

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

HOBBS OCD

Form C-141
Revised October 10, 2003

MAY 04 2012

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

RECEIVED

Release Notification and Corrective Action

OPERATOR

Initial Report Final Report

Name of Company BOPCO, L.P.	Contact Tony Savoie
Address 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220	Telephone No. 432-556-8730
Facility Name: Hat Mesa State 31-32 Battery	Facility Type E&P

Surface Owner: State of N.M.	Mineral Owner State of N.M.	Lease No.
------------------------------	-----------------------------	-----------

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	31	20S	33E					Lea

Latitude N 32.534822 Longitude W 103.700502

NATURE OF RELEASE

Type of Release: Crude Oil	Volume of Release: 5 bbls crude oil	Volume Recovered: 0
Source of Release: A 4" truck load line	Date and Hour of Occurrence Un-known	Date and Hour of Discovery 4/18/12 13:20 p.m.
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* Connections on the 4" truck load have been leaking over a period of time. The tank battery is currently undergoing a complete re-build of the process lines.

Describe Area Affected and Cleanup Action Taken.* An area covering approximately 200 sq.ft. inside the tank battery earthen containment has been affected by the release. Most of the soil has been excavated and is stockpiled on-site. Soil samples have been collected from the excavated area and are being analyzed for TPH, BTEX and Chlorides. A Remediation plan will be developed and submitted prior to moving the material off-site. The spill will be remediated following the NMOCD guidelines for spill remediation.

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.

Signature: <i>Tony Savoie</i>	OIL CONSERVATION DIVISION ENV SPECIALIST	
Printed Name: Tony Savoie	Approved by District Supervisor: <i>[Signature]</i>	
Title: Waste Mgmt. & Remediation Specialist	Approval Date: 5/2/12	Expiration Date: 7/2/12
E-mail Address: TASavoie@BassPet.com	Conditions of Approval: SUBMIT FINAL C-141 BY 7/2/12	Attached <input type="checkbox"/> IRP-5-12-2812
Date: 5/2/12	Phone: 432-556-8730	

* Attach Additional Sheets If Necessary

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Form C-141
Revised October 10, 2003

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District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

Initial Report

Final Report

Name of Company	BOPCO, LP	Contact	Tony Savoie
Address	522 W. Mermod, Suite 704, Carlsbad, NM 88220	Telephone No.	(432)556-8730
Facility Name	Hat Mesa State 31-32 Battery	Facility Type	E&P
Surface Owner	State of N.M.	Mineral Owner	State of N.M.
		Lease No.	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	31	20S	33E					Lea

Latitude 32.534822° North

Longitude 103.700502° West

NATURE OF RELEASE

Type of Release	Crude Oil	Volume of Release	5 bbls crude oil	Volume Recovered	0
Source of Release	A 4" truck load line	Date and Hour of Occurrence	Unknown	Date and Hour of Discovery	4/18/12 13:20 p.m.
Was Immediate Notice Given?	Yes No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?			
By Whom?	Date and Hour				
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken:* Connections on the 4" truck load line had been leaking over a period of time. During initial response activities, the connections were repaired.

Describe Area Affected and Cleanup Action Taken.* An area covering approximately 200 sq. ft. inside the tank battery earthen containment was affected by the release. Following initial response activities, the release was remediated as per NMOCD recommended guidelines. Please reference the attached *Remediation Summary & Risk-Based Site Closure Request* for remediation details.

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.

Signature: 	<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Ben J. Arguijo (agent on behalf of BOPCO, LP)	Approved by District Supervisor:	
Title: Project Manager, Basin Environmental	Approval Date:	Expiration Date:
E-mail Address: bjarguijo@basinenv.com	Conditions of Approval:	
Date: 7/27/2012	Phone: (575)396-2378	

Basin Environmental Service Technologies, LLC

3100 Plains Highway
P. O. Box 301
Lovington, New Mexico 88260

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REMEDIATION SUMMARY & RISK-BASED SITE CLOSURE REQUEST

**BOPCO, LP
HAT MESA STATE 31-32 BATTERY
Lea County, New Mexico
Unit Letter "B" (NW/NE), Section 31, Township 20 South, Range 33 East
Latitude 32.534822° North, Longitude 103.700502° West
NMOCD Reference #1RP-5-12-2812**

Prepared For:

BOPCO, LP
522 W. Mermod, Suite 704
Carlsbad, New Mexico 88220

Prepared By:

Basin Environmental Service Technologies, LLC
3100 Plains Highway
Lovington, New Mexico 88260

July 2012

A handwritten signature in black ink, appearing to read "Ben J. Arguijo", is written over a horizontal line.

Ben J. Arguijo
Project Manager

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1.0 INTRODUCTION & BACKGROUND INFORMATION

Basin Environmental Service Technologies, LLC (Basin Environmental), on behalf of BOPCO, LP (BOPCO), has prepared this *Remediation Summary & Risk-Based Site Closure Request* for the release site known as Hat Mesa State 31-32 Battery. The legal description of the release site is Unit Letter "B" (NW/NE), Section 31, Township 20 South, Range 33 East, in Lea County, New Mexico. The geographic coordinates of the release site are 32.534822° North latitude and 103.700502° West longitude. The property affected by the release is owned by the State of New Mexico and administered by the New Mexico State Land Office (NMSLO). Please reference Figure 1 for a "Site Location Map".

On April 18, 2012, BOPCO discovered a release had occurred at the Hat Mesa State 31-32 tank battery. Connections on a four-inch (4") truck load line had been leaking for an indeterminate period of time, resulting in the release of approximately five barrels (5 bbls) of crude oil. The release was confined to the earthen containment area surrounding the tank battery. During initial response activities, heavily impacted soil was excavated and stockpiled on-site, pending final disposition.

The release was reported to the New Mexico Oil Conservation Division (NMOCD) Hobbs District Office on May 2, 2012. The "Release Notification and Corrective Action" (Form C-141) indicated the release affected an area inside the earthen containment area measuring approximately two hundred square feet (200 ft²). The Form C-141 is provided as Appendix A.

2.0 NMOCD SITE CLASSIFICATION

A search of the New Mexico Water Rights Reporting System (NMWRRS) database maintained by the New Mexico Office of the State Engineer (NMOSE) indicated information was unavailable for Section 31, Township 20 South, Range 33 East. A depth to groundwater reference map utilized by the NMOCD indicates groundwater should be encountered at approximately seventy feet (70') below ground surface (bgs). Based on the NMOCD ranking system, ten (10) points will be assigned to the site as a result of this criterion.

A search of the NMWRRS database indicated there are no water wells within 1,000 feet of the release. Based on the NMOCD ranking system, zero (0) points will be assigned to the site as a result of this criterion.

There are no surface water bodies within 1,000 feet of the release. Based on the NMOCD ranking system, zero (0) points will be assigned to the site as a result of this criterion.

NMOCD guidelines indicate the Hat Mesa release site has an initial ranking score of ten (10) points. The soil remediation levels for a site with a ranking score of ten (10) points are as follows:

- Benzene – 10 mg/Kg (ppm)
- BTEX – 50 mg/Kg (ppm)
- TPH – 1,000 mg/Kg (ppm)

The New Mexico Administrative Code (NMAC) does not currently specify a remediation level for chloride concentrations in soil. Chloride remediation levels are set by the NMOCD on a site-specific basis. Due to the depth to groundwater at the Hat Mesa release site and the possibility of groundwater impact, the NMOCD has set the regulatory remediation action level (RRAL) for chloride at 250 mg/Kg.

3.0 SUMMARY OF SOIL REMEDIATION ACTIVITIES

On April 26, 2012, following initial response activities, delineation of the release site commenced. One (1) hand-augered soil boring was advanced at the site to delineate the vertical extent of impact. The soil boring was advanced in a pooling area of the release located at the center of the Hat Mesa State 31-32 tank battery. The soil boring was advanced to a total depth of approximately two feet (2') bgs. One (1) soil sample (Sample #1) was collected from the soil boring and submitted to Cardinal Laboratories in Hobbs, New Mexico, for analysis of total petroleum hydrocarbon (TPH) and chloride concentrations using EPA methods SW-846 8015M and 4500 Cl-B, respectively. Laboratory analytical results indicated the TPH concentration in soil sample "Sample #1" was 16,460 mg/Kg, and the chloride concentration was 80.0 mg/Kg. Table 1 summarizes the "Concentrations of Benzene, BTEX, TPH & Chloride in Soil". A "Site & Sample Location Map" is provided as Figure 2.

Laboratory analytical results indicated further vertical delineation would be required in the area represented by soil sample "Sample #1".

On May 3, 2012, one (1) hand-augered soil boring was advanced in the area represented by soil sample "Sample #1" to further investigate the vertical extent of impact. Soil samples were collected at two-foot (2') intervals and field-screened using a photo-ionization detector (PID) and chloride test kit. Three soil samples (Sample #2, Sample #5, and Sample #6) were collected from the soil boring and submitted to the laboratory for analysis of TPH concentrations. Soil sample "Sample #6" was also analyzed for concentrations of chloride and benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA Method SW-846 8021b. Laboratory analytical results indicated TPH concentrations ranged from less than the laboratory method detection limit (MDL) in soil sample "Sample #6" to 17,550 mg/Kg in soil sample "Sample #2". BTEX constituent concentrations in soil sample "Sample #6" were less than the appropriate laboratory MDL, and the chloride concentration was 80.0 mg/Kg.

Following advancement of the soil boring, three (3) additional soil samples (Sample #3, Sample #4, and Sample #8) were collected from the pooling area at the center of the tank battery. The soil samples were submitted to the laboratory for analysis of TPH and/or BTEX concentrations. Soil sample "Sample #8" was also analyzed for chloride concentrations. Laboratory analytical results indicated benzene concentrations were less than the laboratory MDL in all submitted soil samples. BTEX concentrations ranged from 0.547 mg/Kg in soil sample "Sample #8" to 1.017 mg/Kg in soil sample "Sample #4". TPH concentrations ranged from 406 mg/Kg in soil sample "Sample #3" to 5,830 mg/Kg in soil sample "Sample #8". The chloride concentration in soil sample "Sample #8" was 3,480 mg/Kg.

A delineation trench was also advanced at the site to investigate the horizontal and vertical extent of impact at the release point. The delineation trench was located approximately five feet (5') to the northwest of the tank battery, between the tank battery and the earthen containment berm.

The trench was advanced to a total depth of approximately ten feet (10') bgs. Soil samples were collected at selected intervals and field-screened using a PID and chloride test kit. A single confirmation soil sample (Sample #12) was collected from the trench and submitted to the laboratory for analysis of BTEX, TPH, and chloride concentrations. Laboratory analytical results indicated BTEX and TPH constituent concentrations were less than the appropriate laboratory MDL, and the chloride concentration was 9,600 mg/Kg.

Laboratory analytical results indicated further vertical delineation would be required in the area represented by soil sample "Sample #12".

Following excavation of the delineation trench, one (1) five-point composite soil sample (Berm Material) of stockpiled material removed from the earthen containment berm was submitted to the laboratory for analysis of BTEX, TPH, and chloride concentrations. Laboratory analytical results indicated BTEX constituent concentrations were less than the appropriate laboratory MDL. The TPH concentration was 1,723 mg/Kg, and the chloride concentration was 1,070 mg/Kg.

On May 4, 2012, B&H Maintenance & Construction of Carlsbad, New Mexico, commenced excavation of impacted soil at the site. To facilitate remediation activities, the excavation was divided into two (2) sections: North Excavation and Middle Excavation. The North Excavation was located at the release point, in the area represented by soil samples "Sample #8" and "Sample #12". The Middle Excavation was located in the center of the tank battery, in the area represented by soil samples "Sample #1" through "Sample #6". To preserve the structural integrity of the five (5) on-site storage tanks, the vertical extent of the North Excavation was limited to eight feet (8') bgs, and the vertical extent of the Middle Excavation was limited to five feet (5') bgs. Excavated soil was stockpiled on-site, pending final disposition.

Following excavation activities, four (4) soil samples (North Excavation North Wall, North Excavation South Wall, North Excavation East Wall, and North Excavation West Wall) were collected from the floor and sidewalls of the North Excavation, and three (3) soil samples (Middle Excavation East Wall, Middle Excavation West Wall, and Middle Excavation Bottom) were collected from the floor and sidewalls of the Middle Excavation. The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and/or chloride concentrations. Laboratory analytical results indicated benzene concentrations were less than the laboratory MDL in all submitted soil samples. BTEX concentrations ranged from less than the laboratory MDL in soil sample "Middle Excavation West Wall" to 1.19 mg/Kg in soil sample "North Excavation North Wall". TPH concentrations ranged from less than the laboratory MDL in soil samples "North Excavation South Wall", "North Excavation West Wall", "Middle Excavation East Wall", and "Middle Excavation Bottom" to 1,710 mg/Kg in soil sample "Middle Excavation West Wall". Chloride concentrations ranged from 1,550 mg/Kg in soil sample "North Excavation West Wall" to 19,600 mg/Kg in soil sample "North Excavation North Wall".

Further excavation in the areas represented by soil samples "North Excavation North Wall", "North Excavation East Wall", "North Excavation West Wall", and "Middle Excavation West Wall" was precluded by the presence of the on-site storage tanks and/or numerous pipes and appurtenances.

Based on laboratory analytical results and field-screens, from May 7 through May 8, 2012, the North Excavation and Middle Excavation were backfilled with non-impacted material to approximately eighteen-inches (18") bgs to facilitate the installation of an impermeable liner in the floor of the excavations at a later date. Prior to backfilling, final dimensions of the North Excavation were approximately twenty-two feet (22') in length, ranging in width from approximately four feet (4') to approximately six feet (6'), and ranging in depth from approximately eight feet (8') to approximately ten feet (10'). Final dimensions of the Middle Excavation were approximately twenty feet (20') in length, ranging in width from approximately four feet (4') to approximately eight feet (8'), and approximately five feet (5') in depth.

On May 21, 2012, a representative of Basin Environmental met with a representative of the NMOCD Hobbs District Office to submit a *Remediation Summary & Risk-Based Site Closure Strategy* (Work Plan) and to discuss potential locations for up to four (4) proposed soil borings to investigate the vertical extent of impacted soil at the site. The Work Plan and proposed soil boring locations were approved by the NMOCD representative. Approval was also obtained to advance monitor wells at the site, if it was determined that contamination impacted groundwater.

On May 25, 2012, four (4) soil borings (SB-1 through SB-4) were advanced at the site to further investigate the vertical extent of impacted soil. Soil samples were collected at five-foot (5') drilling intervals and field screened using a PID and/or chloride test kit. Selected soil samples were submitted to the laboratory for analysis of BTEX, TPH, and/or chloride concentrations. Soil boring logs are provided as Appendix C.

Soil boring SB-1 was advanced at the release point, in the footprint of the North Excavation. The soil boring was advanced to a total depth of approximately twenty feet (20') bgs, when the borehole collapsed. The collapse of the borehole was attributed to insufficient compaction of the backfill material by a previous contractor. Soil samples collected at drilling depths of ten feet (10'), fifteen feet (15'), and twenty feet (20') bgs were submitted to the laboratory for analysis of TPH and/or chloride concentrations. Soil sample SB-1 @ 20' was also analyzed for BTEX concentrations. Laboratory analytical results indicated TPH concentrations ranged from 760 mg/Kg in soil sample SB-1 @ 20' to 889 mg/Kg in soil sample SB-1 @ 15'. Chloride concentrations ranged from 5,100 mg/Kg in soil sample SB-1 @ 20' to 6,480 mg/Kg in soil sample SB-1 @ 10'. BTEX constituent concentrations in soil sample SB-1 @ 20' were less than the appropriate laboratory MDL.

Soil boring SB-2 was advanced approximately forty feet (40') to the south of soil boring SB-1, along the flow path of the release. The soil boring was advanced to a total depth of approximately sixty feet (60') bgs. Soil samples collected at drilling depths of five feet (5'), ten feet (10'), twenty feet (20'), thirty feet (30'), forty feet (40'), forty-five feet (45'), fifty-five feet (55'), and sixty feet (60') bgs were submitted to the laboratory for analysis of BTEX, TPH, and/or chloride concentrations. Laboratory analytical results indicated BTEX constituent concentrations were less than the appropriate laboratory MDL in all submitted soil samples. TPH concentrations were less than the laboratory MDL in all submitted soil samples, with the exception of soil sample SB-2 @ 5', which exhibited a TPH concentration of 122 mg/Kg. Chloride concentrations ranged from 144 mg/Kg in soil sample SB-2 @ 60' to 4,000 mg/Kg in soil sample SB-2 @ 30'.

Soil boring SB-3 was advanced approximately ten feet (10') to the west of soil boring SB-1, outside the containment area of the battery. The soil boring was advanced to a total depth of

approximately thirty-five feet (35') bgs. Soil samples collected at drilling depths of five feet (5'), ten feet (10'), twenty feet (20'), thirty feet (30'), and thirty-five feet (35') bgs were submitted to the laboratory for analysis of BTEX, TPH, and/or chloride concentrations. Laboratory analytical results indicated TPH and BTEX constituent concentrations were less than the appropriate laboratory MDL in all submitted soil samples. Chloride concentrations ranged from 176 mg/Kg in soil sample SB-3 @ 35' to 1,960 mg/Kg in soil sample SB-3 @ 5'.

Soil boring SB-4 was advanced approximately eight feet (8') to the west of soil boring SB-2, outside the containment area of the battery. The soil boring was advanced to a total depth of approximately forty-five feet (45') bgs. Soil samples collected at drilling depths of five feet (5'), ten feet (10'), twenty-five feet (25'), forty feet (40'), and forty-five feet (45') bgs were submitted to the laboratory for analysis of BTEX, TPH, and/or chloride concentrations. Laboratory analytical results indicated TPH and BTEX constituent concentrations were less than the appropriate laboratory MDL in all submitted soil samples. Chloride concentrations ranged from 16.0 mg/Kg in soil samples SB-4 @ 5' and SB-4 @ 25' to 160 mg/Kg in soil sample SB-4 @ 45'.

Based on laboratory analytical results from samples collected from the four (4) soil borings, it was determined that contamination did not impact groundwater at the site.

On June 13, 2012, a representative of Basin Environmental met with a representative of the NMOCD Hobbs District Office to request provisional closure of the Hat Mesa State 31-32 Battery release site. Since laboratory analytical results indicated contamination did not impact groundwater, it was requested that the site be closed without installing monitor wells. Due to safety and environmental concerns, and to preserve the structural integrity of the five (5) on-site storage tanks, it was further requested to leave soil exhibiting chloride concentrations above the RRAL established for the site in-situ. The requests were approved by the NMOCD representative, with the caveat that soil exhibiting chloride concentrations above the RRAL would be remediated following decommission and/or abandonment of the currently active tank battery.

From July 2 through July 10, 2012, a new containment area was constructed around the Hat Mesa State 31-32 Battery, which includes steel perimeter walls extending approximately two feet (2') above ground surface. A felt liner was installed in the floor of the new containment area, and the floor and perimeter walls of the containment area were coated with an impermeable, spray-on polyurethane liner.

On July 13, 2012, the stockpiled material was transported to Lea Land, Inc. (NMOCD Permit # WM-01-035) for disposal by Republic Trucking of Carlsbad, New Mexico.

4.0 QA/QC PROCEDURES

4.1 Soil Sampling

Soil samples were delivered to Xenco Laboratories in Odessa, Texas, for BTEX, TPH, and/or chloride analyses using the methods described below:

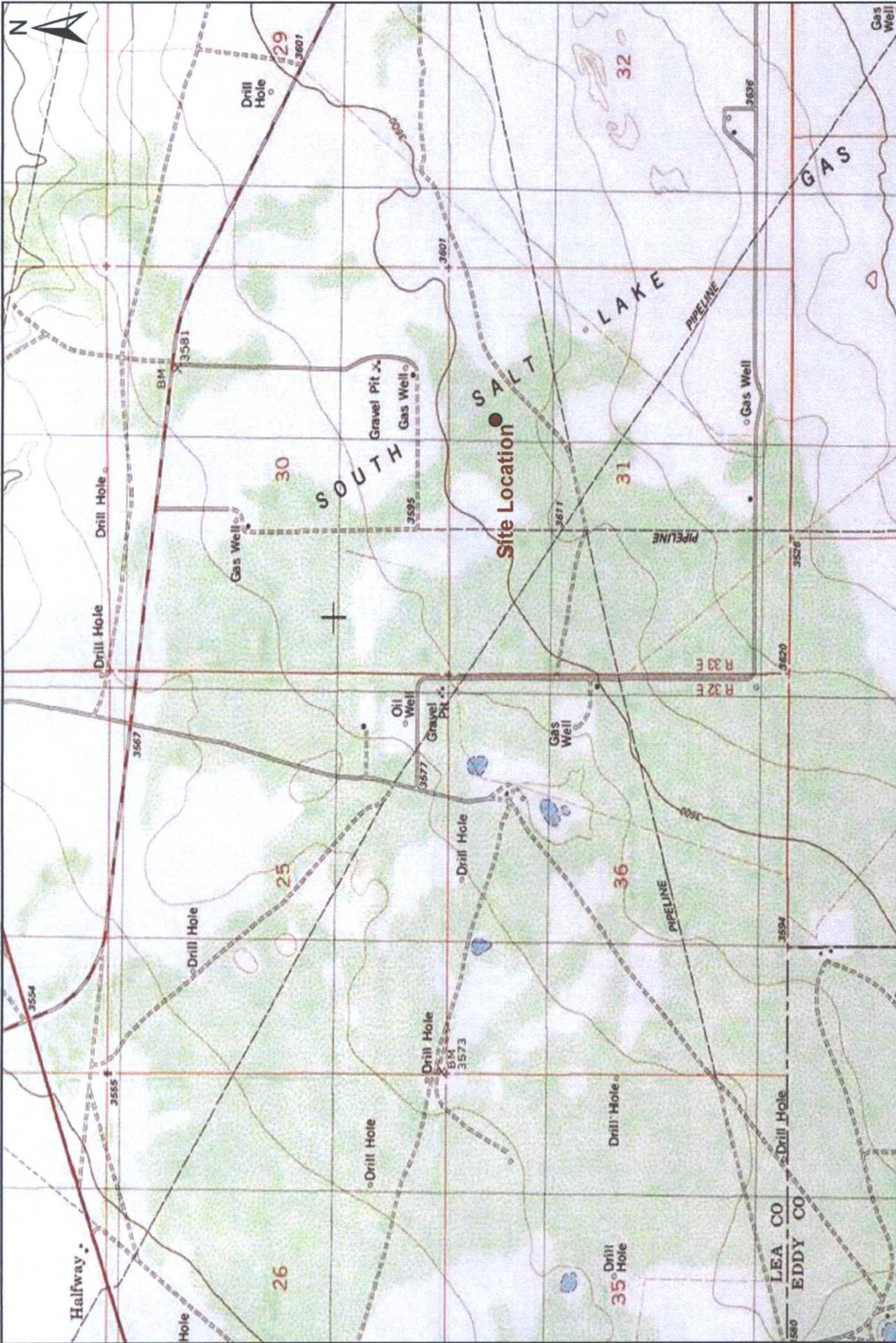
6.0 LIMITATIONS

Basin Environmental Service Technologies, LLC, has prepared this *Remediation Summary & Risk-Based Site Closure Request* to the best of its ability. No other warranty, expressed or implied, is made or intended. Basin Environmental has examined and relied upon documents referenced in the report and on oral statements made by certain individuals. Basin Environmental has not conducted an independent examination of the facts contained in referenced materials and statements. Basin Environmental has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Basin Environmental has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin Environmental notes that the facts and conditions referenced in this report may change over time, and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of BOPCO, LP. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of Basin Environmental Service Technologies, LLC, and/or BOPCO, LP.

7.0 DISTRIBUTION:

- Copy 1: Geoffrey Leking
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1625 French Drive
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New Mexico State Land Office
2702-D N. Grimes
Hobbs, NM 88240
- Copy 3: Tony Savoie
BOPCO, LP
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Carlsbad, NM 88220
- Copy 4: Basin Environmental Service Technologies, LLC
P.O. Box 301
Lovington, NM 88260



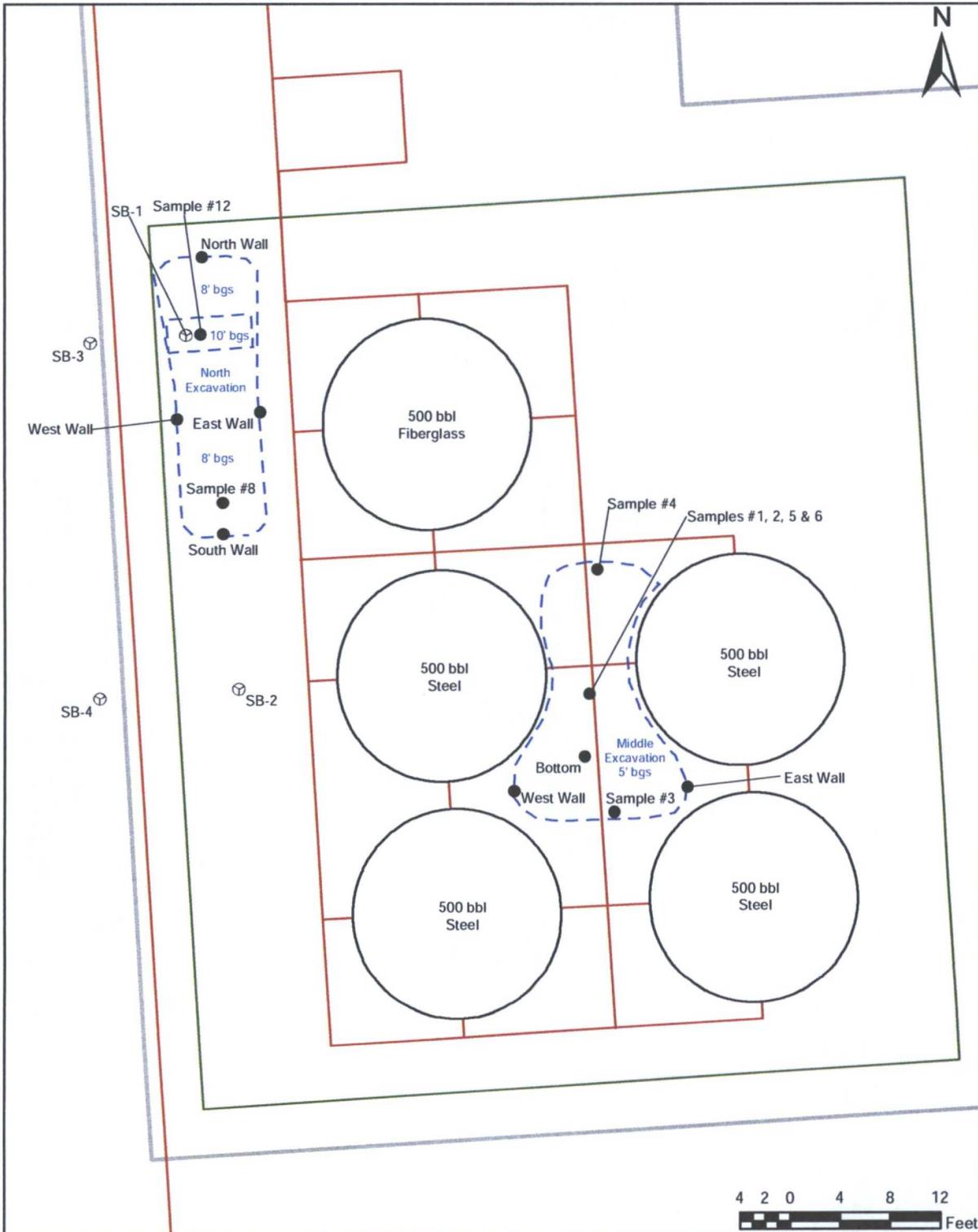
Basin Environmental Service Technologies, LLC
 3100 Plains Hwy.
 Lovington, NM 88260



Drawn By: BJA	Checked By: BRB
May 21, 2012	Scale: 1" = 2000'

Figure 1
Site Location Map
 BOPCO, LP
 Hat Mesa State 31-32 Battery
 Lea County, New Mexico
 NMOCD Ref. #: 1RP-5-12-2812





Legend:

- - - Excavation Extent
- Pipeline
- Earthen Berm
- Steel Berm
- Sample Location
- ⊙ Soil Boring

Figure 2
Site & Sample Location Map
 BOPCO, LP
 Hat Mesa State 31-32 Battery
 Lea County, New Mexico
 NMOCD Ref. #: 1RP-5-12-2812

Basin Environmental Service Technologies
 3100 Plains Hwy.
 Lovington, NM 88260



Drawn By: BJA	Checked By: BRB
July 26, 2012	Scale: 1" = 12'

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL

BOPCO, LP
 HAT MESA STATE 31-32 BATTERY
 LEA COUNTY, NEW MEXICO
 NMOCD REFERENCE #1RP-5-12-2812

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030				METHOD: 8015M				TOTAL TPH C ₆ -C ₃₅ (mg/Kg)	E 300 CHLORIDE (mg/Kg)		
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C ₆ -C ₁₂ (mg/Kg)	DRO C ₁₂ -C ₂₈ (mg/Kg)	ORO C ₂₈ -C ₃₅ (mg/Kg)				
Sample #1	2'	4/26/2012	In-Situ	-	-	-	-	-	-	-	1,510	12,700	2,250	16,460	80.0
Sample #2	4'	5/3/2012	In-Situ	-	-	-	-	-	-	-	1,390	13,300	2,860	17,550	-
Sample #3	3'	5/3/2012	In-Situ	-	-	-	-	-	-	-	<10.0	311	94.5	406	-
Sample #4	3'	5/3/2012	In-Situ	<0.050	<0.050	0.353	0.664	1.017	2,068	75.5	1,700	292	2,068	-	-
Sample #5	6'	5/3/2012	In-Situ	-	-	-	-	-	-	-	<10.0	22.7	16.1	38.8	-
Sample #6	8'	5/3/2012	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.150	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
Sample #8	1'	5/3/2012	In-Situ	<0.050	<0.050	0.547	<0.150	0.547	<200	4,180	1,650	5,830	3,480	-	-
Sample #12	10'	5/3/2012	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.150	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	9,600
Berm Material	N/A	5/3/2012	Excavated	<0.050	<0.050	<0.050	<0.150	<0.150	<50.0	1,190	533	1,723	1,070	-	-
North Excavation North Wall	6'	5/4/2012	In-Situ	<0.050	<0.050	0.297	0.888	1.19	69.8	613	140	823	19,600	-	-
North Excavation South Wall	6'	5/4/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	2,280
North Excavation East Wall	6'	5/4/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	13.2	13.2	12,600	-	-
North Excavation West Wall	6'	5/4/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	1,550
Middle Excavation East Wall	3.5'	5/4/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	<10.0	-	-
Middle Excavation West Wall	3.5'	5/4/2012	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.150	<50.0	1,320	390	1,710	-	-	
Middle Excavation Bottom	5'	5/4/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	<10.0	-	-
SB-1 @ 10'	10'	5/25/2012	In-Situ	-	-	-	-	-	<50.0	558	208	766	6,480	-	-
SB-1 @ 15'	15'	5/25/2012	In-Situ	-	-	-	-	-	<50.0	643	246	889	-	-	-
SB-1 @ 20'	20'	5/25/2012	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.150	<50.0	536	224	760	5,100	-	-
SB-2 @ 5'	5'	5/25/2012	In-Situ	-	-	-	-	-	<10.0	71.8	49.7	122	576	-	-
SB-2 @ 10'	10'	5/25/2012	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.150	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	320
SB-2 @ 20'	20'	5/25/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	656
SB-2 @ 30'	30'	5/25/2012	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.150	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	4,000
SB-2 @ 40'	40'	5/25/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	3,240
SB-2 @ 45'	45'	5/25/2012	In-Situ	-	-	-	-	-	-	-	-	-	-	-	2,000
SB-2 @ 55'	55'	5/25/2012	In-Situ	-	-	-	-	-	-	-	-	-	-	-	304
SB-2 @ 60'	60'	5/25/2012	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.150	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	144
SB-3 @ 5'	5'	5/25/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	1,960
SB-3 @ 10'	10'	5/25/2012	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.150	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	1,180
SB-3 @ 20'	20'	5/25/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	496
SB-3 @ 30'	30'	5/25/2012	In-Situ	-	-	-	-	-	-	-	-	-	-	-	208
SB-3 @ 35'	35'	5/25/2012	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.150	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	176

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL

BOPCO, LP
 HAT MESA STATE 31-32 BATTERY
 LEA COUNTY, NEW MEXICO
 NMOCD REFERENCE #1RP-5-12-2812

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030				METHOD: 8015M				TOTAL TPH C ₆ -C ₃₅ (mg/Kg)	E 300 CHLORIDE (mg/Kg)	
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C ₈ -C ₁₂ (mg/Kg)	DRO C ₁₂ -C ₂₈ (mg/Kg)	ORO C ₂₈ -C ₃₅ (mg/Kg)			
SB-4 @ 5'	5'	5/25/2012	In-Situ	-	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	16.0
SB-4 @ 10'	10'	5/25/2012	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.150	<0.150	<10.0	<10.0	<10.0	<10.0	32.0
SB-4 @ 25'	25'	5/25/2012	In-Situ	-	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	16.0
SB-4 @ 40'	40'	5/25/2012	In-Situ	-	-	-	-	-	-	-	-	-	-	48.0
SB-4 @ 45'	45'	5/25/2012	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.150	<0.150	<10.0	<10.0	<10.0	<10.0	160
NMOCD Standard				10										500
							50							1,000

- = Not analyzed.



Hat Mesa State 31-32 Battery - Release Point (looking north)



Hat Mesa State 31-32 Battery - Release Site



Hat Mesa State 31-32 Battery - Release Site



Hat Mesa State 31-32 Battery - Release Site



Hat Mesa State 31-32 Battery - North Excavation (looking north-northeast)



Hat Mesa State 31-32 Battery - North Excavation



Hat Mesa State 31-32 Battery - North Excavation (following backfill, looking north)



Hat Mesa State 31-32 Battery - Middle Excavation (following backfill)



Hat Mesa State 31-32 Battery - Preparation for Advancement of Soil Boring SB-1



Hat Mesa State 31-32 Battery - Advancement of Soil Boring SB-2



Hat Mesa State 31-32 Battery - Following Installation of Titan Liner (looking southwest)



Hat Mesa State 31-32 Battery - North Excavation (following liner installation, looking east)



Hat Mesa State 31-32 Battery - Following Liner Installation (looking southeast)



Hat Mesa State 31-32 Battery - Middle Excavation (following liner installation)

Soil Boring SB-1

Depth Below Ground Surface	Soil Column	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
0				Moderate	None	0' - 11' - Backfill; red fine sand
5		>2,500	24.7	Moderate	None	
10				Moderate	None	11' - 20' - Tan fine sand
15		>2,500	50.0	Moderate	None	
20		4,288	46.8	Slight	None	

Boring SB-1

Date Drilled May 25, 2012
 Thickness of Bentonite Seal 20 Ft
 Depth of Exploratory Boring 20 Ft bgs
 Depth to Groundwater _____
 Ground Water Elevation _____

- Indicates the PSH level measured on _____
- Indicates the groundwater level measured on _____
- Indicates samples selected for Laboratory Analysis.
- PID Head-space reading in ppm obtained with a photo-ionization detector.

Completion Notes

- 1.) The soil boring was advanced on date using air rotary drilling techniques.
- 2.) The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
- 3.) Borehole collapsed approximately twenty feet (20') below ground surface.

Soil Boring SB-1

BOPCO, LP
 Hat Mesa State 31-32 Battery
 Lea County, New Mexico



Basin Environmental Service Technologies, LLC
 3100 Plains Hwy.
 Lovington, NM 88260

Prep By: BJA	Checked By: BRB
June 21, 2012	

Soil Boring SB-2

Depth Below Ground Surface	Soil Column	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description	Boring SB-2	
0			(1.7)	Slight	None	0' - 6' - Tan to brown fine sand; sandstone	Date Drilled <u>May 25, 2012</u>	
5			(0.6)	None	None	6' - 14' - Red fine sand; sandstone	Thickness of Bentonite Seal <u>60 Ft</u>	
10			1,580	0.4	None	None	14' - 21' - Tan fine sand; sandstone	Depth of Exploratory Boring <u>60 Ft bgs</u>
15					None	None	21' - 23' - Tan fine sand; sandstone; gravel	Depth to Groundwater _____
20			1,580		None	None	23' - 24' - Red fine sand; sandstone	Ground Water Elevation _____
25								 Indicates the PSH level measured on _____
30			(>3,072)		None	None	24' - 42' - Red silty sand; clay	 Indicates the groundwater level measured on _____
35			2,580		None	None		 Indicates samples selected for Laboratory Analysis.
40			(2,580)		None	None		PID Head-space reading in ppm obtained with a photo-ionization detector.
45			(1,772)		None	None	42' - 48' - Tan fine sand; sandstone	
50			644		None	None	48' - 57' - Red silty clay	
55			(366)		None	None	57' - 60' - Red fine sand; gravel	
60		(172)		None	None			

Completion Notes

- 1.) The soil boring was advanced on date using air rotary drilling techniques.
- 2.) The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.

Soil Boring SB-2

BOPCO, LP
 Hat Mesa State 31-32 Battery
 Lea County, New Mexico



Basin Environmental Service Technologies, LLC
 3100 Plains Hwy.
 Lovington, NM 88260

Prep By: BJA	Checked By: BRB
June 21, 2012	

Soil Boring SB-3

Depth Below Ground Surface	Soil Column	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description	
0			0.9	None	None	0' - 9' - Tan fine sand; caliche; sandstone	
5			1.0	None	None	9' - 14' - Red fine sand; sandstone	
10			496	1.7	None		
15			409		None	None	14' - 35' - Tan fine sand; sandstone
20			264		None	None	
25			200		None	None	
30		172		None	None		
35							

Boring SB-3

Date Drilled May 25, 2012
 Thickness of Bentonite Seal 35 Ft
 Depth of Exploratory Boring 35 Ft bgs
 Depth to Groundwater _____
 Ground Water Elevation _____

- Indicates the PSH level measured on _____
- Indicates the groundwater level measured on _____
- Indicates samples selected for Laboratory Analysis.
- PID Head-space reading in ppm obtained with a photo-ionization detector.

Completion Notes

- 1.) The soil boring was advanced on date using air rotary drilling techniques.
- 2.) The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.

Soil Boring SB-3

BOPCO, LP
 Hat Mesa State 31-32 Battery
 Lea County, New Mexico



Basin Environmental Service Technologies, LLC
 3100 Plains Hwy.
 Lovington, NM 88260

Prep By: BJA	Checked By: BRB
June 21, 2012	

Soil Boring SB-4

Depth Below Ground Surface	Soil Column	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description	
0			1.0	None	None	0' - 7' - Tan fine sand; caliche; sandstone	
5			0.7	None	None		
10			<120	0.2	None	None	
15			<120		None	None	7' - 38' - Red fine sand; sandstone
20			<120		None	None	
25			160		None	None	
30		200		None	None	38' - 45' - Red silty sand; silty clay	
35		160		None	None		
40							
45							

Boring SB-4

Date Drilled May 25, 2012
 Thickness of Bentonite Seal 45 Ft
 Depth of Exploratory Boring 45 Ft bgs
 Depth to Groundwater _____
 Ground Water Elevation _____

-  Indicates the PSH level measured on _____
-  Indicates the groundwater level measured on _____
-  Indicates samples selected for Laboratory Analysis.
- PID Head-space reading in ppm obtained with a photo-ionization detector.

Completion Notes

- 1.) The soil boring was advanced on date using air rotary drilling techniques.
- 2.) The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.

Soil Boring SB-4

BOPCO, LP
 Hat Mesa State 31-32 Battery
 Lea County, New Mexico



Basin Environmental Service Technologies, LLC
 3100 Plains Hwy.
 Lovington, NM 88260

Prep By: BJA	Checked By: BRB
June 21, 2012	

May 01, 2012

BEN J. ARGUIJO

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: HAT MESA

Enclosed are the results of analyses for samples received by the laboratory on 04/30/12 8:25.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 BEN J. ARGUIJO
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

 Received: 04/30/2012
 Reported: 05/01/2012
 Project Name: HAT MESA
 Project Number: NONE GIVEN
 Project Location: LEA COUNTY, NM

 Sampling Date: 04/26/2012
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SAMPLE #1 2' (H200976-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	04/30/2012	ND	416	104	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	1510	200	05/01/2012	ND	195	97.5	200	1.00	
DRO >C10-C28	12700	200	05/01/2012	ND	208	104	200	1.79	
EXT DRO >C28-C35	2250	200	05/01/2012	ND					S-06

 Surrogate: 1-Chlorooctane 170 % 55.5-154
 Surrogate: 1-Chlorooctadecane 76.4 % 57.6-158

Cardinal Laboratories

* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

- S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

May 11, 2012

BEN J. ARGUIJO

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: HAT MESA 31-32

Enclosed are the results of analyses for samples received by the laboratory on 05/04/12 10:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 BEN J. ARGUIJO
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

 Received: 05/04/2012
 Reported: 05/11/2012
 Project Name: HAT MESA 31-32
 Project Number: NONE GIVEN
 Project Location: LEA COUNTY, NM

 Sampling Date: 05/03/2012
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SAMPLE #2 4' (H201026-01)

TPH 8015M	mg/kg	Analyzed By: MS					S-06		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	1390	200	05/09/2012	ND	193	96.5	200	1.03	
DRO >C10-C28	13300	200	05/09/2012	ND	184	92.0	200	3.04	
EXT DRO >C28-C35	2860	200	05/09/2012	ND					
<i>Surrogate: 1-Chlorooctane</i> 179 % 55.5-154									
<i>Surrogate: 1-Chlorooctadecane</i> 434 % 57.6-158									

Sample ID: SAMPLE #3 3' (H201026-02)

TPH 8015M	mg/kg	Analyzed By: MS					S-06		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/09/2012	ND	193	96.5	200	1.03	
DRO >C10-C28	311	10.0	05/09/2012	ND	184	92.0	200	3.04	
EXT DRO >C28-C35	94.5	10.0	05/09/2012	ND					
<i>Surrogate: 1-Chlorooctane</i> 91.8 % 55.5-154									
<i>Surrogate: 1-Chlorooctadecane</i> 103 % 57.6-158									

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* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 BEN J. ARGUIJO
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	05/04/2012	Sampling Date:	05/03/2012
Reported:	05/11/2012	Sampling Type:	Soil
Project Name:	HAT MESA 31-32	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

Sample ID: SAMPLE #4 3' (H201026-03)

BTEX 8021B		mg/kg		Analyzed By: ZZZ				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/11/2012	ND	1.98	98.9	2.00	1.92	
Toluene*	<0.050	0.050	05/11/2012	ND	2.17	108	2.00	4.50	
Ethylbenzene*	0.353	0.050	05/11/2012	ND	2.19	110	2.00	5.41	
Total Xylenes*	0.664	0.150	05/11/2012	ND	6.98	116	6.00	7.19	

Surrogate: 4-Bromofluorobenzene (PID) 164 % 64.4-134

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	75.5	50.0	05/09/2012	ND	193	96.5	200	1.03	
DRO >C10-C28	1700	50.0	05/09/2012	ND	184	92.0	200	3.04	
EXT DRO >C28-C35	292	50.0	05/09/2012	ND					

Surrogate: 1-Chlorooctane 110 % 55.5-154

Surrogate: 1-Chlorooctadecane 108 % 57.6-158

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 BEN J. ARGUJO
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

 Received: 05/04/2012
 Reported: 05/11/2012
 Project Name: HAT MESA 31-32
 Project Number: NONE GIVEN
 Project Location: LEA COUNTY, NM

 Sampling Date: 05/03/2012
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SAMPLE #5 6' (H201026-04)

TPH 8015M	mg/kg	Analyzed By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/09/2012	ND	193	96.5	200	1.03	
DRO >C10-C28	22.7	10.0	05/09/2012	ND	184	92.0	200	3.04	
EXT DRO >C28-C35	16.1	10.0	05/09/2012	ND					
<hr/>									
Surrogate: 1-Chlorooctane	80.5 %	55.5-154							
Surrogate: 1-Chlorooctadecane	89.1 %	57.6-158							

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Celey D. Keene, Lab Director/Quality Manager

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 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

 Received: 05/04/2012
 Reported: 05/11/2012
 Project Name: HAT MESA 31-32
 Project Number: NONE GIVEN
 Project Location: LEA COUNTY, NM

 Sampling Date: 05/03/2012
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SAMPLE #6 8' (H201026-05)

BTEX 8021B		mg/kg		Analyzed By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/11/2012	ND	1.98	98.9	2.00	1.92	
Toluene*	<0.050	0.050	05/11/2012	ND	2.17	108	2.00	4.50	
Ethylbenzene*	<0.050	0.050	05/11/2012	ND	2.19	110	2.00	5.41	
Total Xylenes*	<0.150	0.150	05/11/2012	ND	6.98	116	6.00	7.19	

Surrogate: 4-Bromofluorobenzene (PID) 114 % 64.4-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	05/07/2012	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/09/2012	ND	193	96.5	200	1.03	
DRO >C10-C28	<10.0	10.0	05/09/2012	ND	184	92.0	200	3.04	
EXT DRO >C28-C35	<10.0	10.0	05/09/2012	ND					

Surrogate: 1-Chlorooctane 77.2 % 55.5-154

Surrogate: 1-Chlorooctadecane 86.3 % 57.6-158

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 BEN J. ARGUIJO
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

 Received: 05/04/2012
 Reported: 05/11/2012
 Project Name: HAT MESA 31-32
 Project Number: NONE GIVEN
 Project Location: LEA COUNTY, NM

 Sampling Date: 05/03/2012
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SAMPLE #8 1' (H201026-06)

BTEX 8021B		mg/kg		Analyzed By: ZZZ				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/11/2012	ND	1.98	98.9	2.00	1.92	
Toluene*	<0.050	0.050	05/11/2012	ND	2.17	108	2.00	4.50	
Ethylbenzene*	0.547	0.050	05/11/2012	ND	2.19	110	2.00	5.41	
Total Xylenes*	<0.150	0.150	05/11/2012	ND	6.98	116	6.00	7.19	

Surrogate: 4-Bromofluorobenzene (PID) 144 % 64.4-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3480	16.0	05/07/2012	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<200	200	05/09/2012	ND	193	96.5	200	1.03	
DRO >C10-C28	4180	200	05/09/2012	ND	184	92.0	200	3.04	
EXT DRO >C28-C35	1650	200	05/09/2012	ND					

Surrogate: 1-Chlorooctane 97.0 % 55.5-154

Surrogate: 1-Chlorooctadecane 315 % 57.6-158

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 BEN J. ARGUIJO
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

 Received: 05/04/2012
 Reported: 05/11/2012
 Project Name: HAT MESA 31-32
 Project Number: NONE GIVEN
 Project Location: LEA COUNTY, NM

 Sampling Date: 05/03/2012
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SAMPLE #12 10' (H201026-07)

BTEX 8021B		mg/kg		Analyzed By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/11/2012	ND	1.98	98.9	2.00	1.92	
Toluene*	<0.050	0.050	05/11/2012	ND	2.17	108	2.00	4.50	
Ethylbenzene*	<0.050	0.050	05/11/2012	ND	2.19	110	2.00	5.41	
Total Xylenes*	<0.150	0.150	05/11/2012	ND	6.98	116	6.00	7.19	

Surrogate: 4-Bromofluorobenzene (PID) 113 % 64.4-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	9600	16.0	05/07/2012	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/09/2012	ND	193	96.5	200	1.03	
DRO >C10-C28	<10.0	10.0	05/09/2012	ND	184	92.0	200	3.04	
EXT DRO >C28-C35	<10.0	10.0	05/09/2012	ND					

Surrogate: 1-Chlorooctane 84.7 % 55.5-154

Surrogate: 1-Chlorooctadecane 97.5 % 57.6-158

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 BEN J. ARGUIJO
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

 Received: 05/04/2012
 Reported: 05/11/2012
 Project Name: HAT MESA 31-32
 Project Number: NONE GIVEN
 Project Location: LEA COUNTY, NM

 Sampling Date: 05/03/2012
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: BERM MATERIAL (H201026-08)

BTEX 8021B		mg/kg		Analyzed By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/11/2012	ND	1.98	98.9	2.00	1.92	
Toluene*	<0.050	0.050	05/11/2012	ND	2.17	108	2.00	4.50	
Ethylbenzene*	<0.050	0.050	05/11/2012	ND	2.19	110	2.00	5.41	
Total Xylenes*	<0.150	0.150	05/11/2012	ND	6.98	116	6.00	7.19	

Surrogate: 4-Bromofluorobenzene (PID) 115 % 64.4-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1070	16.0	05/07/2012	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	05/09/2012	ND	193	96.5	200	1.03	
DRO >C10-C28	1190	50.0	05/09/2012	ND	184	92.0	200	3.04	
EXT DRO >C28-C35	553	50.0	05/09/2012	ND					

Surrogate: 1-Chlorooctane 87.7 % 55.5-154

Surrogate: 1-Chlorooctadecane 118 % 57.6-158

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

- S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
 (575) 393-2326 FAX (575) 393-2476

BILL TO		ANALYSIS REQUEST									
Company Name: Basin Environmental Service Technologies, LLC		P.O. #:		Company: BOPCO, LP							
Project Manager: Ben J. Arquijo		Address: P.O. Box 301		Attn: Tony Savoie							
City: Lovington		State: NM Zip: 88260		Address: 522 W. Marmod							
Phone #: (575) 396-2378		Fax #: (575) 396-1429		City: Carlsbad							
Project #:		Project Owner: BOPCO, LP		State: NM Zip: 88220							
Project Name: HAT MESA 313Z		Phone #: (432) 556-8730		Fax #:							
Project Location: Lca NM		Sampler Name: Jody Walters									
FOR LAB USE ONLY											
Lab I.D.	Sample I.D.	# CONTAINERS	(G)RAB OR (C)OMP.	MATRIX	PRESERV	SAMPLING	DATE	TIME	Boism	Chlorides	BTEX
14201026											
1	Sample # 2 4'	1	G	WASTEWATER			5-3-12	13:00	X		
2	Sample # 3 3'	1	G	WASTEWATER			5-3-12	13:05	X		
3	Sample # 4 3'	1	G	WASTEWATER			5-3-12	13:10	X		
4	Sample # 5 6'	1	G	WASTEWATER			5-3-12	13:15	X		
5	Sample # 6 8'	1	G	WASTEWATER			5-3-12	13:18	X		
6	Sample # 8 1'	1	G	WASTEWATER			5-3-12	13:25	X		
7	Sample # 12 10'	1	G	WASTEWATER			5-3-12	14:00	X		
8	Berm material	1	C	WASTEWATER			5-3-12	14:10	X		

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Relinquished By: *[Signature]* Date: 5/3/12 Received By: *[Signature]* Date: 5/3/12
 Time: 1:25 Time: 0:00

Delivered By: (Circle One) *[Signature]* Sample Condition: Cool Intact No Yes No

Sampler - UPS - Bus - Other: *[Signature]*

Checked By: (Initials) *[Signature]*

Phone Result: Yes No Add'l Phone #:
 Fax Result: Yes No Add'l Fax #:
 REMARKS:
 Please email results to pm@basincnv.com & TSavoie@Basinfct.com

May 11, 2012

TONY SAVOIE

BOPCO

P. O. BOX 1019

KERMIT, TX 79745

RE: HAT MESA 31-32

Enclosed are the results of analyses for samples received by the laboratory on 05/07/12 9:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 BOPCO
 TONY SAVOIE
 P. O. BOX 1019
 KERMIT TX, 79745
 Fax To: (432) 687-4722

 Received: 05/07/2012
 Reported: 05/11/2012
 Project Name: HAT MESA 31-32
 Project Number: NONE GIVEN
 Project Location: LEA COUNTY, NM

 Sampling Date: 05/04/2012
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: NORTH EXC E WALL (H201031-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	12600	16.0	05/07/2012	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	05/09/2012	ND	193	96.5	200	1.03		
DRO >C10-C28	<10.0	10.0	05/09/2012	ND	184	92.0	200	3.04		
EXT DRO >C28-C35	13.2	10.0	05/09/2012	ND						

Surrogate: 1-Chlorooctane 74.4 % 55.5-154

Surrogate: 1-Chlorooctadecane 84.5 % 57.6-158

Sample ID: NORTH EXC W WALL (H201031-02)

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1550	16.0	05/07/2012	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	05/09/2012	ND	193	96.5	200	1.03		
DRO >C10-C28	<10.0	10.0	05/09/2012	ND	184	92.0	200	3.04		
EXT DRO >C28-C35	<10.0	10.0	05/09/2012	ND						

Surrogate: 1-Chlorooctane 85.4 % 55.5-154

Surrogate: 1-Chlorooctadecane 99.5 % 57.6-158

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* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 BOPCO
 TONY SAVOIE
 P. O. BOX 1019
 KERMIT TX, 79745
 Fax To: (432) 687-4722

 Received: 05/07/2012
 Reported: 05/11/2012
 Project Name: HAT MESA 31-32
 Project Number: NONE GIVEN
 Project Location: LEA COUNTY, NM

 Sampling Date: 05/04/2012
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: NORTH EXC N WALL (H201031-03)

BTEX 8021B		mg/kg		Analyzed By: ZZZ				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/11/2012	ND	1.98	98.9	2.00	1.92	
Toluene*	<0.050	0.050	05/11/2012	ND	2.17	108	2.00	4.50	
Ethylbenzene*	0.297	0.050	05/11/2012	ND	2.19	110	2.00	5.41	
Total Xylenes*	0.888	0.150	05/11/2012	ND	6.98	116	6.00	7.19	

Surrogate: 4-Bromofluorobenzene (PID) 149 % 64.4-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	19600	16.0	05/07/2012	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	69.8	50.0	05/09/2012	ND	193	96.5	200	1.03	
DRO >C10-C28	613	50.0	05/09/2012	ND	184	92.0	200	3.04	
EXT DRO >C28-C35	140	50.0	05/09/2012	ND					

Surrogate: 1-Chlorooctane 80.4 % 55.5-154

Surrogate: 1-Chlorooctadecane 88.1 % 57.6-158

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 BOPCO
 TONY SAVOIE
 P. O. BOX 1019
 KERMIT TX, 79745
 Fax To: (432) 687-4722

Received:	05/07/2012	Sampling Date:	05/04/2012
Reported:	05/11/2012	Sampling Type:	Soil
Project Name:	HAT MESA 31-32	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

Sample ID: NORTH EXC S WALL (H201031-04)

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2280	16.0	05/07/2012	ND	416	104	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/09/2012	ND	193	96.5	200	1.03	
DRO >C10-C28	<10.0	10.0	05/09/2012	ND	184	92.0	200	3.04	
EXT DRO >C28-C35	<10.0	10.0	05/09/2012	ND					

Surrogate: 1-Chlorooctane	86.1 %	55.5-154
Surrogate: 1-Chlorooctadecane	100 %	57.6-158

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 BOPCO
 TONY SAVOIE
 P. O. BOX 1019
 KERMIT TX, 79745
 Fax To: (432) 687-4722

 Received: 05/07/2012
 Reported: 05/11/2012
 Project Name: HAT MESA 31-32
 Project Number: NONE GIVEN
 Project Location: LEA COUNTY, NM

 Sampling Date: 05/04/2012
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: MIDDLE EXC W WALL (H201031-05)

BTEX 8021B		mg/kg		Analyzed By: ZZZ				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/11/2012	ND	1.98	98.9	2.00	1.92	
Toluene*	<0.050	0.050	05/11/2012	ND	2.17	108	2.00	4.50	
Ethylbenzene*	<0.050	0.050	05/11/2012	ND	2.19	110	2.00	5.41	
Total Xylenes*	<0.150	0.150	05/11/2012	ND	6.98	116	6.00	7.19	

Surrogate: 4-Bromofluorobenzene (PID) 154 % 64.4-134

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	05/09/2012	ND	189	94.3	200	2.57	
DRO >C10-C28	1320	50.0	05/09/2012	ND	180	90.2	200	1.12	
EXT DRO >C28-C35	390	50.0	05/09/2012	ND					

Surrogate: 1-Chlorooctane 89.9 % 55.5-154

Surrogate: 1-Chlorooctadecane 140 % 57.6-158

Cardinal Laboratories

* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 BOPCO
 TONY SAVOIE
 P. O. BOX 1019
 KERMIT TX, 79745
 Fax To: (432) 687-4722

 Received: 05/07/2012
 Reported: 05/11/2012
 Project Name: HAT MESA 31-32
 Project Number: NONE GIVEN
 Project Location: LEA COUNTY, NM

 Sampling Date: 05/04/2012
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: MIDDLE EXC E WALL (H201031-06)

TPH 8015M	mg/kg	Analyzed By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/09/2012	ND	189	94.3	200	2.57	
DRO >C10-C28	<10.0	10.0	05/09/2012	ND	180	90.2	200	1.12	
EXT DRO >C28-C35	<10.0	10.0	05/09/2012	ND					
<hr/>									
Surrogate: 1-Chlorooctane	98.9 %	55.5-154							
Surrogate: 1-Chlorooctadecane	117 %	57.6-158							

Sample ID: MIDDLE EXC BOTTOM (H201031-07)

TPH 8015M	mg/kg	Analyzed By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/09/2012	ND	189	94.3	200	2.57	
DRO >C10-C28	<10.0	10.0	05/09/2012	ND	180	90.2	200	1.12	
EXT DRO >C28-C35	<10.0	10.0	05/09/2012	ND					
<hr/>									
Surrogate: 1-Chlorooctane	84.8 %	55.5-154							
Surrogate: 1-Chlorooctadecane	103 %	57.6-158							

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

BILL TO		ANALYSIS REQUEST									
Company Name: <u>State LP</u>		P.O. #:		Company: <u>Boque</u>							
Project Manager: <u>Ben Argyle</u>		Address: <u>PO Box 307</u>		Attn:							
City: <u>Levellano</u>		State: <u>NM</u>		Zip: <u>88240</u>							
Phone #:		Fax #:		Project Owner: <u>EXPOLP</u>							
Project #:		Project Name: <u>H&H Press 31-32</u>		City:							
Project Location: <u>West of F-1002</u>		State:		Phone #:							
Sampler Name: <u>Fly Ru 2</u>		Fax #:		City:							
FOR LAB USE ONLY		MATRIX		PRESERV		SAMPLING					
Lab I.D. <u>H201D31</u>		Sample I.D.		OTHER		DATE		TIME			
1 North Excavation East of F-1002		GROUNDWATER		ICE / COOL		5/11/12		10:38		✓	
2 North Excavation East of F-1002		WASTEWATER		ACID/BASE		-		10:14		✓	
3 North Excavation East of F-1002		SLUDGE		OTHER		-		10:15		✓	
4 North Excavation East of F-1002		DIL		OTHER		-		10:16		✓	
5 Middle Excavation East of F-1002		SOIL		OTHER		-		10:30		✓	
6 Middle Excavation East of F-1002		WASTEWATER		OTHER		-		10:34		✓	
		# CONTAINERS									
		(C)RAB OR (C)OMP									

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Relinquished By: <u>Fly Ru 2</u>	Date: <u>5/11/12</u>	Received By: <u>Ty Franke</u>	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #: _____
Relinquished By: <u>Ty Franke</u>	Time: <u>1:00</u>	Received By: <u>Glad Nelson</u>	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #: _____
Delivered By: (Circle One) <u>Ty Franke</u>	Date: <u>09/20</u>	Sample Condition: <u>Intact</u>	REMARKS:	
Sampler - UPS - Bus - Other: _____	Time: <u>3/11/12</u>	Cool Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		
	Time: <u>2:50</u>	Checked By: (Initials) <u>GN</u>		

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476 #26

June 01, 2012

BEN J. ARGUIJO

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: HAT MESA STATE 31-32

Enclosed are the results of analyses for samples received by the laboratory on 05/30/12 11:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 BEN J. ARGUIJO
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

 Received: 05/30/2012
 Reported: 06/01/2012
 Project Name: HAT MESA STATE 31-32
 Project Number: NONE GIVEN
 Project Location: LEA COUNTY, NM

 Sampling Date: 05/25/2012
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SB -1 @ 10' (H201212-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6480	16.0	05/31/2012	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	05/30/2012	ND	186	93.0	200	0.907	
DRO >C10-C28	558	50.0	05/30/2012	ND	188	93.9	200	1.52	
EXT DRO >C28-C35	208	50.0	05/30/2012	ND					

Surrogate: 1-Chlorooctane 87.8 % 65.2-140
 Surrogate: 1-Chlorooctadecane 118 % 63.6-154

Sample ID: SB -1 @ 15' (H201212-02)

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	05/31/2012	ND	189	94.7	200	0.473	
DRO >C10-C28	643	50.0	05/31/2012	ND	184	92.0	200	3.17	
EXT DRO >C28-C35	246	50.0	05/31/2012	ND					

Surrogate: 1-Chlorooctane 85.8 % 65.2-140
 Surrogate: 1-Chlorooctadecane 118 % 63.6-154

Cardinal Laboratories

* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 BEN J. ARGUIJO
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	05/30/2012	Sampling Date:	05/25/2012
Reported:	06/01/2012	Sampling Type:	Soil
Project Name:	HAT MESA STATE 31-32	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

Sample ID: SB -1 @ 20' (H201212-03)

BTEX 8021B		mg/kg		Analyzed By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/01/2012	ND	2.08	104	2.00	5.71	
Toluene*	<0.050	0.050	06/01/2012	ND	1.90	94.9	2.00	4.96	
Ethylbenzene*	<0.050	0.050	06/01/2012	ND	1.80	89.9	2.00	5.46	
Total Xylenes*	<0.150	0.150	06/01/2012	ND	5.47	91.2	6.00	5.00	

Surrogate: 4-Bromofluorobenzene (PID) 100 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5100	16.0	05/31/2012	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	05/31/2012	ND	189	94.7	200	0.473	
DRO >C10-C28	536	50.0	05/31/2012	ND	184	92.0	200	3.17	
EXT DRO >C28-C35	224	50.0	05/31/2012	ND					

Surrogate: 1-Chlorooctane 78.9 % 65.2-140

Surrogate: 1-Chlorooctadecane 106 % 63.6-154

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

- S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

June 06, 2012

BEN J. ARGUIJO

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: HAT MESA STATE 31-32

Enclosed are the results of analyses for samples received by the laboratory on 05/30/12 11:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

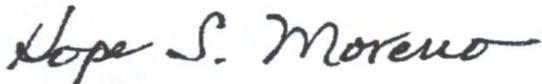
Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Hope Moreno

Inorganic Technical Director

Analytical Results For:

 Basin Environmental Service
 BEN J. ARGUIJO
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

 Received: 05/30/2012
 Reported: 06/06/2012
 Project Name: HAT MESA STATE 31-32
 Project Number: NONE GIVEN
 Project Location: LEA COUNTY, NM

 Sampling Date: 05/25/2012
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SB - 2 @ 5' (H201209-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	576	16.0	05/31/2012	ND	432	108	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/30/2012	ND	186	93.0	200	0.907	
DRO >C10-C28	71.8	10.0	05/30/2012	ND	188	93.9	200	1.52	
EXT DRO >C28-C35	49.7	10.0	05/30/2012	ND					

Surrogate: 1-Chlorooctane 86.2 % 65.2-140

Surrogate: 1-Chlorooctadecane 101 % 63.6-154

Cardinal Laboratories

* = Accredited Analyte

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Hope Moreno, Inorganic Technical Director

Analytical Results For:

 Basin Environmental Service
 BEN J. ARGUIJO
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	05/30/2012	Sampling Date:	05/25/2012
Reported:	06/06/2012	Sampling Type:	Soil
Project Name:	HAT MESA STATE 31-32	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

Sample ID: SB - 2 @ 10' (H201209-02)

BTEX 8021B		mg/kg		Analyzed By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/31/2012	ND	2.02	101	2.00	0.834	
Toluene*	<0.050	0.050	05/31/2012	ND	1.85	92.3	2.00	1.28	
Ethylbenzene*	<0.050	0.050	05/31/2012	ND	1.72	85.9	2.00	0.312	
Total Xylenes*	<0.150	0.150	05/31/2012	ND	5.19	86.6	6.00	0.561	

Surrogate: 4-Bromofluorobenzene (PID) 101 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	05/31/2012	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/30/2012	ND	186	93.0	200	0.907	
DRO >C10-C28	<10.0	10.0	05/30/2012	ND	188	93.9	200	1.52	
EXT DRO >C28-C35	<10.0	10.0	05/30/2012	ND					

Surrogate: 1-Chlorooctane 82.9 % 65.2-140

Surrogate: 1-Chlorooctadecane 96.6 % 63.6-154

Cardinal Laboratories

* = Accredited Analyte

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Hope Moreno, Inorganic Technical Director

Analytical Results For:

 Basin Environmental Service
 BEN J. ARGUIJO
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	05/30/2012	Sampling Date:	05/25/2012
Reported:	06/06/2012	Sampling Type:	Soil
Project Name:	HAT MESA STATE 31-32	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

Sample ID: SB - 2 @ 20' (H201209-03)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	656	16.0	05/31/2012	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	05/30/2012	ND	186	93.0	200	0.907		
DRO >C10-C28	<10.0	10.0	05/30/2012	ND	188	93.9	200	1.52		
EXT DRO >C28-C35	<10.0	10.0	05/30/2012	ND						

Surrogate: 1-Chlorooctane	79.8 %	65.2-140
Surrogate: 1-Chlorooctadecane	91.2 %	63.6-154

Cardinal Laboratories

*=Accredited Analyte

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Hope Moreno, Inorganic Technical Director

Analytical Results For:

 Basin Environmental Service
 BEN J. ARGUIJO
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

 Received: 05/30/2012
 Reported: 06/06/2012
 Project Name: HAT MESA STATE 31-32
 Project Number: NONE GIVEN
 Project Location: LEA COUNTY, NM

 Sampling Date: 05/25/2012
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SB - 2 @ 30' (H201209-04)

BTEX 8021B		mg/kg		Analyzed By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/31/2012	ND	2.02	101	2.00	0.834	
Toluene*	<0.050	0.050	05/31/2012	ND	1.85	92.3	2.00	1.28	
Ethylbenzene*	<0.050	0.050	05/31/2012	ND	1.72	85.9	2.00	0.312	
Total Xylenes*	<0.150	0.150	05/31/2012	ND	5.19	86.6	6.00	0.561	

Surrogate: 4-Bromofluorobenzene (PID) 99.4 % 89.4-126

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4000	16.0	06/06/2012	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/30/2012	ND	186	93.0	200	0.907	
DRO >C10-C28	<10.0	10.0	05/30/2012	ND	188	93.9	200	1.52	
EXT DRO >C28-C35	<10.0	10.0	05/30/2012	ND					

Surrogate: 1-Chlorooctane 82.4 % 65.2-140

Surrogate: 1-Chlorooctadecane 96.3 % 63.6-154

Cardinal Laboratories

* = Accredited Analyte

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Hope Moreno, Inorganic Technical Director

Analytical Results For:

 Basin Environmental Service
 BEN J. ARGUIJO
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

 Received: 05/30/2012
 Reported: 06/06/2012
 Project Name: HAT MESA STATE 31-32
 Project Number: NONE GIVEN
 Project Location: LEA COUNTY, NM

 Sampling Date: 05/25/2012
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SB - 2 @ 40' (H201209-05)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3240	16.0	05/31/2012	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	05/30/2012	ND	186	93.0	200	0.907		
DRO >C10-C28	<10.0	10.0	05/30/2012	ND	188	93.9	200	1.52		
EXT DRO >C28-C35	<10.0	10.0	05/30/2012	ND						

Surrogate: 1-Chlorooctane 78.7 % 65.2-140
 Surrogate: 1-Chlorooctadecane 86.6 % 63.6-154

Sample ID: SB - 2 @ 55' (H201209-06)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	304	16.0	05/31/2012	ND	432	108	400	0.00		

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Hope Moreno, Inorganic Technical Director

Analytical Results For:

 Basin Environmental Service
 BEN J. ARGUIJO
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	05/30/2012	Sampling Date:	05/25/2012
Reported:	06/06/2012	Sampling Type:	Soil
Project Name:	HAT MESA STATE 31-32	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

Sample ID: SB - 2 @ 60' (H201209-07)

BTEX 8021B		mg/kg		Analyzed By: ZZZ						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/31/2012	ND	2.02	101	2.00	0.834		
Toluene*	<0.050	0.050	05/31/2012	ND	1.85	92.3	2.00	1.28		
Ethylbenzene*	<0.050	0.050	05/31/2012	ND	1.72	85.9	2.00	0.312		
Total Xylenes*	<0.150	0.150	05/31/2012	ND	5.19	86.6	6.00	0.561		

Surrogate: 4-Bromofluorobenzene (PID) 101 % 89.4-126

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	05/31/2012	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	05/30/2012	ND	186	93.0	200	0.907		
DRO >C10-C28	<10.0	10.0	05/30/2012	ND	188	93.9	200	1.52		
EXT DRO >C28-C35	<10.0	10.0	05/30/2012	ND						

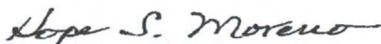
Surrogate: 1-Chlorooctane 83.8 % 65.2-140

Surrogate: 1-Chlorooctadecane 97.0 % 63.6-154

Cardinal Laboratories

* = Accredited Analyte

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Hope Moreno, Inorganic Technical Director

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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Hope Moreno, Inorganic Technical Director

June 01, 2012

BEN J. ARGUIJO

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: HAT MESA STATE 31-32

Enclosed are the results of analyses for samples received by the laboratory on 05/30/12 11:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 BEN J. ARGUIJO
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

 Received: 05/30/2012
 Reported: 06/01/2012
 Project Name: HAT MESA STATE 31-32
 Project Number: NONE GIVEN
 Project Location: LEA COUNTY, NM

 Sampling Date: 05/25/2012
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SB - 3 @ 5' (H201210-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1960	16.0	05/31/2012	ND	432	108	400	3.77	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/30/2012	ND	186	93.0	200	0.907	
DRO >C10-C28	<10.0	10.0	05/30/2012	ND	188	93.9	200	1.52	
EXT DRO >C28-C35	<10.0	10.0	05/30/2012	ND					
<i>Surrogate: 1-Chlorooctane</i>	83.6 %	65.2-140							
<i>Surrogate: 1-Chlorooctadecane</i>	96.8 %	63.6-154							

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 BEN J. ARGUIJO
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

 Received: 05/30/2012
 Reported: 06/01/2012
 Project Name: HAT MESA STATE 31-32
 Project Number: NONE GIVEN
 Project Location: LEA COUNTY, NM

 Sampling Date: 05/25/2012
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SB - 3 @ 10' (H201210-02)

BTEX 8021B		mg/kg		Analyzed By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/31/2012	ND	2.02	101	2.00	0.834	
Toluene*	<0.050	0.050	05/31/2012	ND	1.85	92.3	2.00	1.28	
Ethylbenzene*	<0.050	0.050	05/31/2012	ND	1.72	85.9	2.00	0.312	
Total Xylenes*	<0.150	0.150	05/31/2012	ND	5.19	86.6	6.00	0.561	

Surrogate: 4-Bromofluorobenzene (PID) 100 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1180	16.0	05/31/2012	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/30/2012	ND	186	93.0	200	0.907	
DRO >C10-C28	<10.0	10.0	05/30/2012	ND	188	93.9	200	1.52	
EXT DRO >C28-C35	<10.0	10.0	05/30/2012	ND					

Surrogate: 1-Chlorooctane 84.5 % 65.2-140

Surrogate: 1-Chlorooctadecane 95.8 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 BEN J. ARGUIJO
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	05/30/2012	Sampling Date:	05/25/2012
Reported:	06/01/2012	Sampling Type:	Soil
Project Name:	HAT MESA STATE 31-32	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

Sample ID: SB - 3 @ 20' (H201210-03)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	496	16.0	05/31/2012	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	05/30/2012	ND	186	93.0	200	0.907		
DRO >C10-C28	<10.0	10.0	05/30/2012	ND	188	93.9	200	1.52		
EXT DRO >C28-C35	<10.0	10.0	05/30/2012	ND						

Surrogate: 1-Chlorooctane 86.5 % 65.2-140

Surrogate: 1-Chlorooctadecane 100 % 63.6-154

Sample ID: SB - 3 @ 30' (H201210-04)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	208	16.0	05/31/2012	ND	432	108	400	3.77		

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 BEN J. ARGUIJO
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	05/30/2012	Sampling Date:	05/25/2012
Reported:	06/01/2012	Sampling Type:	Soil
Project Name:	HAT MESA STATE 31-32	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

Sample ID: SB - 3 @ 35' (H201210-05)

BTEX 8021B		mg/kg		Analyzed By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/31/2012	ND	2.02	101	2.00	0.834	
Toluene*	<0.050	0.050	05/31/2012	ND	1.85	92.3	2.00	1.28	
Ethylbenzene*	<0.050	0.050	05/31/2012	ND	1.72	85.9	2.00	0.312	
Total Xylenes*	<0.150	0.150	05/31/2012	ND	5.19	86.6	6.00	0.561	

Surrogate: 4-Bromofluorobenzene (PID) 100 % 89.4-126

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	05/31/2012	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/30/2012	ND	186	93.0	200	0.907	
DRO >C10-C28	<10.0	10.0	05/30/2012	ND	188	93.9	200	1.52	
EXT DRO >C28-C35	<10.0	10.0	05/30/2012	ND					

Surrogate: 1-Chlorooctane 82.4 % 65.2-140

Surrogate: 1-Chlorooctadecane 95.5 % 63.6-154

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager

Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
 (575) 393-2326 FAX (575) 393-2476

BILL TO		ANALYSIS REQUEST																
Company Name: Basin Environmental Service Technologies, LLC		P.O. #:		Company: BOPCO, LP														
Project Manager: Ben J. Arquijo		Attn: Tony Savoie		Address: 522 W. Mexmod														
Address: P O Box 301		City: Lovington		State: NM		Zip: 89260												
Phone #: (575) 396-2378		Fax #: (575) 396-1429		City: Carlsbad		State: NM		Zip: 89220										
Project #:		Project Owner: BOPCO, LP		Phone #: (432) 556-8730		Fax #:												
Project Name: Hat Mesa State 31-12 Battery		Project Location: Lea Co., NM																
Sampler Name:																		
Lab I.D.	Sample I.D.	(G)RAB OR (COMP)	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	SLUDGE	OTHER	ACID/BASE	ICE / COOL	OTHER	PRESERV	SAMPLING	DATE	TIME	8015 M	Chloride	BTEX
1	SB-30 5'	G	1	X					X			X		5/25/12	1230	X	X	X
2	SB-30 10'													1235	X	X	X	X
3	SB-30 20'													1345	X	X	X	X
4	SB-30 30'													1255	X	X	X	X
5	SB-30 35'													1300	X	X	X	X

PLEASE NOTE: Liability and damages Cardinal's liability and client's exclusive remedy for any claim arising under or from, shall be limited to the amount paid by the client for the analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: *[Signature]* Date: 5/29/12
 Received By: *[Signature]* Date: 8/15

Relinquished By: *[Signature]* Date: 8/30/12
 Received By: *[Signature]* Date: 1/10/13

Delivered By: (Circle One) *[Signature]*
 Sampler - UPS - Bus - Other: *[Signature]*

Sample Condition: Cool - Intact Yes No
 Checked By: *[Signature]*

Phone Result: Yes No Add'l Phone #: _____
 Fax Result: Yes No Add'l Fax #: _____

REMARKS: _____

Please email results to pm@basinenv.com
 & TASavoie@BasinEnv.com

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476 #26

June 06, 2012

BEN J. ARGUIJO

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: HAT MESA STATE 31-32

Enclosed are the results of analyses for samples received by the laboratory on 05/30/12 11:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Hope Moreno

Inorganic Technical Director

Analytical Results For:

 Basin Environmental Service
 BEN J. ARGUIJO
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

 Received: 05/30/2012
 Reported: 06/06/2012
 Project Name: HAT MESA STATE 31-32
 Project Number: NONE GIVEN
 Project Location: LEA COUNTY, NM

 Sampling Date: 05/25/2012
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SB - 4 @ 5' (H201211-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	06/06/2012	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	05/30/2012	ND	186	93.0	200	0.907		
DRO >C10-C28	<10.0	10.0	05/30/2012	ND	188	93.9	200	1.52		
EXT DRO >C28-C35	<10.0	10.0	05/30/2012	ND						

Surrogate: 1-Chlorooctane	81.1 %	65.2-140
Surrogate: 1-Chlorooctadecane	93.9 %	63.6-154

Cardinal Laboratories

* = Accredited Analyte

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Hope Moreno, Inorganic Technical Director

Analytical Results For:

 Basin Environmental Service
 BEN J. ARGUIJO
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	05/30/2012	Sampling Date:	05/25/2012
Reported:	06/06/2012	Sampling Type:	Soil
Project Name:	HAT MESA STATE 31-32	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

Sample ID: SB - 4 @ 10' (H201211-02)

BTEX 8021B		mg/kg		Analyzed By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/31/2012	ND	2.02	101	2.00	0.834	
Toluene*	<0.050	0.050	05/31/2012	ND	1.85	92.3	2.00	1.28	
Ethylbenzene*	<0.050	0.050	05/31/2012	ND	1.72	85.9	2.00	0.312	
Total Xylenes*	<0.150	0.150	05/31/2012	ND	5.19	86.6	6.00	0.561	

Surrogate: 4-Bromofluorobenzene (PID) 101 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	05/31/2012	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/30/2012	ND	186	93.0	200	0.907	
DRO >C10-C28	<10.0	10.0	05/30/2012	ND	188	93.9	200	1.52	
EXT DRO >C28-C35	<10.0	10.0	05/30/2012	ND					

Surrogate: 1-Chlorooctane 90.3 % 65.2-140

Surrogate: 1-Chlorooctadecane 96.8 % 63.6-154

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* = Accredited Analyte

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Hope Moreno, Inorganic Technical Director

Analytical Results For:

 Basin Environmental Service
 BEN J. ARGUIJO
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	05/30/2012	Sampling Date:	05/25/2012
Reported:	06/06/2012	Sampling Type:	Soil
Project Name:	HAT MESA STATE 31-32	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

Sample ID: SB - 4 @ 25' (H201211-03)

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	05/31/2012	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	05/30/2012	ND	186	93.0	200	0.907		
DRO >C10-C28	<10.0	10.0	05/30/2012	ND	188	93.9	200	1.52		
EXT DRO >C28-C35	<10.0	10.0	05/30/2012	ND						

Surrogate: 1-Chlorooctane	85.4 %	65.2-140
Surrogate: 1-Chlorooctadecane	97.0 %	63.6-154

Sample ID: SB - 4 @ 40' (H201211-04)

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	05/31/2012	ND	432	108	400	3.77		

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Hope Moreno, Inorganic Technical Director

Analytical Results For:

 Basin Environmental Service
 BEN J. ARGUIJO
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	05/30/2012	Sampling Date:	05/25/2012
Reported:	06/06/2012	Sampling Type:	Soil
Project Name:	HAT MESA STATE 31-32	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

Sample ID: SB - 4 @ 45' (H201211-05)

BTEX 8021B		mg/kg		Analyzed By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/01/2012	ND	2.08	104	2.00	5.71	
Toluene*	<0.050	0.050	06/01/2012	ND	1.90	94.9	2.00	4.96	
Ethylbenzene*	<0.050	0.050	06/01/2012	ND	1.80	89.9	2.00	5.46	
Total Xylenes*	<0.150	0.150	06/01/2012	ND	5.47	91.2	6.00	5.00	

Surrogate: 4-Bromofluorobenzene (PID) 99.3 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	05/31/2012	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/30/2012	ND	186	93.0	200	0.907	
DRO >C10-C28	<10.0	10.0	05/30/2012	ND	188	93.9	200	1.52	
EXT DRO >C28-C35	<10.0	10.0	05/30/2012	ND					

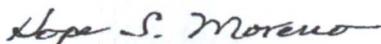
Surrogate: 1-Chlorooctane 86.9 % 65.2-140

Surrogate: 1-Chlorooctadecane 94.8 % 63.6-154

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* = Accredited Analyte

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Hope Moreno, Inorganic Technical Director

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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Hope Moreno, Inorganic Technical Director

June 18, 2012

BEN J. ARGUIJO

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: HAT MESA STATE 31-32

Enclosed are the results of analyses for samples received by the laboratory on 06/13/12 11:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 Basin Environmental Service
 BEN J. ARGUIJO
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	06/13/2012	Sampling Date:	05/25/2012
Reported:	06/18/2012	Sampling Type:	Soil
Project Name:	HAT MESA STATE 31-32	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

Sample ID: SB - 2 @ 45' (H201331-01)

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AP

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2000	16.0	06/18/2012	ND	432	108	400	3.77	

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

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RPD	Relative Percent Difference
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***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager

