

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.04	mg/Kg	1	2.00	102	65.3 - 109.9
4-Bromofluorobenzene (4-BFB)		2.00	mg/Kg	1	2.00	100	61.7 - 119.9

Sample: 209827 - AH-1 .5-1'

Laboratory: Midland
Analysis: Chloride (Titration)
QC Batch: 63593
Prep Batch: 54261

Analytical Method: SM 4500-Cl B
Date Analyzed: 2009-09-16
Sample Preparation: 2009-09-15

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

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2880	mg/Kg	100	4.00

Sample: 209828 - AH-2 0-.5'

Laboratory: Midland
Analysis: BTEX
QC Batch: 63586
Prep Batch: 54277

Analytical Method: S 8021B
Date Analyzed: 2009-09-15
Sample Preparation: 2009-09-15

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

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

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Eddy Co., NM

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.12	mg/Kg	1	2.00	106	84.4 - 111.2
4-Bromofluorobenzene (4-BFB)		2.08	mg/Kg	1	2.00	104	43.1 - 128.4

Sample: 209828 - AH-2 0-.5'

Laboratory: Midland	Analytical Method: SM 4500-Cl B	Prep Method: N/A
Analysis: Chloride (Titration)	Date Analyzed: 2009-09-16	Analyzed By: AR
QC Batch: 63593	Sample Preparation: 2009-09-15	Prepared By: AR
Prep Batch: 54261		

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		5170	mg/Kg	100	4.00

Sample: 209828 - AH-2 0-.5'

Laboratory: Midland	Analytical Method: Mod. 8015B	Prep Method: N/A
Analysis: TPH DRO	Date Analyzed: 2009-09-14	Analyzed By: kg
QC Batch: 63544	Sample Preparation: 2009-09-14	Prepared By: kg
Prep Batch: 54247		

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		119	mg/Kg	1	100	119	13.2 - 219.3

Sample: 209828 - AH-2 0-.5'

Laboratory: Midland	Analytical Method: S 8015B	Prep Method: S 5035
Analysis: TPH GRO	Date Analyzed: 2009-09-15	Analyzed By: AG
QC Batch: 63587	Sample Preparation: 2009-09-15	Prepared By: AG
Prep Batch: 54277		

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

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Eddy Co., NM

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.04	mg/Kg	1	2.00	102	65.3 - 109.9
4-Bromofluorobenzene (4-BFB)		1.96	mg/Kg	1	2.00	98	61.7 - 119.9

Sample: 209829 - AH-2 .5-1'

Laboratory: Midland

Analysis: Chloride (Titration)

QC Batch: 63593

Prep Batch: 54261

Analytical Method: SM 4500-Cl B

Date Analyzed: 2009-09-16

Sample Preparation: 2009-09-15

Prep Method: N/A

Analyzed By: AR

Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		4280	mg/Kg	100	4.00

Sample: 209830 - AH-3 0-.5'

Laboratory: Midland

Analysis: BTEX

QC Batch: 63586

Prep Batch: 54277

Analytical Method: S 8021B

Date Analyzed: 2009-09-15

Sample Preparation: 2009-09-15

Prep Method: S 5035

Analyzed By: AG

Prepared By: AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.09	mg/Kg	1	2.00	104	84.4 - 111.2
4-Bromofluorobenzene (4-BFB)		2.07	mg/Kg	1	2.00	104	43.1 - 128.4

Sample: 209830 - AH-3 0-.5'

Laboratory: Midland

Analysis: Chloride (Titration)

QC Batch: 63593

Prep Batch: 54261

Analytical Method: SM 4500-Cl B

Date Analyzed: 2009-09-16

Sample Preparation: 2009-09-15

Prep Method: N/A

Analyzed By: AR

Prepared By: AR

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Eddy Co., NM

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		11700	mg/Kg	100	4.00

Sample: 209830 - AH-3 0-.5'

Laboratory: Midland
Analysis: TPH DRO
QC Batch: 63544
Prep Batch: 54247

Analytical Method: Mod. 8015B
Date Analyzed: 2009-09-14
Sample Preparation: 2009-09-14

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

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		121	mg/Kg	1	100	121	13.2 - 219.3

Sample: 209830 - AH-3 0-.5'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 63587
Prep Batch: 54277

Analytical Method: S 8015B
Date Analyzed: 2009-09-15
Sample Preparation: 2009-09-15

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

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.03	mg/Kg	1	2.00	102	65.3 - 109.9
4-Bromofluorobenzene (4-BFB)		1.95	mg/Kg	1	2.00	98	61.7 - 119.9

Sample: 209831 - AH-3 .5-1'

Laboratory: Midland
Analysis: Chloride (Titration)
QC Batch: 63593
Prep Batch: 54261

Analytical Method: SM 4500-Cl B
Date Analyzed: 2009-09-16
Sample Preparation: 2009-09-15

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

continued ...

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sample 209831 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		8520	mg/Kg	100	4.00

Sample: 209832 - AH-4 0-.5'

Laboratory: Midland

Analysis: BTEX

QC Batch: 63586

Prep Batch: 54277

Analytical Method: S 8021B

Date Analyzed: 2009-09-15

Sample Preparation: 2009-09-15

Prep Method: S 5035

Analyzed By: AG

Prepared By: AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.11	mg/Kg	1	2.00	106	84.4 - 111.2
4-Bromofluorobenzene (4-BFB)		2.08	mg/Kg	1	2.00	104	43.1 - 128.4

Sample: 209832 - AH-4 0-.5'

Laboratory: Midland

Analysis: Chloride (Titration)

QC Batch: 63593

Prep Batch: 54261

Analytical Method: SM 4500-Cl B

Date Analyzed: 2009-09-16

Sample Preparation: 2009-09-15

Prep Method: N/A

Analyzed By: AR

Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1860	mg/Kg	50	4.00

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Sample: 209832 - AH-4 0-.5'

Laboratory:	Midland	Analytical Method:	Mod. 8015B	Prep Method:	N/A
Analysis:	TPH DRO	Date Analyzed:	2009-09-14	Analyzed By:	kg
QC Batch:	63544	Sample Preparation:	2009-09-14	Prepared By:	kg
Prep Batch:	54247				

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		126	mg/Kg	1	100	126	13.2 - 219.3

Sample: 209832 - AH-4 0-.5'

Laboratory:	Midland	Analytical Method:	S 8015B	Prep Method:	S 5035
Analysis:	TPH GRO	Date Analyzed:	2009-09-15	Analyzed By:	AG
QC Batch:	63587	Sample Preparation:	2009-09-15	Prepared By:	AG
Prep Batch:	54277				

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.05	mg/Kg	1	2.00	102	65.3 - 109.9
4-Bromofluorobenzene (4-BFB)		1.95	mg/Kg	1	2.00	98	61.7 - 119.9

Sample: 209833 - AH-4 .5-1'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-09-16	Analyzed By:	AR
QC Batch:	63593	Sample Preparation:	2009-09-15	Prepared By:	AR
Prep Batch:	54261				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1690	mg/Kg	50	4.00

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Sample: 209834 - AH-5 0-.5'

Laboratory: Midland

Analysis: BTEX

QC Batch: 63586

Prep Batch: 54277

Analytical Method: S 8021B

Date Analyzed: 2009-09-15

Sample Preparation: 2009-09-15

Prep Method: S 5035

Analyzed By: AG

Prepared By: AG

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.10	mg/Kg	1	2.00	105	84.4 - 111.2
4-Bromofluorobenzene (4-BFB)		2.06	mg/Kg	1	2.00	103	43.1 - 128.4

Sample: 209834 - AH-5 0-.5'

Laboratory: Midland

Analysis: Chloride (Titration)

QC Batch: 63593

Prep Batch: 54261

Analytical Method: SM 4500-Cl B

Date Analyzed: 2009-09-16

Sample Preparation: 2009-09-15

Prep Method: N/A

Analyzed By: AR

Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		3380	mg/Kg	100	4.00

Sample: 209834 - AH-5 0-.5'

Laboratory: Midland

Analysis: TPH DRO

QC Batch: 63544

Prep Batch: 54247

Analytical Method: Mod. 8015B

Date Analyzed: 2009-09-14

Sample Preparation: 2009-09-14

Prep Method: N/A

Analyzed By: kg

Prepared By: kg

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		119	mg/Kg	1	100	119	13.2 - 219.3

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Sample: 209834 - AH-5 0-.5'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 63587
Prep Batch: 54277

Analytical Method: S 8015B
Date Analyzed: 2009-09-15
Sample Preparation: 2009-09-15

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

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.03	mg/Kg	1	2.00	102	65.3 - 109.9
4-Bromofluorobenzene (4-BFB)		1.93	mg/Kg	1	2.00	96	61.7 - 119.9

Sample: 209835 - AH-5 .5-1'

Laboratory: Midland
Analysis: Chloride (Titration)
QC Batch: 63593
Prep Batch: 54261

Analytical Method: SM 4500-Cl B
Date Analyzed: 2009-09-16
Sample Preparation: 2009-09-15

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

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2730	mg/Kg	100	4.00

Sample: 209836 - AH-6 0-.5'

Laboratory: Midland
Analysis: BTEX
QC Batch: 63586
Prep Batch: 54277

Analytical Method: S 8021B
Date Analyzed: 2009-09-15
Sample Preparation: 2009-09-15

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

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.12	mg/Kg	1	2.00	106	84.4 - 111.2
4-Bromofluorobenzene (4-BFB)		2.09	mg/Kg	1	2.00	104	43.1 - 128.4

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Sample: 209836 - AH-6 0-.5'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-09-16	Analyzed By:	AR
QC Batch:	63594	Sample Preparation:	2009-09-16	Prepared By:	AR
Prep Batch:	54262				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		6270	mg/Kg	100	4.00

Sample: 209836 - AH-6 0-.5'

Laboratory:	Midland	Analytical Method:	Mod. 8015B	Prep Method:	N/A
Analysis:	TPH DRO	Date Analyzed:	2009-09-14	Analyzed By:	kg
QC Batch:	63544	Sample Preparation:	2009-09-14	Prepared By:	kg
Prep Batch:	54247				

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		118	mg/Kg	1	100	118	13.2 - 219.3

Sample: 209836 - AH-6 0-.5'

Laboratory:	Midland	Analytical Method:	S 8015B	Prep Method:	S 5035
Analysis:	TPH GRO	Date Analyzed:	2009-09-15	Analyzed By:	AG
QC Batch:	63587	Sample Preparation:	2009-09-15	Prepared By:	AG
Prep Batch:	54277				

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.06	mg/Kg	1	2.00	103	65.3 - 109.9
4-Bromofluorobenzene (4-BFB)		1.97	mg/Kg	1	2.00	98	61.7 - 119.9

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Sample: 209837 - AH-6 .5-1'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-09-16	Analyzed By:	AR
QC Batch:	63594	Sample Preparation:	2009-09-16	Prepared By:	AR
Prep Batch:	54262				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		9350	mg/Kg	100	4.00

Sample: 209838 - AH-7 1-1.5'

Laboratory:	Midland	Analytical Method:	S 8021B	Prep Method:	S 5035
Analysis:	BTEX	Date Analyzed:	2009-09-15	Analyzed By:	AG
QC Batch:	63586	Sample Preparation:	2009-09-15	Prepared By:	AG
Prep Batch:	54277				

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.14	mg/Kg	1	2.00	107	84.4 - 111.2
4-Bromofluorobenzene (4-BFB)		2.13	mg/Kg	1	2.00	106	43.1 - 128.4

Sample: 209838 - AH-7 1-1.5'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-09-16	Analyzed By:	AR
QC Batch:	63594	Sample Preparation:	2009-09-16	Prepared By:	AR
Prep Batch:	54262				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		406	mg/Kg	50	4.00

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Sample: 209838 - AH-7 1-1.5'

Laboratory: Midland
Analysis: TPH DRO
QC Batch: 63544
Prep Batch: 54247

Analytical Method: Mod. 8015B
Date Analyzed: 2009-09-14
Sample Preparation: 2009-09-14

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

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		121	mg/Kg	1	100	121	13.2 - 219.3

Sample: 209838 - AH-7 1-1.5'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 63587
Prep Batch: 54277

Analytical Method: S 8015B
Date Analyzed: 2009-09-15
Sample Preparation: 2009-09-15

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

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.10	mg/Kg	1	2.00	105	65.3 - 109.9
4-Bromofluorobenzene (4-BFB)		2.00	mg/Kg	1	2.00	100	61.7 - 119.9

Sample: 209839 - AH-7 1.5'-2'

Laboratory: Midland
Analysis: Chloride (Titration)
QC Batch: 63594
Prep Batch: 54262

Analytical Method: SM 4500-Cl B
Date Analyzed: 2009-09-16
Sample Preparation: 2009-09-16

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

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1100	mg/Kg	50	4.00

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Sample: 209840 - AH-8 0-.5'

Laboratory: Midland
Analysis: BTEX
QC Batch: 63586
Prep Batch: 54277

Analytical Method: S 8021B
Date Analyzed: 2009-09-15
Sample Preparation: 2009-09-15

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

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.10	mg/Kg	1	2.00	105	84.4 - 111.2
4-Bromofluorobenzene (4-BFB)		2.07	mg/Kg	1	2.00	104	43.1 - 128.4

Sample: 209840 - AH-8 0-.5'

Laboratory: Midland
Analysis: Chloride (Titration)
QC Batch: 63594
Prep Batch: 54262

Analytical Method: SM 4500-Cl B
Date Analyzed: 2009-09-16
Sample Preparation: 2009-09-16

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

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		6060	mg/Kg	100	4.00

Sample: 209840 - AH-8 0-.5'

Laboratory: Midland
Analysis: TPH DRO
QC Batch: 63544
Prep Batch: 54247

Analytical Method: Mod. 8015B
Date Analyzed: 2009-09-14
Sample Preparation: 2009-09-14

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

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		125	mg/Kg	1	100	125	13.2 - 219.3

Sample: 209840 - AH-8 0-.5'

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 63587
Prep Batch: 54277

Analytical Method: S 8015B
Date Analyzed: 2009-09-15
Sample Preparation: 2009-09-15

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

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.05	mg/Kg	1	2.00	102	65.3 - 109.9
4-Bromofluorobenzene (4-BFB)		1.95	mg/Kg	1	2.00	98	61.7 - 119.9

Sample: 209841 - AH-8 .5-1'

Laboratory: Midland
Analysis: Chloride (Titration)
QC Batch: 63594
Prep Batch: 54262

Analytical Method: SM 4500-Cl B
Date Analyzed: 2009-09-16
Sample Preparation: 2009-09-16

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

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		9810	mg/Kg	100	4.00

Method Blank (1) QC Batch: 63544

QC Batch: 63544
Prep Batch: 54247

Date Analyzed: 2009-09-14
QC Preparation: 2009-09-14

Analyzed By: kg
Prepared By: kg

Parameter	Flag	MDL Result	Units	RL
DRO		<5.86	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		118	mg/Kg	1	100	118	13 - 178.5

Method Blank (1) QC Batch: 63586

QC Batch: 63586
Prep Batch: 54277

Date Analyzed: 2009-09-15
QC Preparation: 2009-09-15

Analyzed By: AG
Prepared By: AG

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Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00410	mg/Kg	0.01
Toluene		<0.00310	mg/Kg	0.01
Ethylbenzene		<0.00240	mg/Kg	0.01
Xylene		<0.00650	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.11	mg/Kg	1	2.00	106	64.9 - 122.7
4-Bromofluorobenzene (4-BFB)		1.94	mg/Kg	1	2.00	97	43.9 - 121.9

Method Blank (1) QC Batch: 63587

QC Batch: 63587 Date Analyzed: 2009-09-15 Analyzed By: AG
Prep Batch: 54277 QC Preparation: 2009-09-15 Prepared By: AG

Parameter	Flag	MDL Result	Units	RL
GRO		<0.396	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.00	mg/Kg	1	2.00	100	66.2 - 125
4-Bromofluorobenzene (4-BFB)		1.78	mg/Kg	1	2.00	89	62 - 120.5

Method Blank (1) QC Batch: 63593

QC Batch: 63593 Date Analyzed: 2009-09-16 Analyzed By: AR
Prep Batch: 54261 QC Preparation: 2009-09-15 Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Method Blank (1) QC Batch: 63594

QC Batch: 63594 Date Analyzed: 2009-09-16 Analyzed By: AR
Prep Batch: 54262 QC Preparation: 2009-09-15 Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

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Laboratory Control Spike (LCS-1)

QC Batch: 63544
Prep Batch: 54247

Date Analyzed: 2009-09-14
QC Preparation: 2009-09-14

Analyzed By: kg
Prepared By: kg

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	203	mg/Kg	1	250	<5.86	81	57.4 - 133.4

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	213	mg/Kg	1	250	<5.86	85	57.4 - 133.4	5	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	120	114	mg/Kg	1	100	120	114	48.5 - 146.7

Laboratory Control Spike (LCS-1)

QC Batch: 63586
Prep Batch: 54277

Date Analyzed: 2009-09-15
QC Preparation: 2009-09-15

Analyzed By: AG
Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	2.08	mg/Kg	1	2.00	<0.00410	104	75.4 - 115.7
Toluene	2.06	mg/Kg	1	2.00	<0.00310	103	78.4 - 113.6
Ethylbenzene	2.01	mg/Kg	1	2.00	<0.00240	100	76 - 114.2
Xylene	6.08	mg/Kg	1	6.00	<0.00650	101	76.9 - 113.6

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	2.13	mg/Kg	1	2.00	<0.00410	106	75.4 - 115.7	2	20
Toluene	2.11	mg/Kg	1	2.00	<0.00310	106	78.4 - 113.6	2	20
Ethylbenzene	2.09	mg/Kg	1	2.00	<0.00240	104	76 - 114.2	4	20
Xylene	6.31	mg/Kg	1	6.00	<0.00650	105	76.9 - 113.6	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
Trifluorotoluene (TFT)	2.08	2.06	mg/Kg	1	2.00	104	103	65 - 122.9
4-Bromofluorobenzene (4-BFB)	2.07	2.06	mg/Kg	1	2.00	104	103	43.8 - 124.9

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Laboratory Control Spike (LCS-1)

QC Batch: 63587
Prep Batch: 54277

Date Analyzed: 2009-09-15
QC Preparation: 2009-09-15

Analyzed By: AG
Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	20.2	mg/Kg	1	20.0	<0.396	101	52.5 - 114.3

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	20.4	mg/Kg	1	20.0	<0.396	102	52.5 - 114.3	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)	2.05	2.00	mg/Kg	1	2.00	102	100	66.2 - 128.7
4-Bromofluorobenzene (4-BFB)	1.93	1.88	mg/Kg	1	2.00	96	94	64.1 - 127.4

Laboratory Control Spike (LCS-1)

QC Batch: 63593
Prep Batch: 54261

Date Analyzed: 2009-09-16
QC Preparation: 2009-09-15

Analyzed By: AR
Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	102	mg/Kg	1	100	<2.18	102	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	103	mg/Kg	1	100	<2.18	103	85 - 115	1	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 63594
Prep Batch: 54262

Date Analyzed: 2009-09-16
QC Preparation: 2009-09-15

Analyzed By: AR
Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	97.7	mg/Kg	1	100	<2.18	98	85 - 115

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

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Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	100	mg/Kg	1	100	<2.18	100	85 - 115	2	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: 209840

QC Batch: 63544 Date Analyzed: 2009-09-14 Analyzed By: kg
Prep Batch: 54247 QC Preparation: 2009-09-14 Prepared By: kg

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	277	mg/Kg	1	250	<5.86	111	35.2 - 167.1

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	273	mg/Kg	1	250	<5.86	109	35.2 - 167.1	1	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	120	116	mg/Kg	1	100	120	116	34.5 - 178.4

Matrix Spike (MS-1) Spiked Sample: 209894

QC Batch: 63586 Date Analyzed: 2009-09-15 Analyzed By: AG
Prep Batch: 54277 QC Preparation: 2009-09-15 Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	2.00	mg/Kg	1	2.00	<0.00410	100	57.7 - 140.7
Toluene	1.98	mg/Kg	1	2.00	<0.00310	99	53.4 - 146.6
Ethylbenzene	1.98	mg/Kg	1	2.00	<0.00240	99	62.1 - 141.6
Xylene	6.00	mg/Kg	1	6.00	<0.00650	100	61.2 - 142.7

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	2.34	mg/Kg	1	2.00	<0.00410	117	57.7 - 140.7	16	20
Toluene	2.33	mg/Kg	1	2.00	<0.00310	116	53.4 - 146.6	16	20
Ethylbenzene	2.36	mg/Kg	1	2.00	<0.00240	118	62.1 - 141.6	18	20
Xylene	7.18	mg/Kg	1	6.00	<0.00650	120	61.2 - 142.7	18	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)	2.12	2.11	mg/Kg	1	2	106	106	62.7 - 119.6
4-Bromofluorobenzene (4-BFB)	2.15	2.16	mg/Kg	1	2	108	108	49.6 - 136.7

Matrix Spike (MS-1) Spiked Sample: 209840

QC Batch: 63587 Date Analyzed: 2009-09-15 Analyzed By: AG
Prep Batch: 54277 QC Preparation: 2009-09-15 Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	19.0	mg/Kg	1	20.0	<0.396	95	10 - 198.3

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	19.9	mg/Kg	1	20.0	<0.396	100	10 - 198.3	5	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)	2.05	2.02	mg/Kg	1	2	102	101	65.5 - 123
4-Bromofluorobenzene (4-BFB)	2.07	2.02	mg/Kg	1	2	104	101	58.6 - 140

Matrix Spike (MS-1) Spiked Sample: 209835

QC Batch: 63593 Date Analyzed: 2009-09-16 Analyzed By: AR
Prep Batch: 54261 QC Preparation: 2009-09-15 Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	12600	mg/Kg	100	10000	2730	99	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	12700	mg/Kg	100	10000	2730	100	85 - 115	1	20

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

Matrix Spike (MS-1) Spiked Sample: 209941

QC Batch: 63594 Date Analyzed: 2009-09-16 Analyzed By: AR
Prep Batch: 54262 QC Preparation: 2009-09-15 Prepared By: AR

Report Date: September 16, 2009
114-6400290

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Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	9910	mg/Kg	100	10000	<218	99	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	10100	mg/Kg	100	10000	<218	101	85 - 115	2	20

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

Standard (CCV-1)

QC Batch: 63544

Date Analyzed: 2009-09-14

Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	210	84	80 - 120	2009-09-14

Standard (CCV-2)

QC Batch: 63544

Date Analyzed: 2009-09-14

Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	213	85	80 - 120	2009-09-14

Standard (CCV-3)

QC Batch: 63544

Date Analyzed: 2009-09-14

Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	214	86	80 - 120	2009-09-14

Standard (CCV-2)

QC Batch: 63586

Date Analyzed: 2009-09-15

Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.105	105	80 - 120	2009-09-15

continued ...

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Toluene		mg/Kg	0.100	0.103	103	80 - 120	2009-09-15
Ethylbenzene		mg/Kg	0.100	0.102	102	80 - 120	2009-09-15
Xylene		mg/Kg	0.300	0.307	102	80 - 120	2009-09-15

Standard (CCV-3)

QC Batch: 63586

Date Analyzed: 2009-09-15

Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.105	105	80 - 120	2009-09-15
Toluene		mg/Kg	0.100	0.104	104	80 - 120	2009-09-15
Ethylbenzene		mg/Kg	0.100	0.102	102	80 - 120	2009-09-15
Xylene		mg/Kg	0.300	0.309	103	80 - 120	2009-09-15

Standard (CCV-2)

QC Batch: 63587

Date Analyzed: 2009-09-15

Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.20	120	80 - 120	2009-09-15

Standard (CCV-3)

QC Batch: 63587

Date Analyzed: 2009-09-15

Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.12	112	80 - 120	2009-09-15

Standard (ICV-1)

QC Batch: 63593

Date Analyzed: 2009-09-16

Analyzed By: AR

Report Date: September 16, 2009
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Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	95.6	96	85 - 115	2009-09-16

Standard (CCV-1)

QC Batch: 63593

Date Analyzed: 2009-09-16

Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	104	104	85 - 115	2009-09-16

Standard (ICV-1)

QC Batch: 63594

Date Analyzed: 2009-09-16

Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	97.3	97	85 - 115	2009-09-16

Standard (CCV-1)

QC Batch: 63594

Date Analyzed: 2009-09-16

Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	103	103	85 - 115	2009-09-16



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6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

Certifications

WBENC: 237019

HUB: 1752439743100-86536
NCTRCA WFWB38444Y0909

DBE: VN 20657

NELAP Certifications

Lubbock: T104704219-08-TX
LELAP-02003
Kansas E-10317

El Paso: T104704221-08-TX
LELAP-02002

Midland: T104704392-08-TX

Analytical and Quality Control Report

Ike Tavaréz
Tetra Tech
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: December 2, 2009

Work Order: 9112523



Project Location: Eddy Co., NM
Project Name: Belco SWD #1
Project Number: 114-6400290

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
215846	T-1 2'	soil	2009-11-24	00:00	2009-11-25
215847	T-1 4'	soil	2009-11-24	00:00	2009-11-25
215848	T-1 6'	soil	2009-11-24	00:00	2009-11-25
215849	T-1 8'	soil	2009-11-24	00:00	2009-11-25
215850	T-2 2'	soil	2009-11-24	00:00	2009-11-25
215851	T-2 4'	soil	2009-11-24	00:00	2009-11-25
215852	T-2 6'	soil	2009-11-24	00:00	2009-11-25
215853	T-3 2'	soil	2009-11-24	00:00	2009-11-25
215854	T-3 4'	soil	2009-11-24	00:00	2009-11-25
215855	T-3 6'	soil	2009-11-24	00:00	2009-11-25

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
215856	T-3 8'	soil	2009-11-24	00:00	2009-11-25
215857	T-3 10'	soil	2009-11-24	00:00	2009-11-25
215858	T-4 2'	soil	2009-11-24	00:00	2009-11-25
215859	T-4 4'	soil	2009-11-24	00:00	2009-11-25
215860	T-4 6'	soil	2009-11-24	00:00	2009-11-25
215861	T-4 8'	soil	2009-11-24	00:00	2009-11-25
215862	T-4 10'	soil	2009-11-24	00:00	2009-11-25
215863	T-5 2'	soil	2009-11-24	00:00	2009-11-25
215864	T-5 4'	soil	2009-11-24	00:00	2009-11-25
215865	T-5 6'	soil	2009-11-24	00:00	2009-11-25
215866	T-5 8'	soil	2009-11-24	00:00	2009-11-25
215867	T-5 10'	soil	2009-11-24	00:00	2009-11-25
215868	T-6 2'	soil	2009-11-24	00:00	2009-11-25
215869	T-6 4'	soil	2009-11-24	00:00	2009-11-25
215870	T-6 6'	soil	2009-11-24	00:00	2009-11-25
215871	T-6 8'	soil	2009-11-24	00:00	2009-11-25
215872	T-6 10'	soil	2009-11-24	00:00	2009-11-25
215873	T-7 2'	soil	2009-11-24	00:00	2009-11-25
215874	T-7 4'	soil	2009-11-24	00:00	2009-11-25
215875	T-7 6'	soil	2009-11-24	00:00	2009-11-25
215876	T-7 8'	soil	2009-11-24	00:00	2009-11-25
215877	T-7 10'	soil	2009-11-24	00:00	2009-11-25
215878	T-8 2'	soil	2009-11-24	00:00	2009-11-25
215879	T-8 4'	soil	2009-11-24	00:00	2009-11-25
215880	T-8 6'	soil	2009-11-24	00:00	2009-11-25
215881	T-9 2'	soil	2009-11-24	00:00	2009-11-25
215882	T-9 4'	soil	2009-11-24	00:00	2009-11-25
215883	T-10 2'	soil	2009-11-24	00:00	2009-11-25
215884	T-10 4'	soil	2009-11-24	00:00	2009-11-25
215885	T-10 6'	soil	2009-11-24	00:00	2009-11-25
215886	T-10 8'	soil	2009-11-24	00:00	2009-11-25
215887	T-10 10'	soil	2009-11-24	00:00	2009-11-25
215888	T-11 2'	soil	2009-11-24	00:00	2009-11-25
215889	T-11 4'	soil	2009-11-24	00:00	2009-11-25
215890	T-11 6'	soil	2009-11-24	00:00	2009-11-25
215891	T-11 8'	soil	2009-11-24	00:00	2009-11-25
215892	T-11 10'	soil	2009-11-24	00:00	2009-11-25
215893	T-12 2'	soil	2009-11-24	00:00	2009-11-25
215894	T-12 4'	soil	2009-11-24	00:00	2009-11-25
215895	T-13 2'	soil	2009-11-24	00:00	2009-11-25
215896	T-13 4'	soil	2009-11-24	00:00	2009-11-25
215897	T-14 2'	soil	2009-11-24	00:00	2009-11-25
215898	T-14 4'	soil	2009-11-24	00:00	2009-11-25
215899	Background 2'	soil	2009-11-24	00:00	2009-11-25
215900	Background 4'	soil	2009-11-24	00:00	2009-11-25
215901	Background 6'	soil	2009-11-24	00:00	2009-11-25

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
215902	Background 8'	soil	2009-11-24	00:00	2009-11-25
215903	Background 10'	soil	2009-11-24	00:00	2009-11-25

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

This report consists of a total of 27 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

Standard Flags

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

Case Narrative

Samples for project Belco SWD #1 were received by TraceAnalysis, Inc. on 2009-11-25 and assigned to work order 9112523. Samples for work order 9112523 were received intact at a temperature of 3.2 deg. 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	56121	2009-12-01 at 12:44	65688	2009-12-02 at 11:52
Chloride (Titration)	SM 4500-Cl B	56123	2009-12-01 at 10:45	65689	2009-12-02 at 11:53
Chloride (Titration)	SM 4500-Cl B	56124	2009-12-01 at 10:45	65691	2009-12-02 at 11:54
Chloride (Titration)	SM 4500-Cl B	56125	2009-12-01 at 10:46	65692	2009-12-02 at 11:56
Chloride (Titration)	SM 4500-Cl B	56126	2009-12-01 at 10:46	65693	2009-12-02 at 11:57
Chloride (Titration)	SM 4500-Cl B	56127	2009-12-01 at 10:46	65694	2009-12-02 at 11:58

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 9112523 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: 215846 - T-1 2'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65688	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56121				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2660	mg/Kg	100	4.00

Sample: 215847 - T-1 4'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65688	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56121				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1810	mg/Kg	50	4.00

Sample: 215848 - T-1 6'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65688	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56121				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		873	mg/Kg	50	4.00

Sample: 215849 - T-1 8'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65688	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56121				

continued ...

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sample 215849 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		526	mg/Kg	50	4.00

Sample: 215850 - T-2 2'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 65688 Date Analyzed: 2009-12-02 Analyzed By: AR
Prep Batch: 56121 Sample Preparation: 2009-12-01 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2500	mg/Kg	100	4.00

Sample: 215851 - T-2 4'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 65688 Date Analyzed: 2009-12-02 Analyzed By: AR
Prep Batch: 56121 Sample Preparation: 2009-12-01 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1080	mg/Kg	50	4.00

Sample: 215852 - T-2 6'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 65688 Date Analyzed: 2009-12-02 Analyzed By: AR
Prep Batch: 56121 Sample Preparation: 2009-12-01 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		470	mg/Kg	50	4.00

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Sample: 215853 - T-3 2'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65688	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56121				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		9250	mg/Kg	100	4.00

Sample: 215854 - T-3 4'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65688	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56121				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		8710	mg/Kg	100	4.00

Sample: 215855 - T-3 6'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65688	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56121				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1710	mg/Kg	50	4.00

Sample: 215856 - T-3 8'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65689	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56123				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1830	mg/Kg	50	4.00

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Eddy Co., NM

Sample: 215857 - T-3 10'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65689	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56123				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2100	mg/Kg	100	4.00

Sample: 215858 - T-4 2'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65689	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56123				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1170	mg/Kg	50	4.00

Sample: 215859 - T-4 4'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65689	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56123				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		3130	mg/Kg	100	4.00

Sample: 215860 - T-4 6'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65689	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56123				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		5130	mg/Kg	100	4.00

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Sample: 215861 - T-4 8'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65689	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56123				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		5530	mg/Kg	100	4.00

Sample: 215862 - T-4 10'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65689	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56123				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		4130	mg/Kg	100	4.00

Sample: 215863 - T-5 2'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65689	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56123				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		5600	mg/Kg	100	4.00

Sample: 215864 - T-5 4'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65689	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56123				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		3680	mg/Kg	100	4.00

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Sample: 215865 - T-5 6'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 65689 Date Analyzed: 2009-12-02 Analyzed By: AR
Prep Batch: 56123 Sample Preparation: 2009-12-01 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2990	mg/Kg	100	4.00

Sample: 215866 - T-5 8'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 65691 Date Analyzed: 2009-12-02 Analyzed By: AR
Prep Batch: 56124 Sample Preparation: 2009-12-01 Prepared By: AR

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

Sample: 215867 - T-5 10'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 65691 Date Analyzed: 2009-12-02 Analyzed By: AR
Prep Batch: 56124 Sample Preparation: 2009-12-01 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2640	mg/Kg	100	4.00

Sample: 215868 - T-6 2'

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 65691 Date Analyzed: 2009-12-02 Analyzed By: AR
Prep Batch: 56124 Sample Preparation: 2009-12-01 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2360	mg/Kg	100	4.00

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Sample: 215869 - T-6 4'

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65691	Date Analyzed:	2009-12-02
Prep Batch:	56124	Sample Preparation:	2009-12-01
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2830	mg/Kg	100	4.00

Sample: 215870 - T-6 6'

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65691	Date Analyzed:	2009-12-02
Prep Batch:	56124	Sample Preparation:	2009-12-01
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		3080	mg/Kg	100	4.00

Sample: 215871 - T-6 8'

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65691	Date Analyzed:	2009-12-02
Prep Batch:	56124	Sample Preparation:	2009-12-01
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2940	mg/Kg	100	4.00

Sample: 215872 - T-6 10'

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65691	Date Analyzed:	2009-12-02
Prep Batch:	56124	Sample Preparation:	2009-12-01
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2610	mg/Kg	100	4.00

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Sample: 215873 - T-7 2'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65691	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56124				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2000	mg/Kg	100	4.00

Sample: 215874 - T-7 4'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65691	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56124				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		5710	mg/Kg	100	4.00

Sample: 215875 - T-7 6'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65691	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56124				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		5360	mg/Kg	100	4.00

Sample: 215876 - T-7 8'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65692	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56125				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		3120	mg/Kg	100	4.00

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Sample: 215877 - T-7 10'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65692	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56125				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		5930	mg/Kg	100	4.00

Sample: 215878 - T-8 2'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65692	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56125				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		898	mg/Kg	50	4.00

Sample: 215879 - T-8 4'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65692	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56125				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		836	mg/Kg	50	4.00

Sample: 215880 - T-8 6'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65692	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56125				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		210	mg/Kg	50	4.00

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Sample: 215881 - T-9 2'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65692	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56125				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1040	mg/Kg	50	4.00

Sample: 215882 - T-9 4'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65692	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56125				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		354	mg/Kg	50	4.00

Sample: 215883 - T-10 2'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65692	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56125				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1650	mg/Kg	50	4.00

Sample: 215884 - T-10 4'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65692	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56125				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2430	mg/Kg	100	4.00

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Sample: 215885 - T-10 6'

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65692	Date Analyzed:	2009-12-02
Prep Batch:	56125	Sample Preparation:	2009-12-01
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1840	mg/Kg	50	4.00

Sample: 215886 - T-10 8'

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65693	Date Analyzed:	2009-12-02
Prep Batch:	56126	Sample Preparation:	2009-12-01
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1500	mg/Kg	50	4.00

Sample: 215887 - T-10 10'

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65693	Date Analyzed:	2009-12-02
Prep Batch:	56126	Sample Preparation:	2009-12-01
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2300	mg/Kg	100	4.00

Sample: 215888 - T-11 2'

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65693	Date Analyzed:	2009-12-02
Prep Batch:	56126	Sample Preparation:	2009-12-01
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2580	mg/Kg	100	4.00

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Sample: 215889 - T-11 4'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65693	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56126				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		3210	mg/Kg	100	4.00

Sample: 215890 - T-11 6'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65693	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56126				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2390	mg/Kg	100	4.00

Sample: 215891 - T-11 8'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65693	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56126				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1640	mg/Kg	50	4.00

Sample: 215892 - T-11 10'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2009-12-02	Analyzed By:	AR
QC Batch:	65693	Sample Preparation:	2009-12-01	Prepared By:	AR
Prep Batch:	56126				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		890	mg/Kg	50	4.00

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Sample: 215893 - T-12 2'

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65693	Date Analyzed:	2009-12-02
Prep Batch:	56126	Sample Preparation:	2009-12-01
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		326	mg/Kg	50	4.00

Sample: 215894 - T-12 4'

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65693	Date Analyzed:	2009-12-02
Prep Batch:	56126	Sample Preparation:	2009-12-01
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1480	mg/Kg	50	4.00

Sample: 215895 - T-13 2'

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65693	Date Analyzed:	2009-12-02
Prep Batch:	56126	Sample Preparation:	2009-12-01
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1820	mg/Kg	50	4.00

Sample: 215896 - T-13 4'

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65694	Date Analyzed:	2009-12-02
Prep Batch:	56127	Sample Preparation:	2009-12-01
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1320	mg/Kg	50	4.00

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Sample: 215897 - T-14 2'

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65694	Date Analyzed:	2009-12-02
Prep Batch:	56127	Sample Preparation:	2009-12-01
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL	Units	Dilution	RL
		Result			
Chloride		1400	mg/Kg	50	4.00

Sample: 215898 - T-14 4'

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65694	Date Analyzed:	2009-12-02
Prep Batch:	56127	Sample Preparation:	2009-12-01
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL	Units	Dilution	RL
		Result			
Chloride		1240	mg/Kg	50	4.00

Sample: 215899 - Background 2'

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65694	Date Analyzed:	2009-12-02
Prep Batch:	56127	Sample Preparation:	2009-12-01
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL	Units	Dilution	RL
		Result			
Chloride		3510	mg/Kg	100	4.00

Sample: 215900 - Background 4'

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65694	Date Analyzed:	2009-12-02
Prep Batch:	56127	Sample Preparation:	2009-12-01
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL	Units	Dilution	RL
		Result			
Chloride		3660	mg/Kg	100	4.00

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Sample: 215901 - Background 6'

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65694	Date Analyzed:	2009-12-02
Prep Batch:	56127	Sample Preparation:	2009-12-01
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2090	mg/Kg	50	4.00

Sample: 215902 - Background 8'

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65694	Date Analyzed:	2009-12-02
Prep Batch:	56127	Sample Preparation:	2009-12-01
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		3010	mg/Kg	100	4.00

Sample: 215903 - Background 10'

Laboratory:	Midland		
Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B
QC Batch:	65694	Date Analyzed:	2009-12-02
Prep Batch:	56127	Sample Preparation:	2009-12-01
		Prep Method:	N/A
		Analyzed By:	AR
		Prepared By:	AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1580	mg/Kg	50	4.00

Method Blank (1) QC Batch: 65688

QC Batch:	65688	Date Analyzed:	2009-12-02	Analyzed By:	AR
Prep Batch:	56121	QC Preparation:	2009-12-01	Prepared By:	AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

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Method Blank (1) QC Batch: 65689

QC Batch: 65689 Date Analyzed: 2009-12-02 Analyzed By: AR
Prep Batch: 56123 QC Preparation: 2009-12-01 Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Method Blank (1) QC Batch: 65691

QC Batch: 65691 Date Analyzed: 2009-12-02 Analyzed By: AR
Prep Batch: 56124 QC Preparation: 2009-12-01 Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Method Blank (1) QC Batch: 65692

QC Batch: 65692 Date Analyzed: 2009-12-02 Analyzed By: AR
Prep Batch: 56125 QC Preparation: 2009-12-01 Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Method Blank (1) QC Batch: 65693

QC Batch: 65693 Date Analyzed: 2009-12-02 Analyzed By: AR
Prep Batch: 56126 QC Preparation: 2009-12-01 Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

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Method Blank (1) QC Batch: 65694

QC Batch: 65694 Date Analyzed: 2009-12-02 Analyzed By: AR
Prep Batch: 56127 QC Preparation: 2009-12-01 Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Laboratory Control Spike (LCS-1)

QC Batch: 65688 Date Analyzed: 2009-12-02 Analyzed By: AR
Prep Batch: 56121 QC Preparation: 2009-12-01 Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	99.3	mg/Kg	1	100	<2.18	99	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	101	mg/Kg	1	100	<2.18	101	85 - 115	2	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: 65689 Date Analyzed: 2009-12-02 Analyzed By: AR
Prep Batch: 56123 QC Preparation: 2009-12-01 Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	98.9	mg/Kg	1	100	<2.18	99	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	100	mg/Kg	1	100	<2.18	100	85 - 115	1	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 65691 Date Analyzed: 2009-12-02 Analyzed By: AR
Prep Batch: 56124 QC Preparation: 2009-12-01 Prepared By: AR

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Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	101	mg/Kg	1	100	<2.18	101	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	99.1	mg/Kg	1	100	<2.18	99	85 - 115	2	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: 65692
Prep Batch: 56125

Date Analyzed: 2009-12-02
QC Preparation: 2009-12-01

Analyzed By: AR
Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	98.8	mg/Kg	1	100	<2.18	99	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	100	mg/Kg	1	100	<2.18	100	85 - 115	1	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 65693
Prep Batch: 56126

Date Analyzed: 2009-12-02
QC Preparation: 2009-12-01

Analyzed By: AR
Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	101	mg/Kg	1	100	<2.18	101	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	99.8	mg/Kg	1	100	<2.18	100	85 - 115	1	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 65694
Prep Batch: 56127

Date Analyzed: 2009-12-02
QC Preparation: 2009-12-01

Analyzed By: AR
Prepared By: AR

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Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	98.5	mg/Kg	1	100	<2.18	98	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	100	mg/Kg	1	100	<2.18	100	85 - 115	2	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: 215855

QC Batch: 65688
Prep Batch: 56121

Date Analyzed: 2009-12-02
QC Preparation: 2009-12-01

Analyzed By: AR
Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	11800	mg/Kg	100	10000	1710	101	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	12000	mg/Kg	100	10000	1710	103	85 - 115	2	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: 215865

QC Batch: 65689
Prep Batch: 56123

Date Analyzed: 2009-12-02
QC Preparation: 2009-12-01

Analyzed By: AR
Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	13000	mg/Kg	100	10000	2990	100	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	13100	mg/Kg	100	10000	2990	101	85 - 115	1	20

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

Matrix Spike (MS-1) Spiked Sample: 215875

QC Batch: 65691
Prep Batch: 56124

Date Analyzed: 2009-12-02
QC Preparation: 2009-12-01

Analyzed By: AR
Prepared By: AR

Report Date: December 2, 2009
114-6400290

Work Order: 9112523
Belco SWD #1

Page Number: 24 of 27
Eddy Co., NM

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	15400	mg/Kg	100	10000	5360	100	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	15500	mg/Kg	100	10000	5360	101	85 - 115	1	20

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

Matrix Spike (MS-1) Spiked Sample: 215885

QC Batch: 65692
Prep Batch: 56125

Date Analyzed: 2009-12-02
QC Preparation: 2009-12-01

Analyzed By: AR
Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	11800	mg/Kg	100	10000	1840	100	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	12200	mg/Kg	100	10000	1840	104	85 - 115	3	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: 215895

QC Batch: 65693
Prep Batch: 56126

Date Analyzed: 2009-12-02
QC Preparation: 2009-12-01

Analyzed By: AR
Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	12100	mg/Kg	100	10000	1820	103	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	12400	mg/Kg	100	10000	1820	106	85 - 115	2	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: 215903

QC Batch: 65694
Prep Batch: 56127

Date Analyzed: 2009-12-02
QC Preparation: 2009-12-01

Analyzed By: AR
Prepared By: AR

Report Date: December 2, 2009
114-6400290

Work Order: 9112523
Belco SWD #1

Page Number: 25 of 27
Eddy Co., NM

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	11600	mg/Kg	100	10000	1580	100	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	12000	mg/Kg	100	10000	1580	104	85 - 115	3	20

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

Standard (ICV-1)

QC Batch: 65688

Date Analyzed: 2009-12-02

Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2009-12-02

Standard (CCV-1)

QC Batch: 65688

Date Analyzed: 2009-12-02

Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2009-12-02

Standard (ICV-1)

QC Batch: 65689

Date Analyzed: 2009-12-02

Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.6	100	85 - 115	2009-12-02

Standard (CCV-1)

QC Batch: 65689

Date Analyzed: 2009-12-02

Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2009-12-02

Report Date: December 2, 2009
114-6400290

Work Order: 9112523
Belco SWD #1

Page Number: 26 of 27
Eddy Co., NM

Standard (ICV-1)

QC Batch: 65691

Date Analyzed: 2009-12-02

Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2009-12-02

Standard (CCV-1)

QC Batch: 65691

Date Analyzed: 2009-12-02

Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.5	100	85 - 115	2009-12-02

Standard (ICV-1)

QC Batch: 65692

Date Analyzed: 2009-12-02

Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2009-12-02

Standard (CCV-1)

QC Batch: 65692

Date Analyzed: 2009-12-02

Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.8	100	85 - 115	2009-12-02

Standard (ICV-1)

QC Batch: 65693

Date Analyzed: 2009-12-02

Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2009-12-02

Report Date: December 2, 2009
114-6400290

Work Order: 9112523
Belco SWD #1

Page Number: 27 of 27
Eddy Co., NM

Standard (CCV-1)

QC Batch: 65693

Date Analyzed: 2009-12-02

Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.3	99	85 - 115	2009-12-02

Standard (ICV-1)

QC Batch: 65694

Date Analyzed: 2009-12-02

Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	98.8	99	85 - 115	2009-12-02

Standard (CCV-1)

QC Batch: 65694

Date Analyzed: 2009-12-02

Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2009-12-02

Order #: 9112523

Analysis Request of Chain of Custody Record

PAGE: 1 OF: 2

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

CLIENT NAME: Basic		SITE MANAGER: ZK Tavaraz	
PROJECT NO.: 114-640290		PROJECT NAME: Basic / Belco 420 #1	
LAB I.D. NUMBER	DATE	TIME	SAMPLE IDENTIFICATION
215846	11/24	11:24	Eddy Co, NM
847		7-1	2'
848		7-1	4'
849		7-1	6'
850		7-1	8'
851		7-2	2'
852		7-2	4'
		7-2	6'
		7-2	8'
		7-2	10'

RELINQUISHED BY: (Signature)	Date: 11/25	Time: 10:10	RECEIVED BY: (Signature)	Date: 11/25	Time: 10:10
RELINQUISHED BY: (Signature)	Date: 11/25	Time: 10:10	RECEIVED BY: (Signature)	Date: 11/25	Time: 10:10
RELINQUISHED BY: (Signature)	Date: 11/25	Time: 10:10	RECEIVED BY: (Signature)	Date: 11/25	Time: 10:10
RECEIVING LABORATORY:	STATE: TX	ZIP: 79705	DATE: 11/25	TIME: 10:10	

SAMPLE CONDITION WHEN RECEIVED:

32c intact

REMARKS:

All tests - Midland

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
(Circle or Specify Method No.)

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. 8270/825	PCB's 8080/808	Pest. 808/808	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, PH, TDS
												X				

SAMPLED BY: (Print & Initial)

Date: 11/25

Time: 11:24

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

UPS

AIRBILL #:

OTHER:

Results by:

RUSH Charges

Authorized:

Yes

No

PAGE: 3 OF: 8

ANALYSIS REQUEST
(Circle or Specify Method No.)



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

SAMPLE CONDITION WHEN RECEIVED: 3.2°C intact	REMARKS:	ASSAULTING RESULTS (GOLD COPY)
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MAVE
Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

PAGE: 4 OF: 8

Analysis Request of Chain of Custody Record



TETRA TECH

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

CLIENT NAME:		PROJECT NAME:		SITE MANAGER:		PRESERVATIVE METHOD	
114-440290		Basic		Ike Alvarez		HCL	
PROJECT NO.:		PROJECT NAME:		BASIC / Bulco Blvd #1		HNO3	
114-440290		BASIC / Eddy Co, NM		Eddy Co, NM		ICE	
LAB I.D. NUMBER		DATE		TIME		FILTERED (Y/N)	
25873		2009		11/24		NUMBER OF CONTAINERS	
874		2009		11/24		1	
875		2009		11/24		1	
876		2009		11/24		1	
877		2009		11/24		1	
878		2009		11/24		1	
879		2009		11/24		1	
880		2009		11/24		1	
881		2009		11/24		1	
882		2009		11/24		1	
883		2009		11/24		1	
884		2009		11/24		1	
885		2009		11/24		1	
886		2009		11/24		1	
887		2009		11/24		1	
888		2009		11/24		1	
889		2009		11/24		1	
890		2009		11/24		1	
891		2009		11/24		1	
892		2009		11/24		1	
893		2009		11/24		1	
894		2009		11/24		1	
895		2009		11/24		1	
896		2009		11/24		1	
897		2009		11/24		1	
898		2009		11/24		1	
899		2009		11/24		1	
900		2009		11/24		1	
901		2009		11/24		1	
902		2009		11/24		1	
903		2009		11/24		1	
904		2009		11/24		1	
905		2009		11/24		1	
906		2009		11/24		1	
907		2009		11/24		1	
908		2009		11/24		1	
909		2009		11/24		1	
910		2009		11/24		1	
911		2009		11/24		1	
912		2009		11/24		1	
913		2009		11/24		1	
914		2009		11/24		1	
915		2009		11/24		1	
916		2009		11/24		1	
917		2009		11/24		1	
918		2009		11/24		1	
919		2009		11/24		1	
920		2009		11/24		1	
921		2009		11/24		1	
922		2009		11/24		1	
923		2009		11/24		1	
924		2009		11/24		1	
925		2009		11/24		1	
926		2009		11/24		1	
927		2009		11/24		1	
928		2009		11/24		1	
929		2009		11/24		1	
930		2009		11/24		1	
931		2009		11/24		1	
932		2009		11/24		1	
933		2009		11/24		1	
934		2009		11/24		1	
935		2009		11/24		1	
936		2009		11/24		1	
937		2009		11/24		1	
938		2009		11/24		1	
939		2009		11/24		1	
940		2009		11			

CONTACT:

3000 Act

3001 A557

1. **Project Manager retains Pink copy** - Accounting received 1/25/01
 2. **Project Manager retains Yellow copy** - Return Original copy to Tetra Tech
 3. **Laboratory retains Yellow copy** - Laboratory retains Yellow copy
 4. **Project Manager retains Pink copy** - Accounting received 1/25/01

Analysis Request of Chain of Custody Record

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OF:

100

ANALYSIS REQUEST
(Circle or Specify Method No.)

TETRA TECH

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

CLIENT NAME: Basic		PROJECT NAME: Basic / Belco GWD #1		SITE MANAGER: Ike Tavarie		PRESERVATIVE METHOD	
PROJECT NO: 141-400250		PROJECT NAME: Basic / Belco GWD #1		SITE MANAGER: Ike Tavarie		PRESERVATIVE METHOD	
LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	
881	11/24		S		X	T-9	2'
882						T-9	4'
						T-9	6'
						T-9	8'
						T-9	10'
883						T-10	2'
884						T-10	4'
885						T-10	6'
886						T-10	8'
887						T-10	10'
RELINQUISHED BY: (Signature)		Date: 11/25/03		Time: 1010		RECEIVED BY: (Signature)	
RELINQUISHED BY: (Signature)		Date: 10/10		Time: 1010		RECEIVED BY: (Signature)	
RELINQUISHED BY: (Signature)		Date: 10/10		Time: 1010		RECEIVED BY: (Signature)	
RELINQUISHED BY: (Signature)		Date: 10/10		Time: 1010		RECEIVED BY: (Signature)	
RECEIVING LABORATORY: Traction		Date: 11/25/03		Time: 1010		RECEIVED BY: (Signature)	
ADDRESS: 1111111111		City: 1111111111		State: 1111111111		ZIP: 1111111111	
CONTACT: 1111111111		Phone: 1111111111		Date: 11/25/03		Time: 1010	

SAMPLED BY: (Print & Initial)		Date: 11/24/07	
		Time:	
SAMPLE SHIPPED BY: (Circle)		AIRBILL #:	
FEDEX			
BUS		OTHER:	
GRAND DELIVERED			
TETRA TECH CONTACT PERSON:		Results by:	
Ike Tavaraz		RUSH Charges Authorized:	
		Yes	
		No	

REMARKS:

SAMPLE CONDITION WHEN RECEIVED:

infect

W0# : 9112528

Analysis Request of Chain of Custody Record

PAGE: 6 OF: 8

ANALYSIS REQUEST
(Circle or Specify Method No.)



TETRA TECH

1910 N. Big Spring St.
Midland, Texas 79706
(432) 682-4559 • Fax (432) 682-3946

CLIENT NAME: <u>Basic</u>		SITE MANAGER: <u>Ike Tovar</u>	
PROJECT NO.: <u>114-4400290</u>		PROJECT NAME: <u>Basic / 3x10 6400' ±1</u>	
LAB I.D. NUMBER	DATE	TIME	SAMPLE IDENTIFICATION
	2004		
205880	11/24		T-11 2'
089			T-11 4'
890			T-11 6'
891			T-11 8'
892			T-11 10'
893			T-12 2'
894			T-12 4'
			T-12 6'
			T-12 8'
			T-12 10'
RELINQUISHED BY: (Signature) <u>[Signature]</u>		Date: <u>11/25/09</u>	Time: <u>10:10</u>
RELINQUISHED BY: (Signature) <u>[Signature]</u>		Date: <u>11/25/09</u>	Time: <u>10:10</u>
RELINQUISHED BY: (Signature) <u>[Signature]</u>		Date: <u>11/25/09</u>	Time: <u>10:10</u>
RECEIVING LABORATORY: <u>TETRA</u>		RECEIVED BY: (Signature) <u>[Signature]</u>	
CITY: <u>Midland</u> STATE: <u>TX</u> ZIP: <u>79701</u>		RECEIVED BY: (Signature) <u>[Signature]</u>	
CONTACT: <u>3.25c intact</u>		RECEIVED BY: (Signature) <u>[Signature]</u>	
REMARKS: <u>3.25c intact</u>		RECEIVED BY: (Signature) <u>[Signature]</u>	

TPH 8018 MOD. TX1005 (Ed. to C30)	
PAH 8270	
PCRA 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. 8240/8280/824	
GC/MS Semi. Vol. 8270/828	
PCB's 8060/808	
PCB's 808/808	
Gamma Spec.	
Alpha Beta (A/B)	
PLM (Asbestos)	
Major Anions/Cations, pH, TDS	

SAMPLE SHIPPED BY: (Signature) <u>[Signature]</u>		Date: <u>11/25/09</u>	Time: <u>10:10</u>
SAMPLE SHIPPED BY: (Signature) <u>[Signature]</u>		Date: <u>11/25/09</u>	Time: <u>10:10</u>
SAMPLE SHIPPED BY: (Signature) <u>[Signature]</u>		Date: <u>11/25/09</u>	Time: <u>10:10</u>
RECEIVING LABORATORY: <u>TETRA</u>		RECEIVED BY: (Signature) <u>[Signature]</u>	
CITY: <u>Midland</u> STATE: <u>TX</u> ZIP: <u>79701</u>		RECEIVED BY: (Signature) <u>[Signature]</u>	
CONTACT: <u>3.25c intact</u>		RECEIVED BY: (Signature) <u>[Signature]</u>	
REMARKS: <u>3.25c intact</u>		RECEIVED BY: (Signature) <u>[Signature]</u>	

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

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OF: 8

ANALYSIS REQUEST
(Circle or Specify Method No.)

TETRA TECH

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

CLIENT NAME: Basic				SITE MANAGER: Ike Tavaroz			
PROJECT NO.: 114-6400290		PROJECT NAME: Basic / Belco SWD # 1		SAMPLE IDENTIFICATION			
LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB		
895	11/24		S		X	T-13	2'
896						T-13	4'
						T-13	6'
						T-13	8'
						T-13	10'
897						T-14	2'
898						T-14	4'
						T-14	6'
						T-14	8'
						T-14	10'

PRESERVATIVE METHOD		NUMBER OF CONTAINERS		FILTERED (Y/N)	
HCL	HNO3	ICE	NONE		
		X			

RELINQUISHED BY: (Signature)		RECEIVED BY: (Signature)	
Date:	Time:	Date:	Time:
11/25/03	12:18	11/25/03	10:10

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

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

RECEIVING LABORATORY: TPL		DATE: DATE	
ADDRESS:	STATE: TX	ZIP:	PHONE:
Midland			

REMARKS:

SAMPLE CONDITION WHEN RECEIVED:

3.2° intact

12/1/05
 1 - Accounting retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

WO#: 9112523

Analysis Request of Chain of Custody Record

PAGE: 8 OF: 8



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

SITE MANAGER: *Ike Tavaraz*

CLIENT NAME: *Basic*

PROJECT NO.: *114-4100290*

PROJECT NAME: *Basic / 3510 SWD #1*

SAMPLE IDENTIFICATION

LAB I.D. NUMBER

DATE

TIME

MATRIX

COMB

GRAB

NUMBER OF CONTAINERS

FILTERED (Y/N)

PRESERVATIVE METHOD

HCL

HNO3

ICE

NONE

BTEX 8021B
TPH 8015 MOD. TX1006 (Ext. to C38)
PAH 8270
RCRA Metals Ag As Ba Cd Cr Pb Hg Se
TCRP Metals Ag As Ba Cd Vr Pd Hg Se
TCRP Volatiles
TCRP Semi Volatiles
RCI
GC/MS Vol. 8240/8280/824
GC/MS Semi. Vol. 8270/8225
PCB's 8080/808
Post. 808/808
Chloride
Gamma Spec.
Alpha Beta (A1)
PLM (Asbestos)
Major Anions/Cations, pH, TDS

RELINQUISHED BY: (Signature) *[Signature]* Date: *4/25/03* Time: *10:10*
RECEIVED BY: (Signature) *[Signature]* Date: *4/25/03* Time: *10:10*
RELINQUISHED BY: (Signature) *[Signature]* Date: *4/25/03* Time: *10:10*
RECEIVED BY: (Signature) *[Signature]* Date: *4/25/03* Time: *10:10*
RELINQUISHED BY: (Signature) *[Signature]* Date: *4/25/03* Time: *10:10*
RECEIVED BY: (Signature) *[Signature]* Date: *4/25/03* Time: *10:10*

RECEIVING LABORATORY: *Tetra Tech*
ADDRESS: *Midland* STATE: *TX* ZIP: *79705*
CONTACT: *Basic* PHONE: *682-4559* DATE: *4/25/03* TIME: *10:10*

REMARKS:

SAMPLE CONDITION WHEN RECEIVED: *3.2°C Intact*

Results by: *Ike Tavaraz*

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.



6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
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 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail lab@traceanalysis.com

Certifications

WBENC: 237019

HUB: 1752439743100-86536
NCTRCA WFWB38444Y0909

DBE: VN 20657

NELAP Certifications

Lubbock: T104704219-08-TX
LELAP-02003
Kansas E-10317

El Paso: T104704221-08-TX
LELAP-02002

Midland: T104704392-08-TX

Analytical and Quality Control Report

Ike Tavarez
Tetra Tech
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: April 5, 2010

Work Order: 10032909



Project Location: Eddy Co., NM
Project Name: Belco SWD #1
Project Number: 114-6400290

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
226831	BH-1 (15')	soil	2010-03-25	00:00	2010-03-26
226833	BH-2 (15')	soil	2010-03-25	00:00	2010-03-26
226835	BH-3 (15')	soil	2010-03-25	00:00	2010-03-26
226837	BH-4 (15')	soil	2010-03-25	00:00	2010-03-26
226839	BH-5 (2')	soil	2010-03-25	00:00	2010-03-26
226840	BH-5 (4')	soil	2010-03-25	00:00	2010-03-26
226841	BH-5 (6')	soil	2010-03-25	00:00	2010-03-26
226842	BH-5 (8')	soil	2010-03-25	00:00	2010-03-26
226843	BH-5 (10')	soil	2010-03-25	00:00	2010-03-26
226844	BH-5 (15')	soil	2010-03-25	00:00	2010-03-26

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
226846	BH-6 (2')	soil	2010-03-25	00:00	2010-03-26
226847	BH-6 (4')	soil	2010-03-25	00:00	2010-03-26
226848	BH-6 (6')	soil	2010-03-25	00:00	2010-03-26
226849	BH-6 (8')	soil	2010-03-25	00:00	2010-03-26
226850	BH-6 (10')	soil	2010-03-25	00:00	2010-03-26
226851	BH-6 (15')	soil	2010-03-25	00:00	2010-03-26
226853	BH-7 (2')	soil	2010-03-25	00:00	2010-03-26
226854	BH-7 (4')	soil	2010-03-25	00:00	2010-03-26
226855	BH-7 (6')	soil	2010-03-25	00:00	2010-03-26
226856	BH-7 (8')	soil	2010-03-25	00:00	2010-03-26
226857	BH-7 (10')	soil	2010-03-25	00:00	2010-03-26
226858	BH-7 (15')	soil	2010-03-25	00:00	2010-03-26
226860	BH-8 (2')	soil	2010-03-25	00:00	2010-03-26
226861	BH-8 (4')	soil	2010-03-25	00:00	2010-03-26
226862	BH-8 (6')	soil	2010-03-25	00:00	2010-03-26
226863	BH-8 (8')	soil	2010-03-25	00:00	2010-03-26
226864	BH-8 (10')	soil	2010-03-25	00:00	2010-03-26
226865	BH-8 (15')	soil	2010-03-25	00:00	2010-03-26

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 16 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

Standard Flags

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

Case Narrative

Samples for project Belco SWD #1 were received by TraceAnalysis, Inc. on 2010-03-26 and assigned to work order 10032909. Samples for work order 10032909 were received intact at a temperature of 21.0 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	58759	2010-03-29 at 11:24	68747	2010-03-31 at 14:21
Chloride (Titration)	SM 4500-Cl B	58760	2010-03-29 at 11:24	68746	2010-03-31 at 14:20
Chloride (Titration)	SM 4500-Cl B	58761	2010-03-29 at 11:25	68833	2010-04-05 at 13:39
Chloride (Titration)	SM 4500-Cl B	58762	2010-03-29 at 11:25	68834	2010-04-05 at 13:40

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 10032909 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.

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Eddy Co., NM

Analytical Report

Sample: 226831 - BH-1 (15')

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-03-31	Analyzed By:	AR
QC Batch:	68747	Sample Preparation:	2010-03-29	Prepared By:	AR
Prep Batch:	58759				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		3630	mg/Kg	100	4.00

Sample: 226833 - BH-2 (15')

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-03-31	Analyzed By:	AR
QC Batch:	68747	Sample Preparation:	2010-03-29	Prepared By:	AR
Prep Batch:	58759				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		6050	mg/Kg	100	4.00

Sample: 226835 - BH-3 (15')

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-03-31	Analyzed By:	AR
QC Batch:	68747	Sample Preparation:	2010-03-29	Prepared By:	AR
Prep Batch:	58759				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1320	mg/Kg	50	4.00

Sample: 226837 - BH-4 (15')

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-03-31	Analyzed By:	AR
QC Batch:	68747	Sample Preparation:	2010-03-29	Prepared By:	AR
Prep Batch:	58759				

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Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2170	mg/Kg	100	4.00

Sample: 226839 - BH-5 (2')

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 68747 Date Analyzed: 2010-03-31 Analyzed By: AR
Prep Batch: 58759 Sample Preparation: 2010-03-29 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		713	mg/Kg	50	4.00

Sample: 226840 - BH-5 (4')

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 68747 Date Analyzed: 2010-03-31 Analyzed By: AR
Prep Batch: 58759 Sample Preparation: 2010-03-29 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		501	mg/Kg	50	4.00

Sample: 226841 - BH-5 (6')

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 68747 Date Analyzed: 2010-03-31 Analyzed By: AR
Prep Batch: 58759 Sample Preparation: 2010-03-29 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		899	mg/Kg	50	4.00

Sample: 226842 - BH-5 (8')

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 68746 Date Analyzed: 2010-03-31 Analyzed By: AR
Prep Batch: 58760 Sample Preparation: 2010-03-29 Prepared By: AR

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Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1740	mg/Kg	50	4.00

Sample: 226843 - BH-5 (10')

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 68746 Date Analyzed: 2010-03-31 Analyzed By: AR
Prep Batch: 58760 Sample Preparation: 2010-03-29 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2750	mg/Kg	100	4.00

Sample: 226844 - BH-5 (15')

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 68746 Date Analyzed: 2010-03-31 Analyzed By: AR
Prep Batch: 58760 Sample Preparation: 2010-03-29 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1220	mg/Kg	50	4.00

Sample: 226846 - BH-6 (2')

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 68746 Date Analyzed: 2010-03-31 Analyzed By: AR
Prep Batch: 58760 Sample Preparation: 2010-03-29 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		8990	mg/Kg	100	4.00

Sample: 226847 - BH-6 (4')

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 68746 Date Analyzed: 2010-03-31 Analyzed By: AR
Prep Batch: 58760 Sample Preparation: 2010-03-29 Prepared By: AR

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Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		9550	mg/Kg	100	4.00

Sample: 226848 - BH-6 (6')

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 68746 Date Analyzed: 2010-03-31 Analyzed By: AR
Prep Batch: 58760 Sample Preparation: 2010-03-29 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		4490	mg/Kg	100	4.00

Sample: 226849 - BH-6 (8')

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 68746 Date Analyzed: 2010-03-31 Analyzed By: AR
Prep Batch: 58760 Sample Preparation: 2010-03-29 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		4310	mg/Kg	100	4.00

Sample: 226850 - BH-6 (10')

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 68746 Date Analyzed: 2010-03-31 Analyzed By: AR
Prep Batch: 58760 Sample Preparation: 2010-03-29 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		4230	mg/Kg	100	4.00

Sample: 226851 - BH-6 (15')

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 68746 Date Analyzed: 2010-03-31 Analyzed By: AR
Prep Batch: 58760 Sample Preparation: 2010-03-29 Prepared By: AR

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Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2910	mg/Kg	100	4.00

Sample: 226853 - BH-7 (2')

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 68746 Date Analyzed: 2010-03-31 Analyzed By: AR
Prep Batch: 58760 Sample Preparation: 2010-03-29 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		8510	mg/Kg	100	4.00

Sample: 226854 - BH-7 (4')

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 68833 Date Analyzed: 2010-04-05 Analyzed By: AR
Prep Batch: 58761 Sample Preparation: 2010-03-29 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		5010	mg/Kg	100	4.00

Sample: 226855 - BH-7 (6')

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 68833 Date Analyzed: 2010-04-05 Analyzed By: AR
Prep Batch: 58761 Sample Preparation: 2010-03-29 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		3060	mg/Kg	100	4.00

Sample: 226856 - BH-7 (8')

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 68833 Date Analyzed: 2010-04-05 Analyzed By: AR
Prep Batch: 58761 Sample Preparation: 2010-03-29 Prepared By: AR

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Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2740	mg/Kg	100	4.00

Sample: 226857 - BH-7 (10')

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 68833 Date Analyzed: 2010-04-05 Analyzed By: AR
Prep Batch: 58761 Sample Preparation: 2010-03-29 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		4370	mg/Kg	100	4.00

Sample: 226858 - BH-7 (15')

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 68833 Date Analyzed: 2010-04-05 Analyzed By: AR
Prep Batch: 58761 Sample Preparation: 2010-03-29 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2270	mg/Kg	100	4.00

Sample: 226860 - BH-8 (2')

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 68833 Date Analyzed: 2010-04-05 Analyzed By: AR
Prep Batch: 58761 Sample Preparation: 2010-03-29 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2110	mg/Kg	50	4.00

Sample: 226861 - BH-8 (4')

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 68833 Date Analyzed: 2010-04-05 Analyzed By: AR
Prep Batch: 58761 Sample Preparation: 2010-03-29 Prepared By: AR

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Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		5480	mg/Kg	100	4.00

Sample: 226862 - BH-8 (6')

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 68833 Date Analyzed: 2010-04-05 Analyzed By: AR
Prep Batch: 58761 Sample Preparation: 2010-03-29 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		3970	mg/Kg	100	4.00

Sample: 226863 - BH-8 (8')

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 68833 Date Analyzed: 2010-04-05 Analyzed By: AR
Prep Batch: 58761 Sample Preparation: 2010-03-29 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		3730	mg/Kg	100	4.00

Sample: 226864 - BH-8 (10')

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 68833 Date Analyzed: 2010-04-05 Analyzed By: AR
Prep Batch: 58761 Sample Preparation: 2010-03-29 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2760	mg/Kg	100	4.00

Sample: 226865 - BH-8 (15')

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 68834 Date Analyzed: 2010-04-05 Analyzed By: AR
Prep Batch: 58762 Sample Preparation: 2010-04-05 Prepared By: AR

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Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		964	mg/Kg	50	4.00

Method Blank (1) QC Batch: 68746

QC Batch: 68746 Date Analyzed: 2010-03-31 Analyzed By: AR
Prep Batch: 58760 QC Preparation: 2010-03-29 Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Method Blank (1) QC Batch: 68747

QC Batch: 68747 Date Analyzed: 2010-03-31 Analyzed By: AR
Prep Batch: 58759 QC Preparation: 2010-03-29 Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Method Blank (1) QC Batch: 68833

QC Batch: 68833 Date Analyzed: 2010-04-05 Analyzed By: AR
Prep Batch: 58761 QC Preparation: 2010-03-29 Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Method Blank (1) QC Batch: 68834

QC Batch: 68834 Date Analyzed: 2010-04-05 Analyzed By: AR
Prep Batch: 58762 QC Preparation: 2010-03-29 Prepared By: AR

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method blank continued ...

Parameter	Flag	MDL Result	Units	RL
Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Laboratory Control Spike (LCS-1)

QC Batch: 68746 Date Analyzed: 2010-03-31 Analyzed By: AR
Prep Batch: 58760 QC Preparation: 2010-03-29 Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	99.3	mg/Kg	1	100	<2.18	99	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	100	mg/Kg	1	100	<2.18	100	85 - 115	1	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 68747 Date Analyzed: 2010-03-31 Analyzed By: AR
Prep Batch: 58759 QC Preparation: 2010-03-29 Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	99.0	mg/Kg	1	100	<2.18	99	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	100	mg/Kg	1	100	<2.18	100	85 - 115	1	20

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

Laboratory Control Spike (LCS-1)

QC Batch: 68833 Date Analyzed: 2010-04-05 Analyzed By: AR
Prep Batch: 58761 QC Preparation: 2010-03-29 Prepared By: AR

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Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	97.2	mg/Kg	1	100	<2.18	97	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	99.1	mg/Kg	1	100	<2.18	99	85 - 115	2	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: 68834 Date Analyzed: 2010-04-05 Analyzed By: AR
Prep Batch: 58762 QC Preparation: 2010-03-29 Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	98.0	mg/Kg	1	100	<2.18	98	85 - 115

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	99.6	mg/Kg	1	100	<2.18	100	85 - 115	2	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: 226853

QC Batch: 68746 Date Analyzed: 2010-03-31 Analyzed By: AR
Prep Batch: 58760 QC Preparation: 2010-03-29 Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	18400	mg/Kg	100	10000	8510	99	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	18600	mg/Kg	100	10000	8510	101	85 - 115	1	20

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

Matrix Spike (MS-1) Spiked Sample: 226841

QC Batch: 68747 Date Analyzed: 2010-03-31 Analyzed By: AR
Prep Batch: 58759 QC Preparation: 2010-03-29 Prepared By: AR

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Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	11300	mg/Kg	100	10000	899	104	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	11400	mg/Kg	100	10000	899	105	85 - 115	1	20

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

Matrix Spike (MS-1) Spiked Sample: 226864

QC Batch: 68833
Prep Batch: 58761

Date Analyzed: 2010-04-05
QC Preparation: 2010-03-29

Analyzed By: AR
Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	12700	mg/Kg	100	10000	2760	99	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	12900	mg/Kg	100	10000	2760	101	85 - 115	2	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: 227118

QC Batch: 68834
Prep Batch: 58762

Date Analyzed: 2010-04-05
QC Preparation: 2010-03-29

Analyzed By: AR
Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	10400	mg/Kg	100	10000	374	100	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	10600	mg/Kg	100	10000	374	102	85 - 115	2	20

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

Standard (ICV-1)

QC Batch: 68746

Date Analyzed: 2010-03-31

Analyzed By: AR

Report Date: April 5, 2010
114-6400290

Work Order: 10032909
Belco SWD #1

Page Number: 15 of 16
Eddy Co., NM

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	102	102	85 - 115	2010-03-31

Standard (CCV-1)

QC Batch: 68746

Date Analyzed: 2010-03-31

Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	97.9	98	85 - 115	2010-03-31

Standard (ICV-1)

QC Batch: 68747

Date Analyzed: 2010-03-31

Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	98.5	98	85 - 115	2010-03-31

Standard (CCV-1)

QC Batch: 68747

Date Analyzed: 2010-03-31

Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	102	102	85 - 115	2010-03-31

Standard (ICV-1)

QC Batch: 68833

Date Analyzed: 2010-04-05

Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	98.3	98	85 - 115	2010-04-05

Standard (CCV-1)

QC Batch: 68833

Date Analyzed: 2010-04-05

Analyzed By: AR

Report Date: April 5, 2010
114-6400290

Work Order: 10032909
Belco SWD #1

Page Number: 16 of 16
Eddy Co., NM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	102	102	85 - 115	2010-04-05

Standard (ICV-1)

QC Batch: 68834

Date Analyzed: 2010-04-05

Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	98.7	99	85 - 115	2010-04-05

Standard (CCV-1)

QC Batch: 68834

Date Analyzed: 2010-04-05

Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2010-04-05

NO# 10032909

Analysis Request of Chain of Custody Record



TETRA TECH

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

CLIENT NAME: Basic Energy		SITE MANAGER: Mike Toyen	
PROJECT NO.: 114-640 0240		PROJECT NAME: Baldwin	
LAB ID. NUMBER	DATE	TIME	SAMPLE IDENTIFICATION
031	03/25/10		BH-1 (15')
032	03/25/10		BH-1 (20') (Hold Sample)
033	03/25/10		BH-2 (15')
034	03/25/10		BH-2 (20') (Hold Sample)
035	03/25/10		BH-3 (15')
036	03/25/10		BH-3 (20') (Hold Sample)
037	03/25/10		BH-4 (15')
038	03/25/10		BH-4 (20') (Hold Sample)
039	03/25/10		BH-5 (2')
040	03/25/10		BH-5 (4')

NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD			
		HCL	HNO3	ICE	NONE
1				✓	
1				✓	
1				✓	
1				✓	
1				✓	
1				✓	
1				✓	
1				✓	
1				✓	
1				✓	

BTX 80218	TPH 8015 MOD. TX1005 (Ext. to C35)	PAH 8270	HCRA 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	Post. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
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RELINQUISHED BY: (Signature) John Kindy	RECEIVED BY: (Signature) John Kindy
Date: 03/25/10	Date: 03/25/10
Time: 1530	Time: 1530

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Date: 03/25/10	Date: 03/25/10
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RELINQUISHED BY: (Signature) John Kindy	RECEIVED BY: (Signature) John Kindy
Date: 03/25/10	Date: 03/25/10
Time: 1530	Time: 1530

RECEIVING LABORATORY: Tetra Tech	STATE: TX	ZIP: 79705
CITY: Midland	PHONE: (432) 682-4559	DATE: 03/25/10
REMARKS: 21.02c intact		

SAMPLE CONDITION WHEN RECEIVED: 21.02c intact	
RECEIVED BY: John Kindy	
TETRA TECH CONTACT PERSON: John Kindy	
RESULTS BY: John Kindy	
RUSH CHARGES AUTHORIZED: Yes	
No	

Analysis Request of Chain of Custody Record

OF:

(Circle or Specify Method No.)



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

CLIENT NAME:		SITE MANAGER:	
Brook Energy		IK Texas	
PROJECT NO:		PROJECT NAME:	
114-640 0290		Belco SWD	
LAB I.D. NUMBER	DATE	TIME	SAMPLE IDENTIFICATION
841	03/25/10		BH-5 (6')
842	03/25/10		BH-5 (8')
843	03/25/10		BH-5 (10')
844	03/25/10		BH-5 (15')
845	03/25/10		BH-5 (20') (Hold Sample)
846	03/25/10		BH-6 (2')
847	03/25/10		BH-6 (4')
848	03/25/10		BH-6 (6')
849	03/25/10		BH-6 (8')
850	03/25/10		BH-6 (10')

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Date: 03/25/10		Date: 03/25/10	
Time: 15:30		Time: 15:30	
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Time: _____		Time: _____	

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

OF:

ANALYSIS REQUEST

(Circle or Specify Method No.)



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

CLIENT NAME:		SITE MANAGER:		PROJECT NAME:		PROJECT NO.:		DATE		TIME		LAB I.D. NUMBER		DATE		TIME		MATRIX		COMR		GRAB		SAMPLE IDENTIFICATION		NUMBER OF CONTAINERS		FILTERED (Y/N)		PRESERVATIVE METHOD			
PROJECT NO.:		DATE		TIME		LAB I.D. NUMBER		DATE		TIME		MATRIX		COMR		GRAB		SAMPLE IDENTIFICATION		NUMBER OF CONTAINERS		FILTERED (Y/N)		PRESERVATIVE METHOD									
114-640 0290		03/25/10		11:00		03/25/10		11:00		11:00		S		V		V		BH-6 (15')		1				HCL		NONE							
114-640 0290		03/25/10		11:00		03/25/10		11:00		11:00		S		V		V		BH-6 (20') (Hold Sample)		1				HCL		NONE							
114-640 0290		03/25/10		11:00		03/25/10		11:00		11:00		S		V		V		BH-7 (2')		1				HCL		NONE							
114-640 0290		03/25/10		11:00		03/25/10		11:00		11:00		S		V		V		BH-7 (4')		1				HCL		NONE							
114-640 0290		03/25/10		11:00		03/25/10		11:00		11:00		S		V		V		BH-7 (6')		1				HCL		NONE							
114-640 0290		03/25/10		11:00		03/25/10		11:00		11:00		S		V		V		BH-7 (8')		1				HCL		NONE							
114-640 0290		03/25/10		11:00		03/25/10		11:00		11:00		S		V		V		BH-7 (10')		1				HCL		NONE							
114-640 0290		03/25/10		11:00		03/25/10		11:00		11:00		S		V		V		BH-7 (15')		1				HCL		NONE							
114-640 0290		03/25/10		11:00		03/25/10		11:00		11:00		S		V		V		BH-7 (20') (Hold Sample)		1				HCL		NONE							
114-640 0290		03/25/10		11:00		03/25/10		11:00		11:00		S		V		V		BH-8 (2')		1				HCL		NONE							

RELINQUISHED BY: (Signature) [Signature] Date: 11/21/10 Time: 15:40

REQUISITIONED BY: (Signature) [Signature] Date: 11/21/10 Time: 15:42

RECEIVED BY: (Signature) [Signature] Date: 11/21/10 Time: 15:40

RECEIVED BY: (Signature) [Signature] Date: 11/21/10 Time: 15:42

RECEIVING LABORATORY: State Analytical

ADDRESS: 114-640 0290

CITY: Midland STATE: TX ZIP: 79701

CONTACT: 114-640 0290 PHONE: 806-735-1111 DATE: 11/21/10 TIME: 15:40

REMARKS: 21.0c intact

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

W04 10032909

Analysis Request of Chain of Custody Record



TETRA TECH

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

CLIENT NAME: <u>Baio's Energy</u>		SITE MANAGER: <u>Ike Tavares</u>	
PROJECT NO: <u>114-6400290</u>		PROJECT NAME: <u>Baio SWD</u>	
LAB I.D. NUMBER	DATE	TIME	SAMPLE IDENTIFICATION
2210861	03/25/10		BH-8 (4')
062	03/25/10		BH-8 (6')
063	03/25/10		BH-8 (8')
064	03/25/10		BH-8 (10')
065	03/25/10		BH-8 (15')
066	03/25/10		BH-8 (20') (Held Sample)

NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD			
		HCL	HNO3	ICE	NONE
1				✓	✓
1				✓	✓
1				✓	✓
1				✓	✓
1				✓	✓
1				✓	✓

BTEX 0021B	TPH 8015 MOD. TX1005 (Ext. to C35)	PAH 8270	HCRA 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	Peat. 808/608	Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)	Major Anions/Cations, pH, TDS
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RELINQUISHED BY: <u>[Signature]</u>	Date: <u>03/25/10</u> Time: <u>15:30</u>	RECEIVED BY: <u>[Signature]</u>	Date: <u>03/25/10</u> Time: <u>15:30</u>
RELINQUISHED BY: <u>[Signature]</u>	Date: _____ Time: _____	RECEIVED BY: <u>[Signature]</u>	Date: _____ Time: _____
RELINQUISHED BY: <u>[Signature]</u>	Date: _____ Time: _____	RECEIVED BY: <u>[Signature]</u>	Date: _____ Time: _____
RECEIVING LABORATORY: <u>Tetra Tech</u>	ADDRESS: <u>Midland</u> STATE: <u>TX</u> ZIP: _____	CONTACT: _____	PHONE: _____ DATE: _____
SAMPLE CONDITION WHEN RECEIVED: <u>21.0°C intact</u>			
REMARKS: _____			



6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
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 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail lab@traceanalysis.com

Certifications

WBENC: 237019

HUB: 1752439743100-86536
NCTRCA WFWB38444Y0909

DBE: VN 20657

NELAP Certifications

Lubbock: T104704219-08-TX
LELAP-02003
Kansas E-10317

El Paso: T104704221-08-TX
LELAP-02002

Midland: T104704392-08-TX

Analytical and Quality Control Report

Ike Tavaréz
Tetra Tech
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: April 9, 2010

Work Order: 10032909



Project Location: Eddy Co., NM
Project Name: Belco SWD #1
Project Number: 114-6400290

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
226832	BH-1 (20')	soil	2010-03-25	00:00	2010-03-26
226834	BH-2 (20')	soil	2010-03-25	00:00	2010-03-26

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 5 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

Standard Flags

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

Case Narrative

Samples for project Belco SWD #1 were received by TraceAnalysis, Inc. on 2010-03-26 and assigned to work order 10032909. Samples for work order 10032909 were received intact at a temperature of 21.0 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	58987	2010-04-08 at 10:16	68925	2010-04-08 at 16:17

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 10032909 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: April 9, 2010
114-6400290

Work Order: 10032909
Belco SWD #1

Page Number: 4 of 5
Eddy Co., NM

Analytical Report

Sample: 226832 - BH-1 (20')

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-04-08	Analyzed By:	AR
QC Batch:	68925	Sample Preparation:	2010-04-08	Prepared By:	AR
Prep Batch:	58987				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		2070	mg/Kg	100	4.00

Sample: 226834 - BH-2 (20')

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-04-08	Analyzed By:	AR
QC Batch:	68925	Sample Preparation:	2010-04-08	Prepared By:	AR
Prep Batch:	58987				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		5870	mg/Kg	100	4.00

Method Blank (1) QC Batch: 68925

QC Batch:	68925	Date Analyzed:	2010-04-08	Analyzed By:	AR
Prep Batch:	58987	QC Preparation:	2010-04-08	Prepared By:	AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Laboratory Control Spike (LCS-1)

QC Batch:	68925	Date Analyzed:	2010-04-08	Analyzed By:	AR
Prep Batch:	58987	QC Preparation:	2010-04-08	Prepared By:	AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	98.0	mg/Kg	1	100	<2.18	98	85 - 115

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

Report Date: April 9, 2010
114-6400290

Work Order: 10032909
Belco SWD #1

Page Number: 5 of 5
Eddy Co., NM

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	99.7	mg/Kg	1	100	<2.18	100	85 - 115	2	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: 227707

QC Batch: 68925 Date Analyzed: 2010-04-08 Analyzed By: AR
Prep Batch: 58987 QC Preparation: 2010-04-08 Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	15100	mg/Kg	100	10000	4890	102	85 - 115

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	15200	mg/Kg	100	10000	4890	103	85 - 115	1	20

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

Standard (ICV-1)

QC Batch: 68925 Date Analyzed: 2010-04-08 Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	103	103	85 - 115	2010-04-08

Standard (CCV-1)

QC Batch: 68925 Date Analyzed: 2010-04-08 Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	97.3	97	85 - 115	2010-04-08

Analysis Request of Chain of Custody Record

OF: 7

ANALYSIS REQUEST
Article or Specify Method No.)

TETRA TECH

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

CLIENT NAME:		SITE MANAGER:		PROJECT NAME:		PRESERVATIVE METHOD	
PROJECT NO.:		DATE		TIME		NUMBER OF CONTAINERS	
LAB I.D. NUMBER		DATE		TIME		FILTERED (Y/N)	
221041	03/25/10	03/25/10	03/25/10	03/25/10	03/25/10	03/25/10	03/25/10
042	03/25/10	03/25/10	03/25/10	03/25/10	03/25/10	03/25/10	03/25/10
043	03/25/10	03/25/10	03/25/10	03/25/10	03/25/10	03/25/10	03/25/10
044	03/25/10	03/25/10	03/25/10	03/25/10	03/25/10	03/25/10	03/25/10
045	03/25/10	03/25/10	03/25/10	03/25/10	03/25/10	03/25/10	03/25/10
046	03/25/10	03/25/10	03/25/10	03/25/10	03/25/10	03/25/10	03/25/10
047	03/25/10	03/25/10	03/25/10	03/25/10	03/25/10	03/25/10	03/25/10
048	03/25/10	03/25/10	03/25/10	03/25/10	03/25/10	03/25/10	03/25/10
049	03/25/10	03/25/10	03/25/10	03/25/10	03/25/10	03/25/10	03/25/10
050	03/25/10	03/25/10	03/25/10	03/25/10	03/25/10	03/25/10	03/25/10

RELINQUISHED BY: (Signature) [Signature]

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RELINQUISHED BY: (Signature) [Signature]

RECEIVED BY: (Signature) [Signature]

RECEIVED BY: (Signature) [Signature]

RECEIVED BY: (Signature) [Signature]

DATE: 03/25/10

TIME: 1530

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TIME: 1530

DATE: 03/25/10

TIME: 1530

DATE: 03/25/10

TIME: 1530

RECEIVING LABORATORY: Texas Energy

ADDRESS: 114-640 039D

CITY: Midland STATE: TX ZIP:

CONTACT: PHONE: DATE: TIME:

REMARKS: 21.0°C intact

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

PAGE: 3 OF: 4

OF:

OF:

ANALYSIS REQUEST

(Circle or Specify Method No.)



TETRA TECH

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559 • Fax (432) 682-3946

CLIENT NAME:						SITE MANAGER:									
Bonic Energy						Tk Tavares									
PROJECT NO.: 114-640 0290								PROJECT NAME: BALCO SWD							
LAB I.D. NUMBER	DATE	TIME	MATRIX	COMR.	GRAB	SAMPLE IDENTIFICATION				FILTERED (Y/N)	PRESERVATIVE METHOD				
ZL0851	03/25/10		S	V	V	BH-6 (15')				I	HCL		NONE		
852	03/25/10		S	V	V	BH-6 (20') (Hold Sample)				I	HNO3	V	ICE		
853	03/25/10		S	V	V	BH-7 (2')				I	HNO3	V	ICE		
854	03/25/10		S	V	V	BH-7 (4')				I	HNO3	V	ICE		
855	03/25/10		S	V	V	BH-7 (6')				I	HNO3	V	ICE		
856	03/25/10		S	V	V	BH-7 (8')				I	HNO3	V	ICE		
857	03/25/10		S	V	V	BH-7 (10')				I	HNO3	V	ICE		
858	03/25/10		S	V	V	BH-7 (15')				I	HNO3	V	ICE		
859	03/25/10		S	V	V	BH-7 (20') (Hold Sample)				I	HNO3	V	ICE		
860	03/25/10		S	V	V	BH-8 (2')				I	HNO3	V	ICE		
REQUISITIONED BY: (Signature) _____ Date: MM/DD/YYYY RECEIVED BY: (Signature) _____ Date: MM/DD/YYYY															
REQUISITIONED BY: (Signature) _____ Date: MM/DD/YYYY						RECEIVED BY: (Signature) _____ Date: MM/DD/YYYY									
REINQUISHED BY: (Signature) _____ Date: MM/DD/YYYY						RECEIVED BY: (Signature) _____ Date: MM/DD/YYYY									
REINQUISHED BY: (Signature) _____ Date: MM/DD/YYYY						RECEIVED BY: (Signature) _____ Date: MM/DD/YYYY									
REceiving LABORATORY: State Pennsylvania						REceived BY: (Signature) _____ Date: MM/DD/YYYY									
ADDRESS: _____ CITY: Middletown STATE: TX ZIP: _____ PHONE: _____ DATE: _____ TIME: _____															
CONTACT: _____															
SAMPLE CONDITION WHEN RECEIVED: All in contact						REMARKS: _____									

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Analysis Request of Chain of Custody Record

OFF

ANALYSIS REQUEST
(Circle or Specify Method No.)



TETRA TECH

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

CLIENT NAME:		SITE MANAGER:		PROJECT NAME:		PROJECT NO.:		DATE		TIME		MATRIX		COMB		GRAB		SAMPLE IDENTIFICATION		NUMBER OF CONTAINERS		FILTERED (Y/N)		PRESERVATIVE METHOD	
PROJECT NO.:		DATE		TIME		MATRIX		COMB		GRAB		SAMPLE IDENTIFICATION		NUMBER OF CONTAINERS		FILTERED (Y/N)		PRESERVATIVE METHOD							
2208101	03/25/10			S	✓	BH-8 (4')	1																		
062	03/25/10			S	✓	BH-8 (6')	1																		
063	03/25/10			S	✓	BH-8 (8')	1																		
064	03/25/10			S	✓	BH-8 (10')	1																		
065	03/25/10			S	✓	BH-8 (15')	1																		
066	03/25/10			S	✓	BH-8 (20') (Held Sample)	0																		

RELINQUISHED BY: (Signature) [Signature]

ADDRESS: 114-6400 290

CITY: Baldwin STATE: TX ZIP:

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DATE: Mar 26, 2010 TIME: 1530

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DATE: TIME:

RECEIVED BY: (Signature) [Signature]

DATE: TIME:

RECEIVING LABORATORY: Enviro

CONTACT: midland STATE: TX PHONE:

RECEIVED BY: (Signature) [Signature]

DATE: TIME:

RECEIVING LABORATORY: Enviro

CONTACT: midland STATE: TX PHONE:

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DATE: TIME:

RECEIVING LABORATORY: Enviro

CONTACT: midland STATE: TX PHONE: <

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APPENDIX D

RADIAL DIAGRAMS

Major ions

Project Name: [Energen Resources Good Water Well Investigation](#)
 County: [Midland County, Texas](#) [6/21/2010](#)

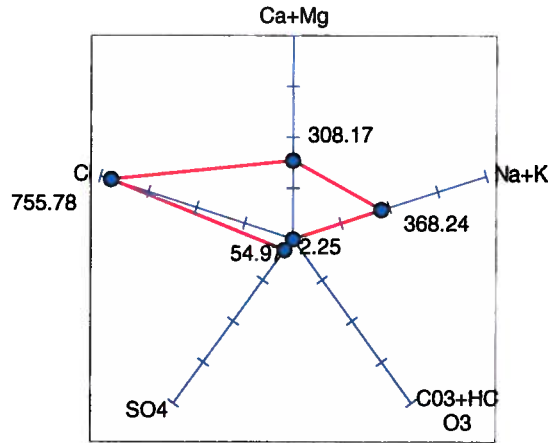
Concentrations in mg/l and me/l						
Cations	Anions	Equivalent Weight	TMW-1		TMW-2	
			mg/l	me/l	mg/l	me/l
Ca		20.04	2270	113.27	914	45.61
Mg		12.16	2370	194.90	970	79.77
Na		23.00	8,450	367.39	1,730	75.22
K		39.10	33.3	0.85	13	0.33
	CO ₃	30.00	0	0.00	0	0.00
	HCO ₃	61.02	137	2.25	155	2.54
	SO ₄	48.03	2640	54.97	2780	57.88
	Cl	35.46	26,800	755.78	4,140	116.75
	NO ₃	62.01	0	0.00	0	0.00
	F	19.00	0	0.00	0	0.00
Cation (sum)				676.42		200.93
Anion (sum)				812.99		177.17
Cation/Anion difference in %				18.34		12.57

Stiff Diagrams (1)

	TMW-1		
Ca	113.27		
Mg	194.90	Ca+Mg	308.17
Na	367.39	Na+K	368.24
K	0.85	CO ₃ +HCO ₃ ⁻	2.25
CO ₃	0.00	SO ₄	54.97
HCO ₃	2.25	Cl	755.78
SO ₄	54.97		
Cl	755.78		
NO ₃	0.00		
F	0.00		

Stiff Diagram for TMW-1
Basic Energy
Belco SWD #1
Eddy County, NM
June 21, 2010

Values in meq/l

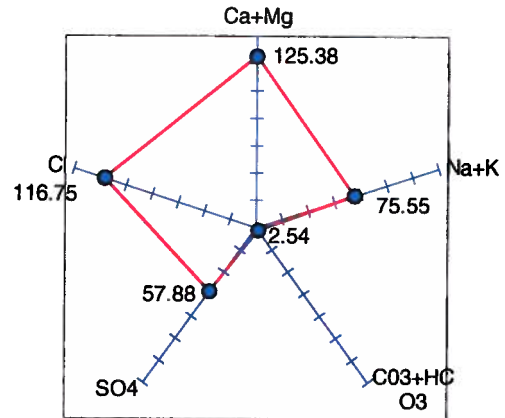


Stiff Diagrams (2)

	TMW-2		
Ca	45.61		
Mg	79.77	Ca+Mg	125.38
Na	75.22	Na+K	75.55
K	0.33	CO ₃ +HCO ₃	2.54
CO ₃	0.00	SO ₄	57.88
HCO ₃	2.54	Cl	116.75
SO ₄	57.88		
Cl	116.75		
NO ₃	0.00		
F	0.00		

Stiff Diagram for TMW-2
Basic Energy
Belco SWD #1
Eddy County, NM
June 21, 2010

Values in meq/l



Major ions

Project Name: [Energen Resources Good Water Well Investigation](#)
 County: [Midland County, Texas](#) [7/22/2010](#)

Concentrations in mg/l and me/l						
Cations	Anions	Equivalent Weight	TMW-1		TMW-2	
			mg/l	me/l	mg/l	me/l
Ca		20.04	3310	165.17	1090	54.39
Mg		12.16	4930	405.43	1090	89.64
Na		23.00	9,550	415.22	2,090	90.87
K		39.10	92.8	2.37	7.41	0.19
	CO ₃	30.00	0	0.00	0	0.00
	HCO ₃	61.02	150	2.46	181	2.97
	SO ₄	48.03	2990	62.25	3030	63.09
	Cl	35.46	32,800	924.99	5,710	161.03
	NO ₃	62.01	0	0.00	0	0.00
	F	19.00	0	0.00	0	0.00
Cation (sum)				988.19		235.09
Anion (sum)				989.70		227.08
Cation/Anion difference in %				0.15		3.47

Stiff Diagrams (1)

	TMW-1		
Ca	165.17		
Mg	405.43	Ca+Mg	570.60
Na	415.22	Na+K	417.59
K	2.37	CO ₃ +HCO ₃ ⁻	2.46
CO ₃	0.00	SO ₄	62.25
HCO ₃	2.46	Cl	924.99
SO ₄	62.25		
Cl	924.99		
NO ₃	0.00		
F	0.00		

Stiff Diagram for TMW-1
Basic Energy
Belco SWD #1
Eddy County, NM
July 22, 2010

Values in meq/l

