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Effective Solutions

REMEDIATION SUMMARY &

SITE CLOSURE REQUEST

BOPCO, LP
JAMES RANCH UNIT #36 TANK BATTERY
Eddy County, New Mexico
Unit Letter "G" (SW/NE), Section 1, Township 23 South, Range 30 East
Latitude 32.335615° North, Longitude 103.832117° West
NMOCD Reference #: 2RP-1204

Prepared For:

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

Prepared By:
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December 2013

Ben J. Arguijo
Project Manager

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

1.0 INTRODUCTION & BACKGROUND INFORMATION

Basin Environmental Service Technologies, LLC (Basin Environmental), on behalf of BOPCO, LP (BOPCO), has prepared this *Remediation Summary & Site Closure Request* for the release site known as James Ranch Unit #36 Tank Battery. The legal description of the release site is Unit Letter "G" (SW/NE), Section 1, Township 23 South, Range 30 East, in Eddy County, New Mexico. The geographic coordinates of the release site are 32.335615° North latitude and 103.832117° West longitude. The property affected by the release is owned by the United States Department of the Interior - Bureau of Land Management (BLM). Please reference Figure 1 for a "Site Location Map".

On June 24, 2012, BOPCO discovered a release had occurred at the James Ranch Unit #36 Tank Battery. A series of mechanical, electrical, and calibration failures involving the primary and secondary water pumps and the high level alarm resulted in a storage tank overflow. The release was immediately reported to the New Mexico Oil Conservation Division (NMOCD) Artesia District Office. The "Release Notification and Corrective Action" (Form C-141) indicated approximately four hundred and fifty barrels (450 bbls) of produced water and approximately five barrels (5 bbls) of crude oil were released. During initial response activities, the mechanical, electrical, and calibration failures were corrected, and a vacuum truck was utilized to recover approximately one hundred barrels (100 bbls) of produced water. Visibly stained soil along the flow path of the release was scraped up and stockpiled on-site, pending final disposition.

The release affected an area measuring approximately thirty-two thousand, nine hundred square feet (32,900 ft^2), which included the caliche pad surrounding the James Ranch Unit #36 Tank Battery, the caliche pad surrounding the nearby Hudson Federal Tank Battery, and the access road connecting the two (2) locations. Approximately eight hundred square feet (800 ft^2) of pastureland adjacent to the Hudson Federal Tank Battery was also affected by the release.

The release mingled with an area of historical impact around the James Ranch Unit #36 Tank Battery, which was undergoing remediation at the time. Since the area affected by the June 24, 2012, release is indistinguishable from that affected by the historical release(s), the releases were remediated concurrently.

The Form C-141 is provided as Appendix A. General photographs of the release site are provided as Appendix B.

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 1, Township 23 South, Range 30 East. A depth-to-groundwater reference map utilized by the NMOCD indicates groundwater should be encountered at approximately one hundred and seventy feet (170') bgs. Based on the NMOCD ranking system, zero (0) 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 one thousand feet (1,000') 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 one thousand feet (1,000') 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 James Ranch Unit #36 Tank Battery release site has an initial ranking score of zero (0) points. The soil remediation levels for a site with a ranking score of zero (0) points are as follows:

- Benzene – 10 mg/kg (ppm)
- Benzene, ethylbenzene, toluene, and xylenes (BTEX) – 50 mg/kg (ppm)
- Total petroleum hydrocarbons (TPH) – 5,000 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.

3.0 SUMMARY OF SOIL REMEDIATION ACTIVITIES

On June 13, 2012, delineation of the historical releases commenced. A series of hand-augered soil borings (Sample #1, Sample #2, Sample #3, Sample #4, Sample #6, and Sample #7) and one (1) delineation trench (Sample #5) were advanced inside the earthen containment area surrounding the James Ranch Unit #36 Tank Battery to investigate the horizontal and vertical extent of impacted soil. The soil borings were each advanced to depths of approximately six inches (6") bgs. The delineation trench was located to the west of the on-site storage tanks, near the release point, and was advanced to a total depth of approximately six feet (6') bgs.

A total of ten (10) delineation soil samples (Sample #1, Sample #2, Sample #3, Sample #4, Sample #5, Sample #5 @ 2', Sample #5 @ 4', Sample #5 @ 6', Sample #6, and Sample #7) were submitted to Cardinal Laboratories in Hobbs, New Mexico, for analysis of TPH and chloride concentrations in accordance with Environmental Protection Agency (EPA) Methods SW-846 8015M and 4500 Cl-B, respectively. Sample #5 @ 6' was also analyzed for concentrations of BTEX in accordance with EPA Method SW-846 8021b.

Laboratory analytical results indicated TPH concentrations ranged from 164 mg/kg in Sample #4 to 17,487 mg/kg in Sample #6. Chloride concentrations ranged from 208 mg/kg in Sample #3 to 26,800 mg/kg in Sample #7. The benzene concentration in Sample #5 @ 6' was less than the laboratory method detection limit (MDL), and the BTEX concentration was 3.71 mg/kg. Table 1 summarizes the "Concentrations of Benzene, BTEX, TPH & Chloride in Soil". Soil sample locations are depicted in Figure 3, "Site & Sample Location Map - JRU #36 Tank Battery Excavation". Laboratory analytical reports are provided as Appendix E.

From June 18 through June 20, 2012, approximately three hundred and forty cubic yards (340 yd^3) of impacted soil was transported to Lea Land, Inc. (NMOCD Permit # WM-01-035), for disposal.

On June 25, 2012, following initial response activities, remediation of the June 24, 2012, release site commenced. From June 25 through June 27, 2012, approximately two hundred and fifty

cubic yards (250 yd^3) of heavily impacted soil was excavated from within the containment area surrounding the James Ranch Unit #36 Tank Battery and stockpiled on-site, pending final disposition. To preserve the structural integrity of the on-site storage tanks, the vertical limits of the excavation were limited to approximately six inches (6") to one foot (1') bgs.

On June 27, 2012, a series of hand-augered soil borings were advanced in the containment area to investigate the vertical extent of impacted soil. The soil borings were each advanced to depths of approximately six inches (6") bgs. A total of six (6) delineation soil samples (Sample #8 through Sample #13) were submitted to the laboratory for analysis of TPH and chloride concentrations. Sample #8 was also analyzed for concentrations of BTEX. Laboratory analytical results indicated TPH concentrations ranged from 587 mg/kg in Sample #12 to 20,509 mg/kg in Sample #8. Chloride concentrations ranged from 6,240 mg/kg in Sample #13 to 17,600 mg/kg in Sample #9. The benzene concentration in Sample #8 was less than the laboratory MDL, and the BTEX concentration was 12.1 mg/kg. Soil sample locations are depicted in Figure 3.

Following sample collection, the James Ranch Unit #36 Tank Battery excavation was backfilled with non-impacted soil.

On July 31, 2012, after having procured both permission from the landowner (BLM) and the proper permit from the NMOSE (File #C-03559), four (4) soil borings (SB-1 through SB-4) were advanced at the site to further delineate the vertical extent of impacted soil. Soil samples were collected at five-foot (5') drilling intervals and field-screened using a Photo-Ionization Detector (PID) and/or chloride test kit. Selected soil samples were submitted to the laboratory for analysis of BTEX, TPH, and/or chloride concentrations. The locations of the soil borings are depicted in Figure 2, "Site & Sample Location Map - Overview (Aerial)". Soil boring logs are provided as Appendix C. BLM and NMOSE permits are provided as Appendix D.

Soil boring SB-1 was located inside the containment area of the James Ranch Unit #36 Tank Battery. The soil boring was advanced to a total depth of approximately fifty feet (50') bgs. Soil samples collected at drilling depths of five feet (5'), ten feet (10'), twenty-five feet (25'), thirty-five feet (35'), forty-five feet (45'), and fifty feet (50') bgs were submitted to the laboratory for analysis of BTEX, TPH, and/or chloride concentrations. Laboratory analytical results indicated BTEX and TPH constituent concentrations were less than the appropriate laboratory MDL in all submitted soil samples. Chloride concentrations ranged from 128 mg/kg in soil sample SB-1 @ 50' to 896 mg/kg in soil sample SB-1 @ 25'.

Soil boring SB-2 was located in the access road between the James Ranch Unit #36 and Hudson Federal tank batteries, in a pooling area along the flow path of the release, approximately two hundred and forty-five feet (245') to the west-southwest of soil boring SB-1. The soil boring was advanced to a total depth of approximately twenty-five feet (25') bgs. Soil samples collected at drilling depths of five feet (5'), ten feet (10'), twenty feet (20'), and twenty-five feet (25') 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 ranged from less than the laboratory MDL in soil samples SB-2 @ 10' and SB-2 @ 25' to 15.4 mg/kg in soil sample SB-2 @ 5'. Chloride concentrations ranged from 144 mg/kg in soil sample SB-2 @ 20' to 1,880 mg/kg in soil sample SB-2 @ 5'.

Soil boring SB-3 was located in the access road between the James Ranch Unit #36 and Hudson Federal tank batteries, in a pooling area along the flow path of the release, approximately three hundred and eighty feet (380') to the west of soil boring SB-2. The soil boring was advanced to a total depth of approximately twenty feet (20') bgs. Soil samples collected at drilling depths of five feet (5'), ten feet (10'), fifteen feet (15'), and twenty feet (20') bgs were submitted to the laboratory for analysis of BTEX, TPH, and/or chloride concentrations. Laboratory analytical results indicated BTEX and TPH constituent concentrations were less than the appropriate laboratory MDL in all submitted soil samples. Chloride concentrations ranged from 208 mg/kg in soil sample SB-3 @ 20' to 1,520 mg/kg in soil sample SB-3 @ 5'.

Soil boring SB-4 was located in a pooling area near the terminus of the flow path of the release, adjacent to, and to the south of, the containment area surrounding the Hudson Federal Tank Battery. The soil boring was advanced to a total depth of approximately twenty-five feet (25') bgs. Soil samples collected at drilling depths of five feet (5'), ten feet (10'), fifteen feet (15'), twenty feet (20'), and twenty-five feet (25') bgs were submitted to the laboratory for analysis of BTEX, TPH, and/or chloride concentrations. Laboratory analytical results indicated BTEX and TPH constituent concentrations were less than the appropriate laboratory MDL in all submitted soil samples. Chloride concentrations ranged from 256 mg/kg in soil sample SB-4 @ 25' to 992 mg/kg in soil sample SB-4 @ 15'.

On February 4, 2013, excavation of impacted soil commenced at the Hudson Federal Tank Battery. A chloride test kit was used to field-screen the horizontal and vertical extent of impacted soil and to guide the excavation. To facilitate remediation activities, the excavation was divided into two (2) sections: Tank Battery Excavation and Pooling Area Excavation. The Tank Battery Excavation was located in the area represented by soil boring SB-4. The Pooling Area Excavation was located in pastureland adjacent to the Hudson Federal Tank Battery, at the terminus of the flow path of the release. From February 4 through March 28, 2013, excavated soil was stockpiled on-site, pending final disposition.

On February 13, 2013, sixteen (16) soil samples (Sample #1 through Sample #16) were collected from the floor and sidewalls of the Tank Battery Excavation and submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from 160 mg/kg in Sample #7, Sample #8, Sample #9, and Sample #12 to 3,200 mg/kg in Sample #1. Soil sample locations are depicted in Figure 4, "Site & Sample Location Map - Hudson Tank Battery Excavation".

Further excavation in the areas represented by Sample #1, Sample #3, Sample #6, and Sample #10 was deemed impracticable due to the presence of active pipelines and appurtenances adjacent to the Tank Battery Excavation.

On March 11, 2013, thirteen (13) soil samples (Sample #1 through Sample #13) were collected from the floor and sidewalls of the Pooling Area Excavation and submitted to the laboratory for analysis of chloride concentrations. Sample #3 and Sample #11 were also analyzed for concentrations of BTEX. Laboratory analytical results indicated chloride concentrations ranged from 48.0 mg/kg in Sample #8 to 864 mg/kg in Sample #2. TPH and BTEX constituent concentrations in Sample #3 and Sample #11 were less than the appropriate laboratory MDL. Soil sample locations are depicted in Figure 5, "Site & Sample Location Map - Hudson Pooling Area Excavation".

Based on laboratory analytical results, from March 20 through April 1, 2013, the Hudson Federal Tank Battery excavations were backfilled in eighteen-inch (18") lifts, compacted, and contoured to fit the surrounding topography. Prior to backfilling, the final dimensions of the Tank Battery Excavation were approximately one hundred and sixty-six feet (166') in length, varying in width from approximately three feet (3') to approximately seventy-five feet (75'), and varying in depth from approximately one and one-half feet (1.5') to approximately two and one-half feet (2.5') bgs. Final dimensions of the Pooling Area Excavation were approximately eighty-nine feet (89') in length, varying in width from approximately fifty-one feet (51') to approximately fifty-eight feet (58'), and varying in depth from approximately two feet (2') to approximately eight feet (8') bgs.

On March 27, 2013, additional excavation was conducted adjacent to, and to the west of, the James Ranch Unit #36 Tank Battery, along the flow path of the release. Excavated soil was stockpiled on-site, pending final disposition.

On March 28, 2013, the second James Ranch Unit #36 Tank Battery excavation was backfilled with non-impacted soil, compacted, and contoured to fit the surrounding topography. Prior to backfilling, the final dimensions of the excavation were approximately one hundred and fifteen feet (115') in length, approximately twenty feet (20') in width, and approximately six inches (6") in depth. The boundaries of the excavation are depicted in Figure 3.

From February 7 through April 1, 2013, approximately one thousand, four hundred and ninety-five cubic yards (1,495 yd^3) of impacted soil was transported to Lea Land, Inc., for disposal.

To mitigate future releases, a steel-walled containment area has been constructed around the James Ranch Unit #36 Tank Battery. A felt liner has been installed in the floor of the new containment area, and the floor and perimeter walls have been coated with an impermeable, spray-on polyurethane liner. The steel perimeter walls extend approximately two feet (2') above ground surface.

Upon landowner request, the area disturbed by the Hudson Federal Tank Battery Pooling Area Excavation will be seeded with a BLM-approved seed mixture at a time conducive to germination.

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:

- BTEX concentrations in accordance with EPA Method SW-846 8021b
- TPH concentrations in accordance with EPA Method SW-846 8015M
- Chloride concentrations in accordance with EPA Methods 4500 Cl-B

4.2 Decontamination of Equipment

Cleaning of the sampling equipment was the responsibility of the environmental technician. Prior to use, and between each sample, the sampling equipment was cleaned with Liqui-Nox® detergent and rinsed with distilled water.

4.3 Laboratory Protocol

The laboratory was responsible for proper QA/QC procedures after signing the chain-of-custody form(s). These procedures were either transmitted with the laboratory reports or are on file at the laboratory.

5.0 SITE CLOSURE REQUEST

Soil samples collected from the floor and sidewalls of the Tank Battery and Pooling Area Excavations were analyzed by an NMOCD-approved laboratory, and concentrations of benzene, BTEX, and TPH were below the regulatory remediation action levels established for the site by the NMOCD.

The Tank Battery Excavation was excavated to the extent practicable. Soil exhibiting chloride concentrations above the regulatory remediation action level will be remediated upon decommission or abandonment of the currently active tank battery and/or pipelines.

Basin Environmental recommends BOPCO provide the NMOCD Artesia District Office a copy of this *Remediation Summary & Site Closure Request* and request the NMOCD grant site closure to the James Ranch Unit #36 Tank Battery release site.

6.0 LIMITATIONS

Basin Environmental Service Technologies, LLC, has prepared this *Remediation Summary & 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: Mike Bratcher
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Figures

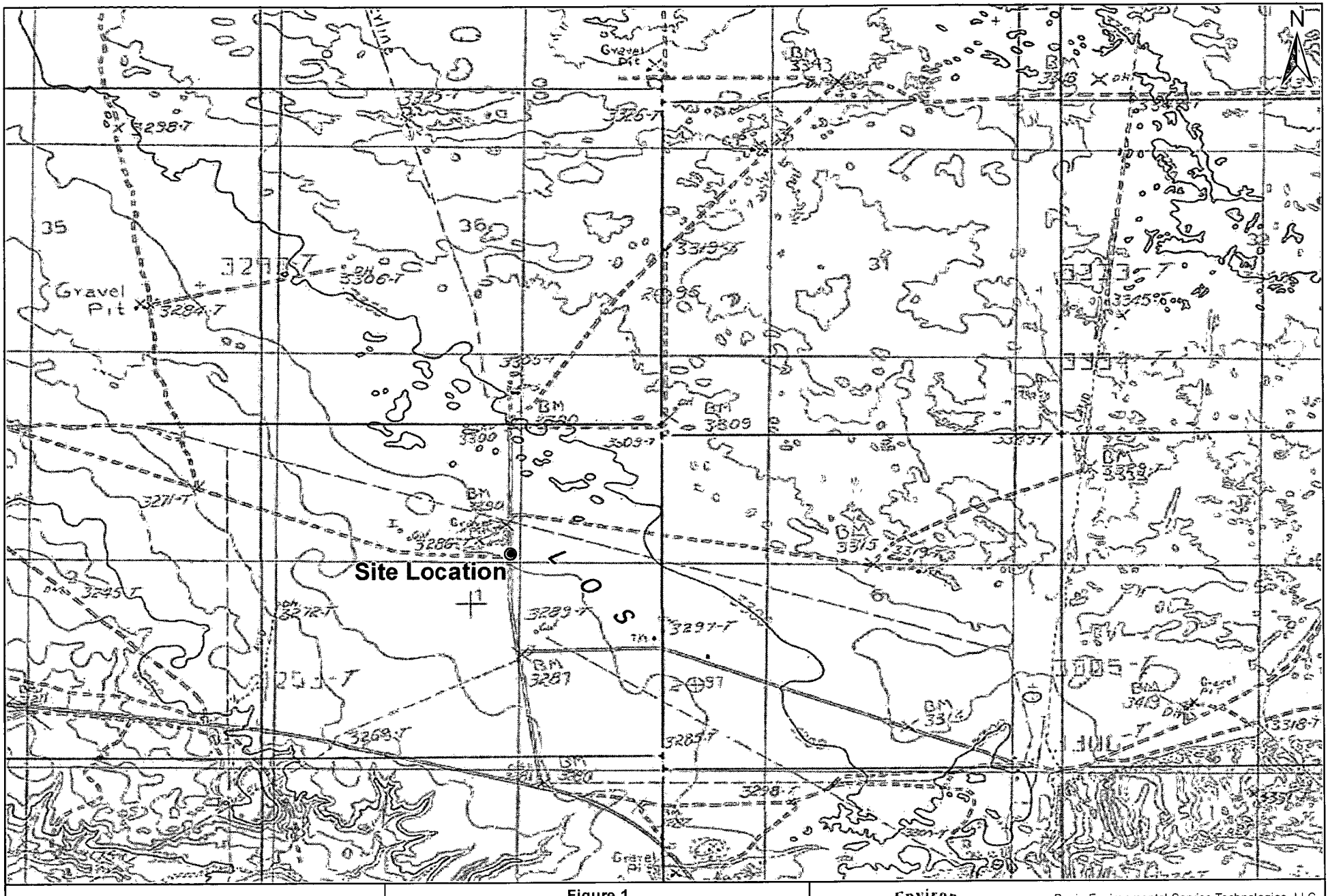

Figure 1
Site Location Map
BOPCO, LP
James Ranch Unit #36 Tank Battery
Eddy County, New Mexico
NMOCD Reference #: 2RP-1204

Basin Environmental Service Technologies
Effective Solutions

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

Drawn By: BJA	Checked By: BRB
September 5, 2012	Scale: 1" = 2000'

Legend

Spill Margins ⊙ Soil Boring

50 25 0 50 100 150 200

Distance in Feet

Figure 2
Site & Sample Location Map
Overview (Aerial)
James Ranch Unit #36 Tank Battery
BOPCO, LP
Eddy County, New Mexico
NMOCD Reference #: 2RP-1204

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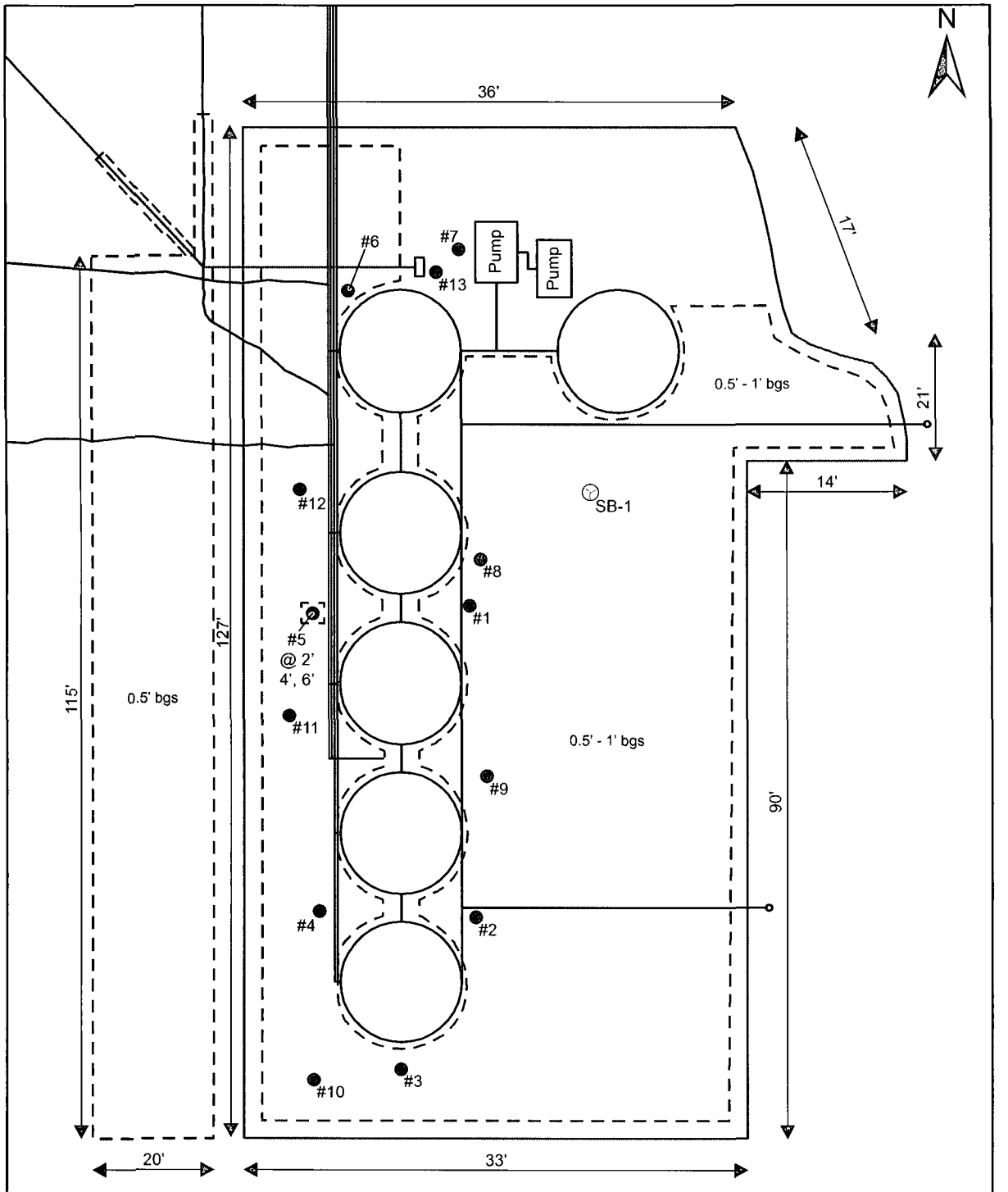
Lovington, NM 88260

Drawn By: BJA	Checked By: BRB
December 11, 2013	Scale: 1" = 200'



*Map Not To Scale

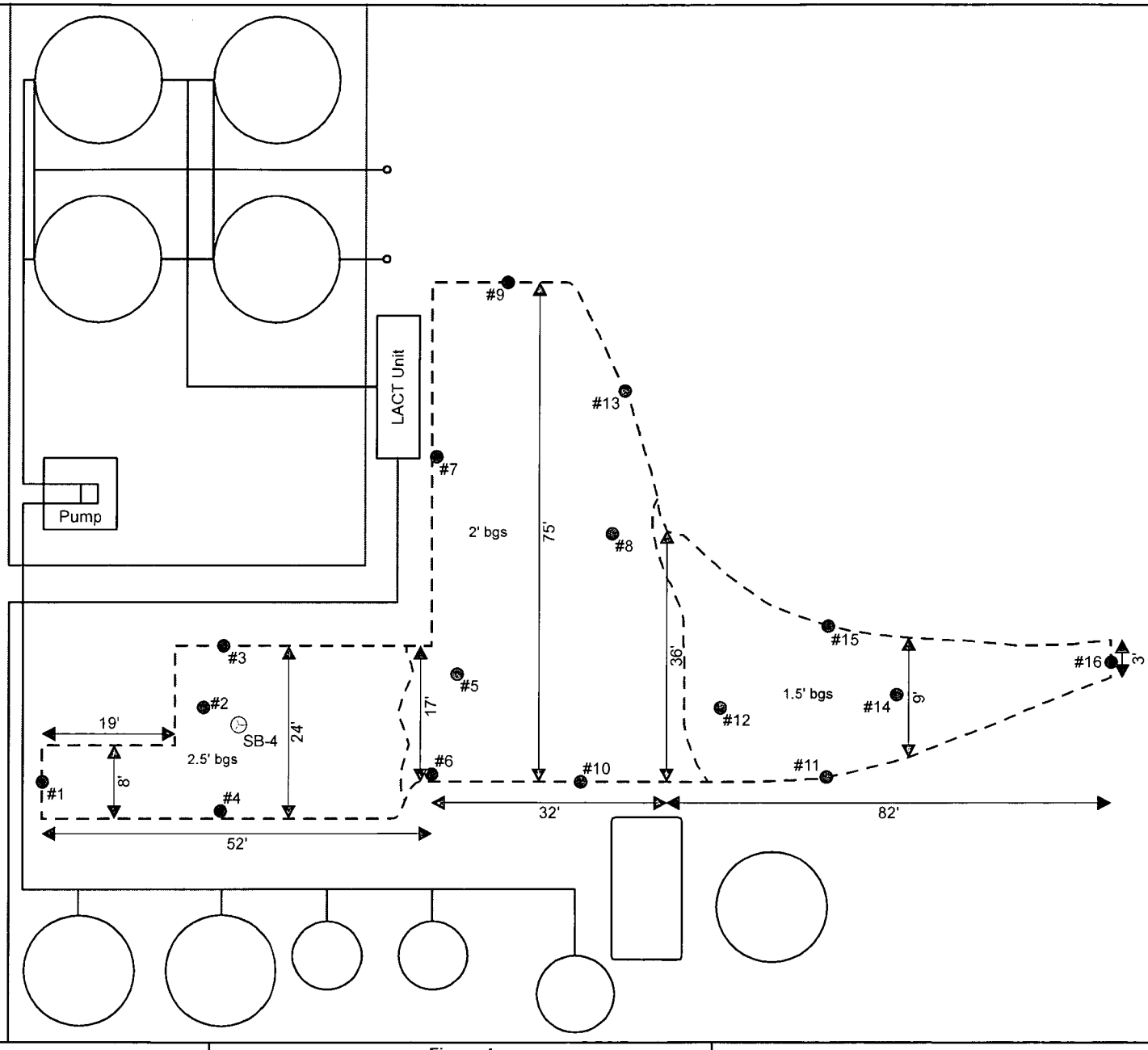
Legend

- Excavation
- Pipeline
- Steel Berm
- Electrical Conduit
- Soil Boring
- Sample Location

Figure 3
Site & Sample Location Map
JRU #36 Tank Battery Excavation
BOPCO, LP
Eddy County, New Mexico
NMOCD Reference #: 2RP-1204

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

Drawn By: BJA	Checked By: BRB
Dec. 13, 2013	Not to Scale



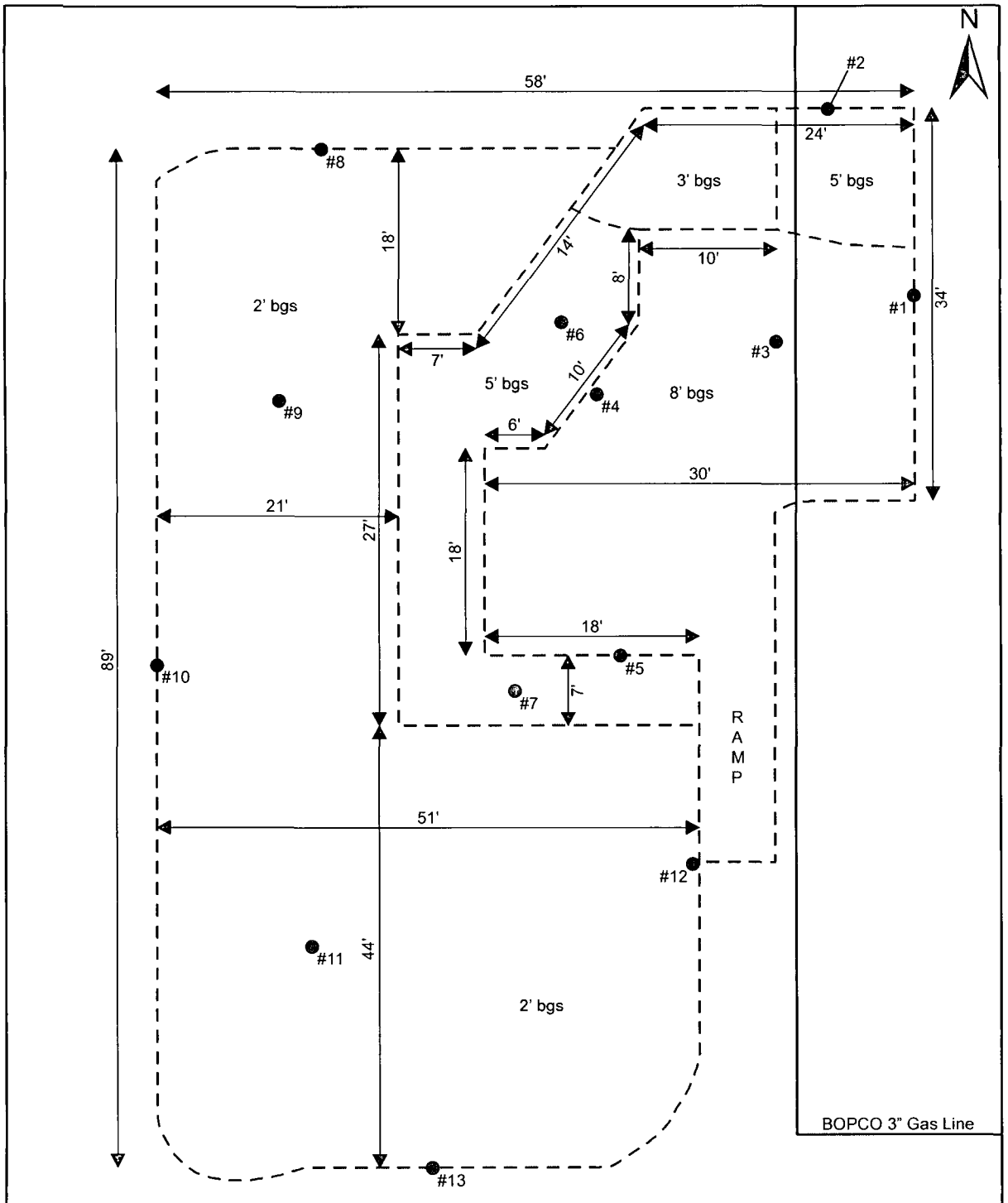
Legend

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

Figure 4
Site & Sample Location Map
Hudson Tank Battery Excavation
James Ranch Unit #36 Tank Battery
BOPCO, LP
Eddy County, New Mexico
NMOCD Reference #: 2RP-1204

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

Drawn By: BJA	Checked By: BRB
December 10, 2013	Scale: 1" = 15'



Legend

- Excavation
- Sample
- Pipeline

Figure 5
Site & Sample Location Map
Hudson Pooling Area Excavation
James Ranch Unit #36 Tank Battery
BOPCO, LP
Eddy County, New Mexico
NMOCD Reference #: 2RP-1204

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

Drawn By: BJA	Checked By: BRB
Dec. 10, 2013	Not to Scale

Tables

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL

BOPCO, LP
JAMES RANCH UNIT #36 TANK BATTERY
EDDY COUNTY, NEW MEXICO
NMOCD REFERENCE #: 2RP-1204

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030					METHOD: 8015M			TOTAL TPH	4500 Cl-B
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C_6-C_{12} (mg/Kg)	DRO C_{12}-C_{28} (mg/Kg)	ORO C_{28}-C_{35} (mg/Kg)	C_6-C_{35} (mg/Kg)	CHLORIDE (mg/Kg)
Sample #1	0.5'	6/13/2012	Excavated	-	-	-	-	-	1,040	6,970	1,250	**9,260**	**17,400**
Sample #2	0.5'	6/13/2012	Excavated	-	-	-	-	-	352	8,550	1,660	**10,562**	704
Sample #3	0.5'	6/13/2012	Excavated	-	-	-	-	-	<50.0	476	268	744	208
Sample #4	0.5'	6/13/2012	Excavated	-	-	-	-	-	<10.0	111	52.6	164	**3,920**
Sample #5	0.5'	6/13/2012	Excavated	-	-	-	-	-	611	9,170	1,970	**11,751**	**11,400**
Sample #5 @ 2'	2'	6/13/2012	Excavated	-	-	-	-	-	1,130	7,690	1,390	**10,210**	**2,880**
Sample #5 @ 4'	4'	6/13/2012	Excavated	-	-	-	-	-	931	6,120	1,080	**8,131**	**7,680**
Sample #5 @ 6'	6'	6/13/2012	Excavated	<0.050	0.165	0.740	2.80	3.71	233	5,120	1,010	**6,363**	**16,000**
Sample #6	0.5'	6/13/2012	Excavated	-	-	-	-	-	867	13,800	2,820	**17,487**	**14,200**
Sample #7	0.5'	6/13/2012	Excavated	-	-	-	-	-	230	9,690	2,060	**11,980**	**26,800**
Sample #8	0.5'	6/27/2012	In-Situ	<0.250	0.867	3.29	7.97	12.1	999	15,100	4,410	**20,509**	**13,200**
Sample #9	0.5'	6/27/2012	In-Situ	-	-	-	-	-	11.4	662	185	858	**17,600**
Sample #10	0.5'	6/27/2012	In-Situ	-	-	-	-	-	<50.0	335	308	643	**8,400**
Sample #11	0.5'	6/27/2012	In-Situ	-	-	-	-	-	<50.0	1,330	478	1,808	**6,880**
Sample #12	0.5'	6/27/2012	In-Situ	-	-	-	-	-	<10.0	443	144	587	**16,400**
Sample #13	0.5'	6/27/2012	In-Situ	-	-	-	-	-	80.2	4,200	941	**5,221**	**6,240**
SB-1 @ 5'	5'	7/31/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	272
SB-1 @ 10'	10'	7/31/2012	In-Situ	<0.050	<0.050	<0.050	<0.0150	<0.0150	<10.0	<10.0	<10.0	<10.0	304
SB-1 @ 25'	25'	7/31/2012	In-Situ	<0.050	<0.050	<0.050	<0.0150	<0.0150	<10.0	<10.0	<10.0	<10.0	896
SB-1 @ 35'	35'	7/31/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	384
SB-1 @ 45'	45'	7/31/2012	In-Situ	-	-	-	-	-	-	-	-	-	176
SB-1 @ 50'	50'	7/31/2012	In-Situ	<0.050	<0.050	<0.050	<0.0150	<0.0150	<10.0	<10.0	<10.0	<10.0	128
SB-2 @ 5'	5'	7/31/2012	In-Situ	-	-	-	-	-	<10.0	15.4	<10.0	15.4	**1,880**
SB-2 @ 10'	10'	7/31/2012	In-Situ	<0.050	<0.050	<0.050	<0.0150	<0.0150	<10.0	<10.0	<10.0	<10.0	944
SB-2 @ 20'	20'	7/31/2012	In-Situ	-	-	-	-	-	-	-	-	-	144
SB-2 @ 25'	25'	7/31/2012	In-Situ	<0.050	<0.050	<0.050	<0.0150	<0.0150	<10.0	<10.0	<10.0	<10.0	192

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL

BOPCO, LP
JAMES RANCH UNIT #36 TANK BATTERY
EDDY COUNTY, NEW MEXICO
NMOCD REFERENCE #: 2RP-1204

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030					METHOD: 8015M			TOTAL TPH C_6-C_{35} (mg/Kg)	4500 Cl-B
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C_6-C_{12} (mg/Kg)	DRO C_{12}-C_{28} (mg/Kg)	ORO C_{28}-C_{35} (mg/Kg)		CHLORIDE (mg/Kg)
SB-3 @ 5'	5'	7/31/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	**1,520**
SB-3 @ 10'	10'	7/31/2012	In-Situ	<0.050	<0.050	<0.050	<0.0150	<0.0150	<10.0	<10.0	<10.0	<10.0	736
SB-3 @ 15'	15'	7/31/2012	In-Situ	-	-	-	-	-	-	-	-	-	320
SB-3 @ 20'	20'	7/31/2012	In-Situ	<0.050	<0.050	<0.050	<0.0150	<0.0150	<10.0	<10.0	<10.0	<10.0	208
SB-4 @ 5'	5'	7/31/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	480
SB-4 @ 10'	10'	7/31/2012	In-Situ	<0.050	<0.050	<0.050	<0.0150	<0.0150	<10.0	<10.0	<10.0	<10.0	720
SB-4 @ 15'	15'	7/31/2012	In-Situ	-	-	-	-	-	-	-	-	-	992
SB-4 @ 20'	20'	7/31/2012	In-Situ	-	-	-	-	-	-	-	-	-	352
SB-4 @ 25'	25'	7/31/2012	In-Situ	<0.050	<0.050	<0.050	<0.0150	<0.0150	<10.0	<10.0	<10.0	<10.0	256
Sample #1	2'	2/13/2013	In-Situ	-	-	-	-	-	-	-	-	-	**3,200**
Sample #2	2.5'	2/13/2013	In-Situ	-	-	-	-	-	-	-	-	-	208
Sample #3	2'	2/13/2013	In-Situ	-	-	-	-	-	-	-	-	-	**1,230**
Sample #4	2'	2/13/2013	In-Situ	-	-	-	-	-	-	-	-	-	272
Sample #5	2'	2/13/2013	In-Situ	-	-	-	-	-	-	-	-	-	592
Sample #6	1.5'	2/13/2013	In-Situ	-	-	-	-	-	-	-	-	-	**1,840**
Sample #7	1.5'	2/13/2013	In-Situ	-	-	-	-	-	-	-	-	-	160
Sample #8	2'	2/13/2013	In-Situ	-	-	-	-	-	-	-	-	-	160
Sample #9	1.5'	2/13/2013	In-Situ	-	-	-	-	-	-	-	-	-	160
Sample #10	1.5'	2/13/2013	In-Situ	-	-	-	-	-	-	-	-	-	**1,540**
Sample #11	1'	2/13/2013	In-Situ	-	-	-	-	-	-	-	-	-	320
Sample #12	1.5'	2/13/2013	In-Situ	-	-	-	-	-	-	-	-	-	160
Sample #13	1.5'	2/13/2013	In-Situ	-	-	-	-	-	-	-	-	-	320
Sample #14	1.5'	2/13/2013	In-Situ	-	-	-	-	-	-	-	-	-	320
Sample #15	1'	2/13/2013	In-Situ	-	-	-	-	-	-	-	-	-	368
Sample #16	1'	2/13/2013	In-Situ	-	-	-	-	-	-	-	-	-	640

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL

BOPCO, LP
JAMES RANCH UNIT #36 TANK BATTERY
EDDY COUNTY, NEW MEXICO
NMOCD REFERENCE #: 2RP-1204

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030					METHOD: 8015M			TOTAL TPH C_6-C_{35} (mg/Kg)	4500 Cl-B
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C_6-C_{12} (mg/Kg)	DRO C_{12}-C_{28} (mg/Kg)	ORO C_{28}-C_{35} (mg/Kg)		CHLORIDE (mg/Kg)
Sample #1	4'	3/11/2013	In-Situ	-	-	-	-	-	-	-	-	-	720
Sample #2	4'	3/11/2013	In-Situ	-	-	-	-	-	-	-	-	-	864
Sample #3	8'	3/11/2013	In-Situ	<0.050	<0.050	<0.050	<0.0150	<0.0150	<10.0	<10.0	<10.0	<10.0	128
Sample #4	7'	3/11/2013	In-Situ	-	-	-	-	-	-	-	-	-	256
Sample #5	7'	3/11/2013	In-Situ	-	-	-	-	-	-	-	-	-	758
Sample #6	5'	3/11/2013	In-Situ	-	-	-	-	-	-	-	-	-	112
Sample #7	5'	3/11/2013	In-Situ	-	-	-	-	-	-	-	-	-	576
Sample #8	1.5'	3/11/2013	In-Situ	-	-	-	-	-	-	-	-	-	48.0
Sample #9	2'	3/11/2013	In-Situ	-	-	-	-	-	-	-	-	-	96.0
Sample #10	1.5'	3/11/2013	In-Situ	-	-	-	-	-	-	-	-	-	80.0
Sample #11	2'	3/11/2013	In-Situ	<0.050	<0.050	<0.050	<0.0150	<0.0150	<10.0	<10.0	<10.0	<10.0	64.0
Sample #12	1.5'	3/11/2013	In-Situ	-	-	-	-	-	-	-	-	-	304
Sample #13	1.5'	3/11/2013	In-Situ	-	-	-	-	-	-	-	-	-	336
NMOCD Regulatory Standard				**10**				**50**				**5,000**	**1,000**

- = Not analyzed.

Appendices

Appendix A

Release Notification &

Corrective Action (Form C-141)

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

RECEIVED
JUN 26 2012
NMOCD ARTESIA

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

nJMW 1219343081

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company BOPCO, L.P. 260737	Contact Tony Savoie
Address 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220	Telephone No. 432-556-8730
Facility Name James Ranch Unit #36 Tank Battery	Facility Type E&P

Surface Owner Federal	Mineral Owner Federal	~~Lease No NM-02884B~~ API # 30-015-27686

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
~~N~~ G	~~36~~ 1	~~22S~~ 23S	30E	1980	North	1860	East	Eddy

Latitude ~~N~~ 32.335615___ **Longitude** W 103.832117___

NATURE OF RELEASE

Type of Release: Produced water and crude oil	Volume of Release: 450 bbls of produced water and 5 bbls of crude oil.	Volume Recovered: 100 bbls produced water.
Source of Release: Produced water storage tank	Date and Hour of Occurrence 6/24/12, Hour unknown	Date and Hour of Discovery 6/24/12 7:30 a.m.
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? NMOCD Emergency #104 and Jim Amos with the BLM	
By Whom? Tony Savoie	Date and Hour 6/24/12, NMOCD at 9:14 a.m. BLM at 9:37 a.m.	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* The primary water pump failed to operate properly due to motor bearing problems, the secondary water transfer pump failed to operate due to Head Switch malfunction, the high level alarm failed to operate properly due to a calibration error and wiring problem. All failures were corrected the same day.

Describe Area Affected and Cleanup Action Taken. Approximately32,900 sq.ft. of caliche road and tank battery pad area around the JRU-36 and the road going to the Hudson Federal and adjacent well pad. Approximately 800 sq.ft. of pasture land was impacted near the Hudson tank battery. The tank battery location at the JRU-36 was currently being re-built and remediated; approximately 340 cubic yards of impacted soil had been excavated and hauled to Lea Land. The area around the tanks had been sampled on 6/13/12 to determine the amount of contamination that remained around the tank battery and the vertical extent of the historical releases. A copy of the sample results is attached. Vertical extent could not be obtained during the sampling event, an air rotary rig was being scheduled to complete the delineation. We will continue to delineate the area around the tank battery and the newly impacted area from the recent release. A remediation plan will be developed in accordance with the NMOCD and BLM remediation guidelines.

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

Signature: Tony Savoie	OIL CONSERVATION DIVISION
Printed Name: Tony Savoie	Approved by District Supervisor: Signed By Mike Bratcher
Title: Waste Mgmt.& Remediation Specialist	Approval Date: JUL 11 2012 Expiration Date:
E-mail Address: TASavoie@BassPet.com	Conditions of Approval: Attached ☐
Date: 6/24/12 Phone:432-556-8730	

* Attach Additional Sheets If Necessary

Remediation per OCD Rules & Guidelines. **SUBMIT REMEDIATION PROPOSAL NOT LATER THAN:** 8-11-2012

2RP-1204

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

State of New Mexico
Energy Minerals and Natural Resources

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

RECEIVED
JAN 23 2014
NMOCD ARTESIA

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

Initial Report X Final Report

Name of Company BOPCO, LP 260737	Contact Tony Savoie
Address 522 W. Mermod, Suite 704, Carlsbad, NM 88220	Telephone No. (432)556-8730
Facility Name James Ranch Unit #36	Facility Type E&P 27686

Surface Owner Federal	Mineral Owner Federal	Lease No. API #30-015-~~2786~~

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	1	23S	30E	1980	North	1860	East	Eddy

Latitude 32.335615° North **Longitude** 103.832117° West

NATURE OF RELEASE

Type of Release Produced water and crude oil	Volume of Release 450 bbls of produced water and 5 bbls of crude oil	Volume Recovered 100 bbls
Source of Release Produced water storage tank	Date and Hour of Occurrence 6/24/12, Hour unknown	Date and Hour of Discovery 6/24/12 7:30 a.m.
Was Immediate Notice Given? X Yes No Not Required	If YES, To Whom? NMOCD Emergency #104 and Jim Amos with the BLM	
By Whom? Tony Savoie	Date and Hour 6/24/12, NMOCD at 9:14 a.m. BLM at 9:37 a.m.	
Was a Watercourse Reached? ☐ Yes X No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken:* The primary water pump failed to operate properly due to motor bearing problems. The secondary water transfer pump failed to operate due to Head Switch malfunction. The high level alarm failed to operate properly due to a calibration error and wiring problem. All failures were corrected the same day.

Describe Area Affected and Cleanup Action Taken.* Approximately 32,900 ft^2 of caliche road and tank battery pad area around the JRU-36 and the road going to the Hudson Federal Battery and adjacent well pad. Approximately 800 ft^2 of pasture land was impacted near the Hudson tank battery. Following initial response activities, the release was remediated as per NMOCD recommended guidelines. Please reference the attached *Remediation Summary & Risk-Based Site Closure Request* for remediation details.

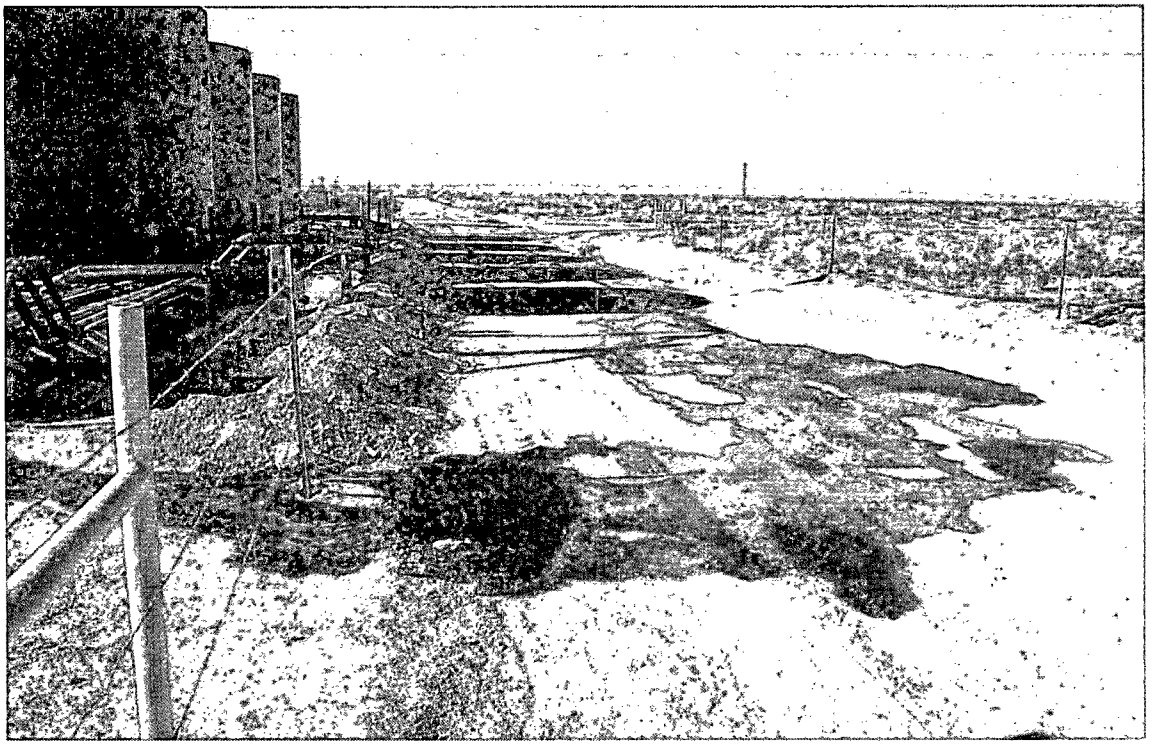
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases, which may endanger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

Signature: Tony Savoie	OIL CONSERVATION DIVISION	
Printed Name: Tony Savoie	Approved by District Supervisor:	
Title: Waste Mgmt. & Remediation Specialist	Approval Date:	Expiration Date:
E-mail Address: TASavoie@BassPet.com	Conditions of Approval:	
Date: 1/22/14 Phone: 432-556-8730		

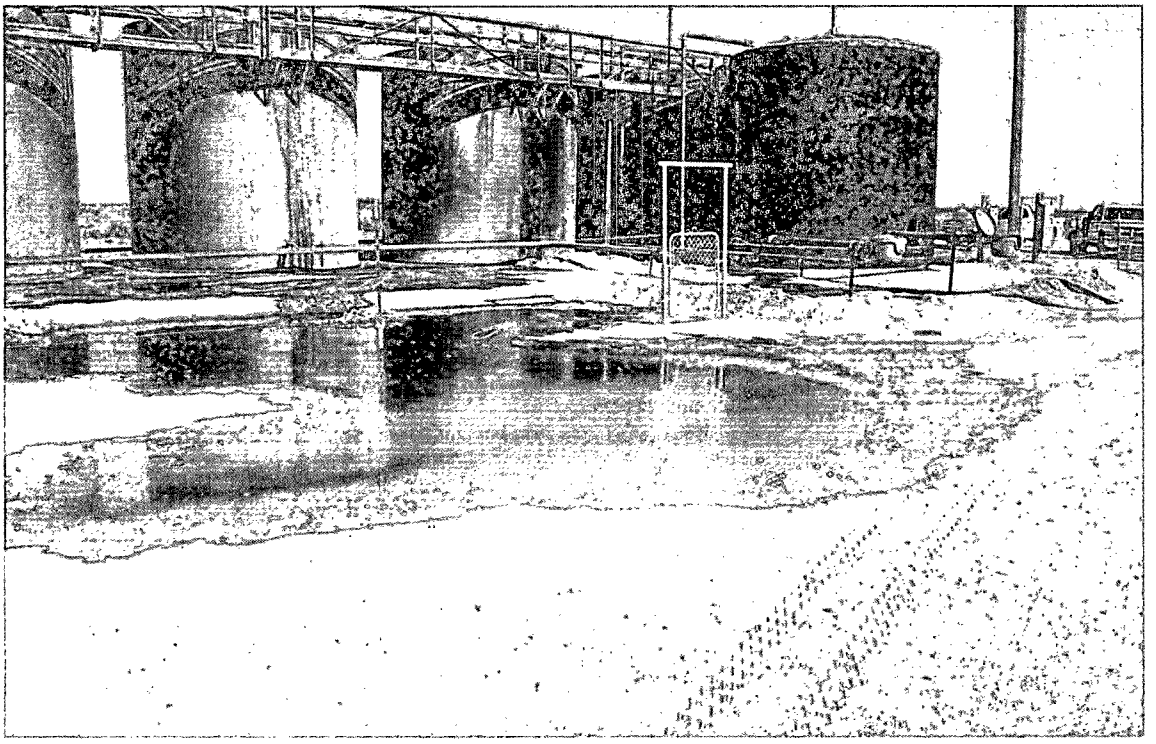
2R P-1204

Appendix B

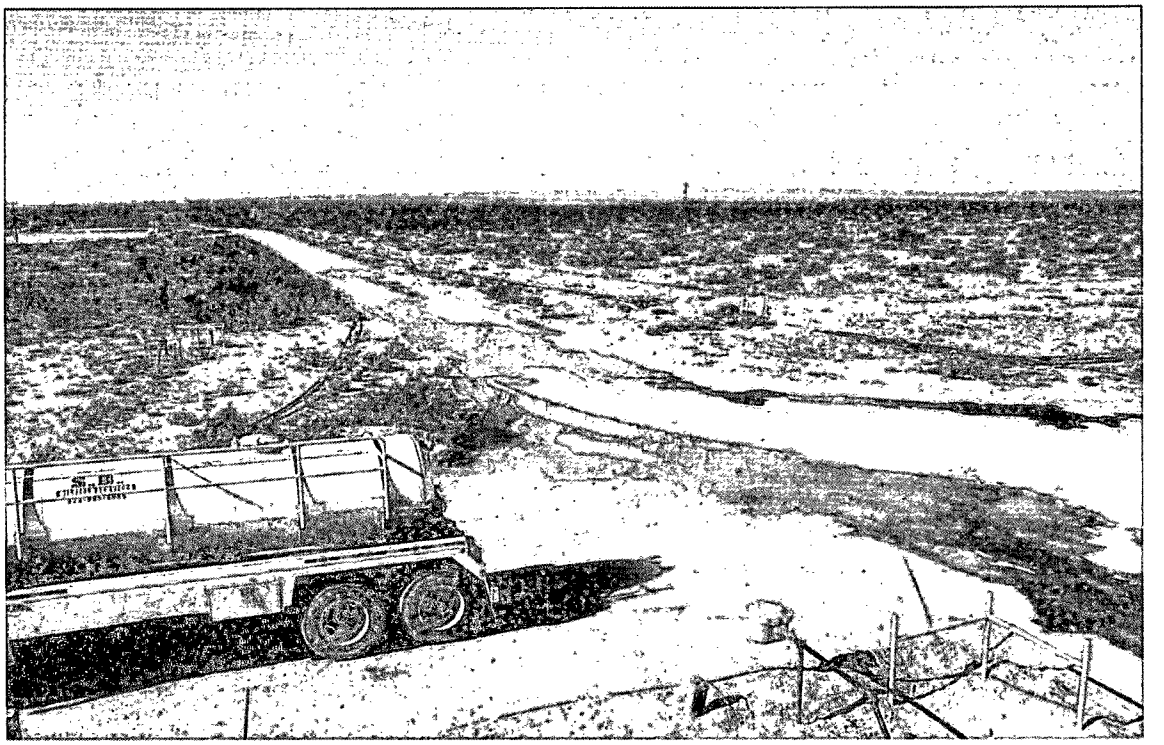
Photographs



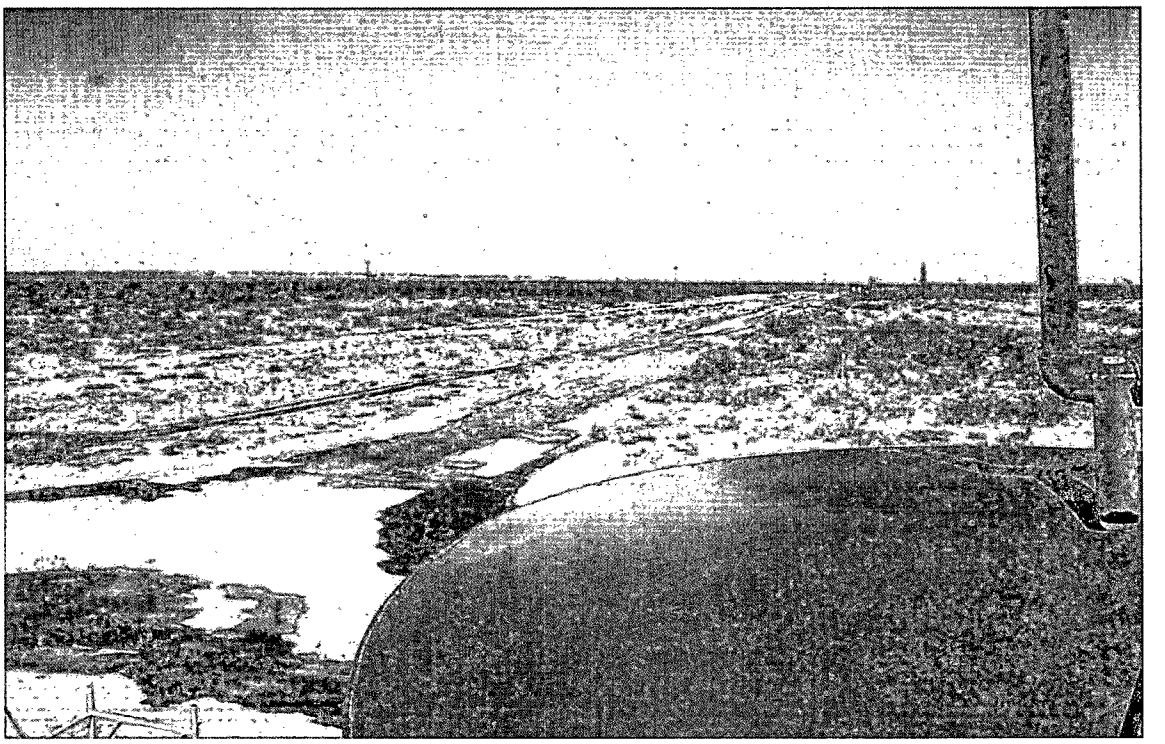
James Ranch Unit #36 Tank Battery - Release Site (Looking South)



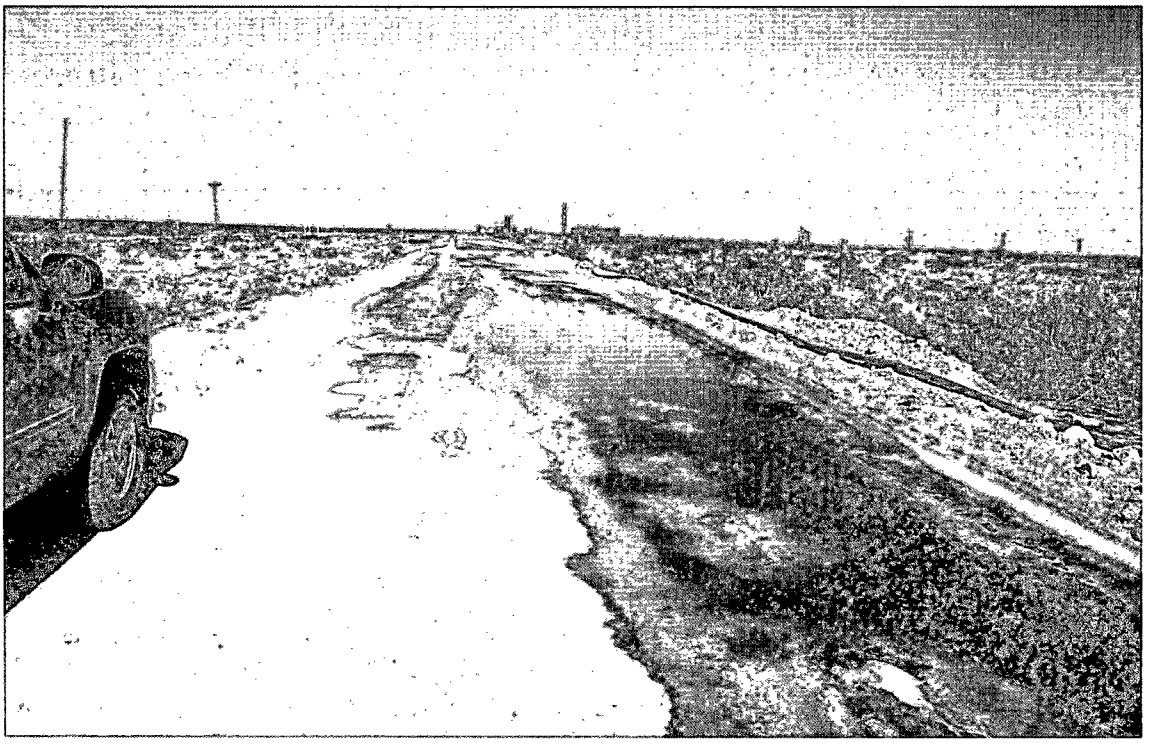
James Ranch Unit #36 Tank Battery - Release Site (Looking Northwest)



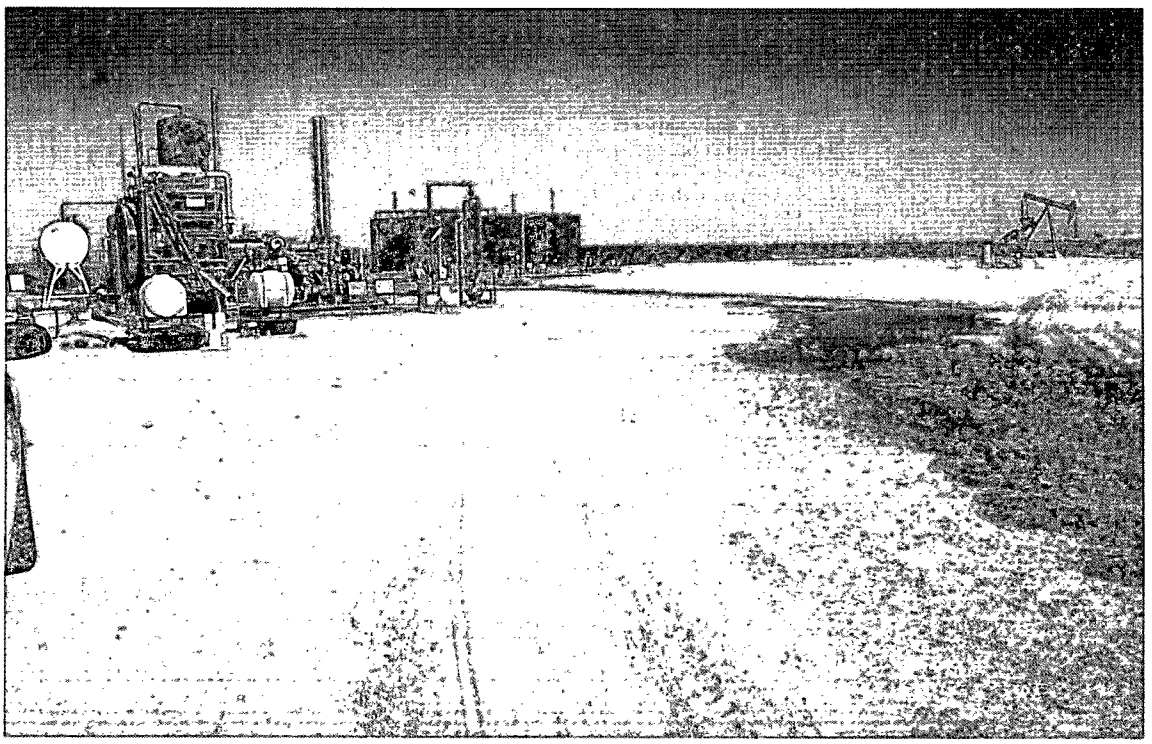
James Ranch Unit #36 Tank Battery - Flow Path (Looking Southwest)



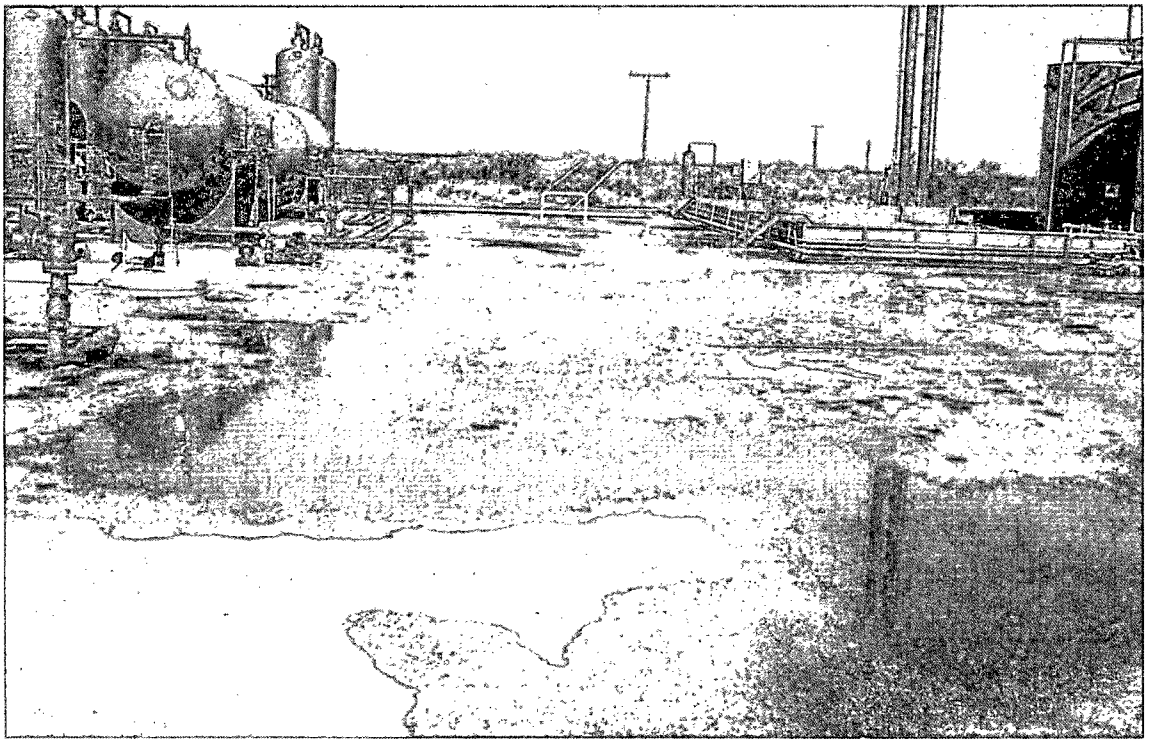
James Ranch Unit #36 Tank Battery - Flow Path (Looking West-southwest)



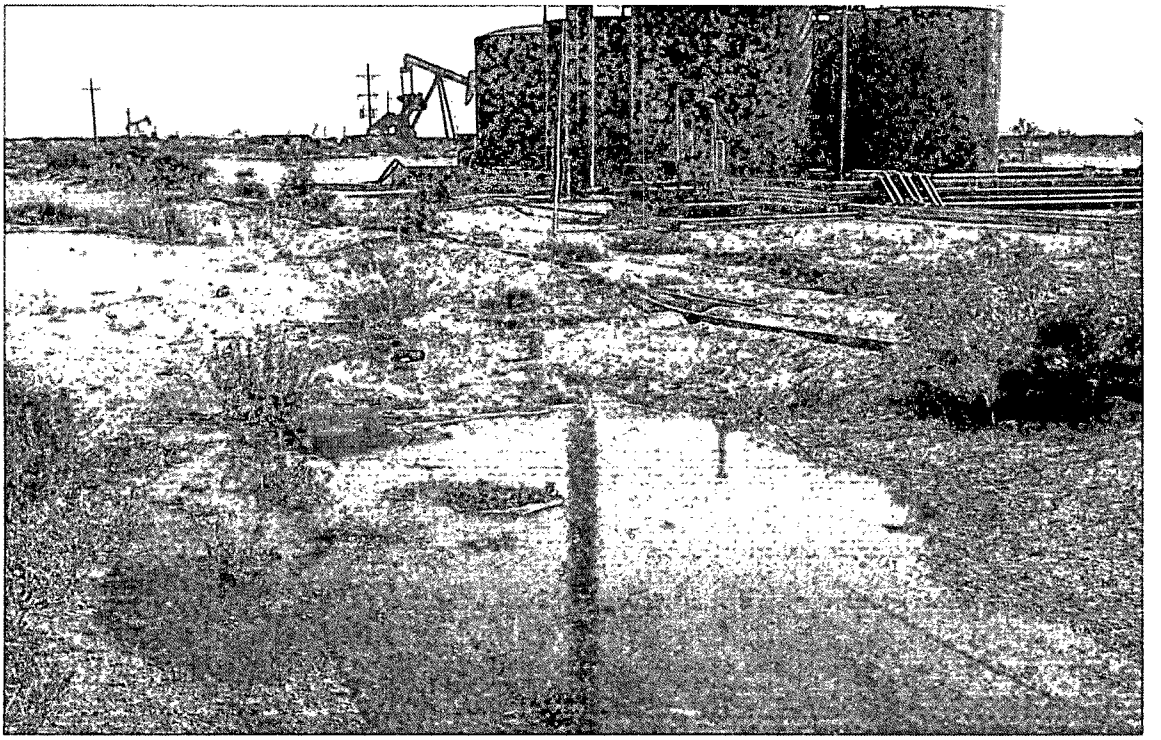
James Ranch Unit #36 Tank Battery - Flow Path (Looking West)



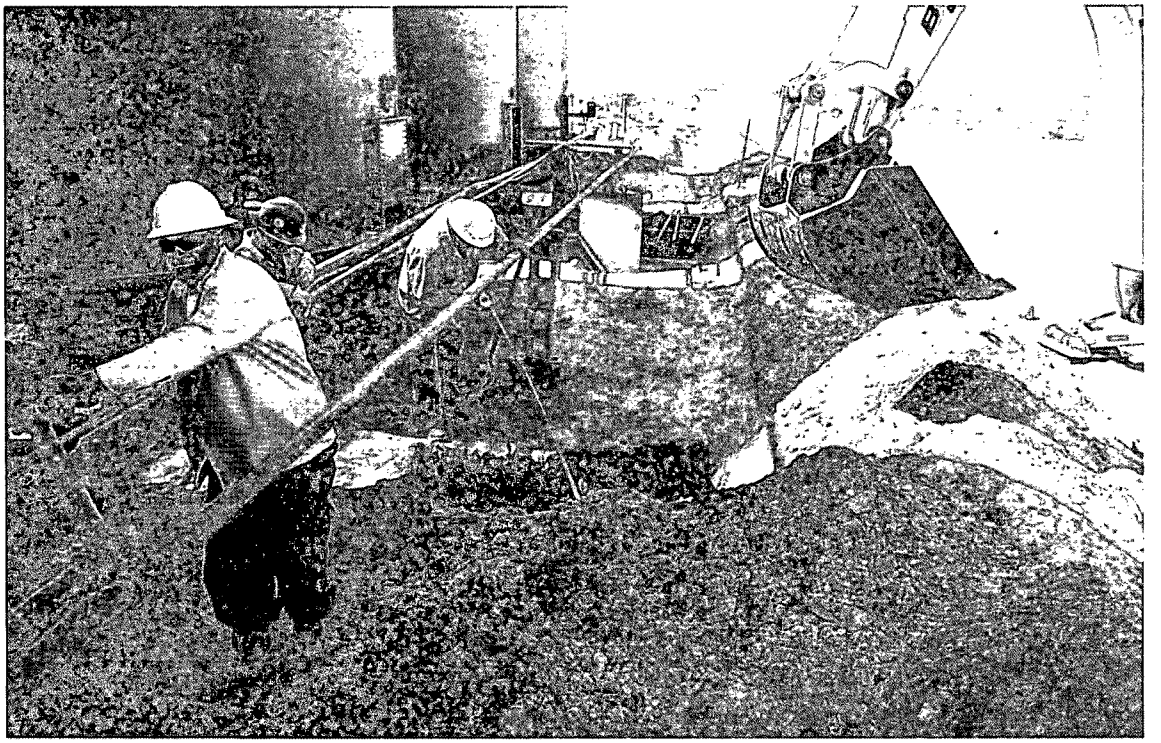
James Ranch Unit #36 Tank Battery - Flow Path at Hudson Federal Battery (Looking Northwest)



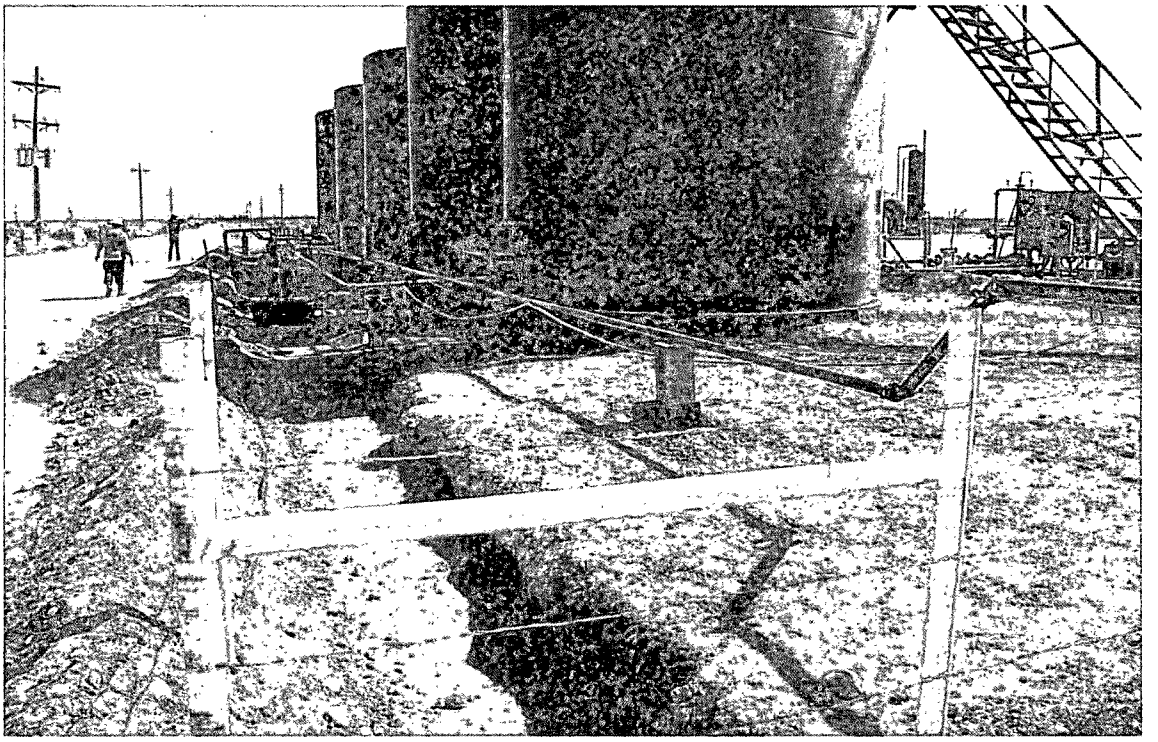
James Ranch Unit #36 Tank Battery - Pooling Area at Hudson Federal Battery (Looking West)



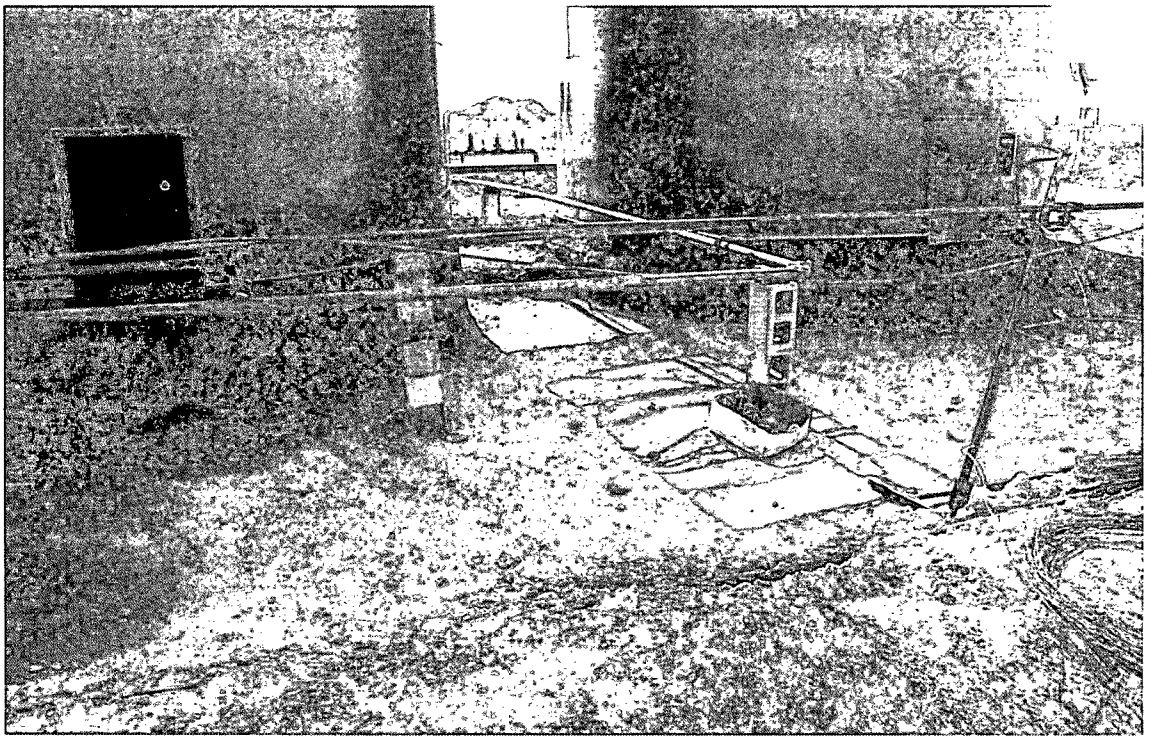
James Ranch Unit #36 Tank Battery - Pooling Area at Hudson Federal Battery
(Looking Northeast)



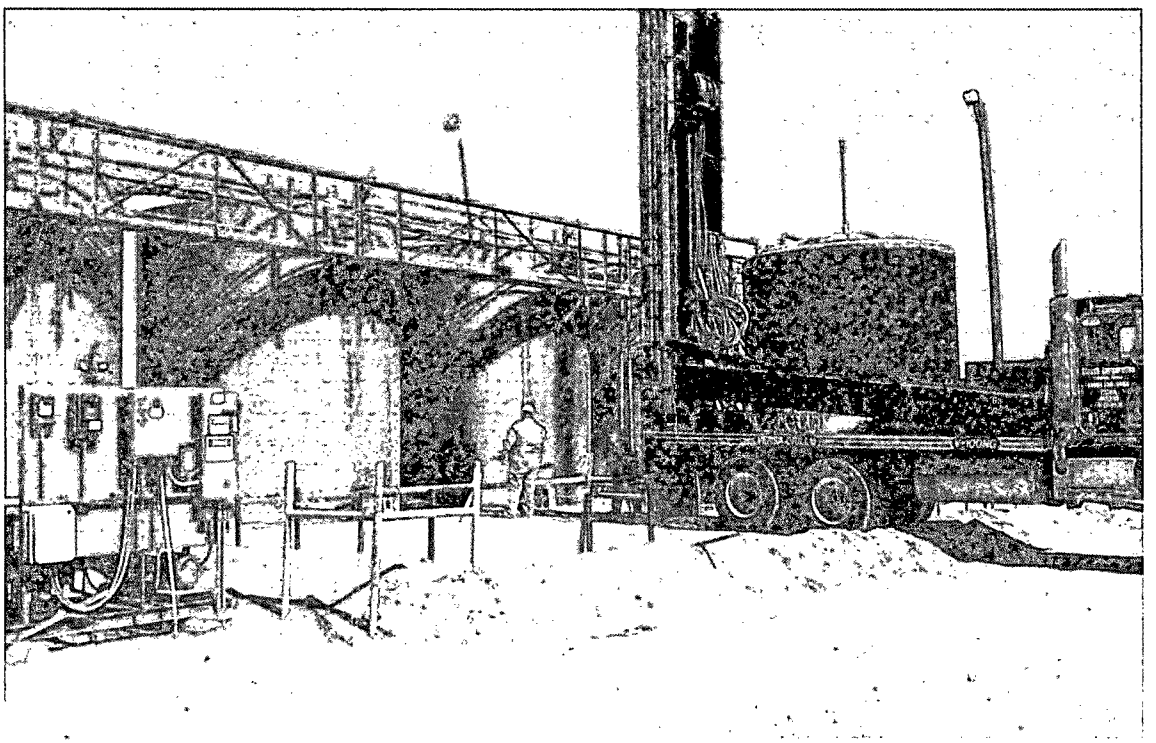
James Ranch Unit #36 Tank Battery - Excavation & Delineation Trenching



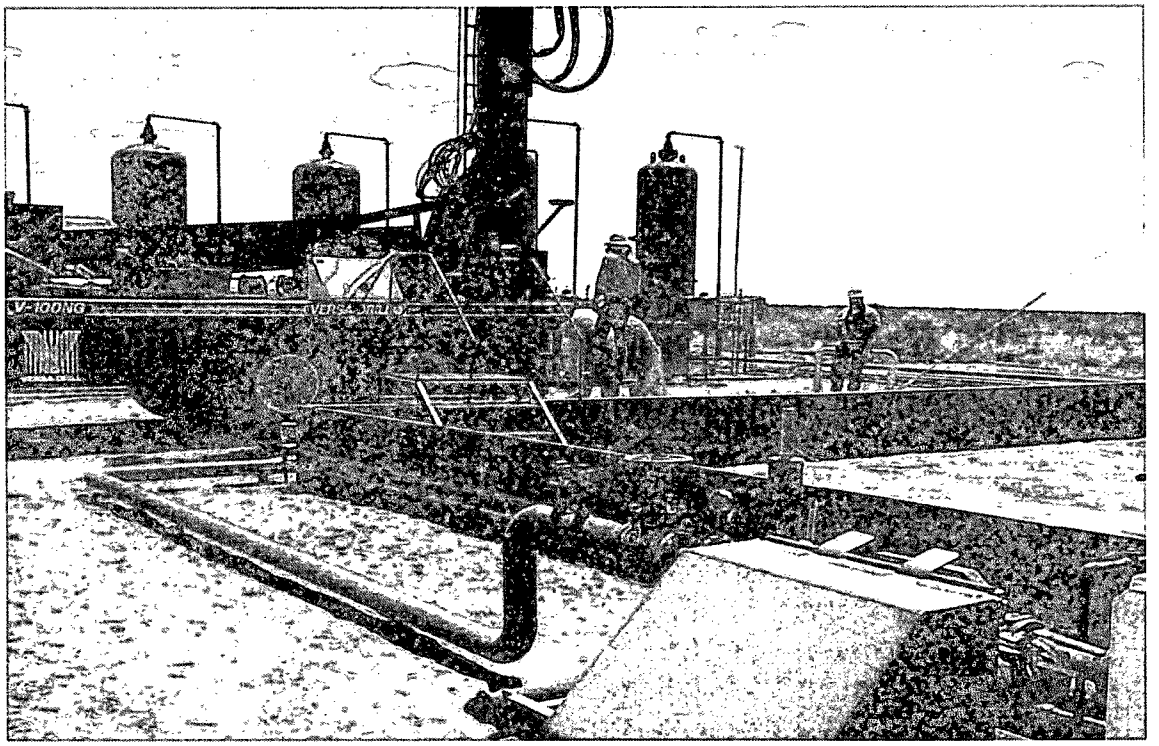
James Ranch Unit #36 Tank Battery - Excavation



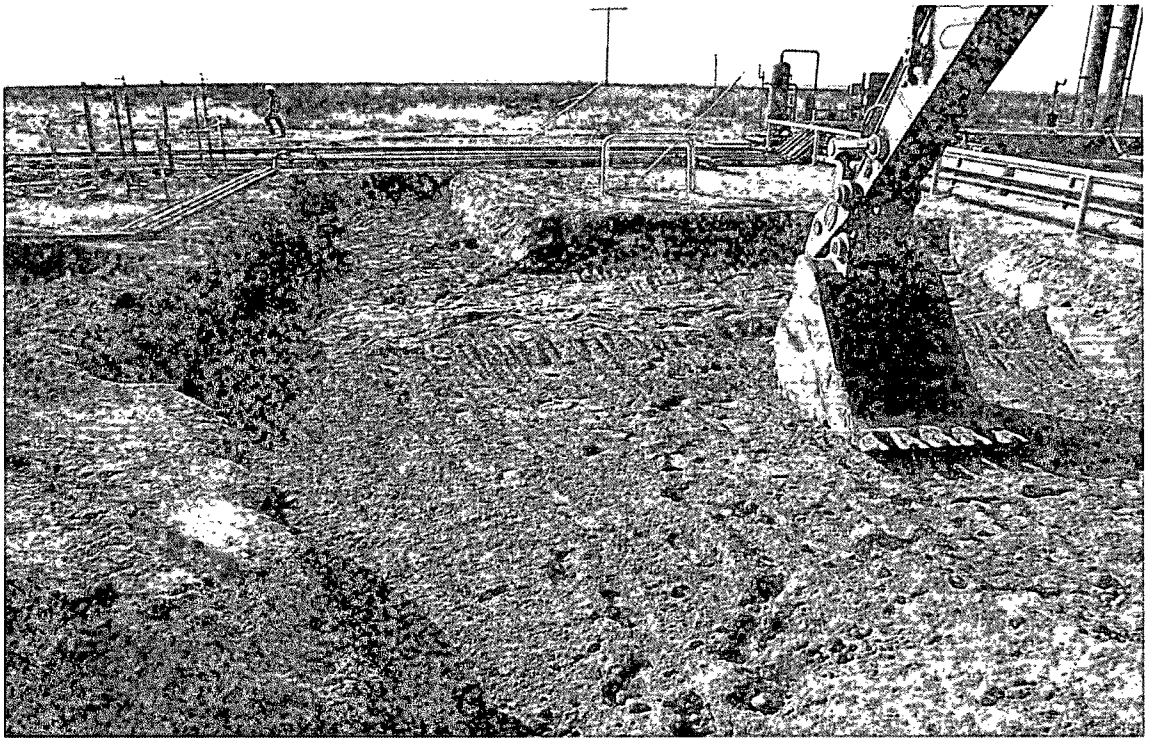
James Ranch Unit #36 Tank Battery - Excavation



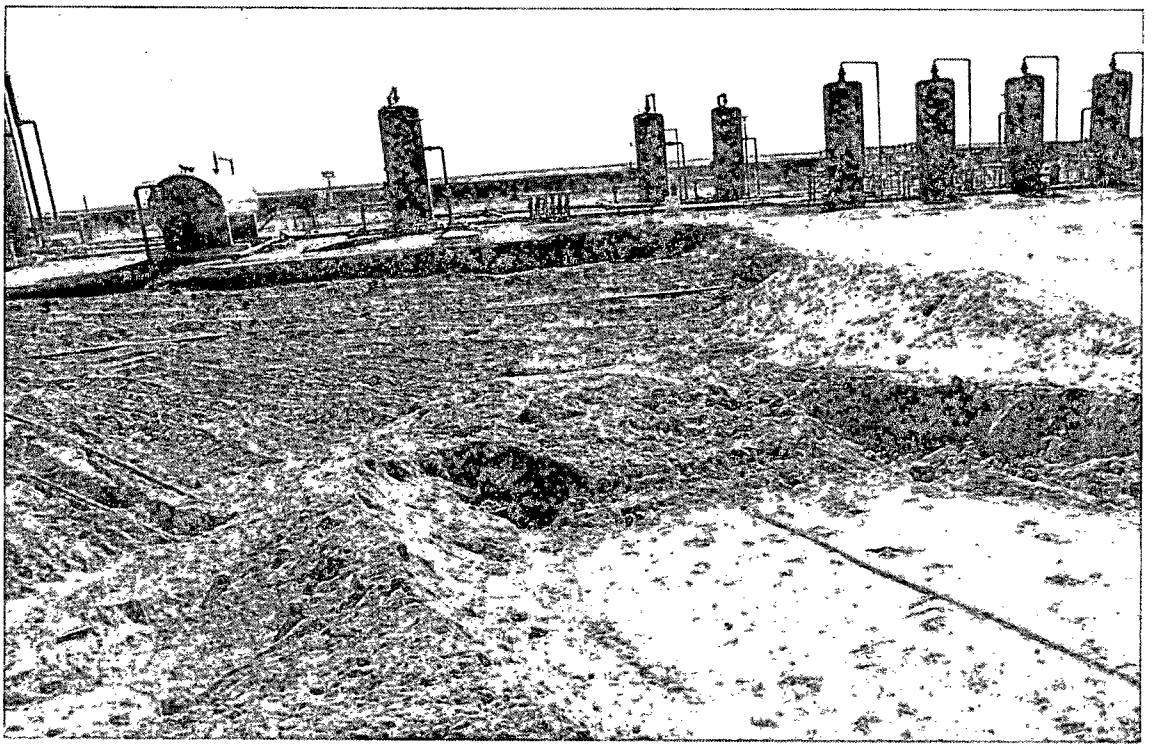
James Ranch Unit #36 Tank Battery - Advancement of Soil Boring SB-1



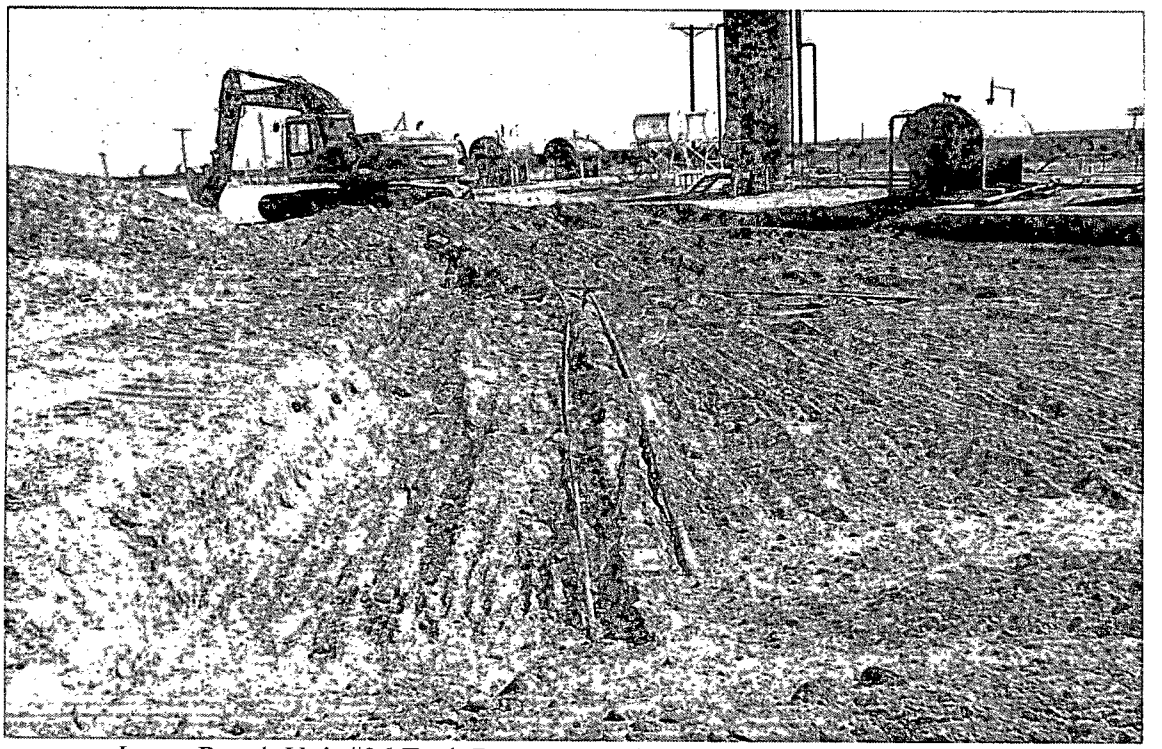
James Ranch Unit #36 Tank Battery - Advancement of Soil Boring SB-4



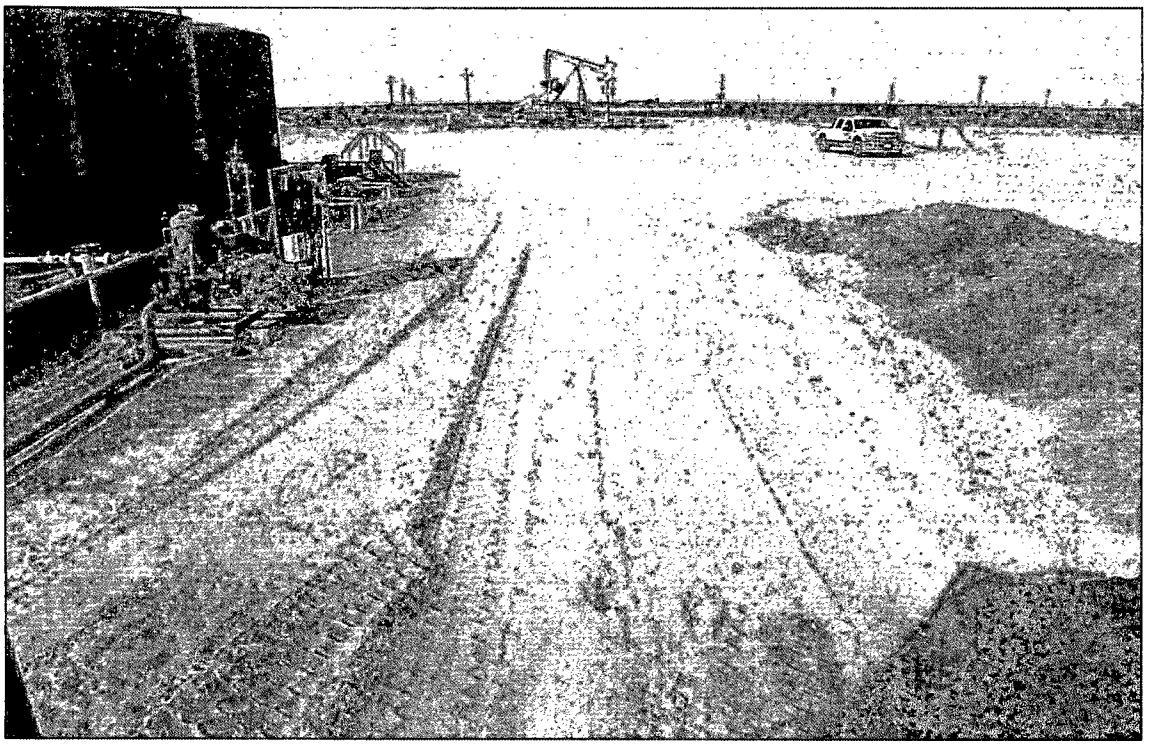
James Ranch Unit #36 Tank Battery - Hudson Federal Battery Excavation



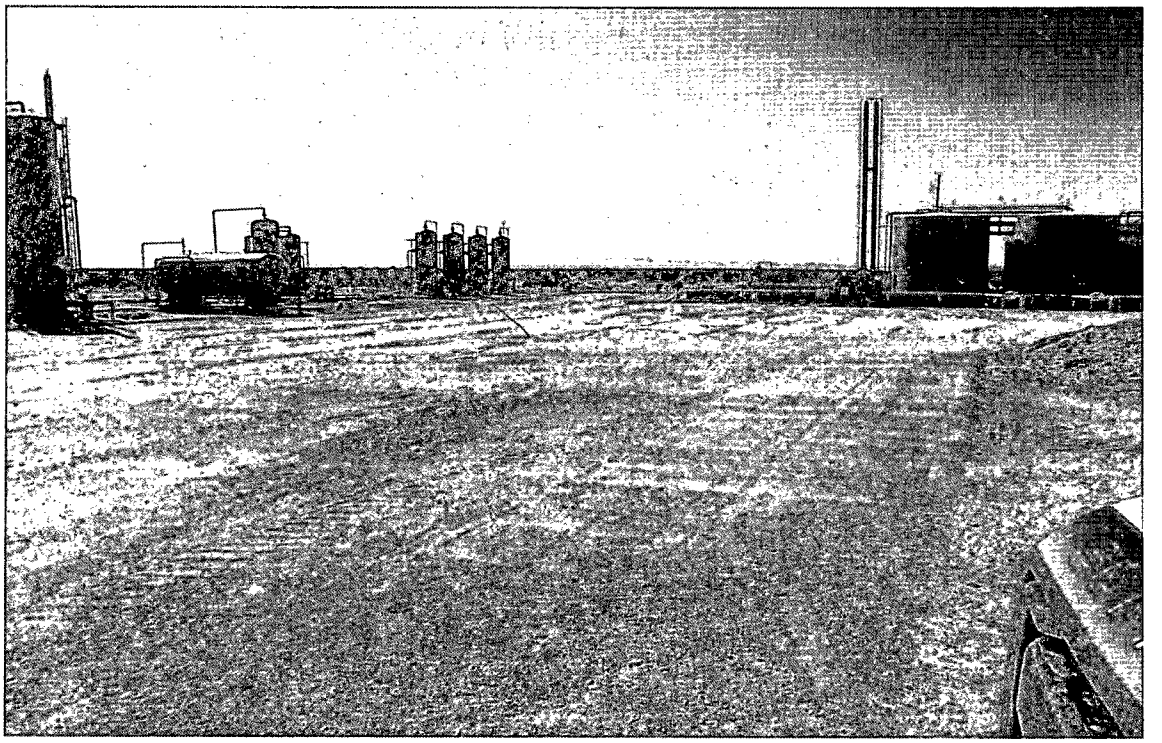
James Ranch Unit #36 Tank Battery - Hudson Federal Battery Excavation



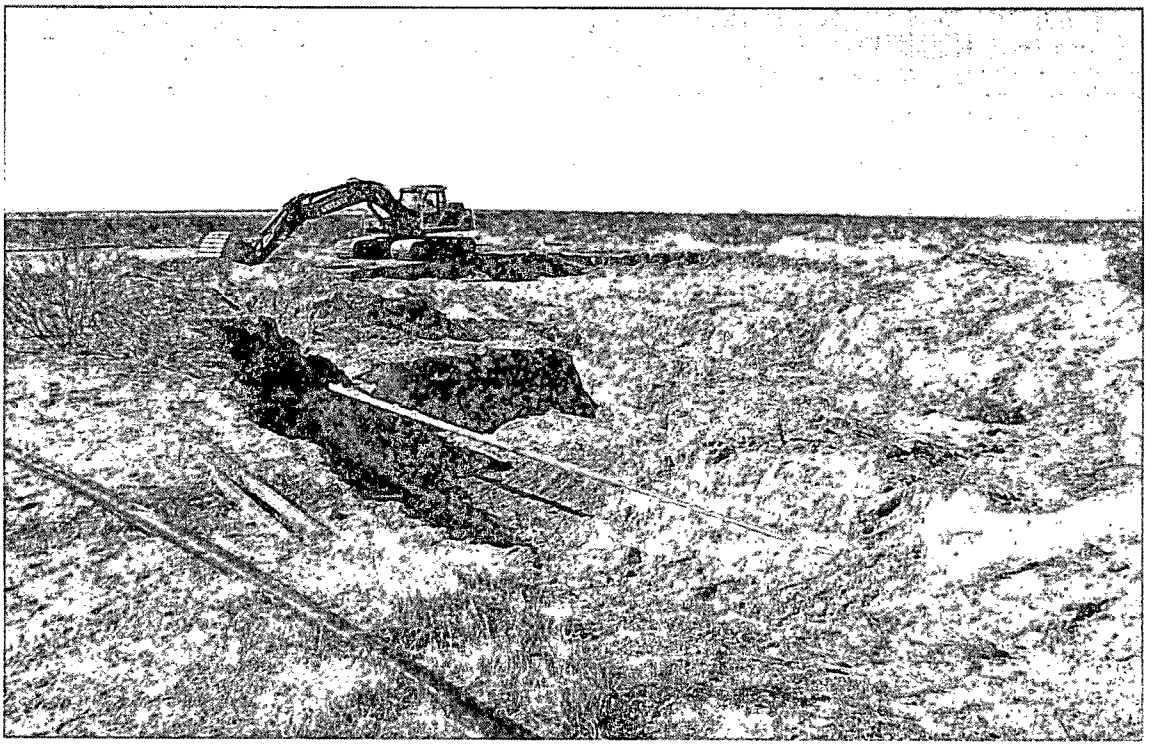
James Ranch Unit #36 Tank Battery - Hudson Federal Battery Excavation



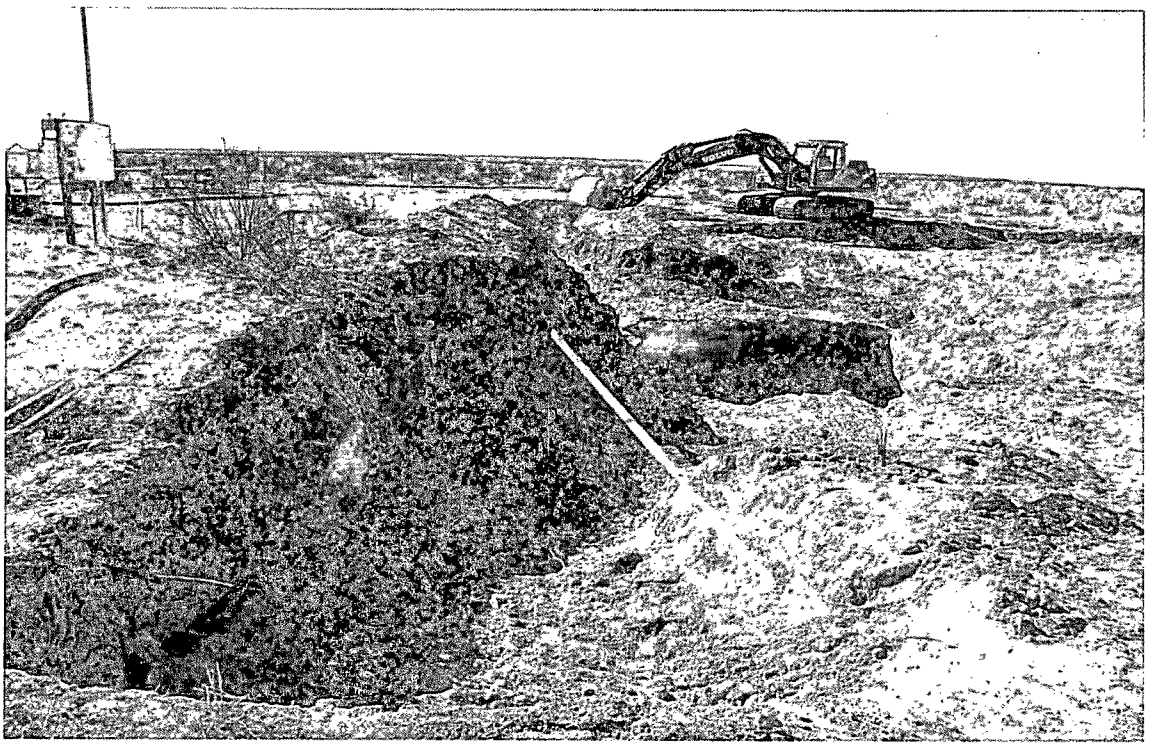
James Ranch Unit #36 Tank Battery - Hudson Federal Battery Excavation (During Backfilling)



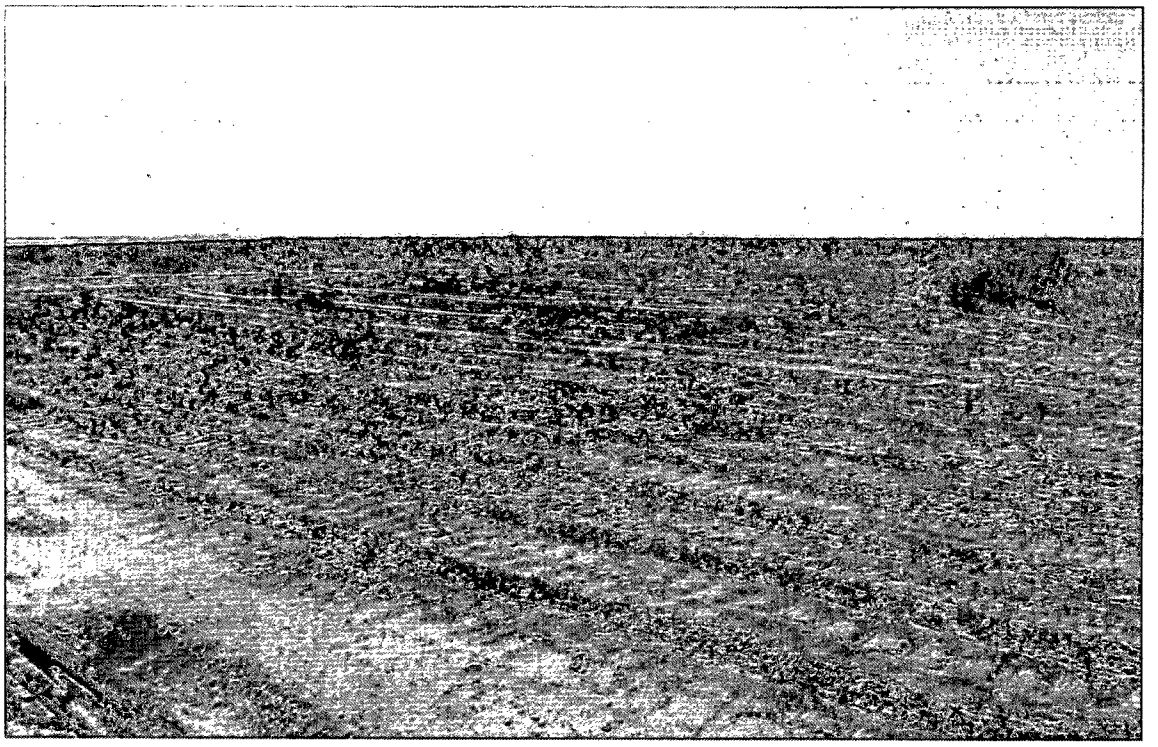
James Ranch Unit #36 Tank Battery - Hudson Federal Battery Excavation
(Following Backfilling)



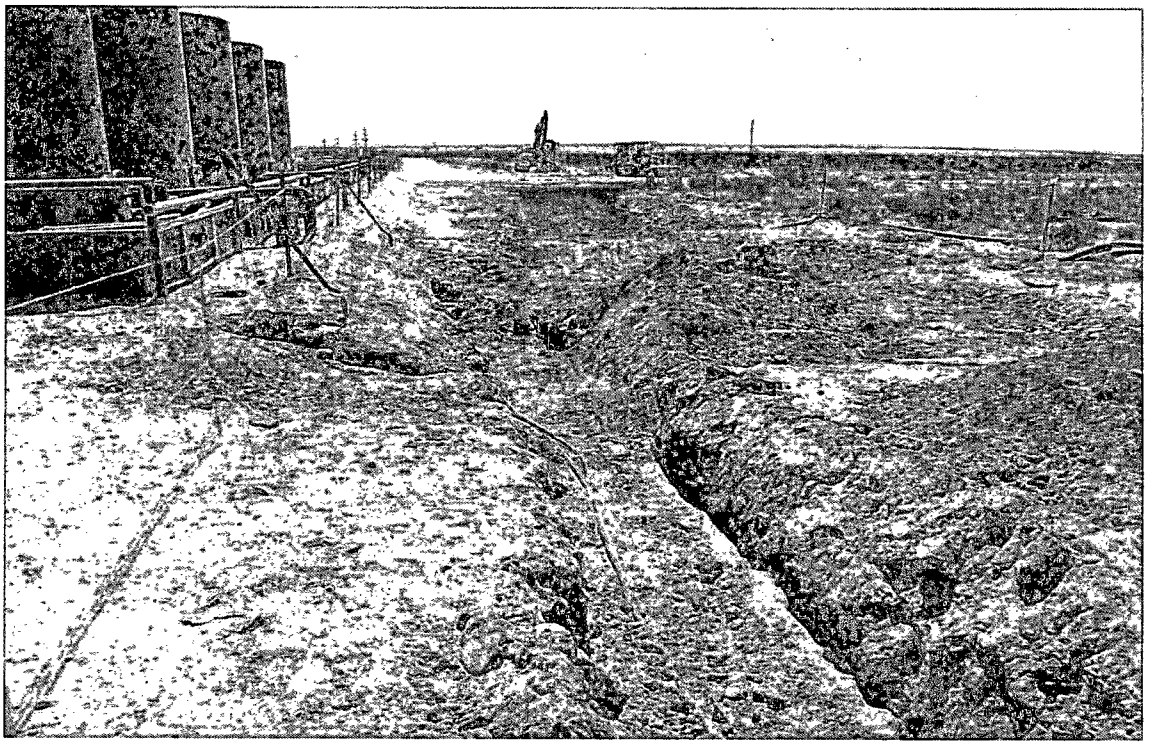
James Ranch Unit #36 Tank Battery - Pooling Area Excavation at Hudson Federal Battery



James Ranch Unit #36 Tank Battery - Pooling Area Excavation at Hudson Federal Battery



James Ranch Unit #36 Tank Battery - Pooling Area Excavation at Hudson Federal Battery
(Following Backfilling)



James Ranch Unit #36 Tank Battery - Excavation
(Following Installation of Steel Containment Area)

Appendix C

Soil Boring Logs

Soil Boring SB-1

Depth Below Ground Surface	Soil Column	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
0						
			7.4	None	None	0' - 2' - Tan fine sand; caliche
5						2' - 5' - Basin fine sand; caliche
			11.7	None	None	5' - 8' - Tan fine sand; sandstone
10						
			11.2	None	None	8' - 13' - Red fine sand
15						13' - 15' - Tan fine sand
			17.8	None	None	
20						
		720	1.1	None	None	15' - 36' - Dark red fine sand; sandstone w/ clay
25						
				None	None	
30						
				None	None	
35						
				None	None	
40		564				
				None	None	36' - 50' - Red silty sand; silty clay
45		160				
				None	None	
50		112				

Boring SB-1

Date Drilled July 31, 2012
Thickness of Bentonite Seal 50 Ft
Depth of Exploratory Boring 50 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.

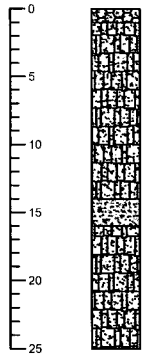
Completion Notes

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-1	**BOPCO, LP** **James Ranch Unit #36 Tank Battery** **Eddy County, New Mexico** **NMOCD Reference #: 2RP-1204**	Basin Environmental Service Technologies	Basin Environmental Service Technologies, LLC 3100 Plains Hwy. Lovington, NM 88260 Prep By: BJA | Checked By: BRB May 20, 2013

Soil Boring SB-2

Depth Below Ground Surface	Soil Column	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
0				None	None	0' - 1' - Tan fine sand; caliche
5			9.8	None	None	1' - 14' - Tan fine sand; sandstone
10		776	1.1	None	None	
15		280	1.8	None	None	14' - 16' - Red fine sand
20		136	2.6	None	None	16' - 25' - Tan fine sand; cemented sandstone
25		216		None	None	



Boring SB-2

Date Drilled July 31, 2012
Thickness of Bentonite Seal 25 Ft
Depth of Exploratory Boring 25 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-2	**BOPCO, LP** **James Ranch Unit #36 Tank Battery** **Eddy County, New Mexico** **NMOCD Reference #: 2RP-1204**	Basin Environmental Effective Solutions Service Technologies	Basin Environmental Service Technologies, LLC 3100 Plains Hwy. Lovington, NM 88260 Prep By: BJA | Checked By: BRB May 20, 2013

Soil Boring SB-3

Depth Below Ground Surface	Soil Column	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
0						
5			0.2	None	None	0' - 1' - Tan fine sand; caliche
10		720	0.0	None	None	1' - 9' - Tan fine sand; sandstone
15		316	0.1	None	None	9' - 18' - Bridge fine sand; sandstone
20		216	0.4	None	None	18' - 20' - Red silty sand; sandstone

Boring SB-3

Date Drilled July 31, 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.

Soil Boring SB-3	**BOPCO, LP** **James Ranch Unit #36 Tank Battery** **Eddy County, New Mexico** **NMOCD Reference #: 2RP-1204**	Basin Environmental Service Technologies	Basin Environmental Service Technologies, LLC 3100 Plains Hwy. Lovington, NM 88260 Prep By: BJA / Checked By: BRB May 20, 2013

Soil Boring SB-4

Depth Below Ground Surface	Soil Column	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
0						
				None	None	0' - 2' - Backfill
5			0.1			2' - 8' - Tan fine sand
				None	None	
10			0.3			8' - 9' - Tan fine sand; sandstone 9' - 11' - Pink fine sand; sandstone
				None	None	
15		904	0.9			11' - 17' - Tan fine sand; sandstone
				None	None	
20		316	0.0			17' - 20' - Rose silty sand; sandstone
				None	None	
25		216	0.1			20' - 25' - Tan silty sand; sandstone

Boring SB-4

Date Drilled July 31, 2012
Thickness of Bentonite Seal 25 Ft
Depth of Exploratory Boring 25 Ft bgs
Depth to Groundwater _____
Ground Water Elevation _____

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

Completion Notes

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

Soil Boring SB-4	**BOPCO, LP** **James Ranch Unit #36 Tank Battery** **Eddy County, New Mexico** **NMOCD Reference #: 2RP-1204**	Basin Environmental Service Technologies	Basin Environmental Service Technologies, LLC 3100 Plains Hwy. Lovington, NM 88260 Prep By: BJA / Checked By: BRB May 20, 2013

Appendix D

Permits

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Carlsbad Field Office
620 E. Greene St.
Carlsbad, NM 88220-6292

In Reply Refer To:
3162.4 (NM-080)
NMNM02884B, NMLC061705B July 5, 2012

NM Office of the State Engineer
Attn: Bill Duemling
1900 W. Second St.
Roswell, NM 88201

Re: NMNM02884B; James Ranch Unit #36 (3001527686)
1980' FNL & 1860' FEL (SW/NE) Section 1, T22S-R30E
Latitude: 32.335615, Longitude: -103.832117
Eddy County, New Mexico

NMLC061705B; Poker Lake Unit #78 (3001527536)
660' FNL & 660' FEL (NE/NE) Section 25, T24S-R30E
Latitude: 32.19467, Longitude: -103.82830
Eddy County, New Mexico

Gentlemen:

The above well locations have had recent spill events related to oil and gas operations on the above referenced well locations. In order to fully delineate the impacted sites, a drilling unit will be needed to complete the delineation. The Bureau of Land Management (land owner) authorizes the use of a drilling unit to accomplish the full delineation of the site.

If you have any questions contact Jim Amos, at 575-234-5909.

Sincerely,

James A. Amos
Supervisory EPS

Scott A. Verhines, P.E.
State Engineer

Roswell Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

Trn Nbr: 507137
File Nbr: C 03559

Jul. 12, 2012

BEN ARGUIJO (BASIN ENVIRONMENTAL)
BOPCO, LP
522 WEST MERMOD
CARLSBAD, NM 88220

Greetings:

Enclosed is your copy of the above numbered permit that has been approved subject to the conditions set forth on the approval page. In accordance with the conditions of approval, the well can only be tested for 10 cumulative days, and the well is to be plugged on or before 07/31/2013, unless a permit to use the water is acquired from this office.

A Well Record & Log (OSE Form wr-20) shall be filed in this office within twenty (20) days after completion of drilling, but no later than 07/31/2013.

Appropriate forms can be downloaded from the OSE website www.ose.state.nm.us or will be mailed upon request.

Sincerely,

Bill Duemling
(575)622-6521

Enclosure

explore

F). C-3559

NEW MEXICO OFFICE OF THE STATE ENGINEER

APPLICATION FOR PERMIT TO DRILL A WELL WITH NO CONSUMPTIVE USE OF WATER

(check applicable box):

For fees, see State Engineer website: http://www.ose.state.nm.us/ 2-3174

STATE ENGINEER OFFICE ROSWELL, NEW MEXICO
2012 JUL 10 A 10: 31

Purpose:	☐ Pollution Control And / Or Recovery	☐ Geo-Thermal
☒ Exploratory	☐ Construction Site De-Watering	☐ Other (Describe):
☐ Monitoring	☐ Mineral De-Watering	

A separate permit will be required to apply water to beneficial use.

☐ Temporary Request - Requested Start Date: **6/28/2012** Requested End Date: **6/28/2013**

Plugging Plan of Operations Submitted? ☐ Yes ☒ No

1. APPLICANT(S)

Name: **BOPCO, LP**	Name:
Contact or Agent: check here if Agent ☒ **Ben J. Arguijo (Basin Environmental)**	Contact or Agent: check here if Agent ☒
Mailing Address: **522 W. Mermod**	Mailing Address:
City: **Carlsbad**	City:
State: **NM** Zip Code: **88220**	State: Zip Code:
Phone: **(432)556-8730** ☐ Home ☒ Cell Phone (Work):	Phone: ☐ Home ☐ Cell Phone (Work):
E-mail (optional): **TASavoie@BassPet.com** **bjarguijo@basinenv.com**	E-mail (optional):

2012 JUL 2 AM 8 31

FOR OSE INTERNAL USE — Application for Permit, Form wr-07, Rev 4/12/12

File Number: C-3559	Trn Number: 507137
Trans Description (optional): EXPL	
Sub-Basin: C	
PCW/LOG Due Date: 07/31/2013	

2. **WELL(S)** Describe the well(s) applicable to this application. 2-31725

Location Required: Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84).
District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.

☐ NM State Plane (NAD83) (Feet)
☐ NM West Zone
☐ NM East Zone
☐ NM Central Zone

☐ UTM (NAD83) (Meters)
☐ Zone 12N
☐ Zone 13N

☒ Lat/Long (WGS84) (to the nearest 1/10th of second)

Well Number (if known):	X or Easting or Longitude:	Y or Northing or Latitude:	Provide if known: -Public Land Survey System (PLSS) (*Quarters or Halves, Section, Township, Range*) OR - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name
SB-1	32.335615 32° 20' 8.214"	-103.832117 -103° 49' 55.621"	Unit Letter "G" (SW/NE), Section 1, Township ~~22~~ 23 South, Range 30 East
SB-2	32.335615	-103.832117	Unit Letter "G" (SW/NE), Section 1, Township ~~22~~ 23 South, Range 30 East
SB-3	32.335615	-103.832117	Unit Letter "G" (SW/NE), Section 1, Township ~~22~~ 23 South, Range 30 East
SB-4	32.335615	-103.832117	Unit Letter "G" (SW/NE), Section 1, Township ~~22~~ 23 South, Range 30 East
SB-5	32.335615	-103.832117	Unit Letter "G" (SW/NE), Section 1, Township ~~22~~ 23 South, Range 30 East

NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions)
Additional well descriptions are attached: ☐ Yes ☒ No **If yes, how many**_____

Other description relating well to common landmarks, streets, or other: **See attached Site Location Map.**

Well is on land owned by: **US Bureau Of Land Management**

Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? ☐ Yes ☐ No
If yes, how many_____

Approximate depth of well (feet): **50.00**	Outside diameter of well casing (inches): **0.00**
Driller Name: **Straub Corporation**	Driller License Number: **WD1478**

3. **ADDITIONAL STATEMENTS OR EXPLANATIONS**

Up to five (5) soil borings will be drilled on-site to investigate the vertical extent of contamination following a crude oil and produced water release at BOPCO's James Ranch Unit #36 site. The exact number, location(s), and depth(s) of the soil bore(s) will be determined on the drilling date by field-screens using a chloride test kit and/or Photo-Ionization Detector. Due to the depth to water at the location (approximately 170 feet below ground surface), it is unlikely that monitor wells will be required.

RECEIVED OCD ENGINEER OFFICE 2013 JUL 10 A 10:32

FOR OSE INTERNAL USE — Application for Permit, Form wr-07

File Number: C-3559	Trn Number: 507137

4. **SPECIFIC REQUIREMENTS:** The applica. ust include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application:

2-31725

Exploratory: ☒ Include a description of any proposed pump test, if applicable.	**Pollution Control and/or Recovery:** ☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for the pollution control or recovery operation. ☐ The estimated maximum period of time for completion of the operation. ☐ The annual diversion amount. ☐ The annual consumptive use amount. ☐ The maximum amount of water to be diverted and injected for the duration of the operation. ☐ The method and place of discharge.	**Construction De-Watering:** ☐ Include a description of the proposed dewatering operation, ☐ The estimated duration of the operation, ☐ The maximum amount of water to be diverted, ☐ A description of the need for the dewatering operation, and, ☐ A description of how the diverted water will be disposed of.	**Mine De-Watering:** ☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for mine dewatering. ☐ The estimated maximum period of time for completion of the operation. ☐ The source(s) of the water to be diverted. ☐ The geohydrologic characteristics of the aquifer(s). ☐ The maximum amount of water to be diverted per annum. ☐ The maximum amount of water to be diverted for the duration of the operation. ☐ The quality of the water. ☐ The method of measurement of water diverted. ☐ The recharge of water to the aquifer. ☐ Description of the estimated area of hydrologic effect of the project. ☐ The method and place of discharge. ☐ An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. ☐ A description of the methods employed to estimate effects on surface water rights and underground water rights. ☐ Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.
Monitoring: ☐ Include the reason for the monitoring well, and, ☐ The duration of the planned monitoring.	☐ The method of measurement of water produced and discharged. ☐ The source of water to be injected. ☐ The method of measurement of water injected. ☐ The characteristics of the aquifer. ☐ The method of determining the resulting annual consumptive use of water and depletion from any related stream system. ☐ Proof of any permit required from the New Mexico Environment Department. ☐ An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.	**Geo-Thermal:** ☐ Include a description of the geothermal heat exchange project, ☐ The amount of water to be diverted and re-injected for the project, ☐ The time frame for constructing the geothermal heat exchange project, and, ☐ The duration of the project. ☐ Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.	

ACKNOWLEDGEMENT

I, We (name of applicant(s)), **Ben J. Arguijo**
Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

Applicant Signature

Applicant Signature

ACTION OF THE STATE ENGINEER

This application is:

☒ approved ☐ partially approved ☐ denied

provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the attached conditions of approval.

Witness my hand and seal this 12th day of July 20 12, for the State Engineer,

Scott A. Verhines, P.E., State Engineer

By: Bill Duenlng
Signature

Bill Duenling
Print

Title: Carlsbad Basin Supervisor
Print

STATE ENGINEER OFFICE
ROSWELL, NEW MEXICO
2012 JUL 10 A 10: 35

FOR OSE INTERNAL USE

Application for Permit, Form wr-07

File Number: C-3559 | Trn Number: 507137

2012 JUL 2 AM 8 31

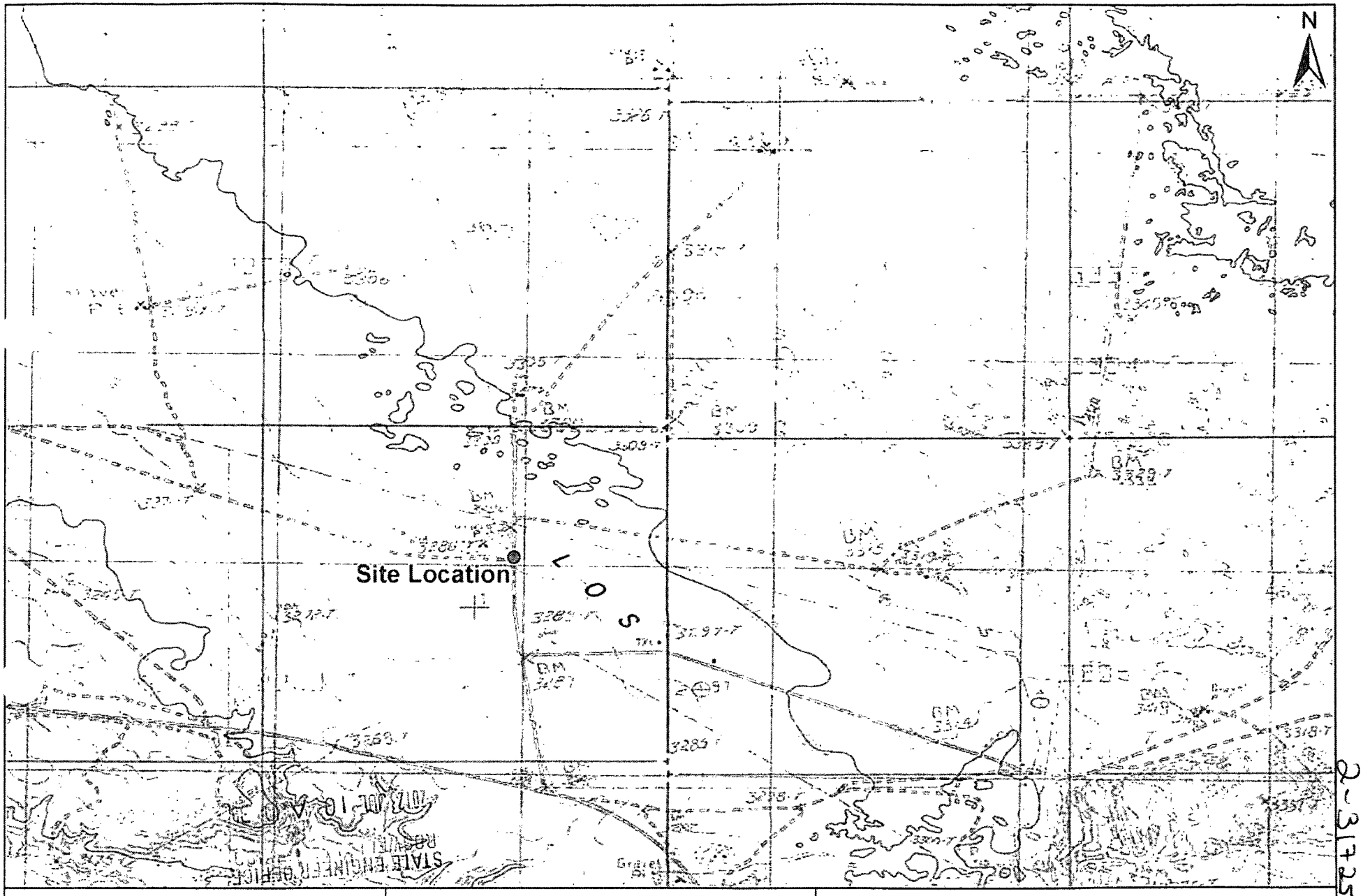


Figure 1
Site Location Map
BOPCO, LP
James Ranch Unit #36
Eddy County, New Mexico

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

Drawn By: BJA	Checked By: BRB
June 28, 2012	Scale: 1" = 2000'

2-31725

NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL

1A Depth of the well shall not exceed the thickness of the valley fill.

4 No water shall be appropriated and beneficially used under this permit.

B The well shall be drilled by a driller licensed in the State of New Mexico in accordance with Section 72-12-12 New Mexico Statutes Annotated.

C Driller's well record must be filed with the State Engineer within 20 days after the well is drilled or driven. Well record forms will be provided by the State Engineer upon request.

LOG The Point of Diversion C 03559 POD1 must be completed and the Well Log filed on or before 07/31/2013.

LOG The Point of Diversion C 03559 POD2 must be completed and the Well Log filed on or before 07/31/2013.

LOG The Point of Diversion C 03559 POD3 must be completed and the Well Log filed on or before 07/31/2013.

LOG The Point of Diversion C 03559 POD4 must be completed and the Well Log filed on or before 07/31/2013.

LOG The Point of Diversion C 03559 POD5 must be completed and the Well Log filed on or before 07/31/2013.

NO WATER SHALL BE DIVERTED FROM THESE BOREHOLES EXCEPT FOR TESTING PURPOSES, WHICH SHALL NOT EXCEED TEN (10) CUMULATIVE DAYS, AND BOREHOLES SHALL BE PLUGGED OR CAPPED ON OR BEFORE 07/31/2013.

THE BOREHOLES SHALL BE CONSTRUCTED, MAINTAINED, AND OPERATED THAT EACH WATER SHALL BE CONFINED TO THE AQUIFER IN WHICH IT IS ENCOUNTERED.

Trn Desc: C 03559:EXPLORATORY BORE HOLES

File Number: C 03559
Trn Number: 507137

NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE

ACTION OF STATE ENGINEER

Notice of Intention Rcvd:	Date Rcvd. Corrected:
Formal Application Rcvd: 07/12/2012	Pub. of Notice Ordered:
Date Returned - Correction:	Affidavit of Pub. Filed:

This application is approved provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state; and further subject to the specific conditions listed previously.

Witness my hand and seal this 12 day of Jul A.D., 2012

Scott A. Verhines, P.E., State Engineer

By: Bill Duemling, Basin Supv.

Trn Desc: C 03559:EXPLORATORY BORE HOLES

File Number: C 03559
Trn Number: 507137

Locator Tool Report

General Information:

Application ID: 30 Date: 07-11-2012 Time: 17:19:34

WR File Number: C-03559
Purpose: POINT OF DIVERSION

Applicant First Name: BOPCO LP & BASIN ENVIRONMENTAL (JAMES RANCH AREA)
Applicant Last Name: POLLUTION TEST BORE HOLES (5 TOTAL)

GW Basin: CARLSBAD
County: EDDY

Critical Management Area Name(s): NONE
Special Condition Area Name(s): NONE
Land Grant Name: NON GRANT

PLSS Description (New Mexico Principal Meridian):

NW 1/4 of SE 1/4 of SW 1/4 of NE 1/4 of Section 01, Township 23S, Range 30E.

Coordinate System Details:

Geographic Coordinates:

Latitude:	32 Degrees	20 Minutes	8.2 Seconds	N
Longitude:	103 Degrees	49 Minutes	55.6 Seconds	W

Universal Transverse Mercator Zone: 13N

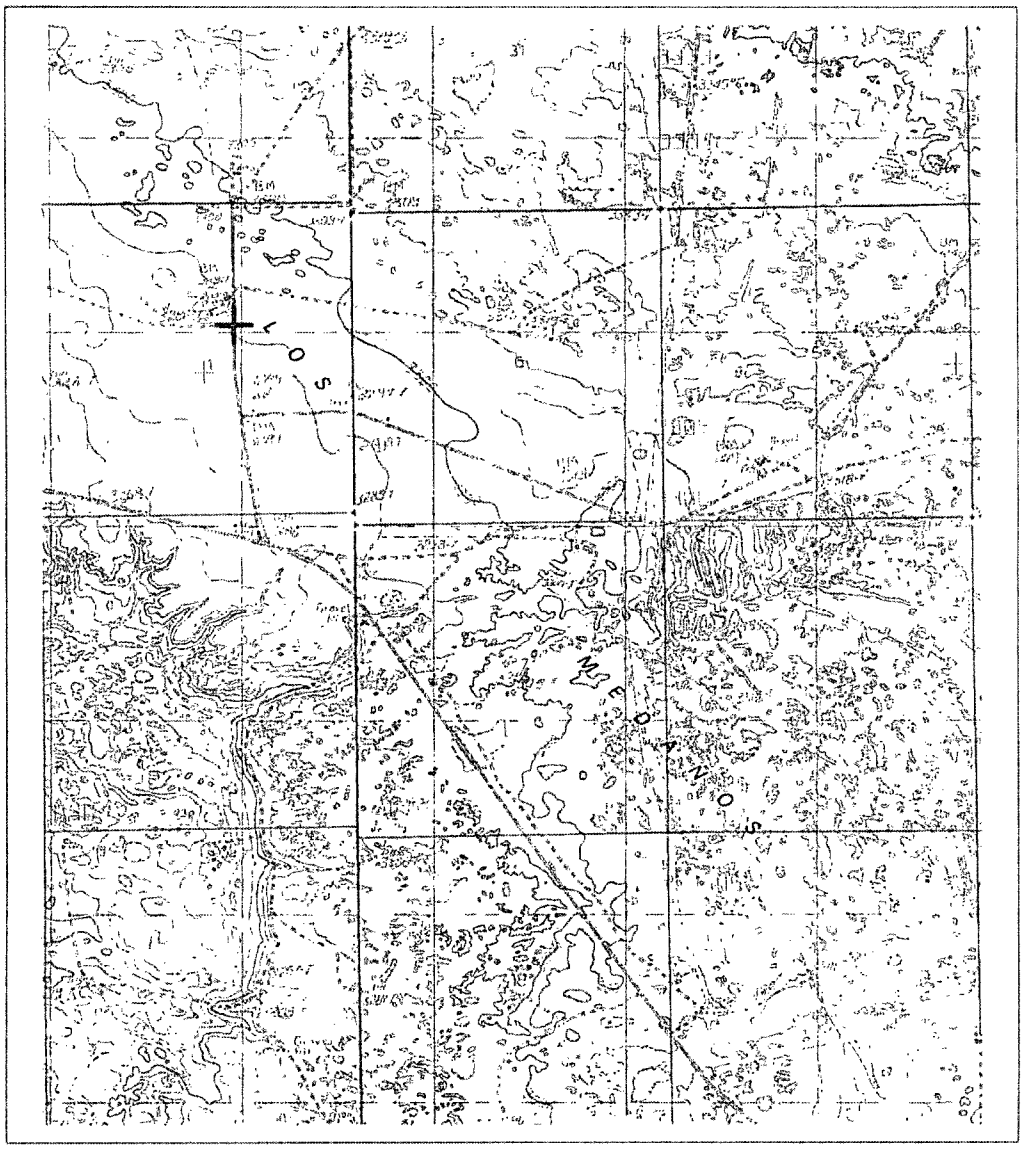
NAD 1983(92) (Meters)	N: 3,578,236	E: 609,912
NAD 1983(92) (Survey Feet)	N: 11,739,596	E: 2,001,021
NAD 1927 (Meters)	N: 3,578,034	E: 609,961
NAD 1927 (Survey Feet)	N: 11,738,934	E: 2,001,180

State Plane Coordinate System Zone: New Mexico East

NAD 1983(92) (Meters)	N: 148,191	E: 212,184
NAD 1983(92) (Survey Feet)	N: 486,191	E: 696,141
NAD 1927 (Meters)	N: 148,173	E: 199,632
NAD 1927 (Survey Feet)	N: 486,131	E: 654,958

NEW MEXICO OFFICE OF STATE ENGINEER

Locator Tool Report



WR File Number: C-03559 Scale: 1:37,354

Northing/Easting: UTM83(92) (Meter): N: 3,578,236 E: 609,912

Northing/Easting: SPCS83(92) (Feet): N: 486,191 E: 696,141

GW Basin: Carlsbad

Print Date: 07/11/2012

Appendix E

Laboratory Analytical Reports

CARDINAL Laboratories

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

June 19, 2012

BEN J. ARGUIJO

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: JAMES RANCH UNIT 36 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 06/14/12 9:00.

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

Cardinal Laboratories is accreditated 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

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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:	06/14/2012	Sampling Date:	06/13/2012
Reported:	06/19/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SAMPLE 1 (H201339-01)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**17400**	16.0	06/18/2012	ND	448	112	400	3.64	

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	**1040**	50.0	06/15/2012	ND	185	92.4	200	1.98	
DRO >C10-C28	**6970**	50.0	06/15/2012	ND	194	97.2	200	3.12	
EXT DRO >C28-C35	**1250**	50.0	06/15/2012	ND					

Surrogate: 1-Chlorooctane	*185 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*250 %*	*63.6-154*

Sample ID: SAMPLE 2 (H201339-02)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**704**	16.0	06/18/2012	ND	448	112	400	3.64	

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	**352**	50.0	06/15/2012	ND	185	92.4	200	1.98	
DRO >C10-C28	**8550**	50.0	06/15/2012	ND	194	97.2	200	3.12	
EXT DRO >C28-C35	**1660**	50.0	06/15/2012	ND					

Surrogate: 1-Chlorooctane	*142 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*289 %*	*63.6-154*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	06/14/2012	Sampling Date:	06/13/2012
Reported:	06/19/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SAMPLE 3 (H201339-03)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**208**	16.0	06/18/2012	ND	448	112	400	3.64	

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	06/15/2012	ND	185	92.4	200	1.98	
DRO >C10-C28	**476**	50.0	06/15/2012	ND	194	97.2	200	3.12	
EXT DRO >C28-C35	**268**	50.0	06/15/2012	ND					

Surrogate: 1-Chlorooctane	*110 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*146 %*	*63.6-154*

Sample ID: SAMPLE 4 (H201339-04)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3920**	16.0	06/18/2012	ND	448	112	400	3.64	

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	06/15/2012	ND	185	92.4	200	1.98	
DRO >C10-C28	**111**	10.0	06/15/2012	ND	194	97.2	200	3.12	
EXT DRO >C28-C35	**52.6**	10.0	06/15/2012	ND					

Surrogate: 1-Chlorooctane	*105 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*128 %*	*63.6-154*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	06/14/2012	Sampling Date:	06/13/2012
Reported:	06/19/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SAMPLE 5 (H201339-05)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**11400**	16.0	06/18/2012	ND	448	112	400	3.64	

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	**611**	50.0	06/15/2012	ND	185	92.4	200	1.98	
DRO >C10-C28	**9170**	50.0	06/15/2012	ND	194	97.2	200	3.12	
EXT DRO >C28-C35	**1970**	50.0	06/15/2012	ND					

Surrogate: 1-Chlorooctane	*162 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*319 %*	*63.6-154*

Sample ID: SAMPLE 5 2' (H201339-06)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2880**	16.0	06/18/2012	ND	448	112	400	3.64	

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	**1130**	50.0	06/15/2012	ND	185	92.4	200	1.98	
DRO >C10-C28	**7690**	50.0	06/15/2012	ND	194	97.2	200	3.12	
EXT DRO >C28-C35	**1390**	50.0	06/15/2012	ND					

Surrogate: 1-Chlorooctane	*197 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*261 %*	*63.6-154*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	06/14/2012	Sampling Date:	06/13/2012
Reported:	06/19/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SAMPLE 5 4' (H201339-07)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**7680**	16.0	06/18/2012	ND	448	112	400	3.64	

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	**931**	50.0	06/15/2012	ND	185	92.4	200	1.98	
DRO >C10-C28	**6120**	50.0	06/15/2012	ND	194	97.2	200	3.12	
EXT DRO >C28-C35	**1080**	50.0	06/15/2012	ND					

Surrogate: 1-Chlorooctane	*178 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*222 %*	*63.6-154*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	06/14/2012	Sampling Date:	06/13/2012
Reported:	06/19/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SAMPLE 5 6' (H201339-08)

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	06/18/2012	ND	1.93	96.5	2.00	7.45	
Toluene*	**0.165**	0.050	06/18/2012	ND	1.94	97.1	2.00	6.42	
Ethylbenzene*	**0.740**	0.050	06/18/2012	ND	1.96	98.2	2.00	6.95	
Total Xylenes*	**2.80**	0.150	06/18/2012	ND	5.91	98.6	6.00	6.73	

Surrogate: 4-Bromofluorobenzene (PID *188 %* *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	**16000**	16.0	06/18/2012	ND	448	112	400	3.64	

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	**233**	50.0	06/15/2012	ND	185	92.4	200	1.98	
DRO >C10-C28	**5120**	50.0	06/15/2012	ND	194	97.2	200	3.12	
EXT DRO >C28-C35	**1010**	50.0	06/15/2012	ND					

Surrogate: 1-Chlorooctane *142 %* *65.2-140*

Surrogate: 1-Chlorooctadecane *224 %* *63.6-154*

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*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	06/14/2012	Sampling Date:	06/13/2012
Reported:	06/19/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SAMPLE 6 (H201339-09)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**14200**	16.0	06/18/2012	ND	448	112	400	3.64	

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	**867**	50.0	06/15/2012	ND	185	92.4	200	1.98	
DRO >C10-C28	**13800**	50.0	06/15/2012	ND	194	97.2	200	3.12	
EXT DRO >C28-C35	**2820**	50.0	06/15/2012	ND					

Surrogate: 1-Chlorooctane	*193 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*291 %*	*63.6-154*

Sample ID: SAMPLE 7 (H201339-10)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**26800**	16.0	06/18/2012	ND	448	112	400	3.64	

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	**230**	50.0	06/15/2012	ND	185	92.4	200	1.98	
DRO >C10-C28	**9690**	50.0	06/15/2012	ND	194	97.2	200	3.12	
EXT DRO >C28-C35	**2060**	50.0	06/15/2012	ND					

Surrogate: 1-Chlorooctane	*149 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*328 %*	*63.6-154*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

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

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

Company Name: Basin Environmental Service Technologies, LLC		**BILL TO**	
Project Manager: Ben J. Arguijo		P.O. #:	
Address: P.O. Box 301		Company: BOPCO, LP	
City: Lovington	State: NM Zip: 88260	Attn: Tony Savoie	
Phone #: (575) 396-2378	Fax #: (575) 396-1429	Address: 522 w. Mermod	
Project #:	Project Owner: BOPCO, LP	City: Carlsbad	
Project Name: James Ranch Unit 36 Battery		State: NM Zip: 88220	
Project Location:		Phone #: (432) 556-8730	
Sampler Name: Jody Walters		Fax #:	

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV: ACID/BASE:	ICE/COOL	OTHER:	SAMPLING: DATE	TIME	Chlorides	8015M	BTEX									
H201339																										
1	Sample 1	G	1			X					X		6-13-12	8:30	X	X										
2	Sample 2	G	1			X					X		6-13-12	8:35	X	X										
3	Sample 3	G	1			X					X		6-13-12	8:40	X	X										
4	Sample 4	G	1			X					X		6-13-12	8:45	X	X										
5	Sample 5	G	1			X					X		6-13-12	9:00	X	X										
6	Sample 5 2'	G	1			X					X		6-13-12	9:05	X	X										
7	Sample 5 4'	G	1			X					X		6-13-12	9:10	X	X										
8	Sample 5 6'	G	1			X					X		6-13-12	9:15	X	X	X									
9	Sample 6	G	1			X					X		6-13-12	9:20	X	X										
10	Sample 7	G	1			X					X		6-13-12	9:30	X	X										

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

Relinquished By:	Date: 6-14-12	Received By:	Phone Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 0700		Fax Result: ☐ Yes ☐ No Add'l Fax #:
Relinquished By:	Date: 6-14-12	Received By:	REMARKS:
	Time: 0900		Please email results to pm@basinenv.com & TAsavoie@BassPet.com jwlowry@basinenv.com
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	5°C	Sample Condition: Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials)

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

#26

CARDINAL Laboratories

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

June 29, 2012

BEN J. ARGUIJO

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: JAMES RANCH UNIT 36 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 06/28/12 8:15.

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

Cardinal Laboratories is accreditated 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

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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:	06/28/2012	Sampling Date:	06/27/2012
Reported:	06/29/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SAMPLE #8 (H201453-01)

BTEX 8021B mg/kg **Analyzed By: ZZZ** **S-04**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.250	0.250	06/28/2012	ND	2.06	103	2.00	8.92	
Toluene*	**0.867**	0.250	06/28/2012	ND	2.08	104	2.00	10.2	
Ethylbenzene*	**3.29**	0.250	06/28/2012	ND	2.12	106	2.00	10.4	
Total Xylenes*	**7.97**	0.750	06/28/2012	ND	6.42	107	6.00	11.3	

Surrogate: 4-Bromofluorobenzene (PIL *213 %* *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	**13200**	16.0	06/28/2012	ND	416	104	400	3.92	

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	**999**	100	06/28/2012	ND	166	82.9	200	1.48	
DRO >C10-C28	**15100**	100	06/28/2012	ND	168	83.9	200	0.998	
EXT DRO >C28-C35	**4410**	100	06/28/2012	ND					

Surrogate: 1-Chlorooctane *159 %* *65.2-140*

Surrogate: 1-Chlorooctadecane *352 %* *63.6-154*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	06/28/2012	Sampling Date:	06/27/2012
Reported:	06/29/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SAMPLE #9 (H201453-02)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**17600**	16.0	06/28/2012	ND	416	104	400	3.92	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	**11.4**	10.0	06/28/2012	ND	166	82.9	200	1.48	
DRO >C10-C28	**662**	10.0	06/28/2012	ND	168	83.9	200	0.998	
EXT DRO >C28-C35	**185**	10.0	06/28/2012	ND					

Surrogate: 1-Chlorooctane	*71.7 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*92.4 %*	*63.6-154*

Sample ID: SAMPLE #10 (H201453-03)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**8400**	16.0	06/28/2012	ND	400	100	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	06/28/2012	ND	166	82.9	200	1.48	
DRO >C10-C28	**335**	50.0	06/28/2012	ND	168	83.9	200	0.998	
EXT DRO >C28-C35	**308**	50.0	06/28/2012	ND					

Surrogate: 1-Chlorooctane	*68.9 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*99.0 %*	*63.6-154*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	06/28/2012	Sampling Date:	06/27/2012
Reported:	06/29/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SAMPLE #11 (H201453-04)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**6880**	16.0	06/28/2012	ND	400	100	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	06/28/2012	ND	166	82.9	200	1.48	
DRO >C10-C28	**1330**	50.0	06/28/2012	ND	168	83.9	200	0.998	
EXT DRO >C28-C35	**478**	50.0	06/28/2012	ND					

Surrogate: 1-Chlorooctane	*79.4 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*121 %*	*63.6-154*

Sample ID: SAMPLE #12 (H201453-05)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16400**	16.0	06/28/2012	ND	400	100	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	06/28/2012	ND	166	82.9	200	1.48	
DRO >C10-C28	**443**	10.0	06/28/2012	ND	168	83.9	200	0.998	
EXT DRO >C28-C35	**144**	10.0	06/28/2012	ND					

Surrogate: 1-Chlorooctane	*68.3 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*95.8 %*	*63.6-154*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	06/28/2012	Sampling Date:	06/27/2012
Reported:	06/29/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SAMPLE #13 (H201453-06)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**6240**	16.0	06/28/2012	ND	400	100	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	**80.2**	50.0	06/28/2012	ND	166	82.9	200	1.48	
DRO >C10-C28	**4200**	50.0	06/28/2012	ND	168	83.9	200	0.998	
EXT DRO >C28-C35	**941**	50.0	06/28/2012	ND					

Surrogate: 1-Chlorooctane	*97.1 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*177 %*	*63.6-154*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

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

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

Company Name:	Basin Environmental Service Technologies, LLC	**BILL TO**	
Project Manager:	Ben J. Arguijo	P.O. #:	
Address:	P.O. Box 301	Company:	BOPCO, LP
City:	Lovington State: NM Zip: 88260	Attn:	Tony Savoie
Phone #:	(575) 396-2378 Fax #: (575) 396-1429	Address:	522 w. Mermod
Project #:	Project Owner: BOPCO, LP	City:	Carlsbad
Project Name:	James Ranch Unit 36 BATTERY	State:	NM Zip: 88220
Project Location:	EDDY, NM.	Phone #:	(432) 556-8730
Sampler Name:	Jody Walters	Fax #:	

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	PRESERV: ACID/BASE:	ICE / COOL	OTHER	SAMPLING: DATE	TIME	ANALYSIS REQUEST: 8015M	Chlorides	BTEX
H201453																	
1	Sample #8	G	1			X					X		6-27-12	7:15	X	X	X
2	Sample #9	G	1			X					X		6-27-12	7:20	X	X	
3	Sample #10	G	1			X					X		6-27-12	7:25	X	X	
4	Sample #11	G	1			X					X		6-27-12	7:30	X	X	
5	Sample #12	G	1			X					X		6-27-12	7:35	X	X	
6	Sample #13	G	1			X					X		6-27-12	7:40	X	X	

Relinquished By:	Date: 6-28-12 Time: 7:05	Received By:	
Relinquished By:	Date: 6-28-12 Time: 8:15	Received By:	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	4°C	Sample Condition: Cool: Yes / No; Intact: Yes / No	CHECKED BY: (Initials)

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS:

Please email results to pm@basinenv.com
& TAsavoie@BassPet.com

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

#26

CARDINAL Laboratories

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

August 07, 2012

BEN J. ARGUIJO

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: JAMES RANCH UNIT 36 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 08/02/12 16:45.

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

Cardinal Laboratories is accreditated 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

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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:	08/02/2012	Sampling Date:	07/31/2012
Reported:	08/07/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SB - 1 @ 5' (H201804-01)

Chloride, SM4500Cl-B mg/kg **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**272**	16.0	08/03/2012	ND	400	100	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	08/03/2012	ND	185	92.4	200	0.862	
DRO >C10-C28	<10.0	10.0	08/03/2012	ND	183	91.3	200	1.23	
EXT DRO >C28-C35	<10.0	10.0	08/03/2012	ND					

Surrogate: 1-Chlorooctane	*88.1 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*88.1 %*	*63.6-154*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	08/02/2012	Sampling Date:	07/31/2012
Reported:	08/07/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SB - 1 @ 10' (H201804-02)

BTEX 8021B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/07/2012	ND	1.70	85.2	2.00	7.84	
Toluene*	<0.050	0.050	08/07/2012	ND	1.83	91.3	2.00	6.14	
Ethylbenzene*	<0.050	0.050	08/07/2012	ND	1.87	93.5	2.00	6.07	
Total Xylenes*	<0.150	0.150	08/07/2012	ND	5.64	94.0	6.00	5.24	

Surrogate: 4-Bromofluorobenzene (PIL *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	**304**	16.0	08/03/2012	ND	400	100	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	08/03/2012	ND	185	92.4	200	0.862	
DRO >C10-C28	<10.0	10.0	08/03/2012	ND	183	91.3	200	1.23	
EXT DRO >C28-C35	<10.0	10.0	08/03/2012	ND					

Surrogate: 1-Chlorooctane *95.2 %* *65.2-140*

Surrogate: 1-Chlorooctadecane *96.0 %* *63.6-154*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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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:	08/02/2012	Sampling Date:	07/31/2012
Reported:	08/07/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SB - 1 @ 25' (H201804-03)

BTEX 8021B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/07/2012	ND	1.70	85.2	2.00	7.84	
Toluene*	<0.050	0.050	08/07/2012	ND	1.83	91.3	2.00	6.14	
Ethylbenzene*	<0.050	0.050	08/07/2012	ND	1.87	93.5	2.00	6.07	
Total Xylenes*	<0.150	0.150	08/07/2012	ND	5.64	94.0	6.00	5.24	

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	**896**	16.0	08/03/2012	ND	400	100	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	08/03/2012	ND	185	92.4	200	0.862	
DRO >C10-C28	<10.0	10.0	08/03/2012	ND	183	91.3	200	1.23	
EXT DRO >C28-C35	<10.0	10.0	08/03/2012	ND					

Surrogate: 1-Chlorooctane *96.4 %* *65.2-140*

Surrogate: 1-Chlorooctadecane *92.8 %* *63.6-154*

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CARDINAL Laboratories

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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:	08/02/2012	Sampling Date:	07/31/2012
Reported:	08/07/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SB - 1 @ 35' (H201804-04)

Chloride, SM4500Cl-B mg/kg **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**384**	16.0	08/03/2012	ND	400	100	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	08/03/2012	ND	185	92.4	200	0.862	
DRO >C10-C28	<10.0	10.0	08/03/2012	ND	183	91.3	200	1.23	
EXT DRO >C28-C35	<10.0	10.0	08/03/2012	ND					

Surrogate: 1-Chlorooctane	*96.2 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*92.7 %*	*63.6-154*

Sample ID: SB - 1 @ 45' (H201804-05)

Chloride, SM4500Cl-B mg/kg **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**176**	16.0	08/03/2012	ND	400	100	400	0.00	

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Analytical Results For:

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

Received:	08/02/2012	Sampling Date:	07/31/2012
Reported:	08/07/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SB - 1 @ 50' (H201804-06)

BTEX 8021B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/07/2012	ND	1.70	85.2	2.00	7.84	
Toluene*	<0.050	0.050	08/07/2012	ND	1.83	91.3	2.00	6.14	
Ethylbenzene*	<0.050	0.050	08/07/2012	ND	1.87	93.5	2.00	6.07	
Total Xylenes*	<0.150	0.150	08/07/2012	ND	5.64	94.0	6.00	5.24	

Surrogate: 4-Bromofluorobenzene (PIL *99.9 %* *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	**128**	16.0	08/03/2012	ND	400	100	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	08/03/2012	ND	185	92.4	200	0.862	
DRO >C10-C28	<10.0	10.0	08/03/2012	ND	183	91.3	200	1.23	
EXT DRO >C28-C35	<10.0	10.0	08/03/2012	ND					

Surrogate: 1-Chlorooctane *87.7 %* *65.2-140*

Surrogate: 1-Chlorooctadecane *86.5 %* *63.6-154*

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Analytical Results For:

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

Received:	08/02/2012	Sampling Date:	07/31/2012
Reported:	08/07/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SB - 2 @ 5' (H201804-07)

Chloride, SM4500Cl-B mg/kg **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1880**	16.0	08/03/2012	ND	400	100	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	08/03/2012	ND	185	92.4	200	0.862	
DRO >C10-C28	**15.4**	10.0	08/03/2012	ND	183	91.3	200	1.23	
EXT DRO >C28-C35	<10.0	10.0	08/03/2012	ND					

Surrogate: 1-Chlorooctane	*93.0 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*92.1 %*	*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:	08/02/2012	Sampling Date:	07/31/2012
Reported:	08/07/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SB - 2 @ 10' (H201804-08)

BTEX 8021B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/07/2012	ND	1.70	85.2	2.00	7.84	
Toluene*	<0.050	0.050	08/07/2012	ND	1.83	91.3	2.00	6.14	
Ethylbenzene*	<0.050	0.050	08/07/2012	ND	1.87	93.5	2.00	6.07	
Total Xylenes*	<0.150	0.150	08/07/2012	ND	5.64	94.0	6.00	5.24	

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	**944**	16.0	08/03/2012	ND	400	100	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	08/03/2012	ND	185	92.4	200	0.862	
DRO >C10-C28	<10.0	10.0	08/03/2012	ND	183	91.3	200	1.23	
EXT DRO >C28-C35	<10.0	10.0	08/03/2012	ND					

Surrogate: 1-Chlorooctane *87.4 %* *65.2-140*

Surrogate: 1-Chlorooctadecane *85.0 %* *63.6-154*

Sample ID: SB - 2 @ 20' (H201804-09)

Chloride, SM4500Cl-B mg/kg **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**144**	16.0	08/03/2012	ND	400	100	400	0.00	

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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:	08/02/2012	Sampling Date:	07/31/2012
Reported:	08/07/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SB - 2 @ 25' (H201804-10)

BTEX 8021B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/07/2012	ND	1.70	85.2	2.00	7.84	
Toluene*	<0.050	0.050	08/07/2012	ND	1.83	91.3	2.00	6.14	
Ethylbenzene*	<0.050	0.050	08/07/2012	ND	1.87	93.5	2.00	6.07	
Total Xylenes*	<0.150	0.150	08/07/2012	ND	5.64	94.0	6.00	5.24	

Surrogate: 4-Bromofluorobenzene (PID *122 %* *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	**192**	16.0	08/03/2012	ND	400	100	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	08/03/2012	ND	185	92.4	200	0.862	
DRO >C10-C28	<10.0	10.0	08/03/2012	ND	183	91.3	200	1.23	
EXT DRO >C28-C35	<10.0	10.0	08/03/2012	ND					

Surrogate: 1-Chlorooctane *95.3 %* *65.2-140*

Surrogate: 1-Chlorooctadecane *92.5 %* *63.6-154*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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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:	08/02/2012	Sampling Date:	07/31/2012
Reported:	08/07/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SB - 3 @ 5' (H201804-11)

Chloride, SM4500Cl-B mg/kg **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1520**	16.0	08/03/2012	ND	400	100	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	08/03/2012	ND	185	92.4	200	0.862	
DRO >C10-C28	<10.0	10.0	08/03/2012	ND	183	91.3	200	1.23	
EXT DRO >C28-C35	<10.0	10.0	08/03/2012	ND					

Surrogate: 1-Chlorooctane	*90.9 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*90.4 %*	*63.6-154*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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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:	08/02/2012	Sampling Date:	07/31/2012
Reported:	08/07/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SB - 3 @ 10' (H201804-12)

BTEX 8021B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/07/2012	ND	1.70	85.2	2.00	7.84	
Toluene*	<0.050	0.050	08/07/2012	ND	1.83	91.3	2.00	6.14	
Ethylbenzene*	<0.050	0.050	08/07/2012	ND	1.87	93.5	2.00	6.07	
Total Xylenes*	<0.150	0.150	08/07/2012	ND	5.64	94.0	6.00	5.24	

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	**736**	16.0	08/03/2012	ND	400	100	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	08/03/2012	ND	185	92.4	200	0.862	
DRO >C10-C28	<10.0	10.0	08/03/2012	ND	183	91.3	200	1.23	
EXT DRO >C28-C35	<10.0	10.0	08/03/2012	ND					

Surrogate: 1-Chlorooctane *95.2 %* *65.2-140*

Surrogate: 1-Chlorooctadecane *93.7 %* *63.6-154*

Sample ID: SB - 3 @ 15' (H201804-13)

Chloride, SM4500Cl-B mg/kg **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**320**	16.0	08/03/2012	ND	400	100	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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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:	08/02/2012	Sampling Date:	07/31/2012
Reported:	08/07/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SB - 3 @ 20' (H201804-14)

BTEX 8021B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/07/2012	ND	1.70	85.2	2.00	7.84	
Toluene*	<0.050	0.050	08/07/2012	ND	1.83	91.3	2.00	6.14	
Ethylbenzene*	<0.050	0.050	08/07/2012	ND	1.87	93.5	2.00	6.07	
Total Xylenes*	<0.150	0.150	08/07/2012	ND	5.64	94.0	6.00	5.24	

Surrogate: 4-Bromofluorobenzene (PID *96.0 %* *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	**208**	16.0	08/03/2012	ND	400	100	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	08/03/2012	ND	185	92.4	200	0.862	
DRO >C10-C28	<10.0	10.0	08/03/2012	ND	183	91.3	200	1.23	
EXT DRO >C28-C35	<10.0	10.0	08/03/2012	ND					

Surrogate: 1-Chlorooctane *97.5 %* *65.2-140*

Surrogate: 1-Chlorooctadecane *97.8 %* *63.6-154*

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	08/02/2012	Sampling Date:	07/31/2012
Reported:	08/07/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SB - 4 @ 5' (H201804-15)

Chloride, SM4500Cl-B mg/kg **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**480**	16.0	08/03/2012	ND	400	100	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	08/03/2012	ND	185	92.3	200	0.279	
DRO >C10-C28	<10.0	10.0	08/03/2012	ND	195	97.6	200	5.50	
EXT DRO >C28-C35	<10.0	10.0	08/03/2012	ND					

Surrogate: 1-Chlorooctane	*95.3 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*94.3 %*	*63.6-154*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	08/02/2012	Sampling Date:	07/31/2012
Reported:	08/07/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SB - 4 @ 10' (H201804-16)

BTEX 8021B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/07/2012	ND	1.70	85.2	2.00	7.84	
Toluene*	<0.050	0.050	08/07/2012	ND	1.83	91.3	2.00	6.14	
Ethylbenzene*	<0.050	0.050	08/07/2012	ND	1.87	93.5	2.00	6.07	
Total Xylenes*	<0.150	0.150	08/07/2012	ND	5.64	94.0	6.00	5.24	

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	**720**	16.0	08/03/2012	ND	400	100	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	08/03/2012	ND	185	92.3	200	0.279	
DRO >C10-C28	<10.0	10.0	08/03/2012	ND	195	97.6	200	5.50	
EXT DRO >C28-C35	<10.0	10.0	08/03/2012	ND					

Surrogate: 1-Chlorooctane *91.5 %* *65.2-140*

Surrogate: 1-Chlorooctadecane *89.5 %* *63.6-154*

Sample ID: SB - 4 @ 15' (H201804-17)

Chloride, SM4500Cl-B mg/kg **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**992**	16.0	08/06/2012	ND	416	104	400	3.92	

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	08/02/2012	Sampling Date:	07/31/2012
Reported:	08/07/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SB - 4 @ 20' (H201804-18)

Chloride, SM4500Cl-B mg/kg **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**352**	16.0	08/06/2012	ND	416	104	400	3.92	

Sample ID: SB - 4 @ 25' (H201804-19)

BTEX 8021B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/07/2012	ND	1.70	85.2	2.00	7.84	
Toluene*	<0.050	0.050	08/07/2012	ND	1.83	91.3	2.00	6.14	
Ethylbenzene*	<0.050	0.050	08/07/2012	ND	1.87	93.5	2.00	6.07	
Total Xylenes*	<0.150	0.150	08/07/2012	ND	5.64	94.0	6.00	5.24	

Surrogate: 4-Bromofluorobenzene (PIL *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	**256**	16.0	08/06/2012	ND	416	104	400	3.92	

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	08/03/2012	ND	185	92.3	200	0.279	
DRO >C10-C28	<10.0	10.0	08/03/2012	ND	195	97.6	200	5.50	
EXT DRO >C28-C35	<10.0	10.0	08/03/2012	ND					

Surrogate: 1-Chlorooctane *90.4 %* *65.2-140*

Surrogate: 1-Chlorooctadecane *92.7 %* *63.6-154*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

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

Celey D. Keene, Lab Director/Quality Manager

Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	Basin Environmental Service Technologies, LLC	**BILL TO**	
Project Manager:	Ben J. Arguijo	P.O. #:	
Address:	P.O. Box 301	Company:	BOPCO, LP
City:	Lovington State: NM Zip: 88260	Attn:	Tony Savoie
Phone #:	(575)396-2378 Fax #: (575)396-1429	Address:	522 W. Mermod
Project #:	Project Owner: BOPCO, LP	City:	Carlsbad
Project Name:	James Ranch Unit #36 Battery	State: NM	Zip: 88220
Project Location:	Eddy Co., NM	Phone #:	(432)556-8720
Sampler Name:		Fax #:	

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST											
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME	Chloride	BTEX 8015 M	BTEX									
H201804																										
1	SB-1 @ 5'	G	1			X					X		7/31/12	0930	X	X										
2	SB-1 @ 10'													0945		X	X									
3	SB-1 @ 25'													1010		X	X									
4	SB-1 @ 35'													1030		X										
5	SB-1 @ 45'													1030												
6	SB-1 @ 50'													1045		X	X									
7	SB-2 @ 5'													1230		X										
8	SB-2 @ 10'													1235		X	X									
9	SB-2 @ 20'													1245												
10	SB-2 @ 25'	↓	↓			↓					↓		↓	1250	↓	X	X									

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

Relinquished By:	Date: 7/31/12	Received By:	Phone Result: ☐ Yes ☐ No	Add'l Phone #:
	Time: 4:45		Fax Result: ☐ Yes ☐ No	Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS:	
	Time:			

Please email results to pm@basinenv.com
& TAsavoie@BassPet.com

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

5°C

Sample Condition	CHECKED BY:
Cool: ☑ Yes ☐ No	(Initials)
Intact: ☑ Yes ☐ No	

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

#12

Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Basin Environmental Service Technologies, LLC		**BILL TO**	
Project Manager: Ben J. Arguijo		P.O. #:	
Address: P.O. Box 301		Company: BOPCO, LP	
City: Lovington	State: NM Zip: 88260	Attn: Tony Savoie	
Phone #: (575)396-2378	Fax #: (575)396-1429	Address: 522 W. Mermod	
Project #:	Project Owner: BOPCO, LP	City: Carlsbad	
Project Name: James Ranch Unit #36 Battery		State: NM Zip: 88220	
Project Location: Eddy Co., NM		Phone #: (432)556-8730	
Sampler Name:		Fax #:	

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST			
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE	ICE / COOL	OTHER	DATE	TIME	Chlorides	8015M	BTEX	
11	SB-3 @ 5'	G	1			X					X		7/2/10	1340	X	X		
12	SB-3 @ 10'													1350		X	X	
13	SB-3 @ 15'													1400				
14	SB-3 @ 20'													1405		X	X	
15	SB-4 @ 5'													1420		X		
16	SB-4 @ 10'													1425		X	X	
17	SB-4 @ 15'													1430				
18	SB-4 @ 20'													1435				
19	SB-4 @ 25'	↓	↓			↓					↓		↓	1440	↓	X	X	

Relinquished By:	Date: 7/2/10	Received By:	Phone Result: ☐ Yes ☐ No	Add'l Phone #:
	Time: 1645	Jodi Henson	Fax Result: ☐ Yes ☐ No	Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS:	
	Time:		Please email results to pmrbasinenv.com and TAsavoie@aesnet.com	
Delivered By: (Circle One)		Sample Condition	CHECKED BY:	
Sampler - UPS - Bus - Other:	5° C	Cool ☐ Yes ☐ No / Intact ☐ Yes ☐ No	(Initials)	

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

#126

CARDINAL Laboratories

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

February 19, 2013

BEN J. ARGUIJO

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: JAMES RANCH UNIT 36 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 02/13/13 15:20.

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

Cardinal Laboratories is accreditated 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

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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:	02/13/2013	Sampling Date:	02/13/2013
Reported:	02/19/2013	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SAMPLE #1 (H300413-01)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3200**	16.0	02/18/2013	ND	448	112	400	0.00	

Sample ID: SAMPLE #2 (H300413-02)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**208**	16.0	02/18/2013	ND	432	108	400	3.64	

Sample ID: SAMPLE #3 (H300413-03)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1230**	16.0	02/18/2013	ND	432	108	400	3.64	

Sample ID: SAMPLE #4 (H300413-04)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**272**	16.0	02/18/2013	ND	432	108	400	3.64	

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	02/13/2013	Sampling Date:	02/13/2013
Reported:	02/19/2013	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SAMPLE #5 (H300413-05)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**592**	16.0	02/18/2013	ND	432	108	400	3.64	

Sample ID: SAMPLE #6 (H300413-06)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1840**	16.0	02/18/2013	ND	432	108	400	3.64	

Sample ID: SAMPLE #7 (H300413-07)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**160**	16.0	02/18/2013	ND	432	108	400	3.64	

Sample ID: SAMPLE #8 (H300413-08)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**160**	16.0	02/18/2013	ND	432	108	400	3.64	

Sample ID: SAMPLE #9 (H300413-09)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**160**	16.0	02/18/2013	ND	432	108	400	3.64	

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	02/13/2013	Sampling Date:	02/13/2013
Reported:	02/19/2013	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SAMPLE #10 (H300413-10)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1540**	16.0	02/19/2013	ND	432	108	400	3.64	

Sample ID: SAMPLE #11 (H300413-11)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**320**	16.0	02/19/2013	ND	432	108	400	3.64	

Sample ID: SAMPLE #12 (H300413-12)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**160**	16.0	02/19/2013	ND	432	108	400	3.64	

Sample ID: SAMPLE #13 (H300413-13)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**320**	16.0	02/19/2013	ND	432	108	400	3.64	

Sample ID: SAMPLE #14 (H300413-14)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**320**	16.0	02/19/2013	ND	432	108	400	3.64	

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	02/13/2013	Sampling Date:	02/13/2013
Reported:	02/19/2013	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SAMPLE #15 (H300413-15)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**368**	16.0	02/19/2013	ND	432	108	400	3.64	

Sample ID: SAMPLE #16 (H300413-16)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**640**	16.0	02/19/2013	ND	432	108	400	3.64	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

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

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

Company Name: Basin Environmental Service Technologies, LLC	**BILL TO**
Project Manager: Ben J. Arguijo	P.O. #:
Address: P.O. Box 301	Company: BOPCO, LP
City: Lovington State: NM Zip: 88260	Attn: Tony Savoie
Phone #: (575)396-2378 Fax #: (575)396-1429	Address: 522 W. Mermod
Project #: Hudson Well PAD Project Owner: BOPCO, LP	City: Carlsbad
Project Name: James Ranch Unit 36 Battery	State: NM Zip: 88220
Project Location: EDDY, NM.	Phone #: (432)556-8730
Sampler Name: Jody Walters	Fax #:

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	Chlorides
H36043															
1	Sample #1	G	1			X							2-13-13	8:30	X
2	Sample #2	G	1			X							2-13-13	8:35	X
3	Sample #3	G	1			X							2-13-13	8:40	X
4	Sample #4	G	1			X							2-13-13	8:45	X
5	Sample #5	G	1			X							2-13-13	8:50	X
6	Sample #6	G	1			X							2-13-13	8:55	X
7	Sample #7	G	1			X							2-13-13	9:00	X
8	Sample #8	G	1			X							2-13-13	9:05	X
9	Sample #9	G	1			X							2-13-13	9:10	X
10	Sample #10	G	1			X							2-13-13	9:15	X

Relinquished By: Jody Walters	Date: 2/13/13 Time: 5:31	Received By: Heidi Henson	Phone Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	Fax Result: ☐ Yes ☐ No Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Sample Condition Cool: Yes Intact: Yes	CHECKED BY: (Initials)	REMARKS: Please email results to pm@basinenv.com & TMsavoie@BassPet.com

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

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Basin Environmental Service Technologies, LLC	**BILL TO**
Project Manager: Ben J. Arguijo	**P.O. #:**
Address: P.O. Box 301	**Company:** BOPCO, LP
City: Lovington **State:** NM **Zip:** 88260	**Attn:** Tony Savoie
Phone #: (575)396-2378 **Fax #:** (575)396-1429	**Address:** 522 W. Mermod
Project #: Hudson well Pad **Project Owner:** BOPCO, LP	**City:** Carlsbad
Project Name: James Ranch Unit 36 Battery	**State:** NM **Zip:** 88220
Project Location: Eddy N.M.	**Phono #:** (432)556-8730
Sampler Name: Jody Walters	**Fax #:**

FOR LAB USE ONLY				MATRIX							PRESERV			SAMPLING		ANALYSIS REQUEST
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER		ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	Chlorides
H30941-0																
11	SAmple#11	G	1			X								2-13-13	9:20	X
12	Sample #12	G	1			X								2-13-13	9:25	X
13	Sample #13	G	1			X								2-13-13	9:30	X
14	Sample #14	G	1			X								2-13-13	9:35	X
15	Sample #15	G	1			X								2-13-13	9:40	X
16	Sample #16	G	1			X								2-13-13	9:45	X

Relinquished By:	**Date:** 2/13/13	**Received By:**	**Phone Result:** ☐ Yes ☐ No **Add'l Phone #:**
Relinquished By:	**Time:** 3:00	**Received By:**	**Fax Result:** ☐ Yes ☐ No **Add'l Fax #:**
	Date:		**REMARKS:**
	Time:		Please email results to pmbasinenv.com & TAsavoie@BassPet.com

Delivered By: (Circle One) Sampler - UPS - Bus - Other:

Sample Condition Cool: ☐ Yes ☐ No Intact: ☐ Yes ☐ No

CHECKED BY: (Initials)

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

CARDINAL Laboratories

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

March 14, 2013

BEN J. ARGUIJO

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: JAMES RANCH UNIT 36 BATTERY POOLING AREA

Enclosed are the results of analyses for samples received by the laboratory on 03/12/13 16:00.

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 on accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated 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

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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:	03/12/2013	Sampling Date:	03/11/2013
Reported:	03/14/2013	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY POOLI	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SAMPLE #1 (H300619-01)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**720**	16.0	03/13/2013	ND	448	112	400	3.64	

Sample ID: SAMPLE #2 (H300619-02)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**864**	16.0	03/13/2013	ND	432	108	400	3.64	

Sample ID: SAMPLE #3 (H300619-03)

BTEX 8021B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/14/2013	ND	2.24	112	2.00	3.79	
Toluene*	<0.050	0.050	03/14/2013	ND	2.16	108	2.00	3.51	
Ethylbenzene*	<0.050	0.050	03/14/2013	ND	2.06	103	2.00	3.28	
Total Xylenes*	<0.150	0.150	03/14/2013	ND	6.28	105	6.00	3.46	
Total BTEX	<0.300	0.300	03/14/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID *114 %* *89.4-126*

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**128**	16.0	03/13/2013	ND	448	112	400	3.64	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	03/12/2013	Sampling Date:	03/11/2013
Reported:	03/14/2013	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY POOLI	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SAMPLE #3 (H300619-03)

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	03/13/2013	ND	209	105	200	2.42	
DRO >C10-C28	<10.0	10.0	03/13/2013	ND	208	104	200	3.91	
EXT DRO >C28-C35	<10.0	10.0	03/13/2013	ND					

Surrogate: 1-Chlorooctane	*87.7 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*107 %*	*63.6-154*

Sample ID: SAMPLE #4 (H300619-04)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**256**	16.0	03/13/2013	ND	432	108	400	3.64	

Sample ID: SAMPLE #5 (H300619-05)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**768**	16.0	03/13/2013	ND	432	108	400	3.64	

Sample ID: SAMPLE #6 (H300619-06)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**112**	16.0	03/13/2013	ND	432	108	400	3.64	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	03/12/2013	Sampling Date:	03/11/2013
Reported:	03/14/2013	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY POOLI	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SAMPLE #7 (H300619-07)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**576**	16.0	03/13/2013	ND	432	108	400	3.64	

Sample ID: SAMPLE #8 (H300619-08)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	03/13/2013	ND	432	108	400	3.64	

Sample ID: SAMPLE #9 (H300619-09)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**96.0**	16.0	03/13/2013	ND	432	108	400	3.64	

Sample ID: SAMPLE #10 (H300619-10)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	03/13/2013	ND	432	108	400	3.64	

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	03/12/2013	Sampling Date:	03/11/2013
Reported:	03/14/2013	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY POOLI	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SAMPLE #11 (H300619-11)

BTEX 8021B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/14/2013	ND	2.24	112	2.00	3.79	
Toluene*	**0.056**	0.050	03/14/2013	ND	2.16	108	2.00	3.51	
Ethylbenzene*	<0.050	0.050	03/14/2013	ND	2.06	103	2.00	3.28	
Total Xylenes*	<0.150	0.150	03/14/2013	ND	6.28	105	6.00	3.46	
Total BTEX	<0.300	0.300	03/14/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID *115 %* *89.4-126*

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	03/13/2013	ND	432	108	400	3.64	

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	03/13/2013	ND	209	105	200	2.42	
DRO >C10-C28	<10.0	10.0	03/13/2013	ND	208	104	200	3.91	
EXT DRO >C28-C35	<10.0	10.0	03/13/2013	ND					

Surrogate: 1-Chlorooctane *85.5 %* *65.2-140*

Surrogate: 1-Chlorooctadecane *105 %* *63.6-154*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	03/12/2013	Sampling Date:	03/11/2013
Reported:	03/14/2013	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT 36 BATTERY POOLI	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SAMPLE #12 (H300619-12)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**304**	16.0	03/13/2013	ND	432	108	400	3.64	

Sample ID: SAMPLE #13 (H300619-13)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**336**	16.0	03/13/2013	ND	432	108	400	3.64	

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

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

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

Company Name:	Basin Environmental Service Technologies, LLC	**BILL TO**	
Project Manager:	Ben J. Arguijo	**P.O. #:**	
Address:	P.O. Box 301	**Company:**	BOPCO, LP
City:	Lovington **State:** NM **Zip:** 88260	**Attn:**	Tony Savoie
Phone #:	(575)396-2378 **Fax #:** (575)396-1429	**Address:**	522 W. Mermod
Project #:	[redacted] **Project Owner:** BOPCO, LP	**City:**	Carlsbad
Project Name:	James Ranch Unit 36 Battery Pooling AREA	**State:** NM **Zip:** 88220	
Project Location:	EDDY, N.M.	**Phone #:**	(432)556-8730
Sampler Name:	Jody Walters	**Fax #:**	

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST											
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	Chlorides	BOR'M	~~BTEX~~ BTEX									
H30069																										
1	Sample #1	G	1			X							3-11-13	8:30	X											
2	Sample #2	G	1			X							3-11-13	8:35	X											
3	Sample #3	G	1			X					X		3-11-13	8:40	X	X	X									
4	Sample #4	G	1			X							3-11-13	8:45	X											
5	Sample #5	G	1			X							3-11-13	8:50	X											
6	Sample # 6	G	1			X							3-11-13	8:55	X											
7	Sample #7	G	1			X							3-11-13	9:00	X											
8	Sample #8	G	1			X							3-11-13	9:05	X											
9	Sample #9	G	1			X							3-11-13	9:10	X											
10	Sample #10	G	1			X							3-11-13	9:15	X											

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

Relinquished By:	**Date:** 3/12/13 **Time:** 4:00	**Received By:**	Phone Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	**Date:** **Time:**	**Received By:**	Fax Result: ☐ Yes ☐ No Add'l Fax #:
			REMARKS:

Please email results to pm@basinenv.com
& TAsavoie@BassPet.com

Delivered By: (Circle One)
Sampler - UPS - Bus - Other: 20°C

Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No

CHECKED BY: (Initials) GW

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

#26

2 of 2

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	BILL TO	ANALYSIS REQUEST
Project Manager:	P.O. #:	
Address:	Company:	
City: State: Zip:	Attn:	
Phone #: Fax #:	Address:	
Project #: Project Owner:	City:	
Project Name:	State: Zip:	
Project Location:	Phone #:	
Sampler Name:	Fax #:	

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Chlorides	8015M	BTEX								
H300619																									
11	SAmple # 11	G	1			Y					Y		3-11-13	9:20	X	X	Y								
12	SAmple # 12	G	1			X							3-11-13	9:25	X										
13	SAmple # 13	G	1			X							3-11-13	9:30	X										

Relinquished By:	Date: 3-12-13	Received By: Jodi Henson
	Time: 4:00	
Relinquished By:	Date:	Received By:
	Time:	

Delivered By: (Circle One) Sampler - UPS - Bus - Other: 2°C	Sample Condition: Cool Yes / No; Intact Yes / No	CHECKED BY: (Initials)

Phone Result: ☐ Yes ☐ No	Add'l Phone #:
Fax Result: ☐ Yes ☐ No	Add'l Fax #:
REMARKS:	

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

#26