Basin Environmental Service Technologies, LLC

3100 Plains Highway
P. O. Box 301
Lovington, New Mexico 88260
bjarguijo@basinenv.com
Office: (575) 396-2378 Fax: (575) 396-1429

Effective Solutions

REMEDIATION SUMMARY &

RISK-BASED SITE CLOSURE REQUEST

BOPCO, LP
JAMES RANCH UNIT #29 SWD
Eddy County, New Mexico
Unit Letter "K" (NE/SW), Section 36, Township 22 South, Range 30 East
Latitude 32.346284° North, Longitude 103.837459° West
NMOCD Reference #'s: 2RP-1174 & 2RP-1265

Prepared For:

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

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

May 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 & Risk-Based Site Closure Request* for the release site known as James Ranch Unit #29 SWD. The legal description of the release site is Unit Letter "K" (NE/SW), Section 36, Township 22 South, Range 30 East, in Eddy County, New Mexico. The geographic coordinates of the release site are 32.346284° North latitude and 103.837459° West longitude. The property affected by the release is owned by the State of New Mexico and administered by the New Mexico State Land Office (NMSLO). Please reference Figure 1 for a "Site Location Map".

On May 22, 2012, BOPCO discovered a release had occurred near the James Ranch Unit #29 Salt Water Disposal (SWD) site. A two and seven-eighths-inch (2 7/8") flow line developed a leak, resulting in a release of produced water. The release was attributed to internal corrosion.

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 one hundred and seventy-five barrels (175 bbls) of produced water were released. During initial response activities, the pump at the James Ranch Unit #29 SWD was shut down, and one (1) joint of the pipeline was replaced. A vacuum truck was utilized to recover approximately fifty barrels (50 bbls) of free-standing liquid, resulting in a net loss of approximately one hundred and twenty-five barrels (125 bbls) of produced water. The release was confined to the pipeline right-of-way and affected an area of pastureland measuring approximately three thousand, two hundred and forty square feet (3,240 ft^2).

On August 8, 2012, BOPCO discovered a second release had occurred near the James Ranch Unit #29 SWD site. A two and seven-eighths-inch (2 7/8") flow line from the James Ranch Unit #29 SWD to the Hudson Federal #1 SWD well developed a leak, resulting in a release of produced water. The release was attributed to internal corrosion.

The release was immediately reported to the NMOCD Artesia District Office. The Form C-141 indicated approximately one hundred barrels (100 bbls) of produced water were released. During initial response activities, a temporary pipeline clamp was employed to mitigate the release. A vacuum truck was utilized to recover approximately eighty barrels (80 bbls) of free-standing liquid, resulting in a net loss of approximately twenty barrels (20 bbls) of produced water. The release affected an area of pastureland measuring approximately two thousand, five hundred and fifty square feet (2,550 ft^2) and comingled with the flow path of the May 22, 2012, release.

Pursuant to the *Remediation Summary & Risk-Based Site Closure Proposal* dated November 2012, the May 22 and August 8, 2012, release sites were remediated concurrently. The Forms C-141 are 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) indicates groundwater should be encountered at approximately two hundred and fifty feet (250') below ground surface (bgs) in

Section 36, Township 22 South, Range 30 East. A depth-to-groundwater reference map utilized by the NMOCD indicates groundwater should be encountered at approximately two hundred feet (200') 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 #29 SWD 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

Following initial response activities, on May 30, 2012, delineation of the May 2012 release site commenced. Four (4) delineation trenches were advanced near the release point and along the flow path of the release to investigate the vertical and horizontal extent of impacted soil. The delineation trenches were each advanced to a depth of approximately eight feet (8') bgs. Soil samples were collected from the floors of the delineation trenches at two-foot (2') intervals and field-screened using a chloride test kit. Field-screening indicated that further vertical delineation would be required at the site.

On August 21, 2012, soil samples were collected from the sidewalls of an open pipeline trench adjacent to, and to the north of, both the flow path of the May 2012 release and the release point of the August 2012 release. The soil samples were field-screened using a chloride test kit. Field-screening indicated further horizontal delineation would be required to the north of the release sites.

On August 22, 2012, after having procured the proper permits from the NMSLO ("Right of Entry" #ROE-2170) and NMOSE (File #C-3561), five (5) soil borings (SB-1 through SB-5) 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 Cardinal Laboratories in Hobbs, New Mexico, for analysis of BTEX, TPH, and/or chloride concentrations in accordance with Environmental Protection Agency (EPA) methods SW-846 8021b, SW-846 8015M, and

4500 Cl-B, respectively. Table 1 summarizes the "Concentrations of Benzene, BTEX, TPH & Chloride in Soil". A "Site & Sample Location Map" is provided as Figure 2. Soil boring logs are provided as Appendix C. NMSLO and NMOSE permits are provided as Appendix D. Laboratory analytical reports are provided as Appendix E.

Soil boring SB-1 was located in a comingled pooling area of the May 2012 and August 2012 releases, approximately seventy-eight feet (78') to the west of the August 2012 release and approximately four hundred and fifty feet (450') to the west of the May 2012 release. The soil boring was advanced to a total depth of approximately thirty feet (30') bgs. Soil samples collected at drilling depths of five feet (5'), ten feet (10'), fifteen feet (15'), twenty feet (20'), twenty-five feet (25'), and thirty feet (30') bgs were submitted to the laboratory for analysis of TPH and/or chloride concentrations. Soil sample SB-1 @ 10' was also submitted for analysis of BTEX concentrations. Laboratory analytical results indicated TPH concentrations were less than the laboratory method detection limit (MDL) in all submitted soil samples. Chloride concentrations ranged from 64.0 mg/Kg in soil sample SB-1 @ 30' to 21,600 mg/Kg in soil sample SB-1 @ 10'. BTEX constituent concentrations in soil sample SB-1 @ 10' were less than the appropriate laboratory MDL.

Soil boring SB-2 was located at the release point of the August 2012 release. 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 TPH and/or chloride concentrations. Soil sample SB-2 @ 10' was also submitted for analysis of BTEX concentrations. Laboratory analytical results indicated TPH concentrations were less than the laboratory MDL in all submitted soil samples. Chloride concentrations ranged from 224 mg/Kg in soil sample SB-2 @ 25' to 13,000 mg/Kg in soil sample SB-2 @ 5'. BTEX constituent concentrations in soil sample SB-2 @ 10' were less than the appropriate laboratory MDL.

Soil boring SB-3 was located in the flow path of the May 2012 release, in a pooling area approximately fifty feet (50') to the west of the release point. 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 TPH and/or chloride concentrations. Soil sample SB-3 @ 10' was also submitted for analysis of BTEX concentrations. Laboratory analytical results indicated TPH concentrations ranged from less than the laboratory MDL in soil sample SB-3 @ 10' to 32.4 mg/Kg in soil sample SB-3 @ 5'. Chloride concentrations ranged from 128 mg/Kg in soil sample SB-3 @ 25' to 12,000 mg/Kg in soil sample SB-3 @ 5'. BTEX constituent concentrations in soil sample SB-3 @ 10' were less than the appropriate laboratory MDL.

Soil boring SB-4 was located at the release point of the May 2012 release. 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 TPH and/or chloride concentrations. Soil sample SB-4 @ 10' was also submitted for analysis of BTEX concentrations. Laboratory analytical results indicated TPH concentrations were less than the laboratory MDL in all submitted soil samples. Chloride concentrations ranged from 176 mg/Kg in soil sample SB-4 @ 25' to 15,800 mg/Kg in soil sample SB-4 @ 10'. BTEX constituent concentrations in soil sample SB-4 @ 10' were less than the appropriate laboratory MDL.

Soil boring SB-5 was located to the north of a comingled pooling area of the May 2012 and August 2012 releases in order to 1.) establish the baseline concentration of chloride in the area and 2.) ensure that horizontal delineation to the north of the pooling area had been achieved. 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 TPH and/or chloride concentrations. Soil sample SB-5 @ 10' was also submitted for analysis of BTEX concentrations. Laboratory analytical results indicated TPH concentrations were less than the laboratory MDL in all submitted soil samples. Chloride concentrations ranged from 32.0 mg/Kg in soil sample SB-5 @ 5' to 160 mg/Kg in soil sample SB-5 @ 15'. BTEX constituent concentrations in soil sample SB-5 @ 10' were less than the appropriate laboratory MDL.

Following advancement of the soil borings, two (2) soil samples (West Trench - West Wall #1 and West Trench - West Wall #2) were collected from an open pipeline trench in the primary pooling area of the August 2012 release. The soil samples were submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from 2,200 mg/Kg in soil sample West Trench - West Wall #1 to 13,800 mg/Kg in soil sample West Trench - West Wall #2.

From November 13 through November 20, 2012, a series of delineation trenches were advanced at the site to further investigate the horizontal extent of impacted soil. The trenches were advanced to the north and south along a three-inch (3") fiberglass pipeline bisecting the release site from east to west. Eleven (11) delineation trenches were advanced on each side of the pipeline, for a total of twenty-two (22) trenches. The delineation trenches were advanced to depths of approximately five feet (5') to six feet (6') bgs and varied in length from approximately six feet (6') to approximately fifty-seven feet (57'). Soil samples were collected from the delineation trenches at approximately three-foot (3') horizontal intervals and field-screened using a chloride test kit.

On December 27, 2012, excavation of impacted soil commenced at the site. To facilitate remediation activities, the excavation was divided into three (3) sections: North Excavation, South Excavation, and Area #2 - West Excavation. The South Excavation was further subdivided into three (3) sections: East, Middle, and West. Field-screen results obtained during the November 2012 delineation event were used to define the horizontal extents of the excavations.

The North and South Excavations were located to the north and south, respectively, of the fiberglass pipeline bisecting the release site, along the flow paths of the May 2012 and August 2012 releases. As an environmental precaution, soil beneath the active fiberglass pipeline was left in-situ to support the line during remediation activities. Area #2 - West Excavation was located in the comingled pooling areas of the May 2012 and August 2012 and the area represented by soil samples West Trench - West Wall #1 and West Trench - West Wall #2.

From December 27, 2012, through January 29, 2013, excavated soil was stockpiled on-site, pending final disposition.

From January 7 through January 29, 2013, approximately seven thousand, six hundred and forty cubic yards (7,640 yd^3) of impacted soil was transported to Lea Land, Inc. (NMOCD Permit # WM-01-035), for disposal.

On January 17, 2013, eight (8) soil samples (North Wall #1 - North Excavation, North Wall #2 - North Excavation, East Wall - North Excavation, South Wall #1 - North Excavation, South Wall #2 - North Excavation, West Wall - North Excavation, Floor #1 - North Excavation, and Floor #2 - North Excavation) were collected from the floor and sidewalls of the North Excavation and submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from 48.0 mg/Kg in soil sample West Wall - North Excavation to 20,400 mg/Kg in soil sample South Wall #1 - North Excavation.

Further excavation in the areas represented by soil samples South Wall #1 - North Excavation and South Wall #2 - North Excavation was deemed impracticable due to the presence of the active fiberglass pipeline adjacent to the excavation.

On January 23, 2013, twenty-five (25) soil samples (North Wall 50' - South Excavation, North Wall 100' - South Excavation, North Wall 150' - South Excavation, North Wall 200' - South Excavation, North Wall 250' - South Excavation, North Wall 300' - South Excavation, North Wall 350' - South Excavation, North Wall 400' - South Excavation, East Wall - South Excavation, South Wall 50' - South Excavation, South Wall 100' - South Excavation, South Wall 150' - South Excavation, South Wall 200' - South Excavation, South Wall 250' - South Excavation, South Wall 300' - South Excavation, South Wall 350' - South Excavation, South Wall 400' - South Excavation, Floor 50' - South Excavation, Floor 100' - South Excavation, Floor 150' - South Excavation, Floor 200' - South Excavation, Floor 250' - South Excavation, Floor 300' - South Excavation, Floor 350' - South Excavation, and Floor 400' - South Excavation) were collected from the South Excavation. With the exception of soil sample East Wall - South Excavation, the soil samples were collected at approximately fifty-foot (50') horizontal intervals along the floor and/or sidewalls of the excavation. The soil samples were submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from 32.0 mg/Kg in soil sample Floor 200' - South Excavation to 56,000 mg/Kg in soil sample North Wall 100' - South Excavation.

Review of laboratory analytical results indicated further excavation would be required in the area represented by soil sample East Wall - South Excavation. Further excavation in the areas represented by soil samples North Wall 50' - South Excavation, North Wall 100' - South Excavation, North Wall 150' - South Excavation, North Wall 200' - South Excavation, North Wall 250' - South Excavation, North Wall 300' - South Excavation, North Wall 350' - South Excavation, and North Wall 400' - South Excavation was deemed impracticable due to the presence of numerous active pipelines and appurtenances adjacent to the excavation.

On January 30, 2013, seven (7) soil samples (North Wall 450' - South Excavation, North Wall 475' - South Excavation, East Wall #2 - South Excavation, South Wall 450' - South Excavation, South Wall 475' - South Excavation, West Wall - South Excavation, and Floor 450' - South Excavation) were collected from the floor and sidewalls of the South Excavation, and eight (8) soil samples (North Wall Area #2 - West Excavation, East Wall Area #2 - West Excavation, South Wall Area #2 - West Excavation, West Wall Area #2 - West Excavation, Floor 4' Area #2 - West Excavation, Floor 6' Area #2 - West Excavation, Floor 8' Area #2 - West Excavation, and East Floor 4' Area #2 - West Excavation) were collected from the floor and sidewalls of Area #2 - West Excavation. Soil sample East Wall #2 - South Excavation was collected in the area represented by soil sample East Wall - South Excavation collected on January 23, 2013.

The soil samples were submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations in the South Excavation ranged from 3,480 mg/Kg in soil sample East Wall #2 - South Excavation to 28,600 mg/Kg in soil sample North Wall 450' - South Excavation. Chloride concentrations in Area #2 - West Excavation ranged from 80.0 mg/Kg in soil sample Floor 8' Area #2 - West Excavation to 18,200 mg/Kg in soil sample North Wall Area #2 - West Excavation.

Further excavation in the areas represented by North Wall 450' - South Excavation, North Wall 475' - South Excavation, South Wall 475' - South Excavation, West Wall - South Excavation, North Wall Area #2 - West Excavation, and West Wall Area #2 - West Excavation was deemed impracticable due to the presence of numerous active pipelines and appurtenances and/or a widely-used oilfield access road adjacent to the excavations.

On February 14, 2013, representatives of Basin Environmental met with a representative of the NMOCD Artesia District Office to request permission to install polyurethane liners in the floors of the East and West sections of the South Excavation. Due to environmental concerns, permission was also requested to leave impacted soil in-situ underneath the fiberglass pipeline bisecting the release site. The requests were granted by the NMOCD representative.

On March 4 and March 7, 2013, twenty (20) mil polyurethane liners were installed in the floors of the East and West sections of the South Excavation at approximately ten feet (10') bgs. A cushion of sand was installed approximately one foot (1') both above and below the liner to protect the liner from damage during installation and backfilling activities. In areas where further excavation was precluded by the presence of active pipelines and/or a roadway, the polyurethane liners were installed along the sidewalls of the excavation(s), to approximately one foot (1') bgs, in order to inhibit horizontal migration of contaminants.

From March 5 through March 25, 2013, the excavations were backfilled in eighteen-inch (18") lifts, compacted, and contoured to fit the surrounding topography. Prior to backfilling, the final dimensions of the North Excavation were approximately eighty-four feet (84') in length, varying in width from approximately twenty-one feet (21') to approximately twenty-five feet (25'), and varying in depth from approximately five feet (5') to approximately nine feet (9') bgs. Final dimensions of the South Excavation were approximately four hundred and seventy-five feet (475') in length, varying in width from approximately twenty-four feet (24') to approximately fifty-six feet (56'), and varying in depth from approximately five feet (5') to approximately fourteen feet (14') bgs. Final dimensions of Area #2 - West Excavation were approximately thirty-three feet (33') in length, varying in width from approximately thirty feet (30') to approximately thirty-four feet (34'), and varying in depth from approximately four feet (4') to approximately eight feet (8') bgs.

4.0 QA/QC PROCEDURES

4.1 Soil Sampling

Soil samples were delivered to Cardinal Laboratories in Hobbs, New Mexico, 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

Remediation activities conducted at the James Ranch Unit #29 SWD release site met the objectives set forth in the *Remediation Summary & Risk-Based Site Closure Proposal* dated November 2012. The North Excavation, South Excavation, and Area #2 - West Excavation were excavated to the extent practicable. Soil samples collected from the floors and sidewalls of the 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. Soil exhibiting chloride concentrations above the remediation action level established for the site by the NMOCD will be remediated upon decommission or abandonment of the currently active access road and/or pipelines.

Impermeable, twenty (20) mil polyurethane liners were installed in the floors of the East and West sections of the South Excavation. This engineered control will inhibit vertical migration of contaminants from below the liner to the surface, protecting the vegetative zone. In addition, the polyurethane liner will shed moisture to the edge of the liner and beyond the maximum horizontal extent of underlying impacted soil, effectively inhibiting vertical migration of contaminants to groundwater.

Basin Environmental recommends BOPCO provide the NMOCD Artesia District Office a copy of this *Remediation Summary & Risk-Based Site Closure Request* and request the NMOCD grant site closure to the James Ranch Unit #29 SWD release site.

6.0 LIMITATIONS

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

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

7.0 DISTRIBUTION:

Copy 1: Mike Bratcher
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division (District 2)
1301 E. Grand Avenue
Artesia, NM 88210

Copy 2: Andrew Kraemer
New Mexico State Land Office
602 N. Canal Street, Suite B
Carlsbad, NM 88220

Copy 3: Tony Savoie
BOPCO, LP
522 W. Mermod, Suite 704
Carlsbad, NM 88220

Copy 4: Basin Environmental Service Technologies, LLC
P.O. Box 301
Lovington, NM 88260

Figures

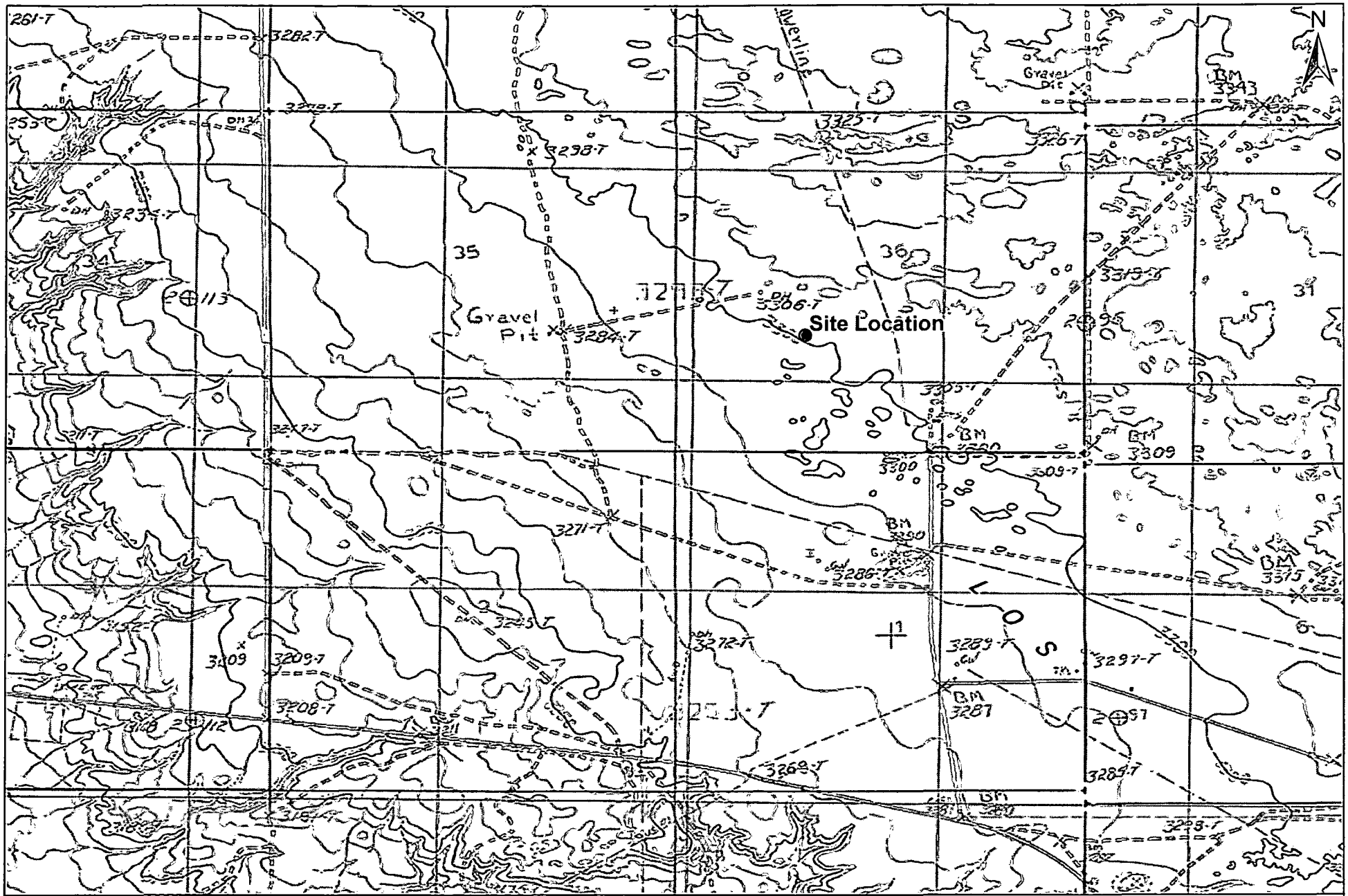
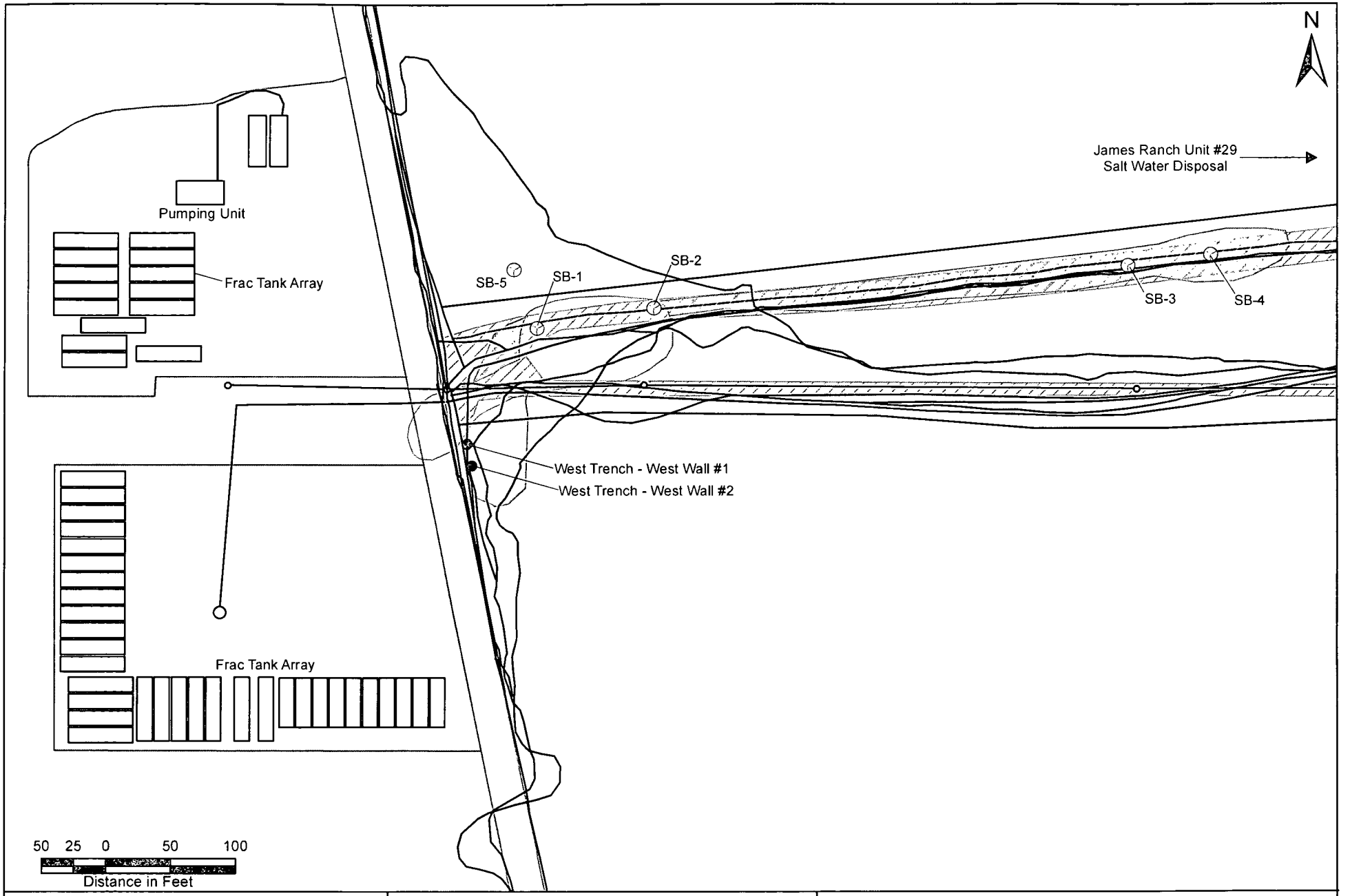


Figure 1
Site Location Map
BOPCO, LP
James Ranch Unit #29 SWD
Eddy County, New Mexico
NMOCD Reference #'s: 2RP-1174 & 2RP-1265

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

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



Legend:

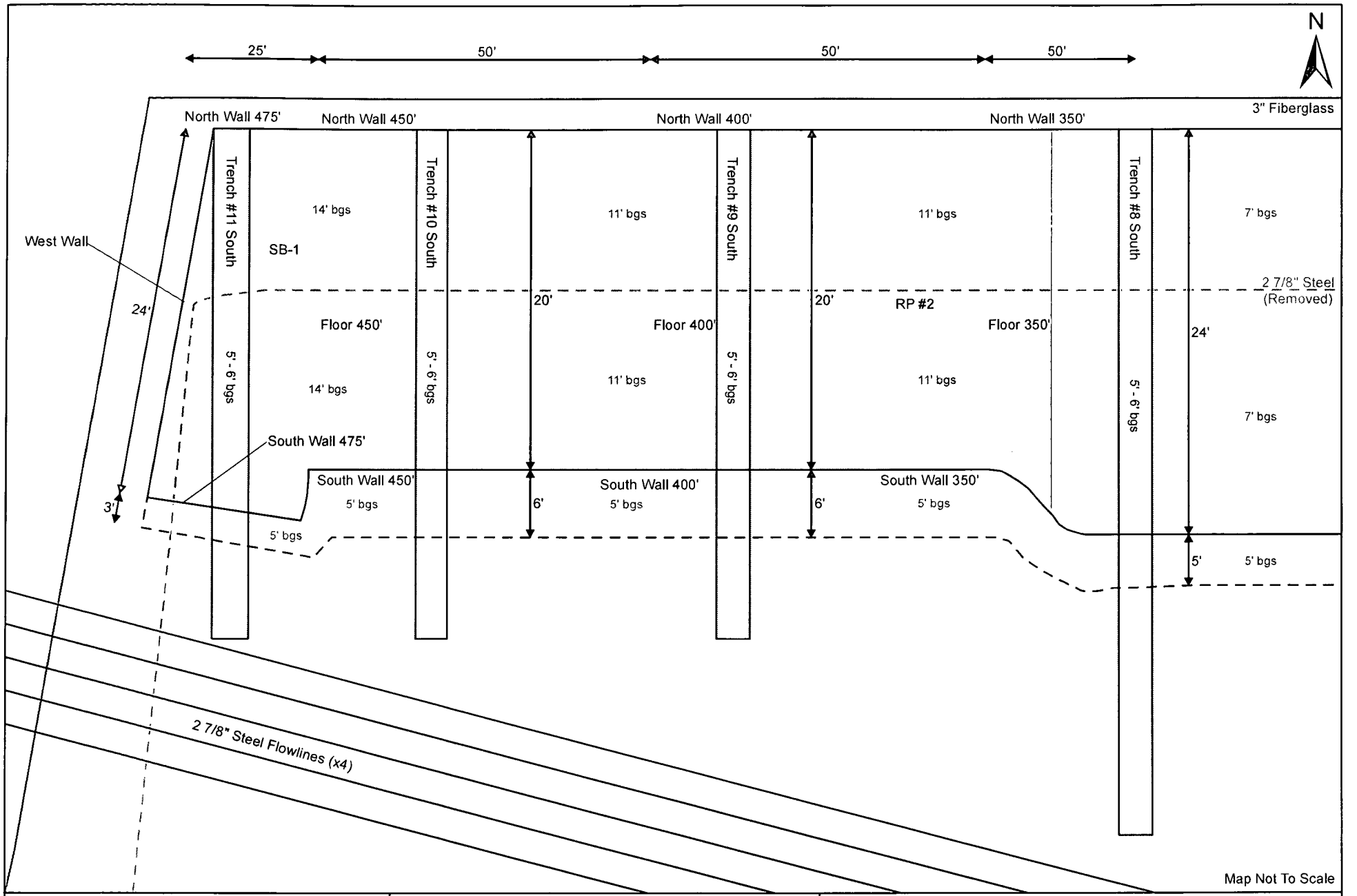
- Excavation Extent
- Pipeline
- Caliche Road/Pad
- Power Line
- Right-of-Way
- Soil Boring
- Sample Location
- May 2012 Release
- August 2012 Release

Figure 2
Site & Sample Location Map
BOPCO, LP
James Ranch Unit #29 SWD
Eddy County, New Mexico
NMOCD Reference #'s: 2RP-1174 & 2RP-1265

Basin Environmental Service Technologies
Effective Solutions

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

Drawn By: BJA	Checked By: BRB
November 8, 2012	Scale: 1" = 100'



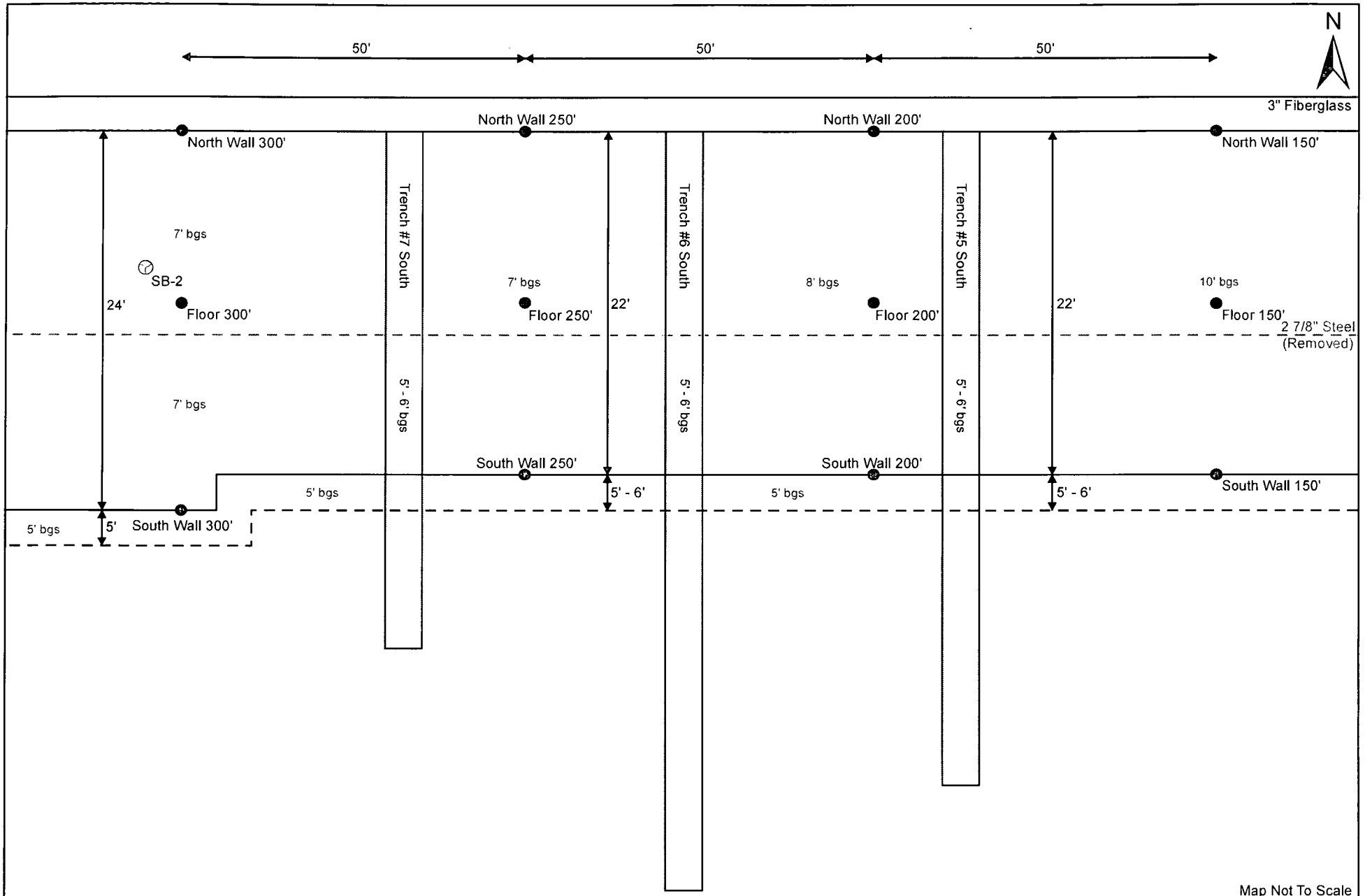
Legend:

- Excavation Extent
- Bench
- Delineation Trench
- Steel Pipeline
- Fiberglass Pipeline
- Historic Pipeline
- Power Line
- Soil Boring
- Sample Location
- Polyurethane Liner

Figure 5
Site & Sample Location Map
South Excavation (West)
BOPCO, LP
James Ranch Unit #29 SWD
Eddy County, New Mexico
NMOCD Reference #'s: 2RP-1174 & 2RP-1265

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

Drawn By: BJA	Checked By: SDW
February 1, 2013	



Legend:

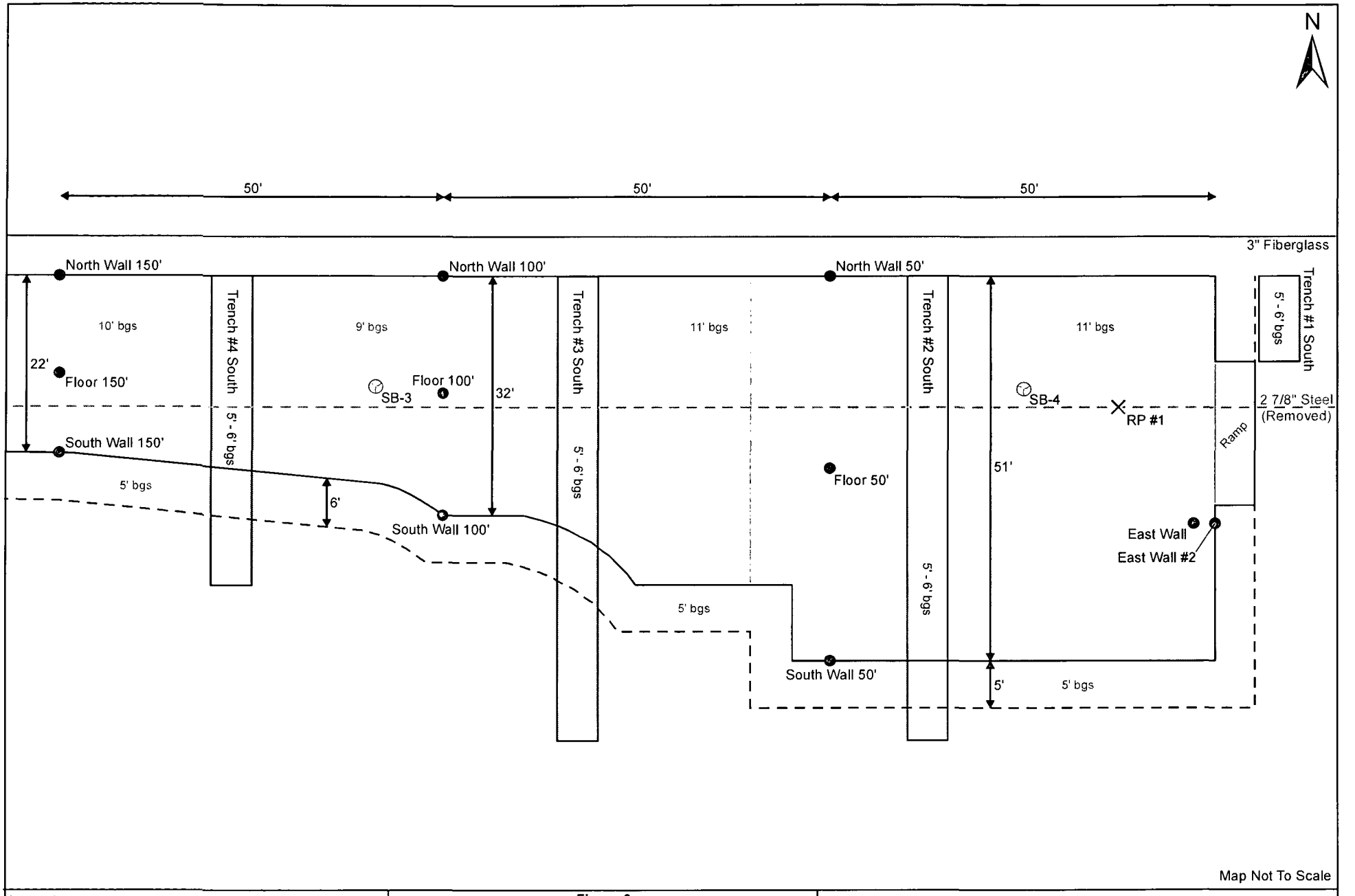
- Excavation Extent
- Bench
- Delineation Trench
- Steel Pipeline
- Fiberglass Pipeline
- Historic Pipeline
- Power Line
- Soil Boring
- Sample Location
- Polyurethane Liner

Figure 4
Site & Sample Location Map
South Excavation (Middle)
BOPCO, LP
James Ranch Unit #29 SWD
Eddy County, New Mexico
NMOCD Reference #'s: 2RP-1174 & 2RP-1265

Basin Environmental Service Technologies
Effective Solutions

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

Drawn By: BJA	Checked By: SDW
February 1, 2013	



Legend:

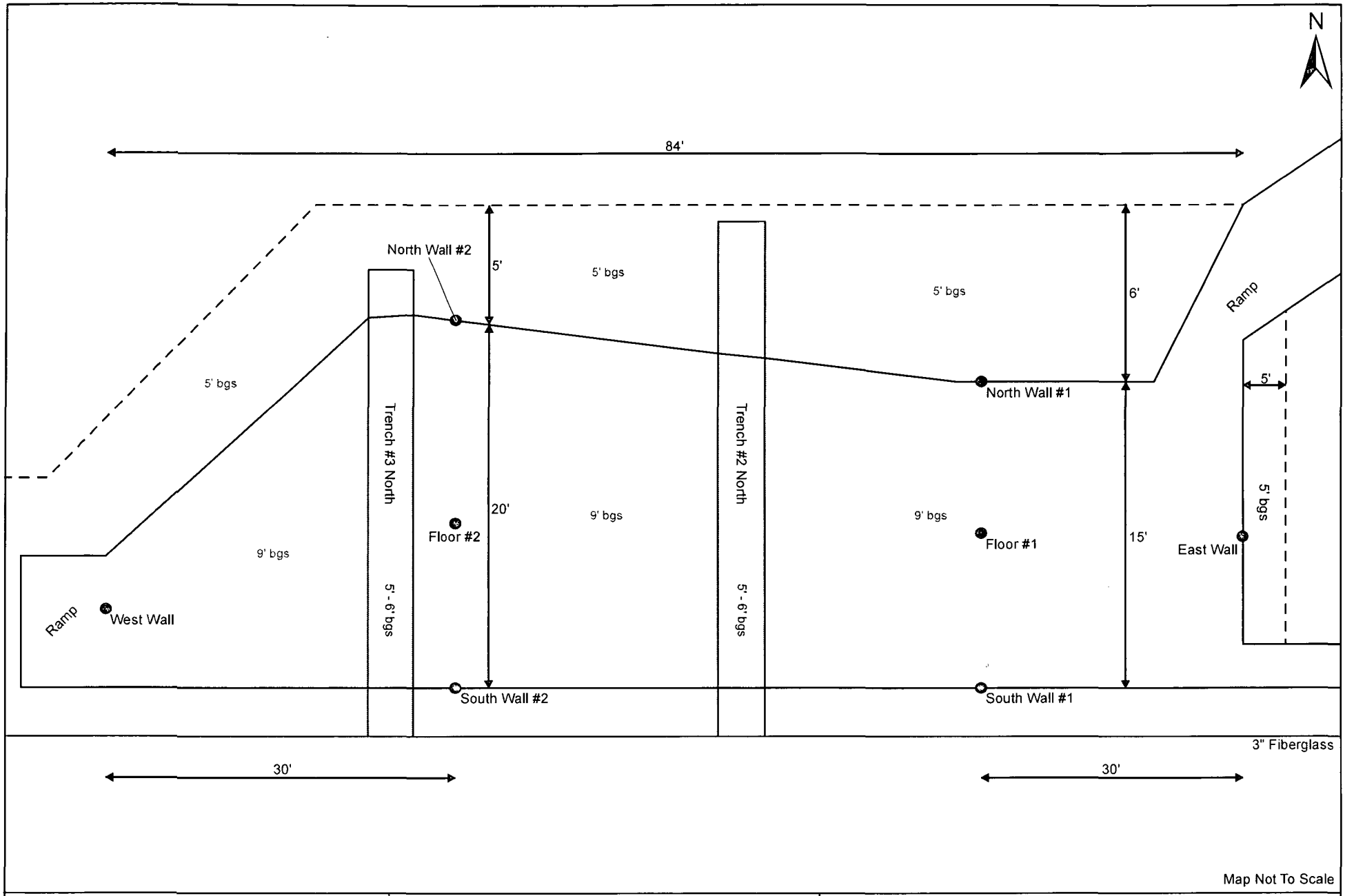
- Excavation Extent
- Bench
- Delineation Trench
- Steel Pipeline
- Fiberglass Pipeline
- Historic Pipeline
- Power Line
- Soil Boring
- Sample Location
- Polyurethane Liner

Figure 3
Site & Sample Location Map
South Excavation (East)
BOPCO, LP
James Ranch Unit #29 SWD
Eddy County, New Mexico
NMOCD Reference #'s: 2RP-1174 & 2RP-1265

Basin Environmental Service Technologies
Effective Solutions

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

Drawn By: BJA	Checked By: SDW
February 1, 2013	



Legend:

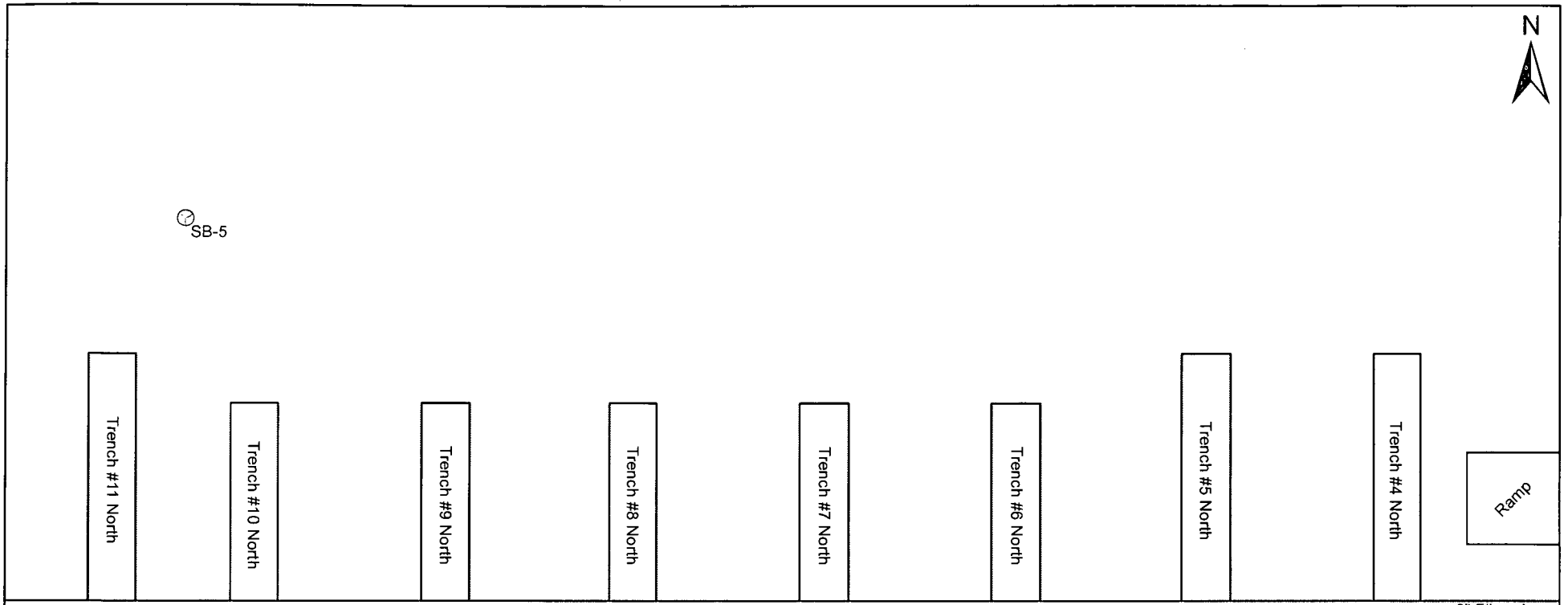
- Excavation Extent
- Bench
- Delineation Trench
- Steel Pipeline
- Fiberglass Pipeline
- Historic Pipeline
- Power Line
- Soil Boring
- Sample Location
- Polyurethane Liner

Figure 6
Site & Sample Location Map
North Excavation (East)
BOPCO, LP
James Ranch Unit #29 SWD
Eddy County, New Mexico
NMOCD Reference #'s: 2RP-1174 & 2RP-1265

Basin Environmental Service Technologies
Effective Solutions

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

Drawn By: BJA	Checked By: SDW
February 1, 2013	



Map Not To Scale

Note: Trench depths average approximately 5' - 6' bgs.

Legend:

- Excavation Extent
- Bench
- Delineation Trench
- Steel Pipeline
- Fiberglass Pipeline
- Historic Pipeline
- Power Line
- Soil Boring
- Sample Location
- Polyurethane Liner

Figure 7
Site & Sample Location Map
North Excavation (West)
BOPCO, LP
James Ranch Unit #29 SWD
Eddy County, New Mexico
NMOCD Reference #'s: 2RP-1174 & 2RP-1265

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

Drawn By: BJA	Checked By: SDW
February 1, 2013	

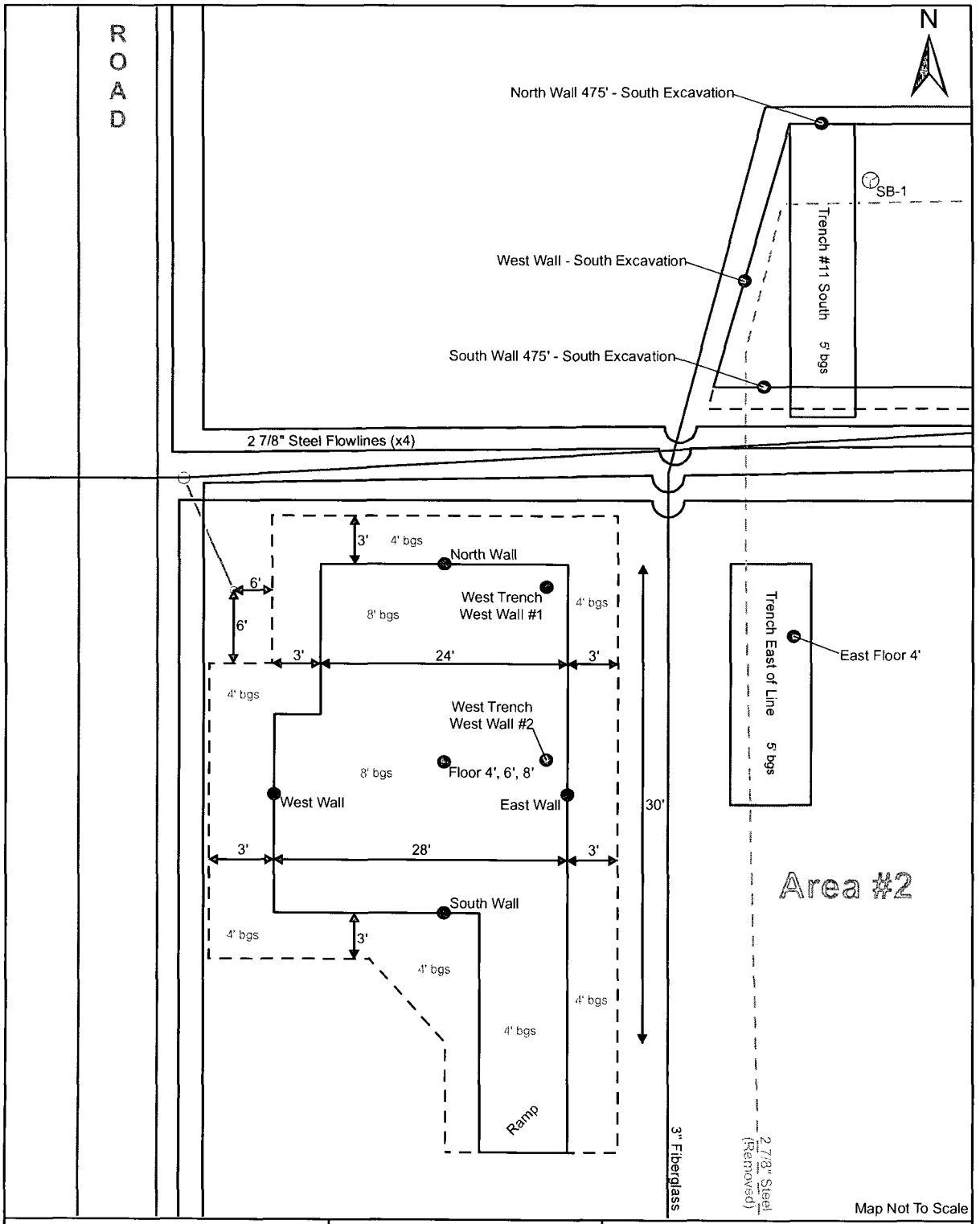


Figure 8
Site & Sample Location Map
Area #2 (West Excavation)
BOPCO, LP
James Ranch Unit #29 SWD
Eddy County, New Mexico
NMOCD Ref. #'s: 2RP-1174 & 2RP-1265

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

Drawn By: BJA	Checked By: SDW
February 4, 2013	

Tables

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL

BOPCO, LP
JAMES RANCH UNIT #29 SWD
EDDY COUNTY, NEW MEXICO
NMOCD REFERENCE #'S: 2RP-1174 & 2RP-1265

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)
SB-1 @ 5'	5'	8/22/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	16,800
SB-1 @ 10'	10'	8/22/2012	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.150	<10.0	<10.0	<10.0	<10.0	21,600
SB-1 @ 15'	15'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	19,200
SB-1 @ 20'	20'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	448
SB-1 @ 25'	25'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	176
SB-1 @ 30'	30'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	64.0
SB-2 @ 5'	5'	8/22/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	13,000
SB-2 @ 10'	10'	8/22/2012	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.150	<10.0	<10.0	<10.0	<10.0	7,700
SB-2 @ 15'	15'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	5,520
SB-2 @ 20'	20'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	1,440
SB-2 @ 25'	25'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	224
SB-3 @ 5'	5'	8/22/2012	In-Situ	-	-	-	-	-	<10.0	21.3	11.1	32.4	12,000
SB-3 @ 10'	10'	8/22/2012	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.150	<10.0	<10.0	<10.0	<10.0	4,480
SB-3 @ 15'	15'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	480
SB-3 @ 20'	20'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	144
SB-3 @ 25'	25'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	128
SB-4 @ 5'	5'	8/22/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	14,800
SB-4 @ 10'	10'	8/22/2012	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.150	<10.0	<10.0	<10.0	<10.0	15,800
SB-4 @ 15'	15'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	1,740
SB-4 @ 20'	20'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	2,120
SB-4 @ 25'	25'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	176
SB-5 @ 5'	5'	8/22/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	32.0
SB-5 @ 10'	10'	8/22/2012	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.150	<10.0	<10.0	<10.0	<10.0	64.0
SB-5 @ 15'	15'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	160
SB-5 @ 20'	20'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	144
West Trench - West Wall #1	3'	8/22/2012	Excavated	-	-	-	-	-	-	-	-	-	2,200
West Trench - West Wall #2	3'	8/22/2012	Excavated	-	-	-	-	-	-	-	-	-	13,800
North Wall #1 - North Excavation	7'	1/17/2013	In-Situ	-	-	-	-	-	-	-	-	-	1,040
North Wall #2 - North Excavation	7'	1/17/2013	In-Situ	-	-	-	-	-	-	-	-	-	176
East Wall - North Excavation	7'	1/17/2013	In-Situ	-	-	-	-	-	-	-	-	-	366
South Wall #1 - North Excavation	7'	1/17/2013	In-Situ	-	-	-	-	-	-	-	-	-	20,400
South Wall #2 - North Excavation	7'	1/17/2013	In-Situ	-	-	-	-	-	-	-	-	-	16,000
West Wall - North Excavation	7'	1/17/2013	In-Situ	-	-	-	-	-	-	-	-	-	48.0
Floor #1 - North Excavation	8'	1/17/2013	In-Situ	-	-	-	-	-	-	-	-	-	480
Floor #2 - North Excavation	8'	1/17/2013	In-Situ	-	-	-	-	-	-	-	-	-	480

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL

BOPCO, LP
JAMES RANCH UNIT #29 SWD
EDDY COUNTY, NEW MEXICO
NMOCD REFERENCE #'S: 2RP-1174 & 2RP-1265

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)
North Wall 50' - South Excavation	10'	1/23/2013	In-Situ	-	-	-	-	-	-	-	-	-	16,600
North Wall 100' - South Excavation	8'	1/23/2013	In-Situ	-	-	-	-	-	-	-	-	-	56,000
North Wall 150' - South Excavation	9'	1/23/2013	In-Situ	-	-	-	-	-	-	-	-	-	17,600
North Wall 200' - South Excavation	7'	1/23/2013	In-Situ	-	-	-	-	-	-	-	-	-	18,800
North Wall 250' - South Excavation	6'	1/23/2013	In-Situ	-	-	-	-	-	-	-	-	-	39,200
North Wall 300' - South Excavation	6'	1/23/2013	In-Situ	-	-	-	-	-	-	-	-	-	22,000
North Wall 350' - South Excavation	7'	1/23/2013	In-Situ	-	-	-	-	-	-	-	-	-	8,800
North Wall 400' - South Excavation	10'	1/23/2013	In-Situ	-	-	-	-	-	-	-	-	-	20,000
East Wall - South Excavation	10'	1/23/2013	Excavated	-	-	-	-	-	-	-	-	-	7,680
South Wall 50' - South Excavation	10'	1/23/2013	In-Situ	-	-	-	-	-	-	-	-	-	352
South Wall 100' - South Excavation	8'	1/23/2013	In-Situ	-	-	-	-	-	-	-	-	-	576
South Wall 150' - South Excavation	9'	1/23/2013	In-Situ	-	-	-	-	-	-	-	-	-	160
South Wall 200' - South Excavation	7'	1/23/2013	In-Situ	-	-	-	-	-	-	-	-	-	272
South Wall 250' - South Excavation	6'	1/23/2013	In-Situ	-	-	-	-	-	-	-	-	-	1,180
South Wall 300' - South Excavation	6'	1/23/2013	In-Situ	-	-	-	-	-	-	-	-	-	2,100
South Wall 350' - South Excavation	7'	1/23/2013	In-Situ	-	-	-	-	-	-	-	-	-	192
South Wall 400' - South Excavation	10'	1/23/2013	In-Situ	-	-	-	-	-	-	-	-	-	1,200
Floor 50' - South Excavation	11'	1/23/2013	In-Situ	-	-	-	-	-	-	-	-	-	17,200
Floor 100' - South Excavation	9'	1/23/2013	In-Situ	-	-	-	-	-	-	-	-	-	704
Floor 150' - South Excavation	10'	1/23/2013	In-Situ	-	-	-	-	-	-	-	-	-	288
Floor 200' - South Excavation	8'	1/23/2013	In-Situ	-	-	-	-	-	-	-	-	-	32.0
Floor 250' - South Excavation	7'	1/23/2013	In-Situ	-	-	-	-	-	-	-	-	-	1,260
Floor 300' - South Excavation	7'	1/23/2013	In-Situ	-	-	-	-	-	-	-	-	-	17,200
Floor 350' - South Excavation	8'	1/23/2013	In-Situ	-	-	-	-	-	-	-	-	-	11,800
Floor 400' - South Excavation	11'	1/23/2013	In-Situ	-	-	-	-	-	-	-	-	-	12,200
North Wall 450' - South Excavation	13'	1/30/2013	In-Situ	-	-	-	-	-	-	-	-	-	28,600
North Wall 475' - South Excavation	13'	1/30/2013	In-Situ	-	-	-	-	-	-	-	-	-	15,800
East Wall #2 - South Excavation	10'	1/30/2013	In-Situ	-	-	-	-	-	-	-	-	-	3,480
South Wall 450' - South Excavation	13'	1/30/2013	In-Situ	-	-	-	-	-	-	-	-	-	3,720
South Wall 475' - South Excavation	13'	1/30/2013	In-Situ	-	-	-	-	-	-	-	-	-	11,000
West Wall - South Excavation	13'	1/30/2013	In-Situ	-	-	-	-	-	-	-	-	-	17,200
Floor 450' - South Excavation	14'	1/30/2013	In-Situ	-	-	-	-	-	-	-	-	-	16,200
North Wall Area #2 - West Excavation	7'	1/30/2013	In-Situ	-	-	-	-	-	-	-	-	-	18,200
East Wall Area #2 - West Excavation	7'	1/30/2013	In-Situ	-	-	-	-	-	-	-	-	-	192
South Wall Area #2 - West Excavation	7'	1/30/2013	In-Situ	-	-	-	-	-	-	-	-	-	1,390
West Wall Area #2 - West Excavation	7'	1/30/2013	In-Situ	-	-	-	-	-	-	-	-	-	9,000
Floor 4' Area #2 - West Excavation	4'	1/30/2013	Excavated	-	-	-	-	-	-	-	-	-	16,000
Floor 6' Area #2 - West Excavation	6'	1/30/2013	Excavated	-	-	-	-	-	-	-	-	-	2,680
Floor 8' Area #2 - West Excavation	8'	1/30/2013	In-Situ	-	-	-	-	-	-	-	-	-	80.0
East Floor 4' Area #2 - West Excavation	4'	1/30/2013	In-Situ	-	-	-	-	-	-	-	-	-	176
NMOCD Regulatory Standard				**10**				**50**				**5,000**	**5,000**

- = 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

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

nMLB 1216757185

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 29 SWD	Facility Type E&P

Surface Owner State of New Mexico	Mineral Owner State of New Mexico	~~Lease No.~~ APZ #1

LOCATION OF RELEASE

30-015-27735

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
K	36	22S	30E					Eddy

Latitude_N 32.346284___ Longitude W 103.837459

NATURE OF RELEASE

Type of Release: Produced water	Volume of Release: 175 Bbls of Produced water	Volume Recovered: 50 Bbls
Source of Release: 2 7/8" flow line	Date and Hour of Occurrence 5/22/12 Time unkown	Date and Hour of Discovery 5/22/12 9:00 a.m.
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? NMOCD Emergency #104	
By Whom? Tony Savoie	Date and Hour 5/22/12 2:30 p.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 flow line developed a leak due to internal corrosion. The SWD pump at the JRU-29 was shut down and 1 joint of pipe was replaced.

Describe Area Affected and Cleanup Action Taken.* Approximately 3240 sq. ft. of pasture land. All of the free standing water was picked up with a vacuum truck. The spill stayed within the pipeline right-of-way. A backhoe was used to collect samples at the point of release and the ponded areas on 5/30/12 to determine the vertical and horizontal extent. The remediation will comply with the NMOCD and BLM requirements for spills.

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

Printed Name: Tony Savoie

Title: Waste Mgmt.& Remediation Specialist

E-mail Address: TASavoie@BassPet.com

Date: 6/3/12 Phone:432-556-8730

OIL CONSERVATION DIVISION

Approved by District Supervisor: Signed By Mike Bratcher

Approval Date: JUN 15 2012 Expiration Date:

Conditions of Approval:

Remediation per OCD Rules & Guidelines. SUBMIT REMEDIATION PROPOSAL NOT LATER THAN: 7/15/2012

Attached ☐

2RP-1174

* Attach Additional Sheets If Necessary

RECEIVED
JUN 12 2012
NMOCD ARTESIA

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

nJMW1224150735

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. 575-887-7329
Facility Name: JRU-29 to Hudson Federal #1 SWD The spill was 200 ft. east of the JRU-67 pumping well.	Facility Type: Exploration and Production

Surface Owner: State of N.M.	Mineral Owner: State of N.M.	API No. 30-015-31004

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
K	36	22S	30 E					Eddy

Latitude N 32.346239 **Longitude** W 103.838688

NATURE OF RELEASE

Type of Release: Produced water	Volume of Release: 100 bbls.	Volume Recovered: 80 bbls.
Source of Release: A buried 2 7/8" SWD line	Date and Hour of Occurrence: 8/8/12 Approximately 12:00 p.m.	Date and Hour of Discovery: 8/8/12 Approximately 1:45 p.m.
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? The NMOCD emergency #104	
By Whom? Tony Savoie	Date and Hour: 8/8/12 at 2:57 p.m.	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

RECEIVED
AUG 20 2012
NMOCD ARTESIA

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
The 2 7/8 SWD line from the JRU-29 disposal to the Hudson Federal #1 SWD well developed and internal corrosion leak, the SWD pump was shut down and a temporary repair clamp was placed on the affected area of the pipe. The entire line will be replaced during the time of the remediation effort.

Describe Area Affected and Cleanup Action Taken.*Approximately 2550 sq.ft. of pasture land was affected by the release, a vacuum truck was used to remove all of the free standing water from the pool areas. this area was previously impacted by a produced water spill on 5/22/12. A C-141 was submitted by BOPCO for that release. An air rotary rig was scheduled to determine the horizontal extent of the release the week of 8/6/12 but was delayed due to scheduling problems. The applications to drill and remediate the area had been approved by the NMOSE and the NMSLO. The rig is set up for the week of 8/13/12 to drill the soil bores. A remediation plan will be developed and submitted to the NMOCD.

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

Printed Name: Tony Savoie

Title: Waste Management and Remediation Specialist

E-mail Address: tasavoie@basspet.com

Date: 8/15/12 Phone: 432-556-8730

OIL CONSERVATION DIVISION

Approved by Environmental Specialist: Signed By Mike Bratcher

Approval Date: AUG 28 2012 Expiration Date:

Conditions of Approval: Attached ☐

Remediation per OCD Rules & Guidelines. **SUBMIT REMEDIATION PROPOSAL NOT LATER THAN:** 9/28/12

2RP-1265

* Attach Additional Sheets If Necessary

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
OCT 03 2013
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	Contact Tony Savoie
Address 522 W. Mermod, Suite 704, Carlsbad, NM 88220	Telephone No. (432)556-8730
Facility Name James Ranch Unit #29 SWD	Facility Type E&P

Surface Owner State of N.M.	Mineral Owner State of N.M.	Lease No. API #30-015-27735

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
K	36	22S	30E					Eddy

Latitude 32.346284° North **Longitude** 103.837459° West

NATURE OF RELEASE

Type of Release Produced water	Volume of Release 175 bbls of produced water	Volume Recovered 50 bbls
Source of Release 2 7/8" flow line	Date and Hour of Occurrence 5/22/12 Time unknown	Date and Hour of Discovery 5/22/12 9:00 a.m.
Was Immediate Notice Given? X Yes No Not Required	If YES, To Whom? NMOCD Emergency #104	
By Whom? Tony Savoie	Date and Hour 5/22/12 2:30 p.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 flow line developed a leak due to internal corrosion. The SWD pump at the JRU-29 was shut down, and 1 joint of pipe was replaced.

Describe Area Affected and Cleanup Action Taken.* Approximately 3240 sq. ft. of pasture land. All of the free-standing fluid was picked up with a vacuum truck. The spill stayed within the pipeline right-of-way. 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:	Approval Date:	Expiration Date:
E-mail Address:	Conditions of Approval:	
Date: 10/3/13 Phone:		

2RP-1174

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
OCT 03 2013
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	Contact Tony Savoie
Address 522 W. Mermod, Suite 704, Carlsbad, NM 88220	Telephone No. (432)556-8730
Facility Name JRU-29 to Hudson Federal #1 SWD The spill was 200 ft. east of the JRU-67 pumping well.	Facility Type E&P

Surface Owner State of N.M.	Mineral Owner State of N.M.	Lease No. API #30-015-31004

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
K	36	22S	30E					Eddy

Latitude 32.346239° North **Longitude** 103.838688° West

NATURE OF RELEASE

Type of Release Produced water	Volume of Release 100 bbls of produced water	Volume Recovered 80 bbls
Source of Release A buried 2 7/8" SWD line	Date and Hour of Occurrence 8/8/12 Approximately 12:00 pm	Date and Hour of Discovery 8/8/12 Approximately 1:45 pm
Was Immediate Notice Given? X Yes No Not Required	If YES, To Whom? NMOCD Emergency #104	
By Whom? Tony Savoie	Date and Hour 8/8/12 2:57 p.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 2 7/8" SWD line from the JRU-29 disposal to the Hudson Federal #1 SWD well developed an internal corrosion leak. The SWD was shut down, and a temporary repair clamp was placed on the affected area of the pipe. The entire line was replaced prior to remediation activities.

Describe Area Affected and Cleanup Action Taken.* Approximately 2250 sq. ft. of pasture land was affected by the release. A vacuum truck was utilized to remove all of the free-standing water from the pooled areas. The area was previously impacted by a produced water spill on 5/22/12. Following initial response activities, both releases were remediated as per NMOCD recommended guidelines. Please reference the attached *Remediation Summary & Risk-Based Site Closure Request* for remediation details.

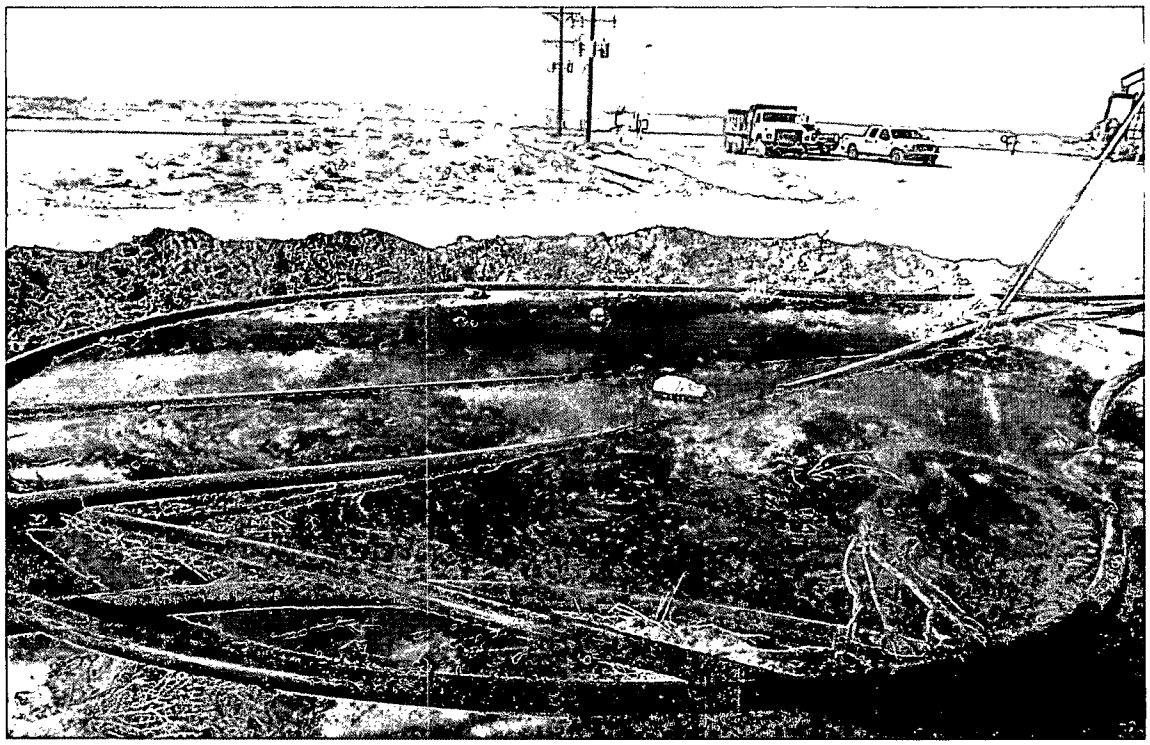
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases, which may endanger 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:	Approval Date: / Expiration Date:
E-mail Address:	Conditions of Approval:
Date: 10/3/13 Phone:	

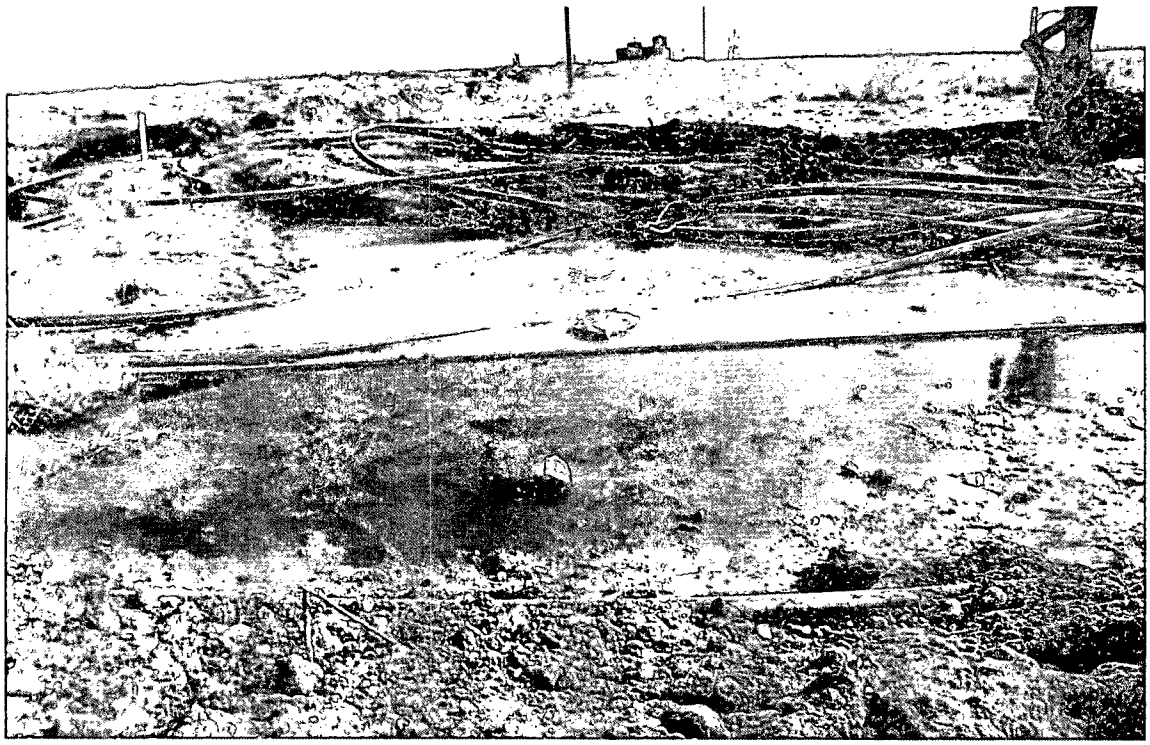
2RP-1265

Appendix B

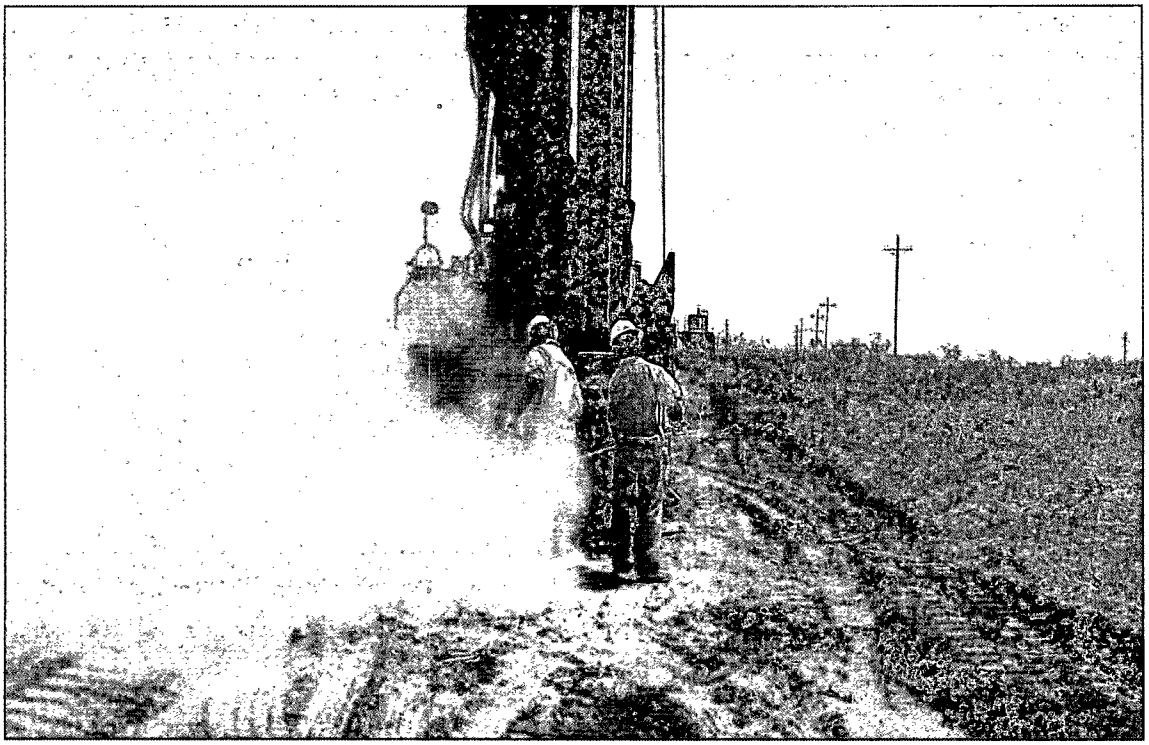
Photographs



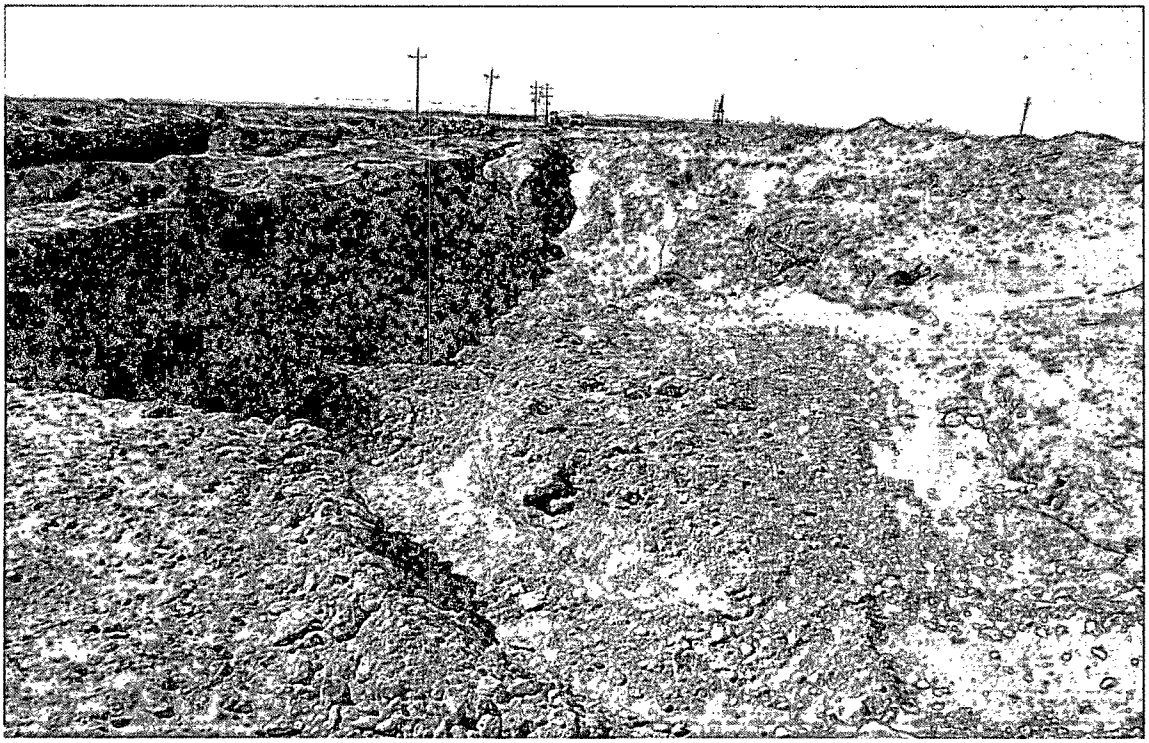
James Ranch Unit #29 SWD - Pooling Area (Looking West)



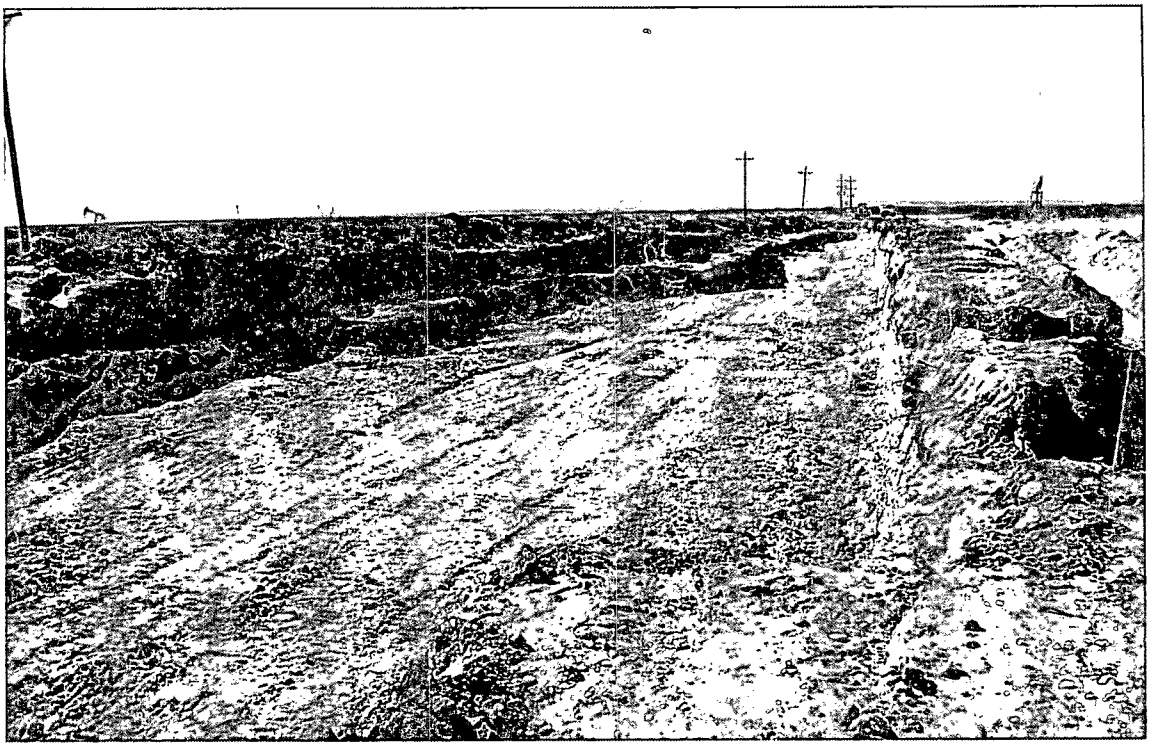
James Ranch Unit #29 SWD - Pooling Area (Looking East)



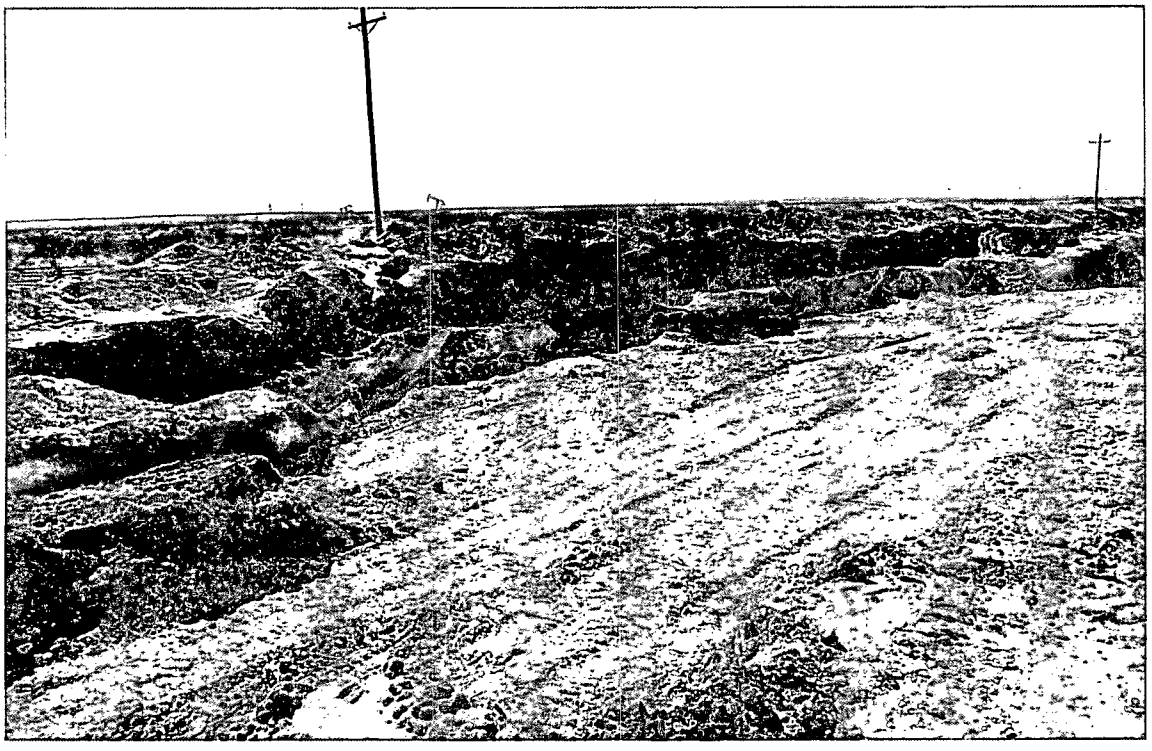
James Ranch Unit #29 SWD - Advancement of Delineation Soil Boring



James Ranch Unit #29 SWD - North Excavation (Looking West)

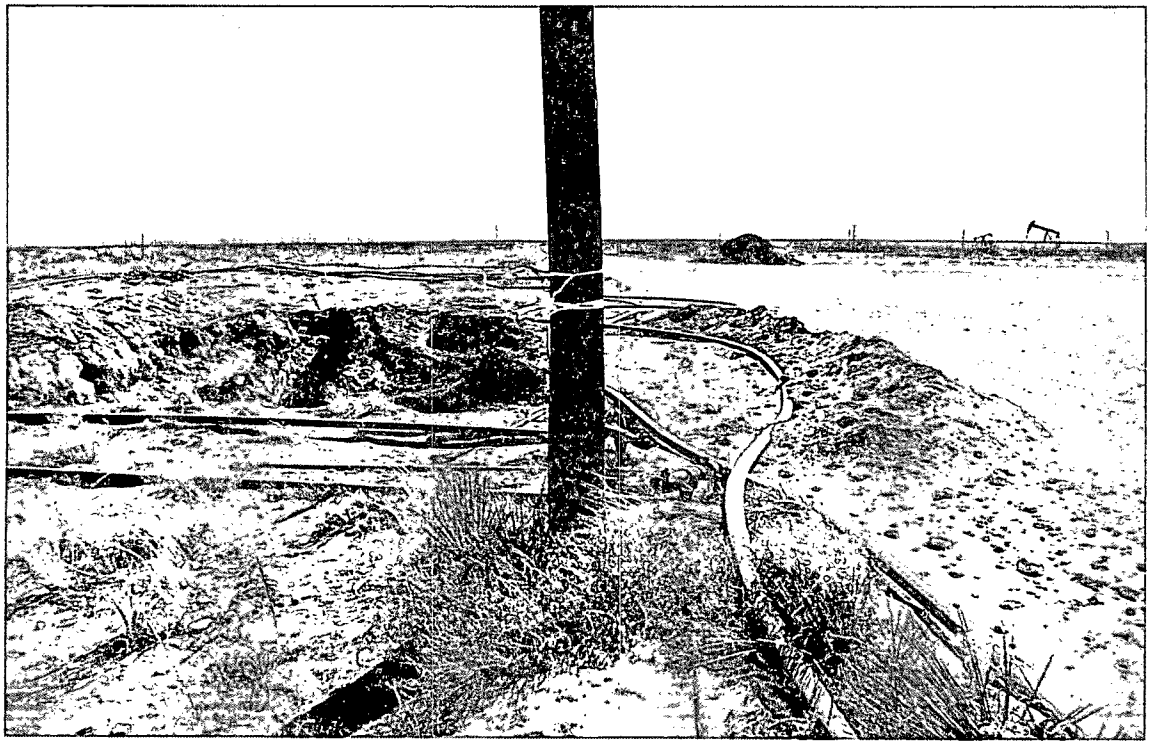


James Ranch Unit #29 SWD - South Excavation (Looking West)



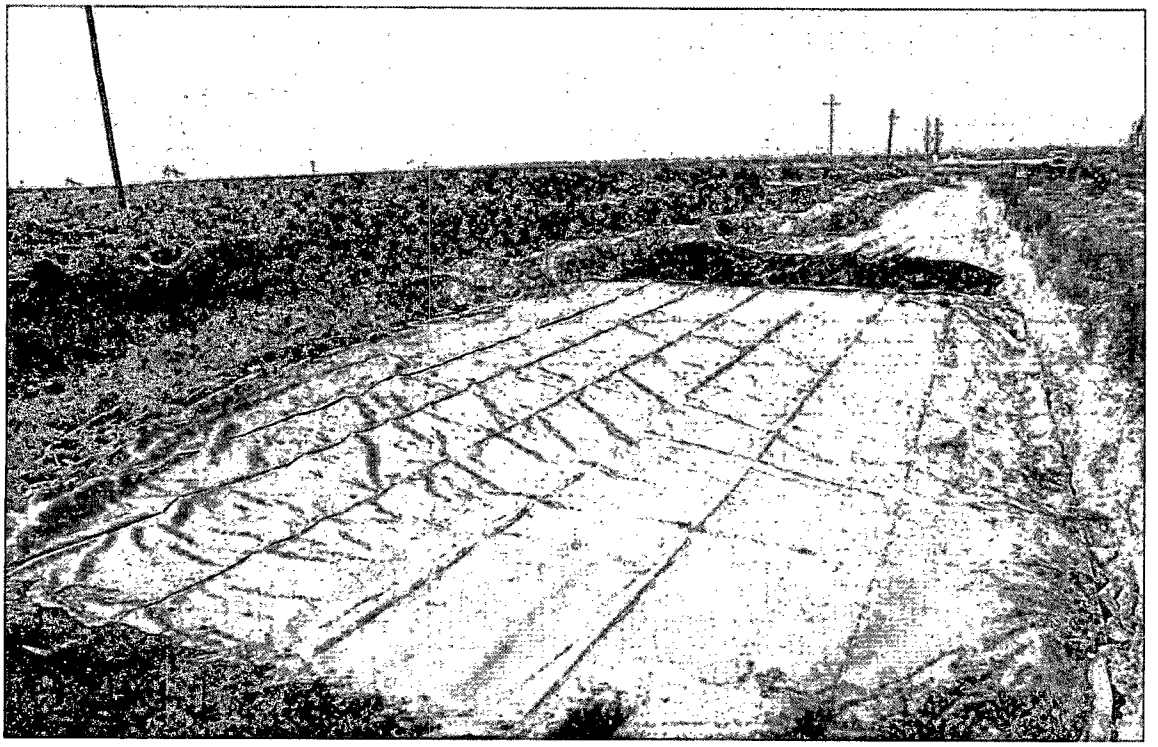
James Ranch Unit #29 SWD - South Excavation (Looking West-Southwest)

James Ranch Unit #29 SWD - South Excavation (Looking East)



James Ranch Unit #29 SWD - Area #2 Excavation (Looking South)

James Ranch Unit #29 SWD - Area #2 Excavation

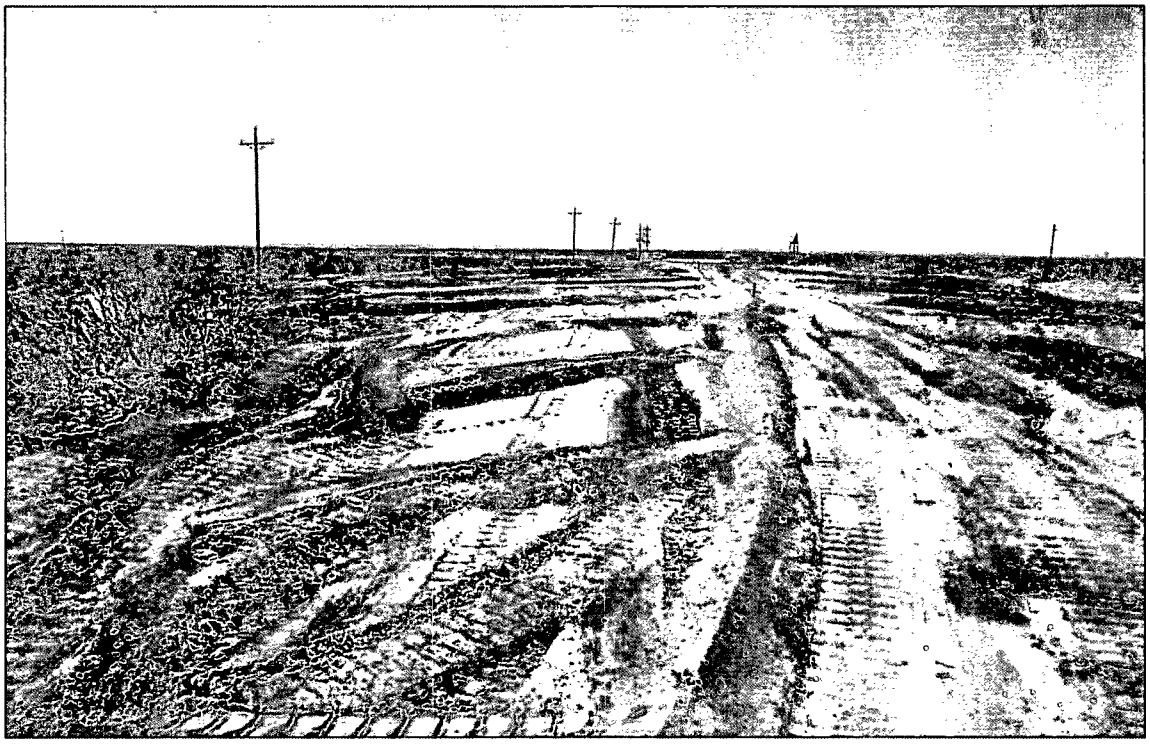


James Ranch Unit #29 SWD - South Excavation, Liner Installation (Looking West)

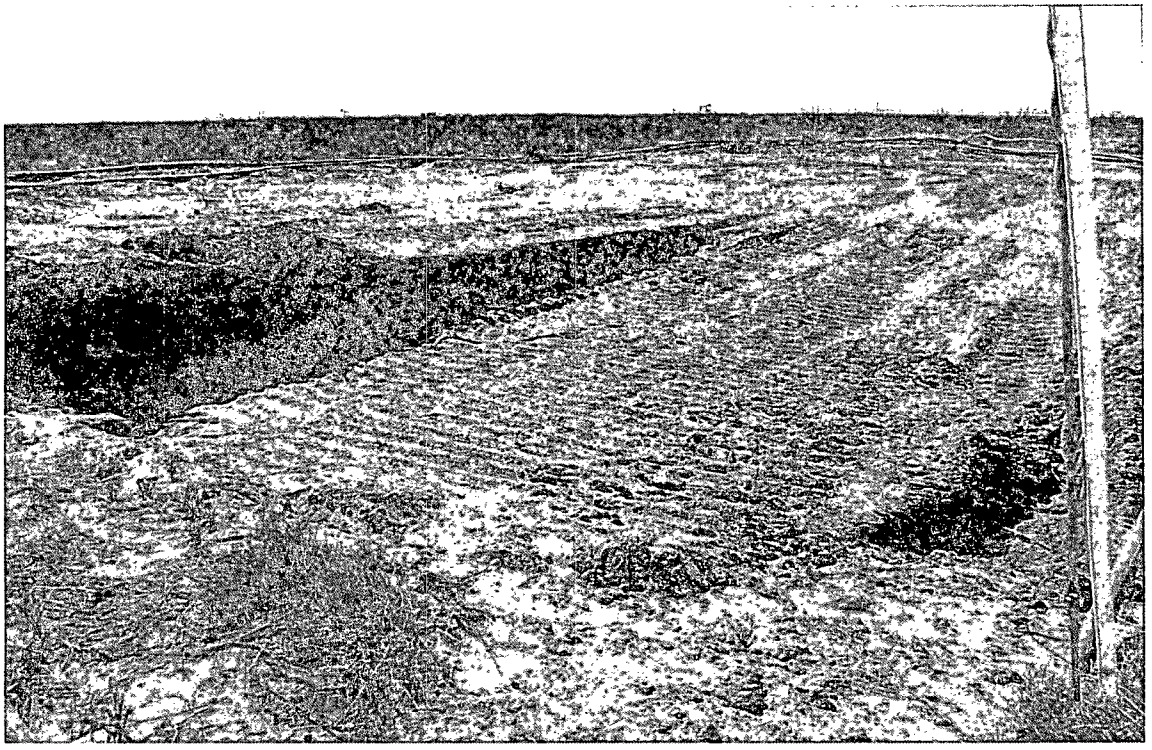
James Ranch Unit #29 SWD - South Excavation, Liner Installation (Looking East)

James Ranch Unit #29 SWD - North Excavation Following Backfill (On Left, Looking East)

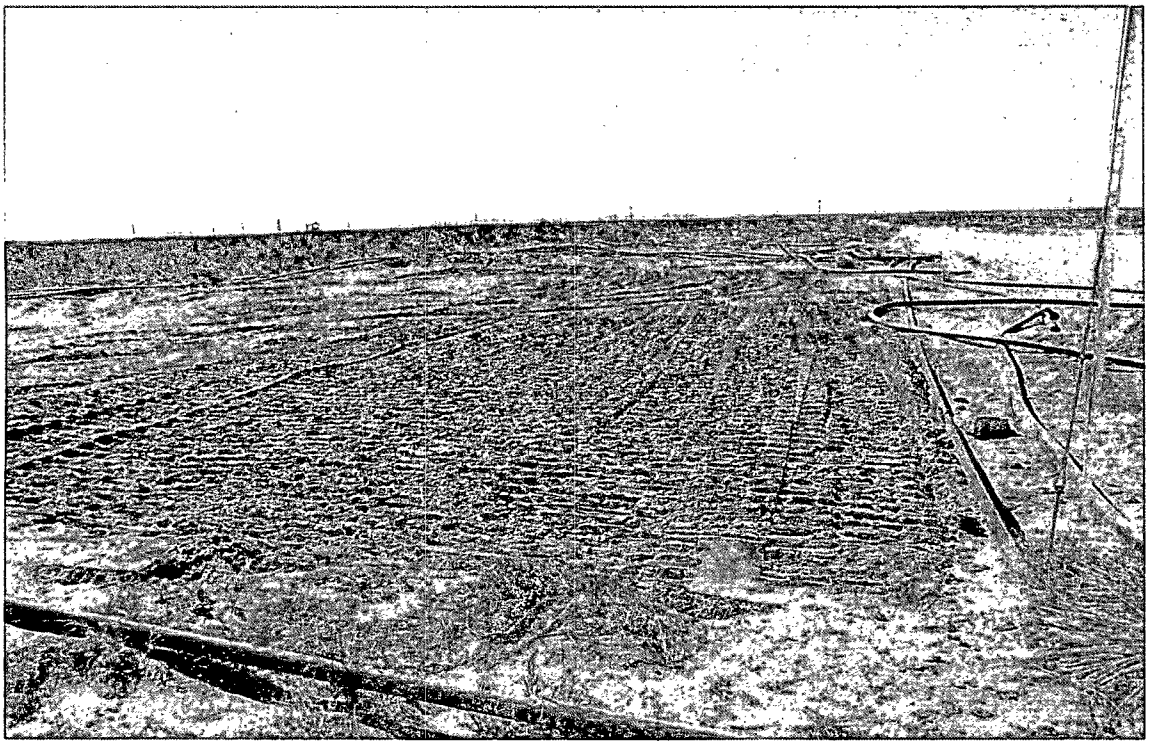
James Ranch Unit #29 SWD - South Excavation, During Backfilling (Looking East)



James Ranch Unit #29 SWD - North & South Excavations Following Backfill (Looking West)



James Ranch Unit #29 SWD - Area #2 Excavation, During Backfilling (Looking Southeast)



James Ranch Unit #29 SWD - Area #2 Excavation, Following Backfill (Looking Southeast)

Appendix C

Soil Boring & Monitor Well Logs

Soil Boring SB-1

Depth Below Ground Surface	Soil Column	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
0						
5			0.8	None	None	0' - 5' - Red very fine sand with clay 5' - 6' - Tan fine sand; sandstone
10			0.6	None	None	6' - 15' - Red very fine sand with clay
15			1.3	None	None	
20		612	0.5	None	None	15' - 24' - Red silty clay
25		352	1.1	None	None	24' - 25' - Red sandstone; gypsum 25' - 27' - Red silty clay; gypsum
30		<112	0.3	None	None	27' - 30' - Tannish red silty clay

Boring SB-1

Date Drilled August 22, 2012
Thickness of Bentonite Seal 30 Ft
Depth of Exploratory Boring 30 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 #29 SWD
Eddy County, New Mexico
NMOCD Reference #: 2RP-1174 & 2RP-1265

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

Prep By: BJA	Checked By: BRB
September 5, 2012	

Soil Boring SB-2

Depth Below Ground Surface	Soil Column	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
0						
5			2.8	None	None	0' - 14' - Red very fine sand w/ clay
10			2.3	None	None	
15		>2,432		None	None	
20		388		None	None	14' - 25' - Red silty clay
25		280		None	None	

Boring SB-2

Date Drilled August 22, 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 #29 SWD
Eddy County, New Mexico
NMOCD Reference #: 2RP-1174 & 2RP-1265

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

Prep By: BJA	Checked By: BRB
September 5, 2012	

Soil Boring SB-3

Depth Below Ground Surface	Soil Column	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
0						
5			1.6	None	None	0' - 5' - Red very fine sand w/ clay
						5' - 7' - Tan fine sand; caliche; sandstone
10			0.7	None	None	
				None	None	7' - 16' - Tan fine sand; sandstone
15		516				
				None	None	
20		136				16' - 25' - Red silty clay
				None	None	
25		248				

Boring SB-3

Date Drilled August 22, 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-3

BOPCO, LP
James Ranch Unit #29 SWD
Eddy County, New Mexico
NMOCD Reference #: 2RP-1174 & 2RP-1265

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

Prep By: BJA	Checked By: BRB
September 5, 2012	

Soil Boring SB-4

Depth Below Ground Surface	Soil Column	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
0						
5			0.5	None	None	0' - 3' - Red fine sand w/ clay 3' - 4' - Tan fine sand; caliche; sandstone
10			0.1	None	None	4' - 12' - Tan fine sand; sandstone
15				None	None	12' - 16' - Red fine sand
20		428		None	None	16' - 25' - Red silty clay
25		188		None	None	

Boring SB-4

Date Drilled August 22, 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 #29 SWD
Eddy County, New Mexico
NMOCD Reference #: 2RP-1174 & 2RP-1265

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

Prep By: BJA	Checked By: BRB
September 5, 2012	

Soil Boring SB-5

Depth Below Ground Surface	Soil Column	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
0						
5		<112	0.1	None	None	0' - 2' - Red fine sand w/ clay 2' - 5' - Tan fine sand; caliche
10		146	0.5	None	None	5' - 8' - Tan fine sand; sandstone
15		216		None	None	8' - 20' - Red silty clay
20		216		None	None	

Boring SB-5

Date Drilled August 22, 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-5

BOPCO, LP
James Ranch Unit #29 SWD
Eddy County, New Mexico
NMOCD Reference #: 2RP-1174 & 2RP-1265

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

Prep By: BJA	Checked By: BRB
September 5, 2012	

Appendix D

Permits

Ray Powell, M.S., D.V.M.
COMMISSIONER

State of New Mexico
Commissioner of Public Lands
310 OLD SANTA FE TRAIL
P.O. BOX 1148
SANTA FE, NEW MEXICO 87504-1148

COMMISSIONER'S OFFICE
Phone (505) 827-5760
Fax (505) 827-5766
www.nmstatelands.org

July 20, 2012

BOBCO, LP
522 W. Mermod
Carlsbad, New Mexico 88220

Attn: Tony Savoie

Re: Right-of-Entry Application No. ROE-2170

Dear Mr. Savoie,

Enclosed is the completed captioned Right-of-Entry permit. If any corrections are necessary, please let us know and we will retype or amend this lease as necessary.

If you have any questions, please feel free to contact this office at the above address or for Donald Martinez, Surface Director @ (505) 827-5731 or myself @ 827-5710.

Sincerely,

Anthony Vigil, Management Analyst
Right of Ways &
Water Resources Bureau

NEW MEXICO STATE LAND OFFICE
Ray Powell, M.S., D.V.M., Commissioner of Public Lands
New Mexico State Land Office Building
P.O. Box 1148, Santa Fe, NM 87504-1148

RIGHT OF ENTRY PERMIT
CONTRACT NO. ROE-2170
(Remediation)

1. RIGHT OF ENTRY PERMIT

This permit is issued under the authority of NMSA 1978, Section 19-1-2. Therefore, and in consideration of and subject to the terms, covenants, conditions, agreements, obligations and reservations contained in the permit and all other existing rights, the Commissioner of Public Lands, New Mexico State Land Office, State Of New Mexico, hereinafter called "COMMISSIONER," grants to **BOPCO, LP** State of Incorporation (if applicable), whose address is **522 W. Mermod, Carlsbad, NM 88220 hereinafter** called "PERMITTEE," authorized use of a specific tract(s) of State Trust Land only for the term, and only for the permitted use, described in this permit.

2. TERM AND LAND DESCRIPTION

Right of entry is granted for a term of **180 days**, commencing **July 5, 2012** and ending **January 1, 2013** to the following State Trust Lands.

Section 36, Township 22 South, Range 30 East. NE ¼ SW ¼ Eddy County

3. APPLICATION and PROCESSING FEE

$ 530.00 (Five Hundred Thirty Dollars)

4. PERMITTED USE, PERSONNEL, EQUIPMENT AND MATERIALS

Permitted use is for the purpose of: **Perform Soil Remediation. (Please note that this permit does Not cover Monitor Wells).**

Personnel present on State Trust Land: **Representatives of BOPCO, Basin Environmental and Straub Corporation.**

Equipment & Materials present on State Trust Land: **Drilling rig, excavator, backhoe, dump trucks and pickups**

Prior to execution of project company must identify and contact the Grazing Lessee.

The granting of this permit does not allow access across private lands.

5. IMPROVEMENTS

No improvements shall be placed on the premises without the prior written consent of the Commissioner.

6. RESERVATIONS

Commissioner reserves the right to execute leases, rights of way, easements, permits, exchange agreements, sale agreements, permits and other lawful rights on or across the land covered by this permit, including but not limited to any such rights for mining purposes and for the extraction of oil, gas, salt, geothermal resources, and other mineral deposits there from and the right to go upon, explore for, mine, remove and sell same.

7. COMPLIANCE WITH LAWS

Permittee shall at its own expense comply fully with and be subject to all applicable regulations, rules, ordinances, and requirements of law or of the Commissioner, including but not limited to the regulations of the State Land Office; Chapter 19 NMSA governing State Trust Lands; federal and state environmental laws and regulations; and the New Mexico Cultural Properties Act, NMSA 1978 Sections 18-6-1 through 18-6-23. It is illegal for any person or his agent to appropriate, excavate, injure, or destroy any historic, or prehistoric ruin or monument, or any object of historical, archaeological, architectural, or scientific value situated on lands owned or controlled by the State Land Office without a valid permit issued by the Cultural Properties Review Committee and approved by the Commissioner of Public Lands.

8. HOLD HARMLESS AND IMDEMNIFICATION

Permittee shall save, hold harmless, indemnify and defend Commissioner, the State Land Office, the State of New Mexico, and any of their officers, employees or agents, in their official and individual capacities, of and from any and all liability, claims, losses, damages, costs, and fees arising out of or alleged to arise out of, or directly or indirectly connected with, the operations of Permittee under this permit on or off State Trust Lands or arising out of the presence on State Trust Lands of any equipment, material, agent, invitee, contractor or subcontractor of Permittee. This Hold Harmless and Indemnification clause covers any claim, including any brought in any court or before any administrative agency, of any loss or alleged loss, and any damages or alleged damages asserted with respect to any violation or alleged violation of any state, federal or local law or regulation, including but not limited to any environmental law or regulation, any cultural properties law (including the New Mexico Cultural Properties Act, cited above) or regulation, and any alleged damage to the property, rights or interests of any

State Land Office lessee, right-of-way holder, or other permittee.

9. AMENDMENT

This permit shall not be altered, changed, or amended except by an instrument in writing executed by Commissioner and Permittee.

10. WITHDRAWAL

Commissioner reserves the right to withdraw any or all of the land authorized for use under this permit. If applicable, Permittee shall vacate the acreage specified within 30 days after receipt of written notification of withdrawal from the Commissioner.

11. CANCELLATION

The violation by Permittee of any of the terms, conditions, or covenants of this permit or the nonpayment by Permittee of the fees due under this permit shall at the option of the Commissioner be considered a default and shall cause the cancellation of this permit 30 days after Permittee has been sent written notice of such.

12. PRESERVE AND PROTECT

The Permittee agrees to preserve and protect the natural environmental conditions of the land encompassed in this permit, and to take those reclamation or corrective actions that are accepted soil and water conservation practices and that are deemed necessary by the Commissioner to protect the land from pollution, erosion, or other environmental degradation. The Permittee further agrees not to injure the property of, or interfere with the operations or rights of, any State Land Office lessee, right-of-way holder, easement holder or other permittee who has rights to use the State Trust Land subject to this permit.

13. RECLAMATION, REMOVAL OF EQUIPMENT, MATERIALS, AND WASTE

The Permittee agrees to reclaim those areas that may be damaged by activities conducted thereon.

The Permittee agrees to remove from the State Trust Lands, no later than the end of the term of this permit, all equipment, and materials it has placed or brought upon the land and to clean up and remove from the land any trash, waste, effluent, or other products used or brought upon the land in connection with this permit.

14. SPECIAL INSTRUCTIONS AND/OR RESTRICTIONS

1. No off road traffic allowed.

2. No wood collection or tree cutting allowed.

3. Disturbing, dislodging, damaging, defacing, destroying or removing historical

archaeological, paleontological or cultural sites or artifacts is prohibited.

4. Disturbing, dislodging, damaging, defacing, destroying any improvement, fixture, item, object or thing placed or located in, under or upon the land is prohibited.

5. This permit does not grant a right to enter State Trust Lands to which there is no public access.

6. Any uses or activities not within the scope of this permit are not allowed unless prior written approval from the Commissioner of Public Lands is granted.

7. OTHER:

WITNESS the hands and seals of PERMITTEE and COMMISSIONER on the day(s) and year entered below.

PERMITTEE Telephone: (432)683-2277

ACKNOWLEDGMENT

STATE OF Texas)

COUNTY OF Midland)

The foregoing instrument was acknowledged before me this 11 day of July, 20 12.

My Commission Expires: 9/6/2015 NOTARY PUBLIC

ROLLI JO TAYLOR
Notary Public, State of Texas
My Commission Expires
September 06, 2015

COMMISSIONER OF PUBLIC LANDS DATE: 7/20/12

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: 507736
File Nbr: C 03561

Aug. 01, 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 08/31/2013, 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 08/31/2013.

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

File No. C-3561

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/ 2-31549 $5.00 2-31727 $20.00

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: **6/8/2012** Requested End Date: **6/8/2013**

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): **TASavole@BassPet.com** **bjarguijo@basinenv.com**	E-mail (optional):

RECEIVED
2012 JUN -6 A 8:24
STATE ENGINEER OFFICE
ROSWELL, NEW MEXICO

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

File Number: C-3561	Trn Number: 507736
Trans Description (optional): Expl	
Sub-Basin: C	
PCW/LOG Due Date: 08-31-2013	

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

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 POD1	32.346284 32,20,46.62	-103.837495 -103,50,14.98	Unit Letter "K" (NE/SW), Section 36, Township 22 South, Range 30 East
SB-2 POD2	32.346284	-103.837495	Unit Letter "K" (NE/SW), Section 36, Township 22 South, Range 30 East
SB-3 POD3	32.346284	-103.837495	Unit Letter "K" (NE/SW), Section 36, Township 22 South, Range 30 East
SB-4 POD4	32.346284	-103.837495	Unit Letter "K" (NE/SW), Section 36, Township 22 South, Range 30 East
SB-5 POD5	32.346284	-103.837495	Unit Letter "K" (NE/SW), Section 36, Township 22 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: **New Mexico State Land Office**

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 29 Disposal. 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 200 feet below ground surface), it is unlikely that monitor wells will be required.

2012 JUN -6 A 8:21
STATE ENGINEER OFFICE
ROSWELL, New Mexico

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

File Number: C-3561	Trn Number: 507736

4. SPECIFIC REQUIREMENTS: The applicant must 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:

Exploratory:	**Pollution Control and/or Recovery:**	**Construction De-Watering:**	**Mine De-Watering:**
☐ Include a description of any proposed pump test, if applicable.	☐ 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.	☐ 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.	☐ 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 1st day of August 20 12, for the State Engineer,

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

By: Bill Duemling
Signature

Bill Duemling
Print

STATE ENGINEER OFFICE
ROSWELL, NEW MEXICO
2012 JUN -6 A 8:21

Title: Carlsbad Basin Supervisor

FOR OSE INTERNAL USE

Application for Permit, Form wr-07

File Number: C-3561	Trn Number: 507736

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 03561 POD1 must be completed and the Well Log filed on or before 08/31/2013.

LOG The Point of Diversion C 03561 POD2 must be completed and the Well Log filed on or before 08/31/2013.

LOG The Point of Diversion C 03561 POD3 must be completed and the Well Log filed on or before 08/31/2013.

LOG The Point of Diversion C 03561 POD4 must be completed and the Well Log filed on or before 08/31/2013.

LOG The Point of Diversion C 03561 POD5 must be completed and the Well Log filed on or before 08/31/2013.

NO WATER SHALL BE DIVERTED FROM EACH BOREHOLE EXCEPT FOR TESTING PURPOSES WHICH SHALL NOT EXCEED TEN (10) CUMULATIVE DAYS, AND EACH BOREHOLE SHALL BE PLUGGED OR CAPPED ON OR BEFORE AUGUST 31, 2013, UNLESS A SEPARATE PERMIT TO USE WATER IS ACQUIRED FROM THE OFFICE OF THE STATE ENGINEER.

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

Trn Desc: C 03561

File Number: C 03561
Trn Number: 507736

NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE

ACTION OF STATE ENGINEER

Notice of Intention Rcvd:	Date Rcvd. Corrected:
Formal Application Rcvd: 07/19/2012	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 01 day of Aug A.D., 2012

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

By: Bill Duemling
Bill Duemling, Basin Supv.

Trn Desc: C 03561

File Number: C 03561
Trn Number: 507736

Locator Tool Report

General Information:

Application ID:30 Date: 06-19-2012 Time: 15:31:45

WR File Number: C
Purpose: POINT OF DIVERSION

Applicant First Name: BOPCO SOIL BORINGS
Applicant Last Name: JAMES RANCH UNIT 29 DISPOSAL

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):

NE 1/4 of SW 1/4 of NE 1/4 of SW 1/4 of Section 36, Township 22S, Range 30E.

Coordinate System Details:

Geographic Coordinates:

Latitude:	32 Degrees	20 Minutes	46.6 Seconds	N
Longitude:	103 Degrees	50 Minutes	15.0 Seconds	W

Universal Transverse Mercator Zone: 13N

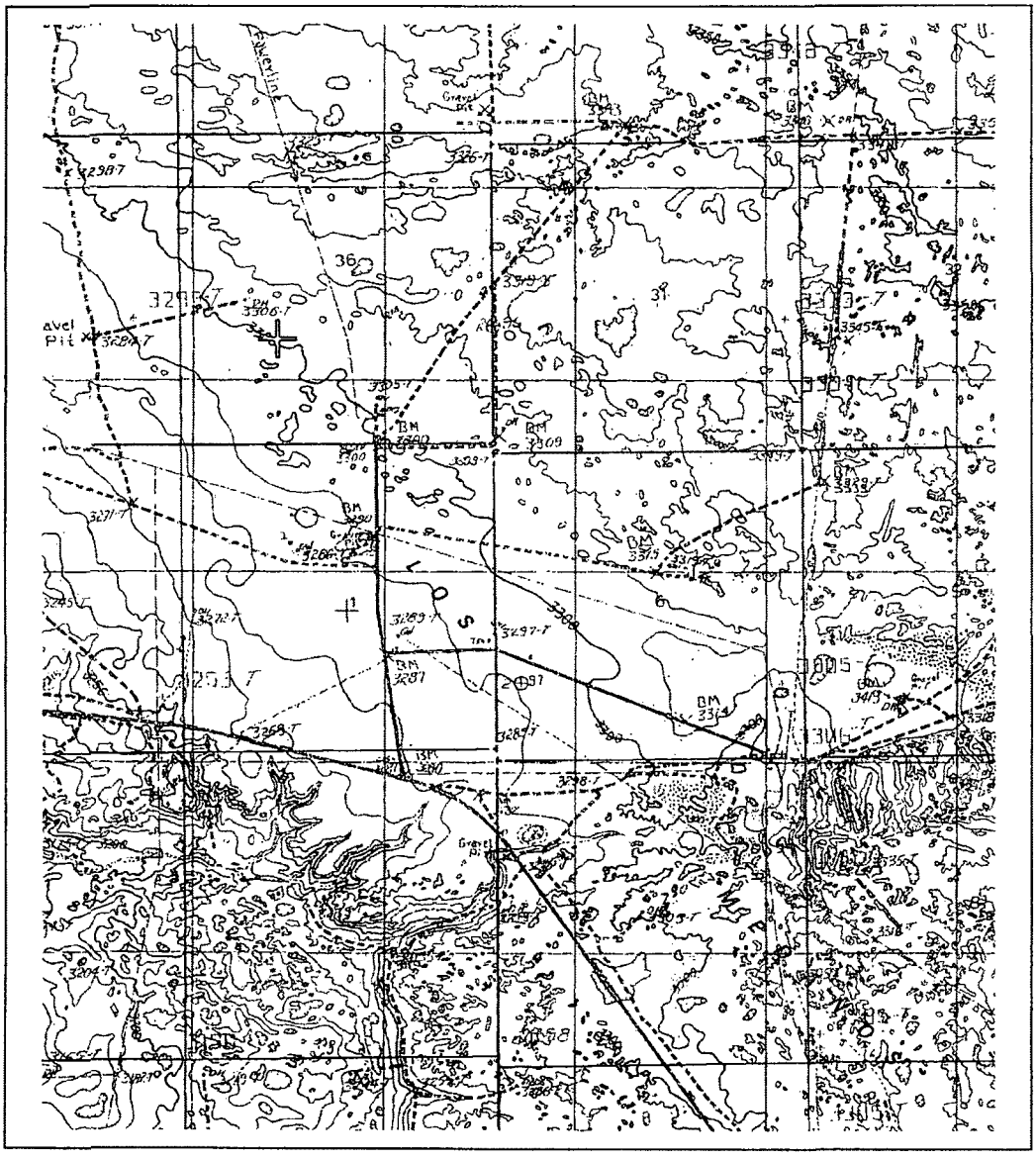
NAD 1983(92) (Meters)	N: 3,579,413	E: 609,393
NAD 1983(92) (Survey Feet)	N: 11,743,459	E: 1,999,318
NAD 1927 (Meters)	N: 3,579,212	E: 609,442
NAD 1927 (Survey Feet)	N: 11,742,797	E: 1,999,478

State Plane Coordinate System Zone: New Mexico East

NAD 1983(92) (Meters)	N: 149,372	E: 211,672
NAD 1983(92) (Survey Feet)	N: 490,064	E: 694,462
NAD 1927 (Meters)	N: 149,354	E: 199,120
NAD 1927 (Survey Feet)	N: 490,004	E: 653,279

NEW MEXICO OFFICE OF STATE ENGINEER

Locator Tool Report



WR File Number: C Scale: 1:38,023

Northing/Easting: UTM83(92) (Meter): N: 3,579,413 E: 609,393

Northing/Easting: SPCS83(92) (Feet): N: 490,064 E: 694,462

GW Basin: Carlsbad

Print Date: 06/19/2012

Appendix E

Laboratory Analytical Reports

CARDINAL Laboratories

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

August 31, 2012

BEN J. ARGUIJO

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: JAMES RANCH UNIT #29 SWD

Enclosed are the results of analyses for samples received by the laboratory on 08/24/12 8:35.

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:	08/24/2012	Sampling Date:	08/22/2012
Reported:	08/31/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT #29 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SB - 1 @ 5' (H202030-01)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16800**	16.0	08/28/2012	ND	416	104	400	0.00	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/28/2012	ND	197	98.3	200	2.52	
DRO >C10-C28	<10.0	10.0	08/28/2012	ND	198	98.8	200	1.52	
EXT DRO >C28-C35	<10.0	10.0	08/28/2012	ND					

Surrogate: 1-Chlorooctane	*84.9 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*98.0 %*	*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:	08/24/2012	Sampling Date:	08/22/2012
Reported:	08/31/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT #29 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SB - 1 @ 10' (H202030-02)

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	08/29/2012	ND	1.64	82.1	2.00	2.13	
Toluene*	<0.050	0.050	08/29/2012	ND	1.67	83.7	2.00	2.70	
Ethylbenzene*	<0.050	0.050	08/29/2012	ND	1.74	87.2	2.00	3.08	
Total Xylenes*	<0.150	0.150	08/29/2012	ND	5.53	92.1	6.00	3.19	

Surrogate: 4-Bromofluorobenzene (PIL *99.7 %* *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	**21600**	16.0	08/28/2012	ND	416	104	400	0.00	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/28/2012	ND	197	98.3	200	2.52	
DRO >C10-C28	<10.0	10.0	08/28/2012	ND	198	98.8	200	1.52	
EXT DRO >C28-C35	<10.0	10.0	08/28/2012	ND					

Surrogate: 1-Chlorooctane *87.6 %* *65.2-140*

Surrogate: 1-Chlorooctadecane *102 %* *63.6-154*

Sample ID: SB - 1 @ 15' (H202030-03)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**19200**	16.0	08/28/2012	ND	416	104	400	0.00	

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:	08/24/2012	Sampling Date:	08/22/2012
Reported:	08/31/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT #29 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SB - 1 @ 20' (H202030-04)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**448**	16.0	08/28/2012	ND	416	104	400	0.00	

Sample ID: SB - 1 @ 25' (H202030-05)

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	08/28/2012	ND	416	104	400	0.00	

Sample ID: SB - 1 @ 30' (H202030-06)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	08/28/2012	ND	416	104	400	0.00	

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:	08/24/2012	Sampling Date:	08/22/2012
Reported:	08/31/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT #29 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SB - 2 @ 5' (H202030-07)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**13000**	16.0	08/28/2012	ND	416	104	400	0.00	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/28/2012	ND	197	98.3	200	2.52	
DRO >C10-C28	<10.0	10.0	08/28/2012	ND	198	98.8	200	1.52	
EXT DRO >C28-C35	<10.0	10.0	08/28/2012	ND					

Surrogate: 1-Chlorooctane	*83.8 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*98.7 %*	*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:	08/24/2012	Sampling Date:	08/22/2012
Reported:	08/31/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT #29 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SB - 2 @ 10' (H202030-08)

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	08/30/2012	ND	2.23	111	2.00	2.49	
Toluene*	<0.050	0.050	08/30/2012	ND	2.30	115	2.00	3.25	
Ethylbenzene*	<0.050	0.050	08/30/2012	ND	2.31	115	2.00	3.89	
Total Xylenes*	<0.150	0.150	08/30/2012	ND	7.49	125	6.00	4.19	

Surrogate: 4-Bromofluorobenzene (PID *98.0 %* *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	**7700**	16.0	08/28/2012	ND	416	104	400	0.00	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/28/2012	ND	197	98.3	200	2.52	
DRO >C10-C28	<10.0	10.0	08/28/2012	ND	198	98.8	200	1.52	
EXT DRO >C28-C35	<10.0	10.0	08/28/2012	ND					

Surrogate: 1-Chlorooctane *83.4 %* *65.2-140*

Surrogate: 1-Chlorooctadecane *96.2 %* *63.6-154*

Sample ID: SB - 2 @ 15' (H202030-09)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**5520**	16.0	08/28/2012	ND	416	104	400	0.00	

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:	08/24/2012	Sampling Date:	08/22/2012
Reported:	08/31/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT #29 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SB - 2 @ 20' (H202030-10)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1440**	16.0	08/28/2012	ND	416	104	400	0.00	

Sample ID: SB - 2 @ 25' (H202030-11)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**224**	16.0	08/28/2012	ND	416	104	400	3.92	

Sample ID: SB - 3 @ 5' (H202030-12)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**12000**	16.0	08/28/2012	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	<10.0	10.0	08/28/2012	ND	201	100	200	0.929	
DRO >C10-C28	**21.3**	10.0	08/28/2012	ND	204	102	200	0.300	
EXT DRO >C28-C35	**11.1**	10.0	08/28/2012	ND					

Surrogate: 1-Chlorooctane	*72.7 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*88.9 %*	*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:	08/24/2012	Sampling Date:	08/22/2012
Reported:	08/31/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT #29 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SB - 3 @ 10' (H202030-13)

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	08/30/2012	ND	2.23	111	2.00	2.49	
Toluene*	<0.050	0.050	08/30/2012	ND	2.30	115	2.00	3.25	
Ethylbenzene*	<0.050	0.050	08/30/2012	ND	2.31	115	2.00	3.89	
Total Xylenes*	<0.150	0.150	08/30/2012	ND	7.49	125	6.00	4.19	

Surrogate: 4-Bromofluorobenzene (PID *97.9 %* *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	**4480**	16.0	08/28/2012	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	<10.0	10.0	08/28/2012	ND	201	100	200	0.929	
DRO >C10-C28	<10.0	10.0	08/28/2012	ND	204	102	200	0.300	
EXT DRO >C28-C35	<10.0	10.0	08/28/2012	ND					

Surrogate: 1-Chlorooctane *77.5 %* *65.2-140*

Surrogate: 1-Chlorooctadecane *91.0 %* *63.6-154*

Sample ID: SB - 3 @ 15' (H202030-14)

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	08/28/2012	ND	416	104	400	3.92	

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:	08/24/2012	Sampling Date:	08/22/2012
Reported:	08/31/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT #29 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SB - 3 @ 20' (H202030-15)

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	08/28/2012	ND	416	104	400	3.92	

Sample ID: SB - 3 @ 25' (H202030-16)

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	08/28/2012	ND	416	104	400	3.92	

Sample ID: SB - 4 @ 5' (H202030-17)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**14800**	16.0	08/28/2012	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	<10.0	10.0	08/28/2012	ND	201	100	200	0.929	
DRO >C10-C28	<10.0	10.0	08/28/2012	ND	204	102	200	0.300	
EXT DRO >C28-C35	<10.0	10.0	08/28/2012	ND					
Surrogate: 1-Chlorooctane	*75.6 %*	*65.2-140*							
Surrogate: 1-Chlorooctadecane	*88.3 %*	*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:	08/24/2012	Sampling Date:	08/22/2012
Reported:	08/31/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT #29 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SB - 4 @ 10' (H202030-18)

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	08/30/2012	ND	2.23	111	2.00	2.49	
Toluene*	<0.050	0.050	08/30/2012	ND	2.30	115	2.00	3.25	
Ethylbenzene*	<0.050	0.050	08/30/2012	ND	2.31	115	2.00	3.89	
Total Xylenes*	<0.150	0.150	08/30/2012	ND	7.49	125	6.00	4.19	

Surrogate: 4-Bromofluorobenzene (PID *98.2 %* *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	**15800**	16.0	08/28/2012	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	<10.0	10.0	08/29/2012	ND	201	100	200	0.929	
DRO >C10-C28	<10.0	10.0	08/29/2012	ND	204	102	200	0.300	
EXT DRO >C28-C35	<10.0	10.0	08/29/2012	ND					

Surrogate: 1-Chlorooctane *78.4 %* *65.2-140*

Surrogate: 1-Chlorooctadecane *91.0 %* *63.6-154*

Sample ID: SB - 4 @ 15' (H202030-19)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1740**	16.0	08/28/2012	ND	416	104	400	3.92	

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:	08/24/2012	Sampling Date:	08/22/2012
Reported:	08/31/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT #29 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SB - 4 @ 20' (H202030-20)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2120**	16.0	08/28/2012	ND	416	104	400	3.92	

Sample ID: SB - 4 @ 25' (H202030-21)

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	08/28/2012	ND	416	104	400	3.92	

Sample ID: SB - 5 @ 5' (H202030-22)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	08/28/2012	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	<10.0	10.0	08/29/2012	ND	201	100	200	0.929	
DRO >C10-C28	<10.0	10.0	08/29/2012	ND	204	102	200	0.300	
EXT DRO >C28-C35	<10.0	10.0	08/29/2012	ND					

Surrogate: 1-Chlorooctane	*80.0 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*93.9 %*	*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:	08/24/2012	Sampling Date:	08/22/2012
Reported:	08/31/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT #29 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SB - 5 @ 10' (H202030-23)

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	08/30/2012	ND	2.23	111	2.00	2.49	
Toluene*	<0.050	0.050	08/30/2012	ND	2.30	115	2.00	3.25	
Ethylbenzene*	<0.050	0.050	08/30/2012	ND	2.31	115	2.00	3.89	
Total Xylenes*	<0.150	0.150	08/30/2012	ND	7.49	125	6.00	4.19	

Surrogate: 4-Bromofluorobenzene (PIL *98.5 %* *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	**64.0**	16.0	08/28/2012	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	<10.0	10.0	08/29/2012	ND	201	100	200	0.929	
DRO >C10-C28	<10.0	10.0	08/29/2012	ND	204	102	200	0.300	
EXT DRO >C28-C35	<10.0	10.0	08/29/2012	ND					

Surrogate: 1-Chlorooctane *80.8 %* *65.2-140*

Surrogate: 1-Chlorooctadecane *87.5 %* *63.6-154*

Sample ID: SB - 5 @ 15' (H202030-24)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**160**	16.0	08/28/2012	ND	416	104	400	3.92	

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:	08/24/2012	Sampling Date:	08/22/2012
Reported:	08/31/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT #29 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SB - 5 @ 20' (H202030-25)

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	08/28/2012	ND	416	104	400	3.92	

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. Arquijo	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 #29 SWD	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	Chloride	8015M	BTEX										
H202030																											
1	SB-1@5'	G	1			X					X		8/22/12	1030	X	X											
2	SB-1@10'													1035		X	X										
3	SB-1@15'													1040													
4	SB-1@20'													1045													
5	SB-1@25'													1050													
6	SB-1@30'													1055													
7	SB-2@5'													1100		X											
8	SB-2@10'													1135		X	X										
9	SB-2@15'													1130													
10	SB-2@20'													1135													

Relinquished By:	Date: 8/23/12	Received By:	
	Time: 1645		
Relinquished By:	Date: 8-24-12	Received By:	
	Time: 8:30		
Delivered By: (Circle One)		Sample Condition	CHECKED BY:
Sampler - UPS - Bus - Other:	5° C	Cool: Yes / No; Intact: Yes / No	(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

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 #29 SWD		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	Chloride	BTEX 8021M	TPH 8015M									
H202030																										
11	SB-3@25'	G	1			X					X		7/23/12	1140	X											
12	SB-3@5'													1325		X										
13	SB-3@10'													1330		X	X									
14	SB-3@15'													1335												
15	SB-3@20'													1340												
16	SB-3@25'													1355												
17	SB-4@5'													1415		X										
18	SB-4@10'													1420		X	X									
19	SB-4@15'													1425												
20	SB-4@20'													1430												

Relinquished By:	Date: 8/23/12	Received By:	Phone Result: ☐ Yes ☐ No	Add'l Phone #:	
	Time: 1645		Fax Result: ☐ Yes ☐ No	Add'l Fax #:	
Relinquished By:	Date: 8-24-12	Received By:	REMARKS:		
	Time: 8:35		Please email results to pm@basinenv.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

#26

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 #29 SWD	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	Chloride	8015M	BTEX									
H20230																										
21	SB-4@25'	G	1			X					X		8/22/12	1435	X											
22	SB-5@5'													1505		X										
23	SB-5@10'													1510		X	X									
24	SB-5@15'													1515												
25	SB-5@20'	↓	↓			↓					↓		↓	1520	↓											

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: 8/23/12 Time: 1645	Received By:	Phone Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: 8-24-12 Time: 7:35	Received By:	Fax Result: ☐ Yes ☐ No Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials)	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 23, 2012

BEN J. ARGUIJO

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: JAMES RANCH UNIT #29 SWD

Enclosed are the results of analyses for samples received by the laboratory on 08/23/12 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:	08/23/2012	Sampling Date:	08/22/2012
Reported:	08/23/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT #29 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: WEST TRENCH-WEST WALL #1 (H202014-01)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2200**	16.0	08/23/2012	ND	400	100	400	4.08	

Sample ID: WEST TRENCH-WEST WALL #2 (H202014-02)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**13800**	16.0	08/23/2012	ND	400	100	400	4.08	

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

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene

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: Games Ranch Unit #29 SWD		State: NM Zip: 88220	
Project Location: Eddy Co., NM		Phone #: (432)556-8730	
Sampler Name: [signature]		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	Chlor. Ion
H20?014															
1	West Trench-West Wall #1	G	1			X					X		8/22/12	1500	X
2	West Trench-West Wall #2	G	1			X					X		8/22/12	1505	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: [signature]	Date: 8/23/12 Time: 0720	Received By: [signature]	Phone Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By: [signature]	Date: 8/23/12 Time: 0740	Received By: [signature]	Fax Result: ☐ Yes ☐ No Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other: [signature] 5°C	Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials) [initials]	REMARKS: Please email results to pm@basinenv.com & TAsavoie@BassPet.com

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

#2/6