

## ADDENDUM

Location name: HAT MESA 31 STATE 001H

OCD Spill Number: nGRL1216655362

Spill date: 4/18/2012

From: Dale Woodall, EXXONMOBIL

Date: 8/20/2025

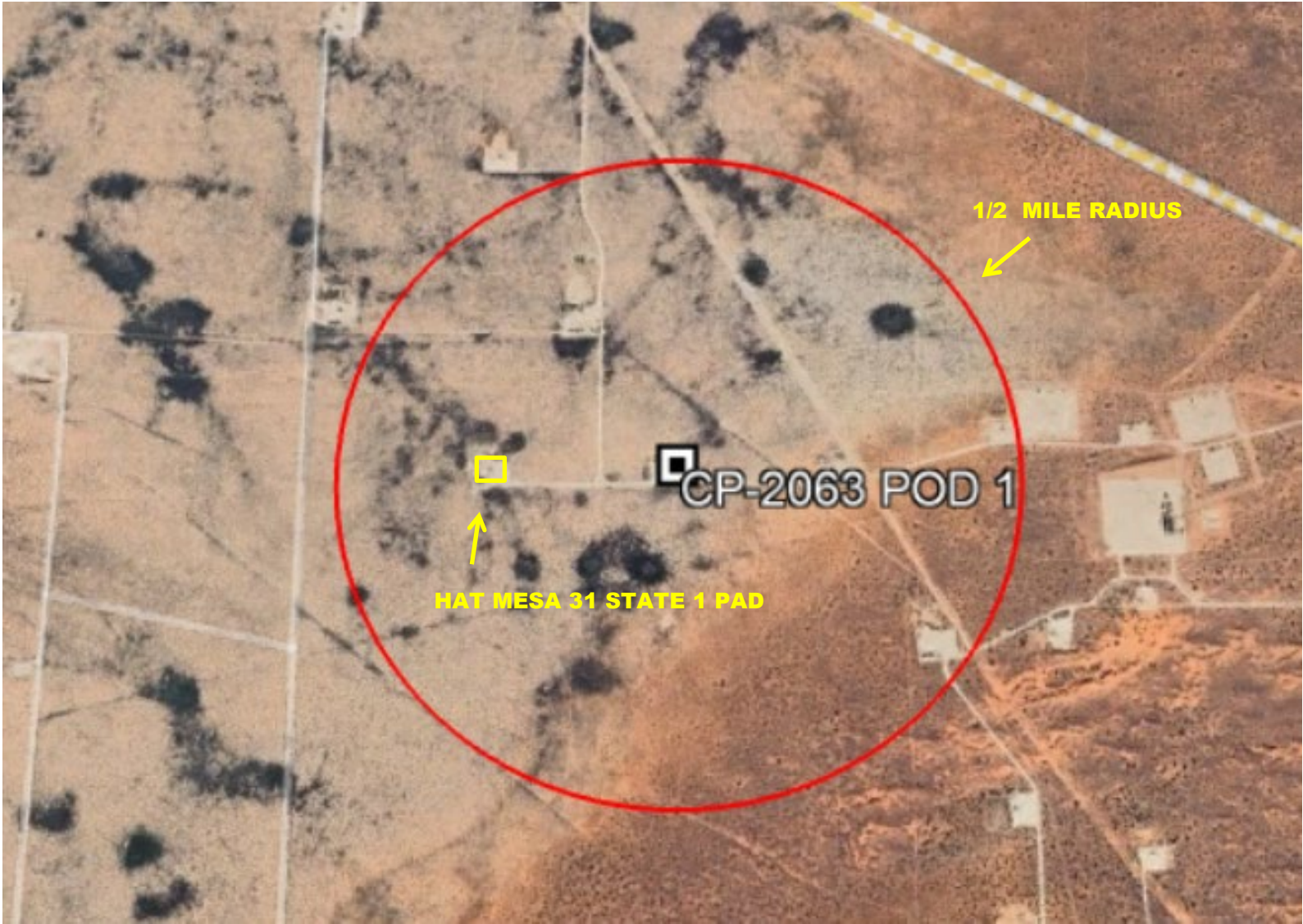
Since the BASIN report for the above referenced spill was written (submitted to the NM OCD on 07/27/2012), there has been an update in the status of the PODs for the location.

A review of New Mexico Office of the State Engineers (OSE) online water well database (New Mexico Office of the State Engineer (NMOSE) online water well database [https://gis.ose.state.nm.us/gisapps/ose\\_pod\\_locations/](https://gis.ose.state.nm.us/gisapps/ose_pod_locations/)).

One pod location is within 0.5 miles of the location and is less than 25 years old. CP- 2063 POD 1 (installed in 2025) did not encounter groundwater at 105 feet and is 0.25 miles west of the location.

The spill was remediated to criteria for DTW of greater than 100 feet bgs.

Boring log of the well CP-2063 POD1 is attached.



CP-2603 = 0.25 MILES FROM LOCATION  
(INSTALLED 6/2025)

FIGURE: NM OSE POD LOCATION	
HAT MESA 31 STATE 1	
OCD INCIDENT nGRL1216655362	
32.535073° / -103.695685°	
drawn by: RDW	Date: 08/2025



2904 W 2nd St.  
Roswell, NM 88201  
voice: 575.624.2420  
fax: 575.624.2421  
www.atkinseng.com

June 20, 2025

DII-NMOSE  
1900 W 2<sup>nd</sup> Street  
Roswell, NM 88201

*Hand Delivered to the DII Office of the State Engineer*

Re: Well Record C-2063 Pod-1

To whom it may concern:

Attached please find a well log & record and a plugging record, in duplicate, for a one (1) soil borings, C-2063 Pod-1.

If you have any questions, please contact me at 575.499.9244 or [lucas@atkinseng.com](mailto:lucas@atkinseng.com).

Sincerely,

A handwritten signature in black ink, appearing to read "Lucas Middleton".

Lucas Middleton

Enclosures: as noted above

OSE DII RECORD  
22 JUL 25 10:31:20



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD 1 (TW-1)		WELL TAG ID NO. N/A		OSE FILE NO(S). CP-2063			
	WELL OWNER NAME(S) Exxon Mobil				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 106 W Green St.				CITY Carlsbad	STATE NM	ZIP 88220	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 32	SECONDS 5.85	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE 103	41	44.71	W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE SE NE NE Sec. 31 T20S R33E. Hat Mesa								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 06/09/2025	DRILLING ENDED 06/09/2025	DEPTH OF COMPLETED WELL (FT) Temporary Well Material		BORE HOLE DEPTH (FT) ±105	DEPTH WATER FIRST ENCOUNTERED (FT) N/A		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add Centralizer info below <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A	DATE STATIC MEASURED	
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES – SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER – SPECIFY: Hollow Stem Auger						CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>	
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	105	±6.25	Soil Boring	--	--	--	--
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL *(if using Centralizers for Artesian wells- indicate the spacing below)	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
				N/A				

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WR-20 WELL RECORD & LOG (Version 09/22/2022)

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LOCATION	WELL TAG ID NO.	PAGE 1 OF 2




4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	6	6	Caliche, semi-consolidated, tan/white	Y    ✓ N	
	6	19	13	Sand, fine-grained, with caliche, tan and white	Y    ✓ N	
	19	39	10	Sand, fine-grained, clay, tannish brown	Y    ✓ N	
	39	69	30	Clay, with fine-grained sand semi-consolidated, Brown	Y    ✓ N	
	69	105	36	Clay, Stiff, High plastic, Brown	Y    ✓ N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
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					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:					TOTAL ESTIMATED WELL YIELD (gpm):	

5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
	MISCELLANEOUS INFORMATION: Temporary well material removed and soil boring backfilled using drill cuttings from total depth to ten feet below ground surface(bgs), then hydrated bentonite chips ten feet bgs to surface.	
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Cameron Pruitt	

6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:	
 Jackie D. Atkins (Jun 20, 2025 07:48 MDT)	Jackie D. Atkins	06/20/2025
SIGNATURE OF DRILLER / PRINT SIGNEE NAME		DATE

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WR-20 WELL RECORD &amp; LOG (Version 09/22/2022)

FILE NO.

POD NO.

TRN NO.

LOCATION

WELL TAG ID NO.

PAGE 2 OF 2



# PLUGGING RECORD



**NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC**

## I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: CP-2063 POD-1

Well owner: Exxon Mobil

Phone No.: 575-628-0451

Mailing address: 106 W Green St.

City: Carlsbad

State: NM

Zip code: 88220

## II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Jackie D. Atkins ( Atkins Engineering Associates Inc.)

2) New Mexico Well Driller License No.: 1249 Expiration Date: 04/30/27

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Cameron Pruitt

4) Date well plugging began: 06/17/2025 Date well plugging concluded: 06/17/2025

5) GPS Well Location: Latitude: 32 deg, 32 min, 5.85 sec  
Longitude: 103 deg, 41 min, 44.71 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 105 ft below ground level (bgl),  
by the following manner: water level probe

7) Static water level measured at initiation of plugging: n/a ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 05/13/2025

9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

OSE DII ROSWELL NM  
20 JUN '25 AM 9:20

- 10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

<u>Depth</u> (ft bgl)	<u>Plugging Material Used</u> (include any additives used)	<u>Volume of Material Placed</u> (gallons)	<u>Theoretical Volume of Borehole/ Casing</u> (gallons)	<u>Placement Method</u> (tremie pipe, other)	<u>Comments</u> ("casing perforated first", "open annular space also plugged", etc.)
0-10'	Hydrated Bentonite	Approx. 15 gallons	15 gallons	Boring	
10' 105'	Drill Cuttings	Approx. 151 gallons	151 gallons	Boring	

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

### III. SIGNATURE:

I, Jackie D. Atkins, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

  
Jackie D. Atkins (Jun 20, 2025 07:48 MDT)

Signature of Well Driller

06/20/2025

Date






# WR-20 Well Record and Log-packet-forsign

Final Audit Report

2025-06-20

Created:	2025-06-20
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAUDRjg2-cTP4LK_OCw1T5KdRCnje7O46N

## "WR-20 Well Record and Log-packet-forsign" History

-  Document created by Lucas Middleton (lucas@atkinseng.com)  
2025-06-20 - 1:11:28 PM GMT
-  Document emailed to Jack Atkins (jack@atkinseng.com) for signature  
2025-06-20 - 1:11:53 PM GMT
-  Email viewed by Jack Atkins (jack@atkinseng.com)  
2025-06-20 - 1:44:53 PM GMT
-  Document e-signed by Jack Atkins (jack@atkinseng.com)  
Signature Date: 2025-06-20 - 1:48:22 PM GMT - Time Source: server
-  Agreement completed.  
2025-06-20 - 1:48:22 PM GMT

OSE DII ROSWELL NM  
20 JUN '25 AM9:21



## ***Basin Environmental Service Technologies, LLC***

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P. O. Box 301  
Lovington, New Mexico 88260

**bjarguijo@basinenv.com**

Office: (575) 396-2378 Fax: (575) 396-1429



### **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**

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**Ben J. Arguijo  
Project Manager**

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**FIGURES**

Figure 1 – Site Location Map

Figure 2 – Site & Sample Location Map

**TABLES**

Table 1 – Concentrations of Benzene, BTEX, TPH & Chloride in Soil

**APPENDICES**

Appendix A – Release Notification and Corrective Action (Form C-141)

Appendix B – Photographs

Appendix C – Soil Boring Logs

Appendix D – Laboratory Analytical Reports

## 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 ft<sup>2</sup>). 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 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.

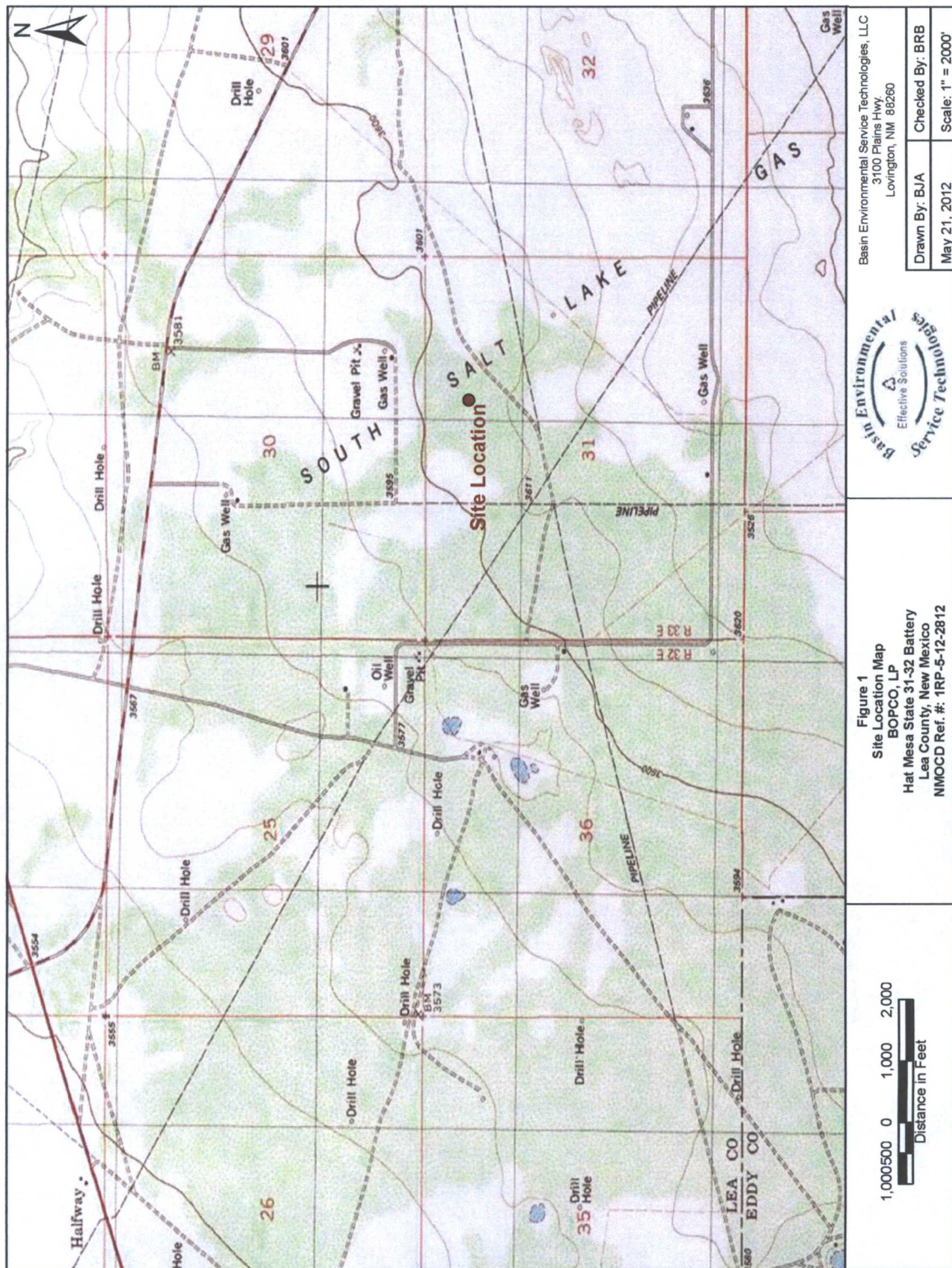
This report has been prepared for the benefit of BOPCO, LP. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of Basin Environmental Service Technologies, LLC, and/or BOPCO, LP.



## 7.0 DISTRIBUTION:

- Copy 1: Geoffrey Leking  
New Mexico Energy, Minerals and Natural Resources Department  
Oil Conservation Division (District 1)  
1625 French Drive  
Hobbs, NM 88240  
GeoffreyR.Leking@state.nm.us
- Copy 2: William Sonnamaker  
New Mexico State Land Office  
2702-D N. Grimes  
Hobbs, NM 88240
- Copy 3: Tony Savoie  
BOPCO, LP  
522 W. Mermod, Suite 704  
Carlsbad, NM 88220
- Copy 4: Basin Environmental Service Technologies, LLC  
P.O. Box 301  
Lovington, NM 88260







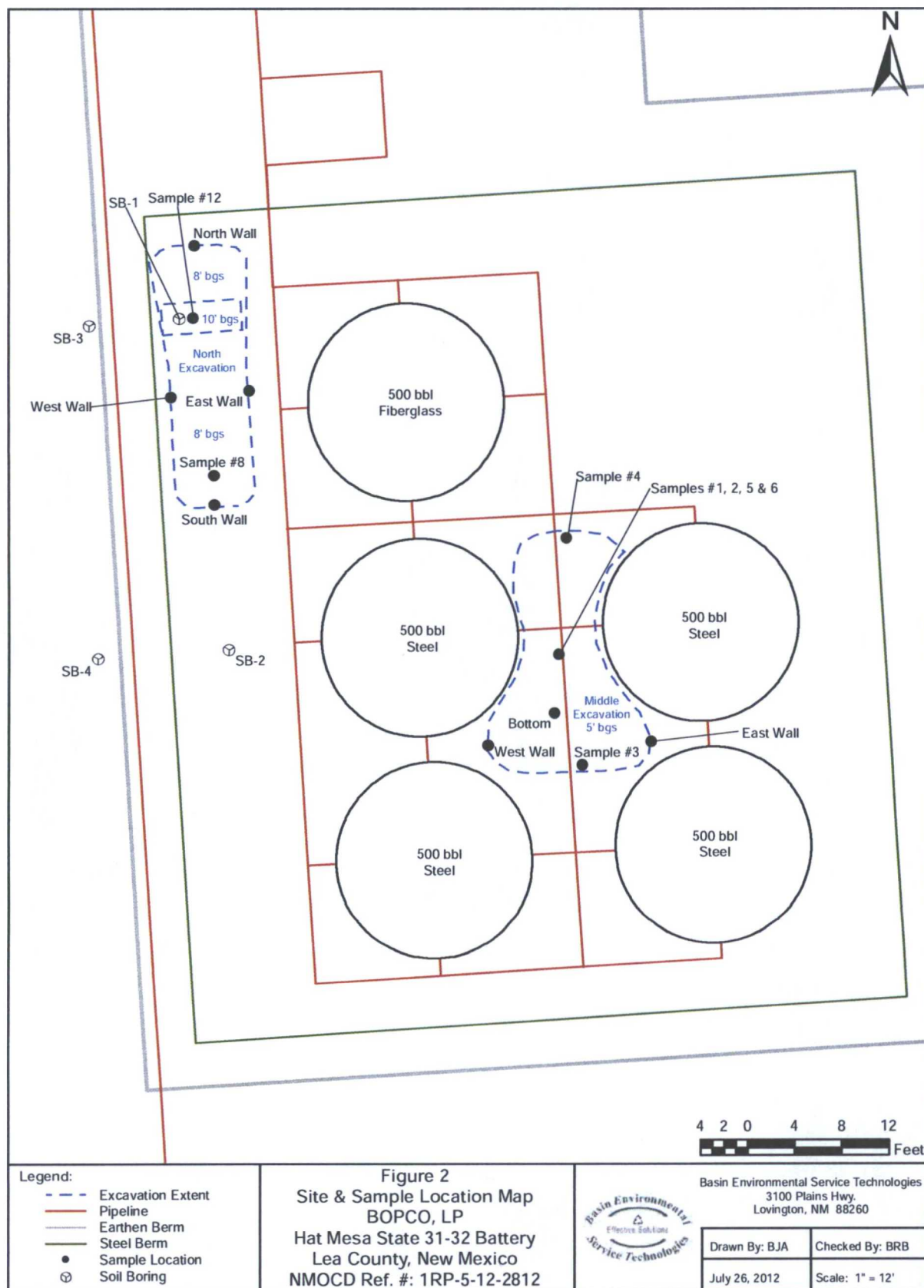


TABLE 1

## CONCENTRATIONS OF BENZENE, BTEX, TPH &amp; CHLORIDE IN SOIL

BOPCO, LP  
HAT MESA STATE 31-32 BATTERY  
LEA COUNTY, NEW MEXICO  
NMOC 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 <sub>6</sub> -C <sub>35</sub> (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 <sub>6</sub> -C <sub>12</sub> (mg/Kg)	DRO C <sub>12</sub> -C <sub>28</sub> (mg/Kg)	ORO C <sub>28</sub> -C <sub>35</sub> (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	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	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	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	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	1,550	
Middle Excavation East Wall	3.5'	5/4/2012	In-Situ	-	-	-	-	-	<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	-	
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	320	
SB-2 @ 20'	20'	5/25/2012	In-Situ	-	-	-	-	-	<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	4,000	
SB-2 @ 40'	40'	5/25/2012	In-Situ	-	-	-	-	-	<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	144	
SB-3 @ 5'	5'	5/25/2012	In-Situ	-	-	-	-	-	<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	1,180	
SB-3 @ 20'	20'	5/25/2012	In-Situ	-	-	-	-	-	<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	176	



TABLE 1

## CONCENTRATIONS OF BENZENE, BTX, TPH &amp; 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 <sub>6</sub> -C <sub>35</sub> (mg/Kg)	E 300 CHLORIDE (mg/Kg)
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTX (mg/Kg)	GRO C <sub>6</sub> -C <sub>12</sub> (mg/Kg)	DRO C <sub>12</sub> -C <sub>28</sub> (mg/Kg)	ORO C <sub>28</sub> -C <sub>35</sub> (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	<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	<10.0	<10.0	<10.0	<10.0	160	
				10										
NMOCD Standard							50					1,000	500	

- = Not analyzed.



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

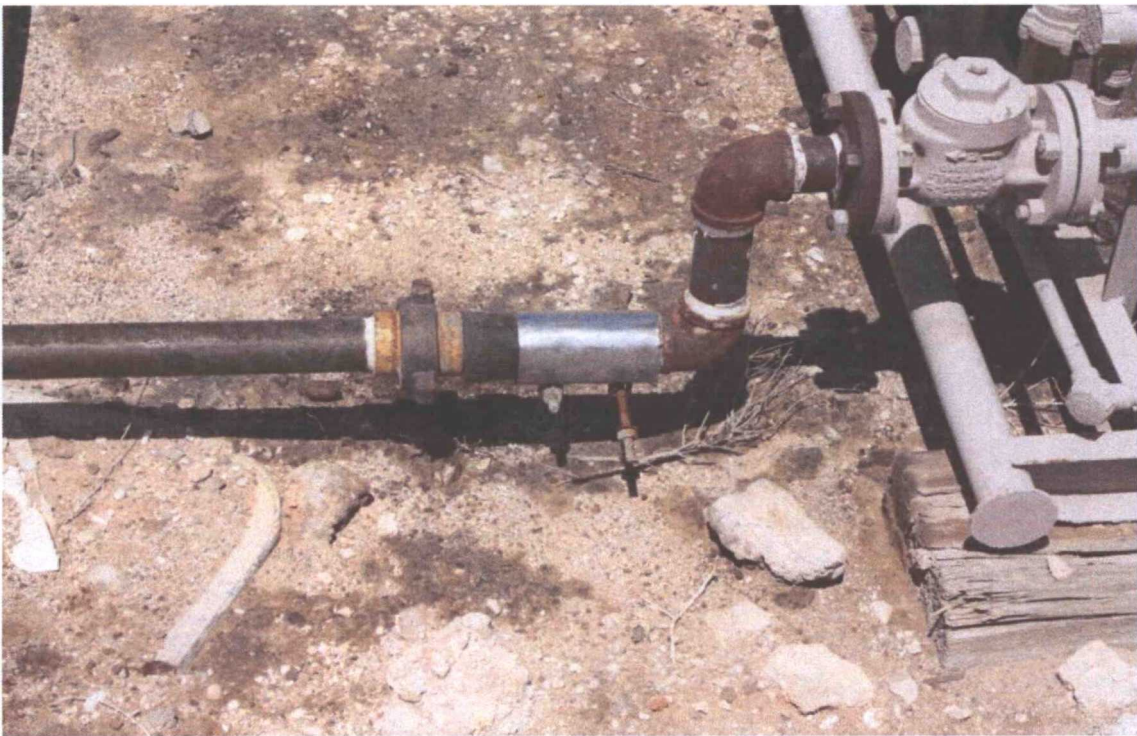


Hat Mesa State 31-32 Battery - Release Site





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



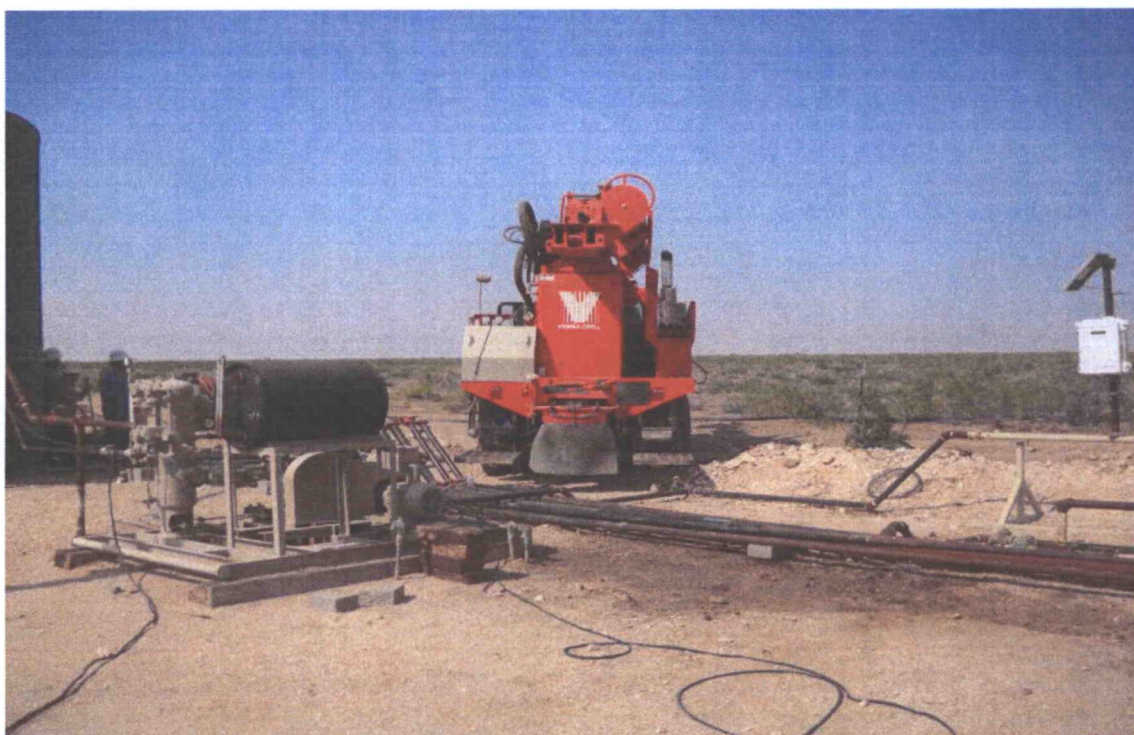


Hat Mesa State 31-32 Battery - North Excavation (following backfill, looking north)



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		>2,500	50.0	Moderate	None	11' - 20' - Tan fine sand
15		4,288	46.8	Slight	None	
20						

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

## 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	None	
15		409		None	None	
20		264		None	None	14' - 35' - Tan fine sand; sandstone
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  
 June 21, 2012

Checked By: BRB



# Soil Boring SB-4

Depth Below Ground Surface	Soil Column	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description	Boring SB-4
0							Date Drilled <u>May 25, 2012</u>
5			1.0	None	None	0' - 7' - Tan fine sand; caliche; sandstone	Thickness of Bentonite Seal <u>45 Ft</u>
10			0.7	None	None		Depth of Exploratory Boring <u>45 Ft bgs</u>
15		<120	0.2	None	None		Depth to Groundwater _____
20		<120		None	None	7' - 38' - Red fine sand; sandstone	Ground Water Elevation _____
25		<120		None	None		
30				None	None		
35		160		None	None		
40		200		None	None	38' - 45' - Red silty sand; silty clay	
45		160		None	None		

 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	



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

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](http://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,

A handwritten signature in dark ink, appearing to read "Coley D. Keene", written in a cursive style.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

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

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

---

### 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

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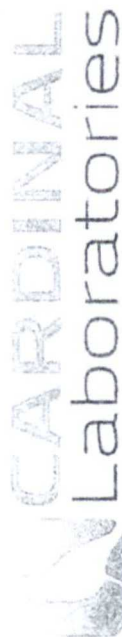
Cardinal Laboratories

\* = Accredited Analyte

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A handwritten signature in dark ink, appearing to read "Celey D. Keene", is written over a horizontal line.

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. #:									
Project Manager: Ben J. Arguijo		Company: BOPCO, LP									
Address: P.O. Box 301		Attn: Tony Savoie									
City: Lovington		Address: 522 W. Mermod									
Phone #: (575) 396-2378		City: Carlsbad									
Project #:		State: NM									
Project Name: HAT mesa		Zip: 88220									
Project Location: Lea, N.M.		Phone #: (432) 556-8730									
Sampler Name: Jody Walters		Fax #:									
FOR LAB USE ONLY	MATRIX	PRESERV.	SAMPLING								
	GROUNDWATER										
	WASTEWATER										
	SOIL										
	SLUDGE										
	OTHER										
	ACID/BASE										
	ICE / COOL										
	OTHER										
	# CONTAINERS										
	IGRAB OR (COMP										
	DATE										
	TIME										
	Boism										
	Chlorides										

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising out of or from this contract or test shall be limited to the amount paid by the client for the analyses. All claims, including those for negligence and any other cause of action, 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 time, or loss of profits incurred by client. Its subsidiaries, affiliates or subcontractors, including but not limited to the performance of services provided by Cardinal, regardless of subcontracting, shall be held liable upon any of the above stated services or otherwise.

Relinquished By: <i>[Signature]</i>	Date: 4/30/12	Received By: <i>[Signature]</i>	Date: 4/30/12	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
Relinquished By: <i>[Signature]</i>	Time: 0445	Received By: <i>[Signature]</i>	Time: 0445	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Delivered By: (Circle One) <i>[Signature]</i>	Date: 4/30/12	Received By: <i>[Signature]</i>	Date: 4/30/12	REMARKS:	
Sampler - UPS - Bus - Other:	40	Sample Condition: Cool <input type="checkbox"/> Intact <input type="checkbox"/>	40	Please email results to pm@basinenv.com & TSavoie@BasinPet.com	
		Checked By: <i>[Signature]</i>			

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



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

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](http://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,

A handwritten signature in dark ink, reading "Celey D. Keene", written in a cursive style.

Celey D. Keene

Lab Director/Quality Manager





PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

**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					
Surrogate: 1-Chlorooctane	179 %	55.5-154							
Surrogate: 1-Chlorooctadecane	434 %	57.6-158							

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

TPH 8015M	mg/kg	Analyzed By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<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					
Surrogate: 1-Chlorooctane	91.8 %	55.5-154							
Surrogate: 1-Chlorooctadecane	103 %	57.6-158							

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\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**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 #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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Celey D. Keene, Lab Director/Quality Manager





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**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 #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	
<b>DRO &gt;C10-C28</b>	<b>22.7</b>	10.0	05/09/2012	ND	184	92.0	200	3.04	
<b>EXT DRO &gt;C28-C35</b>	<b>16.1</b>	10.0	05/09/2012	ND					
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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**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 #6 8' (H201026-05)**

BTX 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

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

Basin Environmental Service  
 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 #8 1' (H201026-06)**

BTX 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*	<b>0.547</b>	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, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<b>3480</b>	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	<b>4180</b>	200	05/09/2012	ND	184	92.0	200	3.04	
EXT DRO >C28-C35	<b>1650</b>	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



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 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)**

BTX 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, SM4500Cl-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





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**Analytical Results For:**

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 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)**

BTX 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

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

---

**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

---

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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: Basin Environmental Service Technologies, LLC										P.O. #:										
Project Manager: Ben J. Arquijo										Company: BOPCO, LP										
Address: P.O. Box 301										Attn: Tony Savoie										
City: Lovington										Address: 522 W. Marmod										
Phone #: (575) 396-2378										City: Carlsbad										
Project #:										State: NM Zip: 88220										
Project Name: HAT MESA 313Z										Phone #: (432) 556-8730										
Project Location: Lea NM										Fax #:										
Sampler Name: Jody Walters																				
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX	PRESERV.	SAMPLING	DATE	TIME												
1420026	1 Sample # 2 4'	0	1	WASTE WATER			5-3-12	13:00												
	2 Sample # 3 3'	0	1	WASTE WATER			5-3-12	13:05												
	3 Sample # 4 3'	0	1	WASTE WATER			5-3-12	13:10												
	4 Sample # 5 6'	0	1	WASTE WATER			5-3-12	13:15												
	5 Sample # 6 8'	0	1	WASTE WATER			5-3-12	13:18												
	6 Sample # 8 1'	0	1	WASTE WATER			5-3-12	13:25												
	7 Sample # 12 10'	0	1	WASTE WATER			5-3-12	14:00												
	8 Berm material	0	1	WASTE WATER			5-3-12	14:10												

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising from this contract shall be limited to the amount paid by the client for the analysis. 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. It is not a valid claim for negligence 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 rendered by Cardinal, regardless of whether such claim is brought upon any of the above stated remedies or otherwise.

Relinquished By: 	Date: 5/3/12	Received By: 	Date: 5/3/12
Time: 1:25		Time: 1:25	
Relinquished By: 	Date: 5/4/12	Received By: 	Date: 5/4/12
Time: 0:00		Time: 0:00	
Delivered By: (Circle One)	Sample Condition		
Sampler - UPS - Bus - Other:	Cool <input type="checkbox"/> Intact <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Checked By: (Initials) 
Remarks: Please email results to pm@basinenv.com & TSavoie@Basinet.com			

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

5/3/12







PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

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](http://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



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

**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, SM4500Cl-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, SM4500Cl-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





PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

**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)**

BTX 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*	<b>0.297</b>	0.050	05/11/2012	ND	2.19	110	2.00	5.41	
Total Xylenes*	<b>0.888</b>	0.150	05/11/2012	ND	6.98	116	6.00	7.19	

Surrogate: 4-Bromofluorobenzene (PID) 149 % 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	<b>19600</b>	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	<b>69.8</b>	50.0	05/09/2012	ND	193	96.5	200	1.03	
DRO >C10-C28	<b>613</b>	50.0	05/09/2012	ND	184	92.0	200	3.04	
EXT DRO >C28-C35	<b>140</b>	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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\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**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 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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**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)**

BTX 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

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Celey D. Keene, Lab Director/Quality Manager





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**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							

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**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

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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													
P.O. #:																	
Company: <u>Bapt</u>																	
Attn:																	
Address:																	
City:																	
State:																	
Phone #:																	
Fax #:																	
Project Name: <u>HT+Mesa 31-32</u>																	
Project Location: <u>West of F-100</u>																	
Sampler Name: <u>FLY, Ruz</u>																	
FOR LAB USE ONLY																	
Lab I.D.	Sample I.D.	# CONTAINERS	MATRIX	PRESERV	SAMPLING	DATE	TIME										
		(G)RAB OR (C)OMP	GROUNDWATER WASTEWATER SOIL SLUDGE OTHER	ACID/BASE ICE / COOL OTHER													
H201D31	1 North Excavation East of F-100	✓	✓	✓	✓	5/11/12	10:38	✓	✓	✓	✓	✓	✓	✓	✓		
	2 North Excavation East of F-100	✓	✓	✓	✓	5/11/12	10:14	✓	✓	✓	✓	✓	✓	✓	✓		
	3 North Excavation East of F-100	✓	✓	✓	✓	5/11/12	10:15	✓	✓	✓	✓	✓	✓	✓	✓		
	4 North Excavation East of F-100	✓	✓	✓	✓	5/11/12	10:16	✓	✓	✓	✓	✓	✓	✓	✓		
	5 Middle Excavation East of F-100	✓	✓	✓	✓	5/11/12	10:30	✓	✓	✓	✓	✓	✓	✓	✓		
	6 Middle Excavation East of F-100	✓	✓	✓	✓	5/11/12	10:34	✓	✓	✓	✓	✓	✓	✓	✓		

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Relinquished By: <u>FLY, Ruz</u>	Received By: <u>Ty, Benson</u>	Date: <u>5/11/12</u>	Time: <u>11:00</u>	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #: <u></u>
Relinquished By: <u>Ty, Benson</u>	Received By: <u>Glenn Henderson</u>	Date: <u>5/11/12</u>	Time: <u>09:20</u>	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #: <u></u>
Delivered By: (Circle One)	Sample Condition: <u>Intact</u>	Checked By: <u>Glenn Henderson</u>	Initials: <u>GH</u>	REMARKS: <u></u>	
Sampler - UPS - Bus - Other:	Cool <input type="checkbox"/> Yes <input type="checkbox"/> No	Intact <input type="checkbox"/> Yes <input type="checkbox"/> No			

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

#26





PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

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](http://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,

A handwritten signature in dark ink, appearing to read "Coley D. Keene", written in a cursive style.

Celey D. Keene

Lab Director/Quality Manager



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**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, SM4500Cl-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

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Celey D. Keene, Lab Director/Quality Manager



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**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)**

BTX 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

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Celey D. Keene, Lab Director/Quality Manager



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### 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

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\*=Accredited Analyte

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---

Celey D. Keene, Lab Director/Quality Manager

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Basin Environmental Service Technologies, LLC		<b>BILL TO</b>		ANALYSIS REQUEST																	
Project Manager: Ben J. Arguijo		P.O. #:																			
Address: P.O. Box 301		Company: BOPCO, LP																			
City: Lovington		Attn: Tony Savoie																			
Phone #: (575) 396-2378		Address: 522 W. Mermod																			
Project #:		City: Carlsbad																			
Project Name: Hat Mesa State 31-32 Battery		State: NM Zip: 88220																			
Project Location: Lea Co., NM		Phone #: (432) 556-8730																			
Sampler Name:		Fax #:																			
FOR LAB USE ONLY																					
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	MATRIX	PRESERV	SAMPLING	DATE	TIME													
H2D1212	SB-1 Q 10'	G 1	1	WASTEWATER	OTHER	ACID/BASE	5/25/12	1100	8015 M	Chlor de	BTEX										
1	SB-1 Q 15'	1	1	SOIL	OTHER	ACID/BASE	1005	1005	X	X	X										
2	SB-1 Q 20'	1	1	GROUNDWATER	OTHER	ACID/BASE	1210	1210	X	X	X										
3																					
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Relinquished By:		Date: 5/29/12		Received By:		Date: 5/29/12		Time: 11:00 AM		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Phone #: <input type="checkbox"/> Yes <input type="checkbox"/> No									
Relinquished By:		Time: 11:00 AM		Received By:		Date: 5/29/12		Time: 11:00 AM		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Fax #: <input type="checkbox"/> Yes <input type="checkbox"/> No									
Delivered By: (Circle One)		Date: 5/29/12		Received By:		Date: 5/29/12		Time: 11:00 AM		REMARKS:		Please email results to pm@basinenr.com & TSavoie@BassPet.com									
Sampler - UPS - Bus - Other:		Sample Condition		Cool		Intact		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Checked By: (Initials)		JTS									

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



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

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](http://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,

A handwritten signature in black ink that reads "Hope S. Moreno". The signature is written in a cursive, flowing style.

Hope Moreno

Inorganic Technical Director





PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

**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



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**Analytical Results For:**

Basin Environmental Service  
 BEN J. ARGUJO  
 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)**

BTX 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

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Hope Moreno, Inorganic Technical Director



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**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 @ 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								

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**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 @ 30' (H201209-04)**

BTX 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, SM4500Cl-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

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Hope Moreno, Inorganic Technical Director



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**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, SM4500Cl-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, SM4500Cl-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



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**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)**

BTX 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	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

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Hope Moreno, Inorganic Technical Director



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---

**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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\* = Accredited Analyte

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Hope Moreno, Inorganic Technical Director





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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](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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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





PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

**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, SM4500Cl-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						
Surrogate: 1-Chlorooctane	83.6 %	65.2-140								
Surrogate: 1-Chlorooctadecane	96.8 %	63.6-154								

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**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)**

BTX 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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\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

**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 @ 20' (H201210-03)**

Chloride, SM4500Cl-B			mg/kg Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>496</b>	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, SM4500Cl-B			mg/kg Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>208</b>	16.0	05/31/2012	ND	432	108	400	3.77	

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Celey D. Keene, Lab Director/Quality Manager





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**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)**

BTX 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	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

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Celey D. Keene, Lab Director/Quality Manager

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**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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Celey D. Keene, Lab Director/Quality Manager

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[illegible]

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Relinquished By: <i>[Signature]</i> Date: 5/19/12 Time: 1815		Received By: <i>[Signature]</i> Date: 5.30.12 Time: 1:06		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #: _____ Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Fax #: _____ REMARKS:	
Relinquished By: <i>[Signature]</i> Date: _____ Time: _____		Received By: <i>[Signature]</i> Date: _____ Time: _____		Checked By: <i>[Signature]</i> (Initials)	
Delivered By: (Circle One) <i>[Signature]</i>		Sample Condition Cool - Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Please email results to <a href="mailto:emlabasincv.com">emlabasincv.com</a> & <a href="mailto:TASaavoic@Bassnet.com">TASaavoic@Bassnet.com</a>	
Sampler - UPS - Bus - Other: _____					

Please email results to [pm@basinov.com](mailto:pm@basinov.com)  
[tasavoices@basinov.com](mailto:tasavoices@basinov.com)

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





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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](http://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,

A handwritten signature in black ink that reads "Hope S. Moreno". The signature is written in a cursive, flowing style.

Hope Moreno

Inorganic Technical Director



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**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								

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\* = Accredited Analyte

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Hope Moreno, Inorganic Technical Director



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**Analytical Results For:**

Basin Environmental Service  
 BEN J. ARGUJO  
 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)**

BTX 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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Hope Moreno, Inorganic Technical Director





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**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 @ 25' (H201211-03)**

Chloride, SM4500Cl-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, SM4500Cl-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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**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)**

BTX 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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**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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## 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. #:												
Project Manager: Ben J. Arguilo		Company: BOPCO, LP												
Address: P.O. Box 301		Attn: Tony Sayoie												
City: Lovington		Address: 522 W. Mermod												
Phone #: (575) 396-2378		City: Carlsbad												
Project #:		State: NM Zip: 88220												
Project Name: Bat Mesa State 31-32 Battery		Phone #: (432) 556-8730												
Project Location: Lea Co., NM		Fax #:												
Sampler Name:														
FOR LAB USE ONLY														
Lab I.D.	Sample I.D.	MATRIX	PRESERV	SAMPLING	DATE	TIME								
H2D12.11	SB-4 @ 5'	GROUNDWATER	✓	✓	5/25/12	1330	✓	✓	✓	✓	✓	✓	✓	
1	SB-4 @ 10'	GROUNDWATER	✓	✓	5/25/12	1335	✓	✓	✓	✓	✓	✓	✓	
2	SB-4 @ 25'	GROUNDWATER	✓	✓	5/25/12	1350	✓	✓	✓	✓	✓	✓	✓	
3	SB-4 @ 40'	GROUNDWATER	✓	✓	5/25/12	1405	✓	✓	✓	✓	✓	✓	✓	
4	SB-4 @ 45'	GROUNDWATER	✓	✓	5/25/12	1410	✓	✓	✓	✓	✓	✓	✓	
5														

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising from this contract or for any claim arising from 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 rendered by Cardinal, regardless of whether such claim is based upon any of the above stated methods or otherwise.

Relinquished By:	Date: 5/25/12	Time: 1815	Received By:	Date: 5/25/12	Time: 1815
Relinquished By:	Date: 5/25/12	Time: 1815	Received By:	Date: 5/25/12	Time: 1815
Delivered By: (Circle One)	Date: 5/25/12	Time: 1815	Delivered By: (Circle One)	Date: 5/25/12	Time: 1815
Sampler - UPS - Bus - Other:	Date: 5/25/12	Time: 1815	Sampler - UPS - Bus - Other:	Date: 5/25/12	Time: 1815
Sample Condition	✓	Yes	Sample Condition	✓	Yes
Cool / Intact	✓	Yes	Cool / Intact	✓	Yes
Checked By: (Initials)	✓	Yes	Checked By: (Initials)	✓	Yes
Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No
Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No
Add'l Phone #: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #: <input type="checkbox"/> Yes <input type="checkbox"/> No
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REMARKS:					

Please email results to [pm@basinenr.com](mailto:pm@basinenr.com)  
& [TASavoie@BasinPet.com](mailto:TASavoie@BasinPet.com)

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



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

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](http://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,

A handwritten signature in dark ink, appearing to read "C. D. Keene", written in a cursive style.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

**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  
 Reported: 06/18/2012  
 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 @ 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	

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**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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A handwritten signature in cursive script, appearing to read "Celey D. Keene", is written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager

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101 East Marland, Hobbs, NM 88240  
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[illegible]

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**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

QUESTIONS

Action 497593

**QUESTIONS**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 497593
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

**QUESTIONS**

Prerequisites	
Incident ID (n#)	nGRL1216655362
Incident Name	NGRL1216655362 HAT MESA 31 STATE #001 @ 30-025-34575
Incident Type	Oil Release
Incident Status	Remediation Closure Report Received
Incident Well	[30-025-34575] HAT MESA 31 STATE #001

**Location of Release Source**

Please answer all the questions in this group.

Site Name	HAT MESA 31 STATE #001
Date Release Discovered	04/18/2012
Surface Owner	State

**Incident Details**

Please answer all the questions in this group.

Incident Type	Oil Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

**Nature and Volume of Release**

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.

Crude Oil Released (bbls) Details	Cause: Corrosion   Flow Line - Production   Crude Oil   Released: 5 BBL   Recovered: 0 BBL   Lost: 5 BBL.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	Not answered.
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.



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QUESTIONS, Page 2

Action 497593

**QUESTIONS (continued)**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 497593
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
Is this a gas only submission (i.e. only significant Mcf values reported)	<b>More info needed to determine if this will be treated as a "gas only" report.</b>
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	<b>No</b>
Reasons why this would be considered a submission for a notification of a major release	<i>Unavailable.</i>
<i>With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.</i>	

**Initial Response**

*The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.*

The source of the release has been stopped	<b>True</b>
The impacted area has been secured to protect human health and the environment	<b>True</b>
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	<b>True</b>
All free liquids and recoverable materials have been removed and managed appropriately	<b>True</b>
If all the actions described above have not been undertaken, explain why	<i>Not answered.</i>

*Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.*

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

I hereby agree and sign off to the above statement	Name: Robert Woodall Title: Environmental Analyst Email: <a href="mailto:robert.d.woodall@exxonmobil.com">robert.d.woodall@exxonmobil.com</a> Date: 08/20/2025
--	---

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QUESTIONS, Page 3

Action 497593

**QUESTIONS (continued)**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  497593
	Action Type:  [C-141] Deferral Request C-141 (C-141-v-Deferral)

**QUESTIONS****Site Characterization**

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	Attached Document
Did this release impact groundwater or surface water	No
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Greater than 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1 and 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

**Remediation Plan**

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

**Soil Contamination Sampling:** (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride (EPA 300.0 or SM4500 Cl B)	19600
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	889
GRO+DRO (EPA SW-846 Method 8015M)	246
BTEX (EPA SW-846 Method 8021B or 8260B)	1.2
Benzene (EPA SW-846 Method 8021B or 8260B)	0

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

On what estimated date will the remediation commence	05/03/2012
On what date will (or did) the final sampling or liner inspection occur	05/25/2012
On what date will (or was) the remediation complete(d)	07/13/2012
What is the estimated surface area (in square feet) that will be reclaimed	313
What is the estimated volume (in cubic yards) that will be reclaimed	99
What is the estimated surface area (in square feet) that will be remediated	313
What is the estimated volume (in cubic yards) that will be remediated	99

These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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QUESTIONS, Page 4

Action 497593

**QUESTIONS (continued)**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  497593
	Action Type:  [C-141] Deferral Request C-141 (C-141-v-Deferral)

**QUESTIONS**

<b>Remediation Plan (continued)</b>	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
<b>This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:</b>	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	<a href="#">fEEM0112342028 LEA LAND LANDFILL</a>
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.	
I hereby agree and sign off to the above statement	Name: Robert Woodall Title: Environmental Analyst Email: <a href="mailto:robert.d.woodall@exxonmobil.com">robert.d.woodall@exxonmobil.com</a> Date: 08/20/2025
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	



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QUESTIONS, Page 5

Action 497593

**QUESTIONS (continued)**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  497593
	Action Type:  [C-141] Deferral Request C-141 (C-141-v-Deferral)

**QUESTIONS**

<b>Deferral Requests Only</b>	
<i>Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.</i>	
Requesting a deferral of the remediation closure due date with the approval of this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Is the remaining contamination in areas immediately under or around production equipment where remediation could cause a major facility deconstruction	Yes
Please list or describe the production equipment and how (re)moving the equipment would cause major facility deconstruction	aboveground water production and oil tanks, above ground piping servicing the tanks would need to be removed
What is the remaining surface area (in square feet) that will still need to be remediated if a deferral is granted	132
What is the remaining volume (in cubic yards) that will still need to be remediated if a deferral is granted	40
<i>Per Paragraph (2) of Subsection C of 19.15.29.12 NMAC if contamination is located in areas immediately under or around production equipment such as production tanks, wellheads and pipelines where remediation could cause a major facility deconstruction, the remediation, restoration and reclamation may be deferred with division written approval until the equipment is removed during other operations, or when the well or facility is plugged or abandoned, whichever comes first.</i>	
Enter the facility ID (f#) on which this deferral should be granted	Not answered.
Enter the well API (30-) on which this deferral should be granted	30-025-34594 HAT MESA 31 STATE #002
Contamination does not cause an imminent risk to human health, the environment, or groundwater	True
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.	
I hereby agree and sign off to the above statement	Name: Robert Woodall Title: Environmental Analyst Email: robert.d.woodall@exxonmobil.com Date: 08/20/2025

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QUESTIONS, Page 6

Action 497593

QUESTIONS (continued)

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  497593
	Action Type:  [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	{Unavailable.}

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	No

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CONDITIONS

Action 497593

**CONDITIONS**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:
	5380
	Action Number: 497593
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

**CONDITIONS**

Created By	Condition	Condition Date
michael.buchanan	Remediation closure is approved.	12/12/2025
michael.buchanan	The reclamation report will need to include: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. The OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical; pictures of the top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater; and a revegetation plan.	12/12/2025
michael.buchanan	A reclamation report will not be accepted until reclamation of the release area, including areas reasonably needed for production or drilling activities, is complete and meet the requirements of 19.15.29.13 NMAC. Areas not reasonably needed for production or drilling activities will still need to be reclaimed and revegetated as early as practicable.	12/12/2025
michael.buchanan	All revegetation activities will need to be documented and included in the revegetation report. The revegetation report will need to include: An executive summary of the revegetation activities including: Seed mix, Method of seeding, dates of when the release area was reseeded, information pertinent to inspections, information about any amendments added to the soil, information on how the vegetative cover established meets the life-form ratio of plus or minus fifty percent of pre-disturbance levels and a total percent plant cover of at least seventy percent of pre-disturbance levels, excluding noxious weeds per 19.15.29.13 D.(3) NMAC, and any additional information; a scaled Site Map including area that was revegetated in square feet; and pictures of the revegetated areas during reseeding activities, inspections, and final pictures when revegetation is achieved.	12/12/2025
michael.buchanan	A revegetation report will not be accepted until revegetation of the release area, including areas reasonably needed for production or drilling activities, is complete and meet the requirements of 19.15.29.13 NMAC. Areas not reasonably needed for production or drilling activities will still need to be reclaimed and revegetated as early as practicable.	12/12/2025
michael.buchanan	Per 19.15.29.13 E. NMAC, if a reclamation and revegetation report has been submitted to the surface owner, it may be used if the requirements of the surface owner provide equal or better protection of freshwater, human health, and the environment. A copy of the approval of the reclamation and revegetation report from the surface owner and a copy of the approved reclamation and revegetation report will need to be submitted to the OCD via the Permitting website.	12/12/2025