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Effective Solutions

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NMOCD ARTESIA

REMEDIATION SUMMARY &

SOIL CLOSURE REQUEST

BOPCO, LP
G.H. Cobb Federal #1
Eddy County, New Mexico
Unit Letter "M" (SWSW), Section 23, Township 20 South, Range 31 East
Latitude 32° 33' 11.412" North, Longitude 103° 50' 44.304"
NMOCD Reference # 2RP-369

Prepared For:

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

Prepared By:

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3100 Plains Highway
Lovington, New Mexico 88260

September 2011

Ben J. Arguijo
Project Manager

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

1.0 INTRODUCTION AND BACKGROUND INFORMATION

Basin Environmental Service Technologies, LLC (Basin), on behalf of BOPCO, LP (BOPCO), has prepared this *Remediation Summary & Soil Closure Request* for the site known as G.H. Cobb Federal #1: a permanent, unlined pit. The legal description of the site is Unit Letter "M" (SWSW), Section 23, Township 20 South, Range 31 East, in Eddy County, New Mexico. The property is owned and administered by the United States Department of the Interior, Bureau of Land Management (BLM). The geographic coordinates of the site are 32° 33' 11.412" North latitude and 103° 50' 44.304" West longitude. Please reference Figure 1 for a "Site Location Map" and Figure 2 for a "Site & Sample Location Map".

On July 1, 2009, BOPCO submitted a Pit, Closed-Loop System, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application (Form C-144) to the New Mexico Oil Conservation Division (NMOCD). The Form C-144 is provided as Appendix A.

On November 13, 2009, BOPCO requested Basin assume remediation oversight of the G.H. Cobb Federal #1 site.

On November 20, 2009, BOPCO and Basin representatives met with NMOCD Artesia District Office representatives to discuss remediation activities to be conducted at the site. The pit was to be excavated to approximately ten (10) feet below the surface of the pit, to a total depth of approximately thirty-five (35) feet below ground surface (bgs). Due to safety issues associated with the depth of the excavation, it was decided a six (6) inch PVC conduit would be cemented in the floor of the excavation and extended to approximately fifteen (15) feet bgs. The excavation would then be backfilled around the conduit, which would allow drilling activities to be conducted in the floor of the excavation.

On December 7, 2009, BOPCO submitted a Release Notification and Corrective Action (Form C-141) to the NMOCD and notified the BLM of its intent to commence pit closure activities at the G.H. Cobb Federal #1 site. The final dimensions of the excavation were approximately one hundred and fifty-five (155) feet in width, one- hundred and sixty-one (161) feet in length, and approximately thirty-five (35) feet in depth. All excavated soil was transported to R360 Environmental Solutions (formerly Controlled Recovery, Inc., NM Permit #R-9166). The Form C-141 is provided as Appendix B. General photographs of pit closure activities are provided as Appendix C.

2.0 NMOCD SITE CLASSIFICATION

A search of the New Mexico Water Rights Reporting System (NMWRRS) database maintained by the New Mexico Office of the State Engineer (NMOSE) indicated information was unavailable for Section 23, Township 20 South, Range 31 East. A depth to groundwater reference map utilized by the NMOCD indicates groundwater should be encountered at approximately seventy-five (75) feet below ground surface (bgs). BOPCO has installed six (6) on-site monitor wells, which indicate the average depth to groundwater is approximately seventy (70) feet bgs at the release site. Analytical results from soil samples collected during the installation of monitor well MW-2 indicated chloride concentrations exceeded NMOCD

regulatory standards within fifty (50) feet of groundwater. The depth of chloride impact results in a score of twenty (20) points being assigned to the site based on the NMOCD depth to groundwater criterion.

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

There are no surface water bodies within 1,000 feet of the site. 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 G.H. Cobb Federal #1 site has an initial ranking score of twenty (20) points. The soil remediation levels for a site with a ranking score of twenty (20) points are as follows:

- Benzene – 10 mg/Kg (ppm)
- BTEX – 50 mg/Kg (ppm)
- TPH – 100 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

From December 30, 2009, through January 15, 2010, thirteen (13) soil borings (SB-1, SB-2, SB-3, SB-4, SB-5, SB-6, SB-7, SB-8, SB-9, SB-10, SB-11, SB-12, and SB-13) were advanced to investigate the vertical and horizontal extent of impact at the site. Soil samples were collected at five (5) foot drilling intervals and field-screened using a Photo-Ionization Detector (PID) and chloride test kit. Selected soil samples were submitted to Cardinal Laboratories in Hobbs, New Mexico, for determination of concentrations of benzene, toluene, ethyl-benzene, and total xylene (BTEX), total petroleum hydrocarbons (TPH), and chlorides using EPA Method SW-846 8021B, EPA Method SW-846 8015M, and EPA Method 4500 Cl-B, respectively. Selected soil samples were also analyzed for concentrations of potassium, arsenic, and magnesium using EPA Method SW-846 6010B.

Summaries of "Concentrations of Benzene, BTEX, TPH & Chlorides in Soil" and "Concentrations of Potassium, Arsenic & Magnesium in Soil" are provided in Tables 1 and 2, respectively. A Stratigraphic Cross Section is provided as Figure 3. Soil boring logs are provided as Appendix D. Laboratory analytical reports are provided as Appendix E.

Soil Boring SB-1 was advanced approximately seventy (70) feet to the south of the excavation. The soil boring was advanced to a total depth of approximately ninety (90) feet bgs. Soil samples collected at 5, 15, 25, 35, 45, 55, 60, 65, 70, 75, 80, 85, and 90 feet bgs were submitted to the laboratory for analysis of chloride and TPH concentrations. Laboratory analytical results indicated chloride concentrations ranged from 64 mg/Kg in the soil sample collected at 55 feet

indicated TPH concentrations were less than the laboratory method detection limit (MDL) for each of the soil samples submitted, with the exception of the soil sample collected at 25 feet bgs, which exhibited a concentration of 40.3 mg/Kg. Soil boring SB-1 was converted to a two (2) inch monitor well (MW-1).

Soil Boring SB-2 was advanced through the conduit in the floor of the excavation at approximately thirty (30) feet bgs. The soil boring was advanced to a total depth of approximately ninety (90) feet bgs. Soil samples collected at 34, 44, 54, 64, 74, 79, 84, and 89 feet bgs were submitted to the laboratory for analysis of chloride concentrations. The soil sample collected at 34 feet bgs was also analyzed for BTEX and TPH constituent concentrations. Laboratory analytical results indicated chloride concentrations ranged from 1,300 mg/Kg in the soil sample collected at 89 feet bgs to 15,400 mg/Kg in the soil sample collected at 64 feet bgs. The soil sample collected at 34 feet bgs exhibited benzene and BTEX concentrations less than the appropriate laboratory MDL. The TPH concentration was 15.6 mg/Kg. Soil boring SB-2 was converted to a two (2) inch monitor well (MW-2).

Soil boring SB-3 was advanced in the northern portion of the excavation at approximately fifteen (15) feet bgs. The soil boring was advanced to a total depth of approximately seventy-five (75) feet bgs. Soil samples collected at 20, 30, 40, 50, 55, 60, 70, and 75 feet bgs were submitted to the laboratory for analysis of chloride concentrations. The soil sample collected at 20 feet bgs was also analyzed for BTEX and TPH constituent concentrations. Laboratory analytical results indicated chloride concentrations ranged from 384 mg/Kg in the soil sample collected at 30 feet bgs to 12,000 mg/Kg in the soil sample collected at 55 feet bgs. The soil sample collected at 20 feet bgs exhibited benzene and BTEX concentrations less than the appropriate laboratory MDL. The TPH concentration was 15.6 mg/Kg.

Soil boring SB-4 was advanced approximately one hundred and ten (110) feet to the west of the excavation. The soil boring was advanced to a total depth of approximately seventy-five (75) feet bgs. Soil samples collected at 5, 15, 25, 30, 35, 45, 55, 60, 65, 70, and 75 feet bgs were submitted to the laboratory for analysis of chloride concentrations. The soil sample collected at 5 feet bgs was also analyzed for BTEX and TPH constituent concentrations. Laboratory analytical results indicated chloride concentrations ranged from 128 mg/Kg in the soil sample collected at 5 feet bgs to 14,400 mg/Kg in the soil sample collected at 70 feet bgs. The soil sample collected at 5 feet bgs exhibited benzene and BTEX concentrations less than the appropriate laboratory MDL. The TPH concentration was 16.6 mg/Kg.

Soil boring SB-5 was advanced approximately twenty-five (25) feet to the east of the excavation. The soil boring was advanced to a total depth of approximately eighty (80) feet bgs. Soil samples collected at 5, 15, 25, 30, 35, 45, 55, 60, 65, 70, 75, and 80 feet bgs were submitted to the laboratory for analysis of chloride concentrations. The soil sample collected at 5 feet bgs was also analyzed for BTEX and TPH constituent concentrations. The laboratory analytical results indicated chloride concentrations ranged from 560 mg/Kg in the soil sample collected at 15 feet bgs to 18,600 mg/Kg in the soil sample collected at 80 feet bgs. The soil sample collected at 5 feet bgs exhibited benzene and BTEX concentrations less than the appropriate laboratory MDL. The TPH concentration was 17.2 mg/Kg.

Soil boring SB-6 was advanced approximately fifty (50) feet north of the excavation. The soil boring was advanced to a total depth of approximately seventy (70) feet bgs. Soil samples collected at 5, 15, 25, 30, 35, 45, 55, 60, 65, and 70 feet bgs were submitted to the laboratory for analysis of chloride concentrations. The soil sample collected at 5 feet bgs was also analyzed for BTEX and TPH constituent concentrations. Laboratory analytical results indicated chloride concentrations ranged from 304 mg/Kg in the soil sample collected at 15 feet bgs to 13,400 mg/Kg in the soil sample collected at 65 feet bgs. The soil sample collected at 5 feet bgs exhibited benzene, BTEX, and TPH concentrations less than the appropriate laboratory MDL.

Soil boring SB-7 was advanced approximately one hundred and forty-five (145) feet to the west of the excavation. The soil boring was advanced to a total depth of approximately seventy-five (75) feet bgs. Soil samples collected at 5, 15, 25, 30, 35, 45, 55, 60, 65, 70, and 75 feet bgs were submitted to the laboratory for analysis of chloride concentrations. The soil sample collected at 5 feet bgs was also analyzed for BTEX and TPH constituent concentrations. Laboratory analytical results indicated chloride concentrations ranged from 32 mg/Kg in the soil sample collected at 5 feet bgs to 12,400 mg/Kg in the soil sample collected at 75 feet bgs. The soil sample collected at 5 feet bgs exhibited benzene, BTEX, and TPH constituent concentrations less than the appropriate laboratory MDL.

Soil boring SB-8 was advanced approximately three hundred and eighty (380) feet to the south of the excavation. The soil boring was advanced to a total depth of approximately one hundred and five (105) feet bgs. Soil samples collected at 5, 15, 25, 35, 45, 55, 65, 75, 80, and 85 feet bgs were submitted to the laboratory for analysis of chloride concentrations. The soil sample collected at 5 feet bgs was also analyzed for BTEX and TPH constituent concentrations. Laboratory analytical results indicated chloride concentrations ranged from 32 mg/Kg in the soil samples collected at 55, 65, and 75 feet bgs to 560 mg/Kg in the soil sample collected at 5 feet bgs. The soil sample collected at 5 feet bgs exhibited benzene, BTEX and TPH constituent concentrations less than the appropriate laboratory MDL. Soil boring SB-8 was converted to a two (2) inch monitor well (MW-3).

Soil boring SB-9 was advanced approximately twenty-five (25) feet to the south of the excavation. The soil boring was advanced to a total depth of approximately twenty (20) feet bgs. Soil samples collected at 5, 15, and 20 feet bgs were submitted to the laboratory for analysis of chloride concentrations. The soil sample collected at 5 feet bgs was also analyzed for BTEX and TPH constituent concentrations. Laboratory analytical results indicated chloride concentrations ranged from 144 mg/Kg in the soil sample collected at 15 feet bgs to 1,140 mg/Kg in the soil sample collected at 5 feet bgs. The soil sample collected at 5 feet bgs exhibited benzene, BTEX, and TPH constituent concentrations less than the appropriate laboratory MDL.

Soil boring SB-10 was advanced approximately ten (10) feet to the east of the excavation. The soil boring was advanced to a total depth of approximately twenty (20) feet bgs. Soil samples collected at 5, 15, and 20 feet bgs were submitted to the laboratory for analysis of chloride concentrations. The soil sample collected at 5 feet bgs was also analyzed for BTEX and TPH constituent concentrations. Laboratory analytical results indicated chloride concentrations ranged from 224 mg/Kg in the soil sample collected at 15 feet bgs to 1,360 mg/Kg in the soil sample collected at 5 feet bgs. The soil sample collected at 5 feet bgs exhibited benzene and BTEX

concentrations less than the appropriate laboratory MDL. The TPH concentration was 42.7 mg/Kg.

Soil boring SB-11 was advanced approximately two hundred and fifty (250) feet to the west of the excavation. The soil boring was advanced to a total depth of approximately ninety (90) feet bgs. Soil samples collected at 5, 15, 25, 35, 45, 55, 65, 70, 75, and 80 feet bgs were submitted to the laboratory for analysis of chloride concentrations. The soil sample collected at 5 feet bgs was also analyzed for BTEX and TPH constituent concentrations. Laboratory analytical results indicated chloride concentrations ranged from 16 mg/Kg in the soil sample collected at 5 feet bgs to 7,000 mg/Kg in the soil sample collected at 70 feet bgs. The soil sample collected at 5 feet bgs exhibited benzene, BTEX and TPH constituent concentrations less than the appropriate laboratory MDL. Soil boring SB-11 was converted to a two (2) inch monitor well (MW-4).

Soil boring SB-12 was advanced approximately two hundred and eighty (280) feet to the north of the excavation. The soil boring was advanced to a total depth of approximately ninety (90) feet bgs. Soil samples collected at 5, 15, 25, 35, 45, 55, 65, 75, 80, 85, and 90 feet bgs were submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from 48 mg/Kg in the soil samples collected at 5 and 35 feet bgs to 5,680 mg/Kg in the soil sample collected at 80 feet bgs. Soil boring SB-12 was converted to a two (2) inch monitor well (MW-5).

Soil boring SB-13 was advanced approximately sixty (60) feet to the west of the excavation. The soil boring was advanced to a total depth of approximately ninety-five (95) feet bgs. Soil samples collected at 5, 15, 25, 35, 45, 55, 65, 75, 85, and 95 feet bgs were submitted to the laboratory for analysis of chloride concentrations. The soil sample collected at 5 feet bgs was also analyzed for BTEX and TPH constituent concentrations. Laboratory analytical results indicated chloride concentrations ranged from 32 mg/Kg in the soil samples collected at 55, 65, and 95 feet bgs to 144 mg/Kg in the soil sample collected at 70 feet bgs. The soil sample collected at 5 feet bgs exhibited benzene, BTEX and TPH constituent concentrations less than the appropriate laboratory MDL. Soil boring SB-13 was converted to a two (2) inch monitor well (MW-6).

On January 8, 2010, nine (9) soil samples (Northwest S/W @ 10', Northeast S/W @ 10', West S/W @ 10', East S/W @ 10', South S/W @ 10', Northwest Corner @ 10', Northeast Corner @ 10', Southwest Corner @ 10', and Southeast Corner @ 10') were collected from the sidewalls of the excavation and submitted to the laboratory for analysis of BTEX, TPH, and chloride concentrations. Laboratory analytical results indicated benzene, BTEX, and TPH concentrations were less than the appropriate laboratory MDL for each of the submitted soil samples. Chloride concentrations ranged from 192 mg/Kg in soil sample Northwest Corner @ 10' to 9,900 mg/Kg in soil sample East S/W @ 10'.

Analytical results from soil borings advanced to the south and the east of the excavation (SB-9 and SB-10) indicate chloride concentrations within the soil column are less than 250 mg/Kg at 20 feet bgs. The excavation was advanced in the areas represented by soil samples Northeast S/W @ 10', West S/W @ 10', and Southeast Corner @ 10'. Further excavation to the south and east was prohibited due to the proximity of a widely used oilfield access road and active oilfield production facilities.

On January 18, 2010, Basin resumed excavation activities on the west sidewall and the northwest and southeast corners of the excavation. Excavated soil was placed in the excavation and leveled.

On February 11, 2010, three (3) soil samples (West S/W A @ 10', Southeast Corner A @ 10', and Northwest Corner A @ 10') were collected and submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations were less than the NMOCD-approved level of 1,000 mg/Kg in all the submitted soil samples. Chloride concentrations ranged from 112 mg/Kg in soil sample West S/W A @ 10' to 496 mg/Kg in soil sample Southwest Corner A @ 10'.

Based on laboratory analytical results, and with NMOCD approval, from March 30 through April 28, 2011, the excavation was backfilled in eighteen-inch (18") lifts with non-impacted material, compacted, and contoured to fit the surrounding topography. Prior to backfilling, a twenty (20) mil polyurethane liner was installed in the floor of the excavation at approximately ten feet (10') to twelve feet (12') feet bgs. Approximately one foot (1') of non-impacted pad sand was installed both above and below the liner to protect the liner from damage during installation and backfilling activities.

On August 17, 2011, the G.H. Cobb Federal #1 site was seeded with a BLM-approved seed mixture (BLM #2). Pictures of the seeding event are included in Appendix B. A subsequent seeding event will take place during the 2012 calendar year.

4.0 SOIL CLOSURE REQUEST

BOPCO has completed the soil closure activities detailed in the *Remediation Summary and Soil Closure Strategy* dated December 2010. Soil samples collected from the floor and sidewalls of the G.H. Cobb Federal #1 excavation were analyzed by an NMOCD-approved laboratory, and concentrations of benzene, BTEX, TPH, and chloride were less than the remediation action levels established for the site by the NMOCD. Based on these analytical results, Basin recommends BOPCO provide the NMOCD Santa Fe and Artesia District Offices a copy of this *Remediation Summary & Soil Closure Request* and request the NMOCD grant soil closure to the G.H. Cobb Federal #1 site.

5.0 QA/QC PROCEDURES

5.1 Soil Sampling

Soil samples were delivered to Cardinal Laboratories, Inc., of 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 modified EPA Method SW-846 8015M
- Chloride concentrations in accordance with EPA Method SM 4500 Cl-B
- Potassium, arsenic, and magnesium using EPA Method SW-846 6010B.

5.2 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.

5.3 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.

6.0 LIMITATIONS

Basin Environmental Service Technologies, LLC, has prepared this *Remediation Summary & Soil Closure Request* to the best of its ability. No other warranty, expressed or implied, is made or intended. Basin has examined and relied upon documents referenced in the report and on oral statements made by certain individuals. Basin has not conducted an independent examination of the facts contained in referenced materials and statements. Basin has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Basin has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin 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:

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Figures

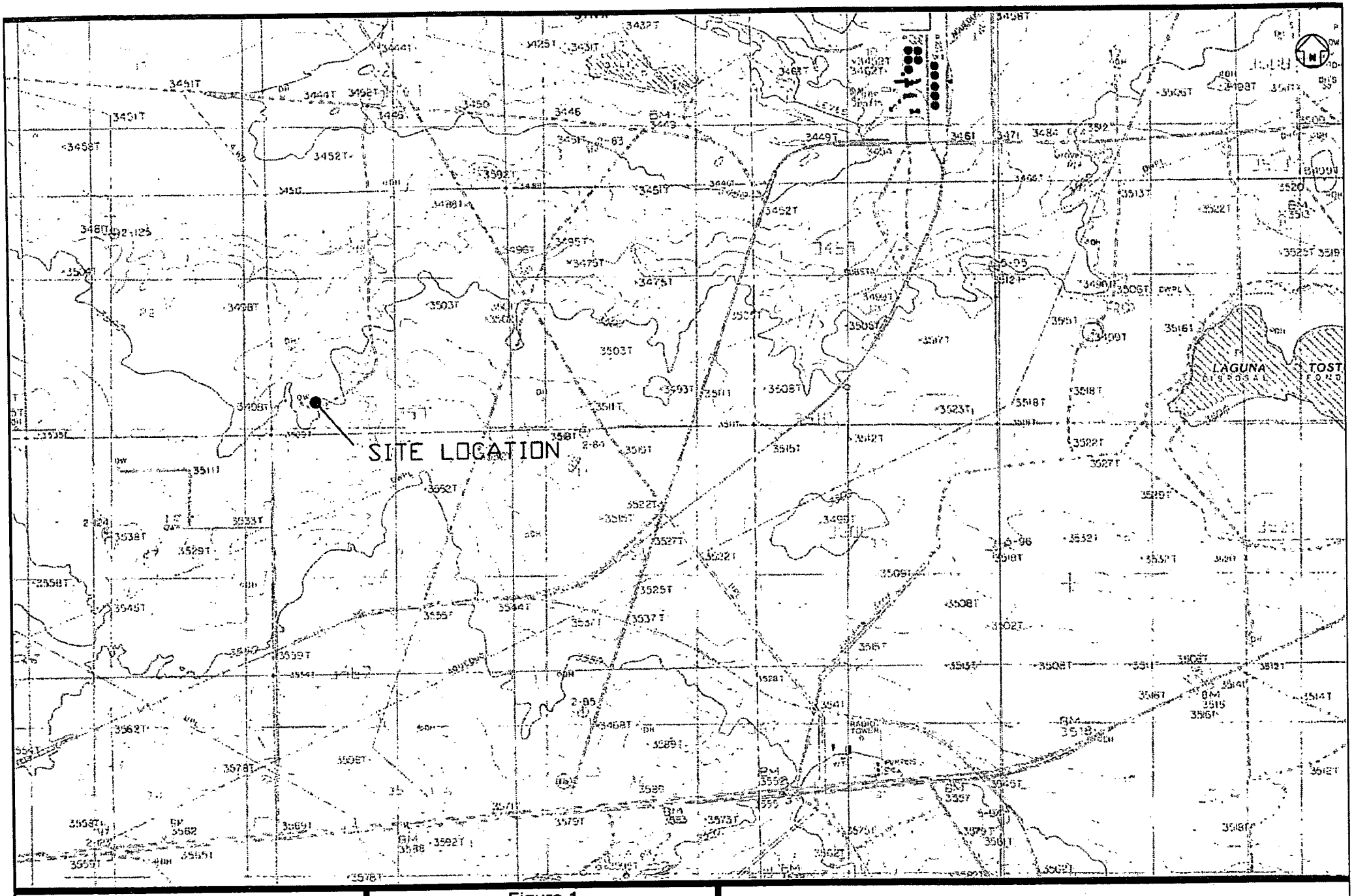
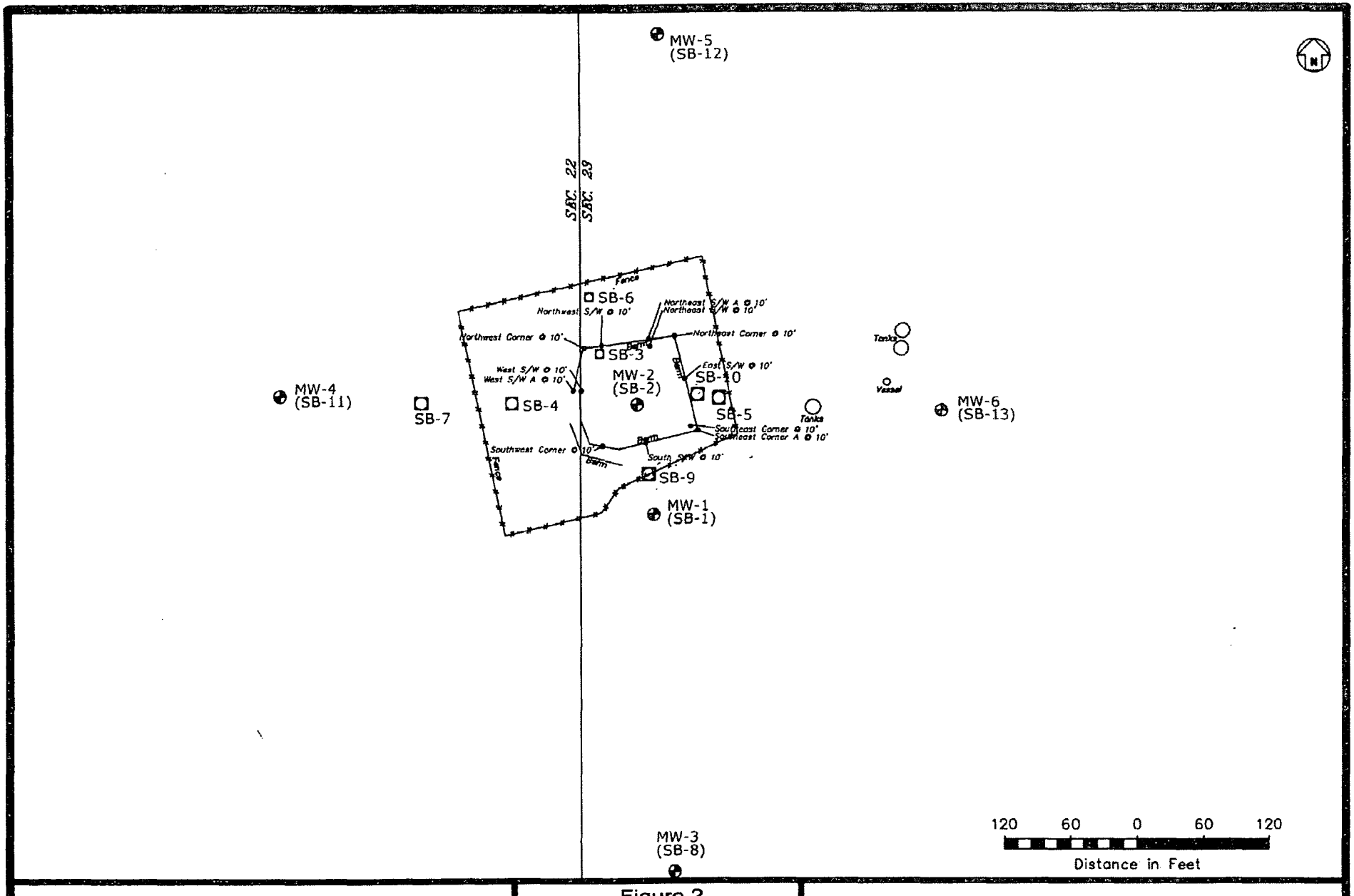


Figure 1
Site Location Map
BOPCO, LP
Cobb Federal #1
Eddy County, New Mexico
2RP-369

Basin Environmental Consulting

Prep By: JWL	Checked By: CDS
October 04, 2010	Scale 1"=1,200'



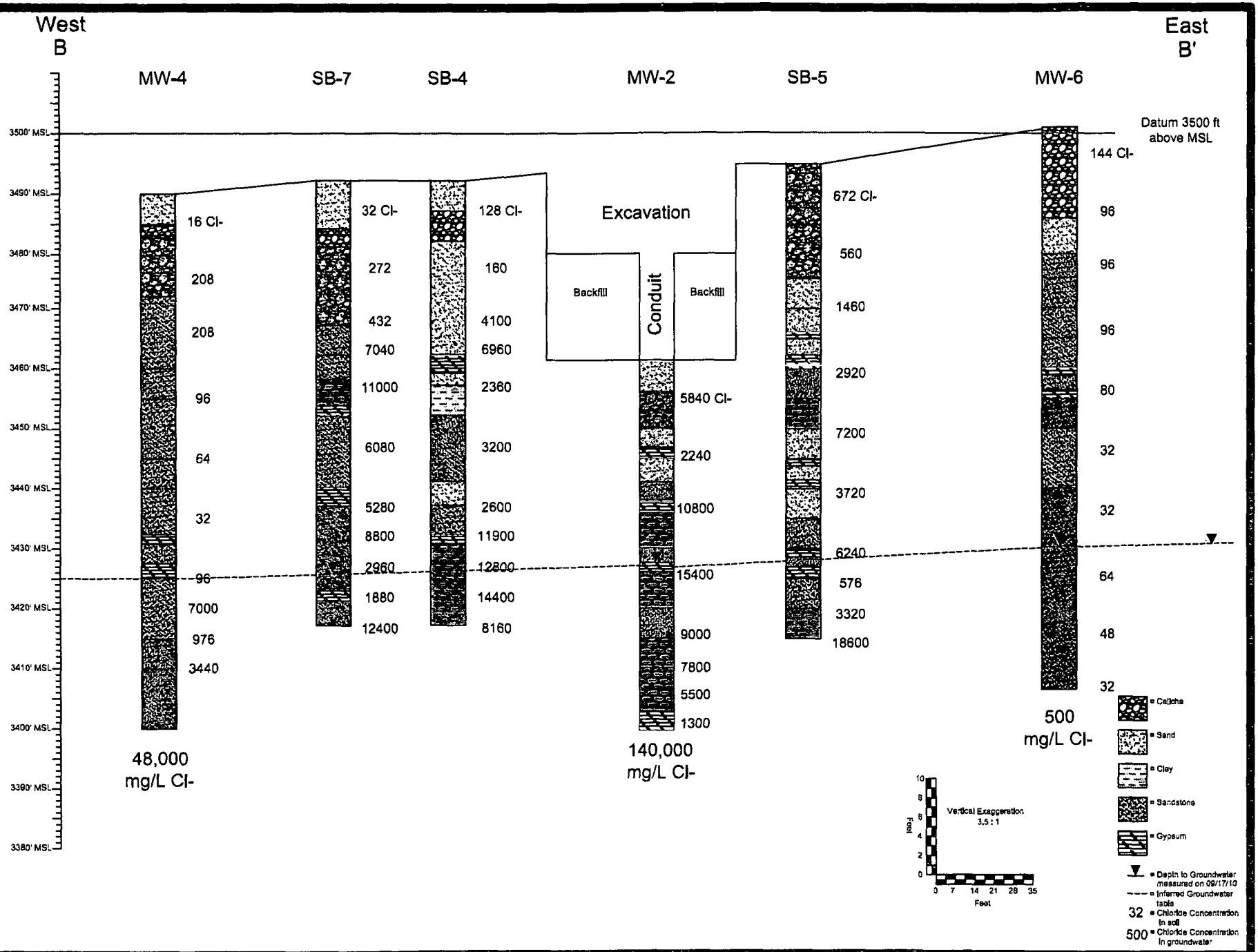
Legend:

- Excavation Extent
- Bench Extent
- MW-1 Monitor Well Location
- SB-1 Soil Boring Location
- Sample Location

Figure 2
Site Map
BOPCO
GH Cobb Fed #1
Eddy County, NM

Basin Environmental Consulting

Prep By: CDS	Checked By: CJB
March 3, 2010	Scale 1"=120'



East - West Stratigraphic Cross Section B - B'
G.H. Cobb Federal #1 (2RP-369) Eddy County, New Mexico
BOPCO, L.P.

Basin Environmental Services

Prep By: JWL	Checked By: CJB
Date: Oct 11, 2010	Scale: See Scale Bar

Tables

TABLE 1

CONCENTRATIONS OF TPH, BTEX AND CHLORIDES IN SOIL

BOPCO, LP
G.H. COBB FEDERAL #1
EDDY COUNTY, NEW MEXICO
NMOCD # 2RP-369

SAMPLE LOCATION	SAMPLE DEPTH (Below Grade Surface)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030					SW 846-8015M				4500
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	BTEX (mg/Kg)	GRO C_6-C_{10} (mg/Kg)	DRO C_{10}-C_{28} (mg/Kg)	DRO Ext. C_{28}-C_{35} (mg/Kg)	TOTAL TPH C_6-C_{35} (mg/Kg)	CHLORIDE (mg/Kg)
SB-1 @ 5'	5 Feet	12/30/09	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	320
SB-1 @ 15'	15 Feet	12/30/09	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	128
SB-1 @ 25'	25 Feet	12/30/09	In-Situ	-	-	-	-	-	<10.0	40.3	<10.0	40.3	304
SB-1 @ 35'	35 Feet	12/30/09	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	1,090
SB-1 @ 45'	45 Feet	12/30/09	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	80
SB-1 @ 55'	55 Feet	12/30/09	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	64
SB-1 @ 60'	60 Feet	12/30/09	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	112
SB-1 @ 65'	65 Feet	12/30/09	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	8,200
SB-1 @ 70'	70 Feet	12/30/09	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	4,480
SB-1 @ 75'	75 Feet	12/30/09	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	1,230
SB-1 @ 80'	80 Feet	12/30/09	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	896
SB-1 @ 85'	85 Feet	12/30/09	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	624
SB-1 @ 90'	90 Feet	12/30/09	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	144
SB-2 @ 5'	34 Feet	01/04/10	In-Situ	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	15.6	<10.0	15.6	5,840
SB-2 @ 15'	44 Feet	01/04/10	In-Situ	-	-	-	-	-	-	-	-	-	2,240
SB-2 @ 25'	54 Feet	01/04/10	In-Situ	-	-	-	-	-	-	-	-	-	10,800
SB-2 @ 35'	64 Feet	01/04/10	In-Situ	-	-	-	-	-	-	-	-	-	15,400
SB-2 @ 45'	74 Feet	01/04/10	In-Situ	-	-	-	-	-	-	-	-	-	9,000
SB-2 @ 50'	79 Feet	01/04/10	In-Situ	-	-	-	-	-	-	-	-	-	7,800
SB-2 @ 55'	84 Feet	01/04/10	In-Situ	-	-	-	-	-	-	-	-	-	5,500
SB-2 @ 60'	89 Feet	01/04/10	In-Situ	-	-	-	-	-	-	-	-	-	1,300
SB-3 @ 5'	20 Feet	01/04/10	In-Situ	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	14.8	<10.0	14.8	528
SB-3 @ 15'	30 Feet	01/04/10	In-Situ	-	-	-	-	-	-	-	-	-	384
SB-3 @ 25'	40 Feet	01/04/10	In-Situ	-	-	-	-	-	-	-	-	-	4,800
SB-3 @ 35'	50 Feet	01/04/10	In-Situ	-	-	-	-	-	-	-	-	-	6,800
SB-3 @ 40'	55 Feet	01/04/10	In-Situ	-	-	-	-	-	-	-	-	-	12,000
SB-3 @ 45'	60 Feet	01/04/10	In-Situ	-	-	-	-	-	-	-	-	-	9,500
SB-3 @ 55'	70 Feet	01/04/10	In-Situ	-	-	-	-	-	-	-	-	-	6,300
SB-3 @ 60'	75 Feet	01/04/10	In-Situ	-	-	-	-	-	-	-	-	-	5,200
SB-4 @ 5'	5 Feet	01/05/10	In-Situ	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	16.6	<10.0	16.6	128
SB-4 @ 15'	15 Feet	01/05/10	In-Situ	-	-	-	-	-	-	-	-	-	160
SB-4 @ 25'	25 Feet	01/05/10	In-Situ	-	-	-	-	-	-	-	-	-	4,100
SB-4 @ 30'	30 Feet	01/05/10	In-Situ	-	-	-	-	-	-	-	-	-	6,960
SB-4 @ 35'	35 Feet	01/05/10	In-Situ	-	-	-	-	-	-	-	-	-	2,360
SB-4 @ 45'	45 Feet	01/05/10	In-Situ	-	-	-	-	-	-	-	-	-	3,200
SB-4 @ 55'	55 Feet	01/05/10	In-Situ	-	-	-	-	-	-	-	-	-	2,600
SB-4 @ 60'	60 Feet	01/05/10	In-Situ	-	-	-	-	-	-	-	-	-	11,900
SB-4 @ 65'	65 Feet	01/05/10	In-Situ	-	-	-	-	-	-	-	-	-	12,800
SB-4 @ 70'	70 Feet	01/05/10	In-Situ	-	-	-	-	-	-	-	-	-	14,400
SB-4 @ 75'	75 Feet	01/05/10	In-Situ	-	-	-	-	-	-	-	-	-	8,160
SB-5 @ 5'	5 Feet	01/05/10	In-Situ	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	17.2	<10.0	17.2	672
SB-5 @ 15'	15 Feet	01/05/10	In-Situ	-	-	-	-	-	-	-	-	-	560
SB-5 @ 25'	25 Feet	01/05/10	In-Situ	-	-	-	-	-	-	-	-	-	1,460
SB-5 @ 35'	35 Feet	01/06/10	In-Situ	-	-	-	-	-	-	-	-	-	2,920
SB-5 @ 45'	45 Feet	01/06/10	In-Situ	-	-	-	-	-	-	-	-	-	7,200
SB-5 @ 55'	55 Feet	01/06/10	In-Situ	-	-	-	-	-	-	-	-	-	3,720
SB-5 @ 65'	65 Feet	01/06/10	In-Situ	-	-	-	-	-	-	-	-	-	6,240
SB-5 @ 70'	70 Feet	01/06/10	In-Situ	-	-	-	-	-	-	-	-	-	576
SB-5 @ 75'	75 Feet	01/06/10	In-Situ	-	-	-	-	-	-	-	-	-	3,320
SB-5 @ 80'	80 Feet	01/06/10	In-Situ	-	-	-	-	-	-	-	-	-	18,600
SB-6 @ 5'	5 Feet	01/06/10	In-Situ	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	<10.0	<10.0	<10.0	432
SB-6 @ 15'	15 Feet	01/06/10	In-Situ	-	-	-	-	-	-	-	-	-	304
SB-6 @ 25'	25 Feet	01/06/10	In-Situ	-	-	-	-	-	-	-	-	-	704
SB-6 @ 35'	35 Feet	01/06/10	In-Situ	-	-	-	-	-	-	-	-	-	7,520
SB-6 @ 45'	45 Feet	01/06/10	In-Situ	-	-	-	-	-	-	-	-	-	4,320
SB-6 @ 55'	55 Feet	01/06/10	In-Situ	-	-	-	-	-	-	-	-	-	5,760
SB-6 @ 60'	60 Feet	01/06/10	In-Situ	-	-	-	-	-	-	-	-	-	8,560
SB-6 @ 65'	65 Feet	01/06/10	In-Situ	-	-	-	-	-	-	-	-	-	13,400
SB-6 @ 70'	70 Feet	01/06/10	In-Situ	-	-	-	-	-	-	-	-	-	12,400

TABLE 1

CONCENTRATIONS OF TPH, BTEX AND CHLORIDES IN SOIL

BOPCO, LP
G.H. COBB FEDERAL #1
EDDY COUNTY, NEW MEXICO
NMOCD # 2RP-369

SAMPLE LOCATION	SAMPLE DEPTH (Below Grade Surface)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030					SW 846-8015M				4500
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	BTEX (mg/Kg)	GRO C_6-C_{10} (mg/Kg)	DRO C_{10}-C_{28} (mg/Kg)	DRO Ext. C_{28}-C_{35} (mg/Kg)	TOTAL TPH C_6-C_{35} (mg/Kg)	CHLORIDE (mg/Kg)
SB-7 @ 5'	5 Feet	01/11/10	In-Situ	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	<10.0	<10.0	<10.0	32
SB-7 @ 15'	15 Feet	01/11/10	In-Situ	-	-	-	-	-	-	-	-	-	272
SB-7 @ 25'	25 Feet	01/11/10	In-Situ	-	-	-	-	-	-	-	-	-	432
SB-7 @ 30'	30 Feet	01/11/10	In-Situ	-	-	-	-	-	-	-	-	-	7,040
SB-7 @ 35'	35 Feet	01/11/10	In-Situ	-	-	-	-	-	-	-	-	-	11,000
SB-7 @ 45'	45 Feet	01/11/10	In-Situ	-	-	-	-	-	-	-	-	-	6,080
SB-7 @ 55'	55 Feet	01/11/10	In-Situ	-	-	-	-	-	-	-	-	-	5,280
SB-7 @ 60'	60 Feet	01/11/10	In-Situ	-	-	-	-	-	-	-	-	-	8,800
SB-7 @ 65'	65 Feet	01/11/10	In-Situ	-	-	-	-	-	-	-	-	-	2,960
SB-7 @ 70'	70 Feet	01/11/10	In-Situ	-	-	-	-	-	-	-	-	-	1,880
SB-7 @ 75'	75 Feet	01/11/10	In-Situ	-	-	-	-	-	-	-	-	-	12,400
SB-8 @ 5'	5 Feet	01/12/10	In-Situ	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	<10.0	<10.0	<10.0	560
SB-8 @ 15'	15 Feet	01/12/10	In-Situ	-	-	-	-	-	-	-	-	-	240
SB-8 @ 25'	25 Feet	01/12/10	In-Situ	-	-	-	-	-	-	-	-	-	288
SB-8 @ 35'	35 Feet	01/12/10	In-Situ	-	-	-	-	-	-	-	-	-	80
SB-8 @ 45'	45 Feet	01/12/10	In-Situ	-	-	-	-	-	-	-	-	-	48
SB-8 @ 55'	55 Feet	01/12/10	In-Situ	-	-	-	-	-	-	-	-	-	32
SB-8 @ 65'	65 Feet	01/12/10	In-Situ	-	-	-	-	-	-	-	-	-	32
SB-8 @ 75'	75 Feet	01/12/10	In-Situ	-	-	-	-	-	-	-	-	-	32
SB-8 @ 80'	80 Feet	01/12/10	In-Situ	-	-	-	-	-	-	-	-	-	48
SB-8 @ 85'	85 Feet	01/12/10	In-Situ	-	-	-	-	-	-	-	-	-	48
SB-9 @ 5'	5 Feet	01/12/10	In-Situ	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	<10.0	<10.0	<10.0	1,140
SB-9 @ 15'	15 Feet	01/12/10	In-Situ	-	-	-	-	-	-	-	-	-	144
SB-9 @ 20'	20 Feet	01/12/10	In-Situ	-	-	-	-	-	-	-	-	-	192
SB-10 @ 5'	5 Feet	01/12/10	In-Situ	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	42.7	<10.0	42.7	1,360
SB-10 @ 15'	15 Feet	01/12/10	In-Situ	-	-	-	-	-	-	-	-	-	416
SB-10 @ 20'	20 Feet	01/12/10	In-Situ	-	-	-	-	-	-	-	-	-	224
SB-11 @ 5'	5 Feet	01/13/10	In-Situ	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	<10.0	<10.0	<10.0	16
SB-11 @ 15'	15 Feet	01/13/10	In-Situ	-	-	-	-	-	-	-	-	-	208
SB-11 @ 25'	25 Feet	01/13/10	In-Situ	-	-	-	-	-	-	-	-	-	208
SB-11 @ 35'	35 Feet	01/13/10	In-Situ	-	-	-	-	-	-	-	-	-	96
SB-11 @ 45'	45 Feet	01/13/10	In-Situ	-	-	-	-	-	-	-	-	-	64
SB-11 @ 55'	55 Feet	01/13/10	In-Situ	-	-	-	-	-	-	-	-	-	32
SB-11 @ 65'	65 Feet	01/13/10	In-Situ	-	-	-	-	-	-	-	-	-	96
SB-11 @ 70'	70 Feet	01/13/10	In-Situ	-	-	-	-	-	-	-	-	-	7,000
SB-11 @ 75'	75 Feet	01/13/10	In-Situ	-	-	-	-	-	-	-	-	-	976
SB-11 @ 80'	80 Feet	01/15/10	In-Situ	-	-	-	-	-	-	-	-	-	3,440
SB-12 @ 5'	5 Feet	01/15/10	In-Situ	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	<10.0	<10.0	<10.0	48
SB-12 @ 15'	15 Feet	01/15/10	In-Situ	-	-	-	-	-	-	-	-	-	208
SB-12 @ 25'	25 Feet	01/15/10	In-Situ	-	-	-	-	-	-	-	-	-	240
SB-12 @ 35'	35 Feet	01/15/10	In-Situ	-	-	-	-	-	-	-	-	-	48
SB-12 @ 45'	45 Feet	01/15/10	In-Situ	-	-	-	-	-	-	-	-	-	128
SB-12 @ 55'	55 Feet	01/15/10	In-Situ	-	-	-	-	-	-	-	-	-	144
SB-12 @ 65'	65 Feet	01/15/10	In-Situ	-	-	-	-	-	-	-	-	-	4,000
SB-12 @ 75'	75 Feet	01/15/10	In-Situ	-	-	-	-	-	-	-	-	-	2,640
SB-12 @ 80'	80 Feet	01/15/10	In-Situ	-	-	-	-	-	-	-	-	-	5,680
SB-12 @ 85'	85 Feet	01/15/10	In-Situ	-	-	-	-	-	-	-	-	-	2,680
SB-12 @ 90'	90 Feet	01/15/10	In-Situ	-	-	-	-	-	-	-	-	-	992
SB-13 @ 5'	5 Feet	01/15/10	In-Situ	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	<10.0	<10.0	<10.0	144
SB-13 @ 15'	15 Feet	01/15/10	In-Situ	-	-	-	-	-	-	-	-	-	96
SB-13 @ 25'	25 Feet	01/15/10	In-Situ	-	-	-	-	-	-	-	-	-	96
SB-13 @ 35'	35 Feet	01/15/10	In-Situ	-	-	-	-	-	-	-	-	-	96
SB-13 @ 45'	45 Feet	01/15/10	In-Situ	-	-	-	-	-	-	-	-	-	80
SB-13 @ 55'	55 Feet	01/15/10	In-Situ	-	-	-	-	-	-	-	-	-	32
SB-13 @ 65'	65 Feet	01/15/10	In-Situ	-	-	-	-	-	-	-	-	-	32
SB-13 @ 75'	75 Feet	01/15/10	In-Situ	-	-	-	-	-	-	-	-	-	64
SB-13 @ 85'	85 Feet	01/15/10	In-Situ	-	-	-	-	-	-	-	-	-	48
SB-13 @ 95'	95 Feet	01/15/10	In-Situ	-	-	-	-	-	-	-	-	-	32
Northwest S/W @ 10'	10 Feet	01/08/10	In-Situ	<0.050	0.065	<0.050	<0.300	0.065	<10.0	<10.0	<10.0	<10.0	256
Northeast S/W @ 10'	10 Feet	01/08/10	Excavated	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	<10.0	<10.0	<10.0	1,220
West S/W @ 10'	10 Feet	01/08/10	Excavated	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	<10.0	<10.0	<10.0	4,600
East S/W @ 10'	10 Feet	01/08/10	In-Situ	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	<10.0	<10.0	<10.0	9,900
South S/W @ 10'	10 Feet	01/08/10	In-Situ	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	<10.0	<10.0	<10.0	8,500
Northwest Corner @ 10'	10 Feet	01/08/10	In-Situ	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	<10.0	<10.0	<10.0	192
Northeast Corner @ 10'	10 Feet	01/08/10	In-Situ	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	<10.0	<10.0	<10.0	3,680
Southwest Corner @ 10'	10 Feet	01/08/10	In-Situ	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	<10.0	<10.0	<10.0	896
Southeast Corner @ 10'	10 Feet	01/08/10	Excavated	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	<10.0	<10.0	<10.0	6,900
Northeast S/W A @ 10'	10 Feet	02/11/10	In-Situ	-	-	-	-	-	-	-	-	-	1,060
Southeast Corner A @ 10'	10 Feet	02/11/10	In-Situ	-	-	-	-	-	-	-	-	-	768
West S/W A @ 10'	10 Feet	02/11/10	In-Situ	-	-	-	-	-	-	-	-	-	672
NMOCD Regulatory Standard				10				50					1,000

TABLE 2

CONCENTRATIONS OF POTASSIUM, ARSENIC AND MAGNESIUM IN SOIL

BOPCO, LP
G.H. COBB FEDERAL #1
EDDY COUNTY, NEW MEXICO

SAMPLE LOCATION	SAMPLE DEPTH (Below Grade Surface)	SAMPLE DATE	SOIL STATUS	METHOD: EPA 600/4-91/010, 3050		
				TOTAL POTASSIUM (mg/Kg)	TOTAL ARSENIC (mg/Kg)	TOTAL MAGNESIUM (mg/Kg)
SB-1 @ 60'	60 Feet	12/30/09	In-Situ	459	<5	3,340
SB-1 @ 65'	65 Feet	12/30/09	In-Situ	494	<5	4,600
SB-1 @ 70'	70 Feet	12/30/09	In-Situ	600	<5	7,140
SB-1 @ 75'	75 Feet	12/30/09	In-Situ	2,150	7.2	12,200
SB-2 @ Surface	29 Feet	01/04/10	In-Situ	701	10.8	3,170
SB-2 @ 5'	44 Feet	01/04/10	In-Situ	730	<10.0	8,900
SB-2 @ 35'	64 Feet	01/04/10	In-Situ	1,060	<10.0	7,110
SB-2 @ 40'	69 Feet	01/04/10	In-Situ	1,330	16	18,800
SB-2 @ 45'	74 Feet	01/04/10	In-Situ	684	<10	6,740
SB-2 @ 50'	79 Feet	01/04/10	In-Situ	884	11.2	12,300
SB-3 @ Surface	15 Feet	01/04/10	In-Situ	1,030	<10	7,290
SB-3 @ 5'	20 Feet	01/04/10	In-Situ	455	<10	4,150
SB-3 @ 50'	65 Feet	01/04/10	In-Situ	1,610	<10	9,930
SB-3 @ 55'	70 Feet	01/04/10	In-Situ	1,490	12.1	14,800
SB-3 @ 60'	75 Feet	01/04/10	In-Situ	1,990	13.9	16,600
SB-4 @ 25'	25 Feet	01/05/10	In-Situ	452	11.9	3,660
SB-4 @ 60'	60 Feet	01/05/10	In-Situ	927	<10	7,960
SB-4 @ 65'	65 Feet	01/05/10	In-Situ	1,420	12.7	18,400
SB-4 @ 70'	70 Feet	01/05/10	In-Situ	1,350	10	13,000
SB-4 @ 75'	75 Feet	01/05/10	In-Situ	1,010	14.3	15,800
SB-5 @ 25'	25 Feet	01/06/10	In-Situ	752	<10	6,670
SB-5 @ 65'	65 Feet	01/06/10	In-Situ	1,150	<10	5,100
SB-5 @ 70'	70 Feet	01/06/10	In-Situ	1,290	15.1	18,100
SB-5 @ 75'	75 Feet	01/06/10	In-Situ	630	<10	3,260
SB-5 @ 80'	80 Feet	01/06/10	In-Situ	1,200	<10	9,770
SB-6 @ 25'	25 Feet	01/06/10	In-Situ	887	<10	6,260
SB-6 @ 35'	35 Feet	01/06/10	In-Situ	985	<10	18,000
SB-6 @ 60'	60 Feet	01/06/10	In-Situ	1,570	<10	6,990
SB-6 @ 65'	65 Feet	01/06/10	In-Situ	1,220	10.4	11,000
SB-6 @ 70'	70 Feet	01/06/10	In-Situ	748	<10	2,870
NMOCD Regulatory Standard				-	100	-

Appendices

Appendix A

Pit, Closed-Loop System, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application (Form C-144)

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

Form C-144
July 21, 2008

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit, Closed-Loop System, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application

Type of action: ☐ Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method
☐ Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method
☐ Modification to an existing permit
☒ Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.
Operator: BOPCO, L.P. OGRID #:001801
Address: P.O. Box 2760, Midland, Texas 79702
Facility or well name: G.H. Cobb Federal #1
API Number: 30-015-05829 OCD Permit Number:
U/L or Qtr/Qtr M Section 23 Township 20S Range 31E County: Eddy
Center of Proposed Design: Latitude N32°33'11.412 Longitude W103°50'44.304 NAD: ☐1927 ☐ 1983
Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
☒ **Pit:** Subsection F or G of 19.15.17.11 NMAC
Temporary: ☐ Drilling ☐ Workover
☒ Permanent ☐ Emergency ☐ Cavitation ☐ P&A
☐ Lined ☒ Unlined Liner type: Thickness _____mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
☐ String-Reinforced
Liner Seams: ☐ Welded ☐ Factory ☐ Other _____ Volume: _____bbl Dimensions: L_____ x W_____ x D_____

3.
☐ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC
Type of Operation: ☐ P&A ☐ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other _____
☐ Lined ☐ Unlined Liner type: Thickness _____mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
Liner Seams: ☐ Welded ☐ Factory ☐ Other _____

4.
☐ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC
Volume: _____bbl Type of fluid: _____
Tank Construction material: _____
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other _____
Liner type: Thickness _____mil ☐ HDPE ☐ PVC ☐ Other _____

5.
☐ **Alternative Method:**
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

6.

Fencing: Subsection D of 19.15.17.11 NMAC *(Applies to permanent pits, temporary pits, and below-grade tanks)*

☐ Chain link, six feet in height, two strands of barbed wire at top *(Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)*

☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet

☐ Alternate. Please specify_____

7.

Netting: Subsection E of 19.15.17.11 NMAC *(Applies to permanent pits and permanent open top tanks)*

☐ Screen ☐ Netting ☐ Other_____

☐ Monthly inspections (If netting or screening is not physically feasible)

8.

Signs: Subsection C of 19.15.17.11 NMAC

☒ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

Signed in compliance with 19.15.3.103 NMAC

9.

Administrative Approvals and Exceptions:

Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

Please check a box if one or more of the following is requested, if not leave blank:

☐ Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval.

☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

10.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. **Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.**

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to temporary, emergency, or cavitation pits and below-grade tanks)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No ☐ NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to permanent pits)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No ☐ NA
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ No

11.
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- ☐ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

12.
Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
- ☐ Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____

☐ Previously Approved Operating and Maintenance Plan API Number: _____ *(Applies only to closed-loop system that use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)*

13.
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H_2S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

14.
Proposed Closure: 19.15.17.13 NMAC
Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

Type: ☐ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☒ Permanent Pit ☐ Below-grade Tank ☐ Closed-loop System ☐ Alternative

Proposed Closure Method: ☒ Waste Excavation and Removal
- ☐ Waste Removal (Closed-loop systems only)
- ☐ On-site Closure Method (Only for temporary pits and closed-loop systems)
  - ☐ In-place Burial ☐ On-site Trench Burial
- ☐ Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

15.
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

- ☒ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☒ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- ☒ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- ☒ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☒ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
- ☒ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

16.

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)

Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please provide the information below) ☐ No

Required for impacted areas which will not be used for future service and operations:

☐ Soil Backfill and Cover Design Specifications - - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC

☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

17.

Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC

Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 50 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ No

18.

On-Site Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC

☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC

☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC

☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)

☐ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC

☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19.

Operator Application Certification:

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): Steve Johnson Title: SR. Production

Signature: [signature] Date: 7/1/09

e-mail address: Telephone: (432) 683-2277

20.

OCD Approval: ☐ Permit Application (including closure plan) ☐ Closure Plan (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature: _____ **Approval Date:** _____

Title: _____ **OCD Permit Number:** _____

21.

Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC

Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

☐ **Closure Completion Date:** _____

22.

Closure Method:

☒ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)

☐ If different from approved plan, please explain.

23.

Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:

Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

Required for impacted areas which will not be used for future service and operations:

☐ Site Reclamation (Photo Documentation)

☐ Soil Backfilling and Cover Installation

☐ Re-vegetation Application Rates and Seeding Technique

24.

Closure Report Attachment Checklist: ***Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.***

☐ Proof of Closure Notice (surface owner and division)

☐ Proof of Deed Notice (required for on-site closure)

☐ Plot Plan (for on-site closures and temporary pits)

☐ Confirmation Sampling Analytical Results (if applicable)

☐ Waste Material Sampling Analytical Results (required for on-site closure)

☐ Disposal Facility Name and Permit Number

☐ Soil Backfilling and Cover Installation

☐ Re-vegetation Application Rates and Seeding Technique

☐ Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude _____ Longitude _____ NAD: ☐1927 ☐ 1983

25.

Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): Title:

Signature: _____ Date: _____

e-mail address: Telephone:

Appendix B

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

RECEIVED
DEC - 7 2009
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

30-015-05829

Release Notification and Corrective Action

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: G.H. Cobb Federal #1	Facility Type E&P

Surface Owner Federal	Mineral Owner Federal	Lease No.30-015-05829

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
M	23	20S	31E					Eddy

Latitude N 32.33'11.412 **Longitude W 103.50'44.304**

NATURE OF RELEASE

Type of Release: Produced water, and crude oil sediment	Volume of Release: Un-known	Volume Recovered: 0
Source of Release: Un-lined evaporation pit	Date and Hour of Occurrence Pre 2009	Date and Hour of Discovery 7/1/09
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
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.* Operation of the pit ceased prior to 7/1/09, approximately 4000 cubic yards of soil has been removed

Describe Area Affected and Cleanup Action Taken.*Pasture land measuring approximately 80 ft. by 80ft.
A remediation closure plan was submitted to the NMOCD on 11/20/09. The area will be partially backfilled, an air rotary rig will be used to define the vertical and horizontal extent of the pit area. A complete remediation and closure plan will be submitted based on the results of the core samples. The pit will be closed under the guidance of the NMOCD pit closure guidelines.

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

Signature: Tony Savoie

Printed Name: Tony Savoie

Title: Waste Mgmt.& Remediation Specialist

E-mail Address: TASavoie@BassPet.com

Date: 12/7/09 Phone:432-556-8730

OIL CONSERVATION DIVISION

Approved by District Supervisor: Signed By Mike Bratcher

Approval Date: MAR 24 2010 Expiration Date:

Conditions of Approval:
REMEDIATION per OCD Rules and Guidelines. SUBMIT REMEDIATION PROPOSAL BY: Investigation is ongoing as of 3/24/10

Attached ☐

2RP-369

* Attach Additional Sheets If Necessary

pMLB 0934455618

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
DEC 21 2011
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 GH Cobb Federal #1	Facility Type E&P

Surface Owner Federal	Mineral Owner Federal	Lease No. 30-015-05829

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
M	23	20S	31E					Eddy

Latitude 32° 33' 11.412" North **Longitude** 103° 50' 44.304 West

NATURE OF RELEASE

Type of Release Produced water and crude oil sediment	Volume of Release Unknown	Volume Recovered 0
Source of Release Un-lined evaporation pit	Date and Hour of Occurrence Pre 2009	Date and Hour of Discovery 7/1/09
Was Immediate Notice Given? Yes X No Not Required	If YES, To Whom?	
By Whom? Tony Savoie	Date and Hour	
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:* Operation of the pit ceased prior to 7/1/09. Approximately 4000 cubic yards of soil has been removed.

Describe Area Affected and Cleanup Action Taken.* Pasture land measuring approximately 80 ft. by 80 ft. The site was remediated as per NMOCD recommended guidelines. Please reference the attached *Remediation Summary & Soil Closure Request* for remediation details.

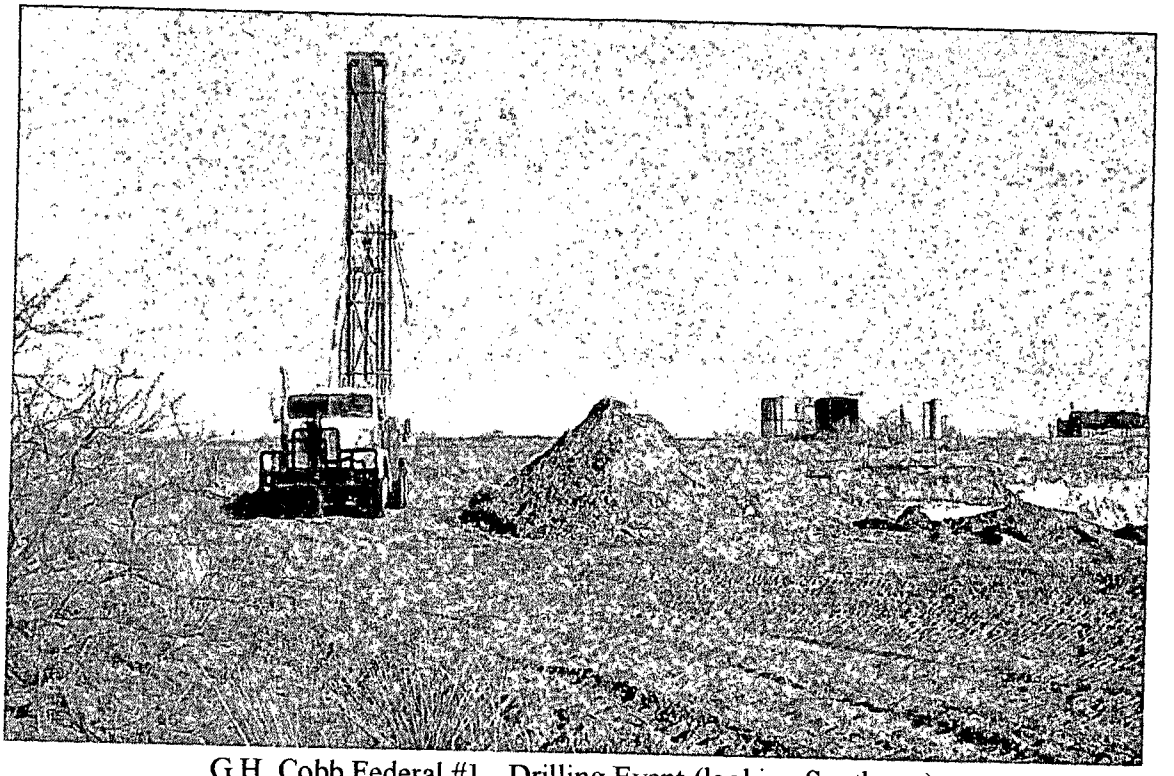
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases, which may endanger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

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

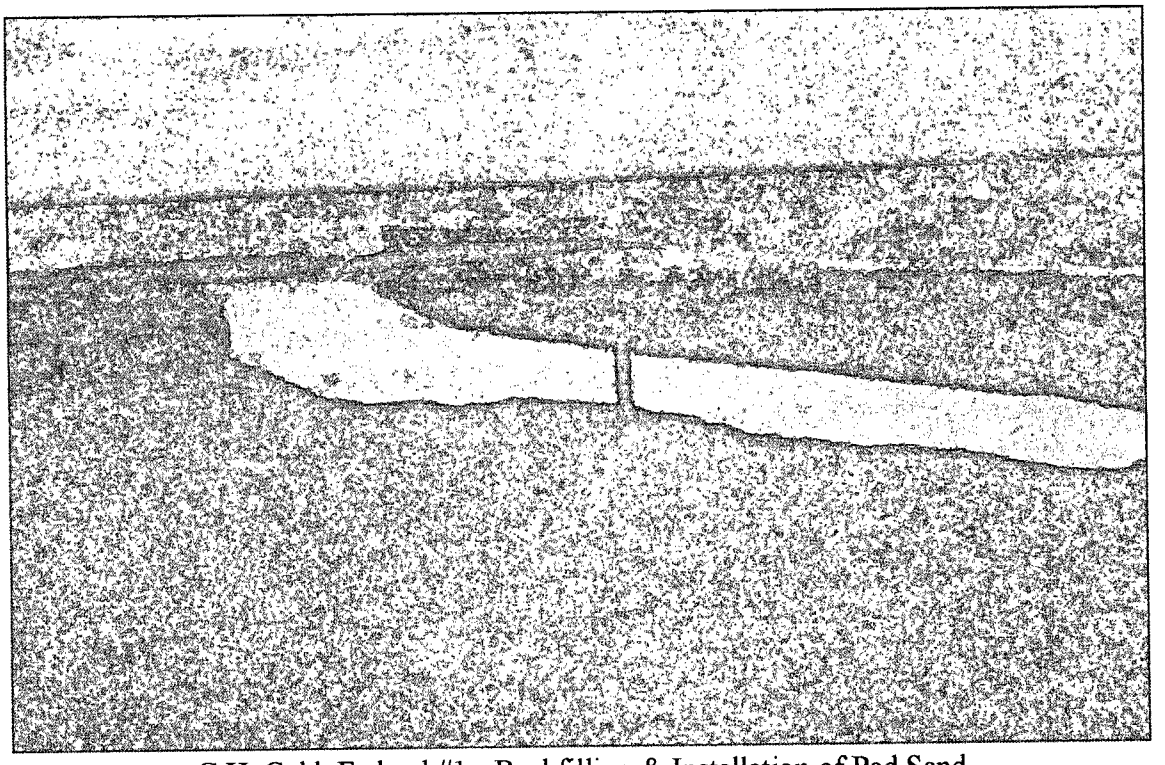
Appendix C

Photographs

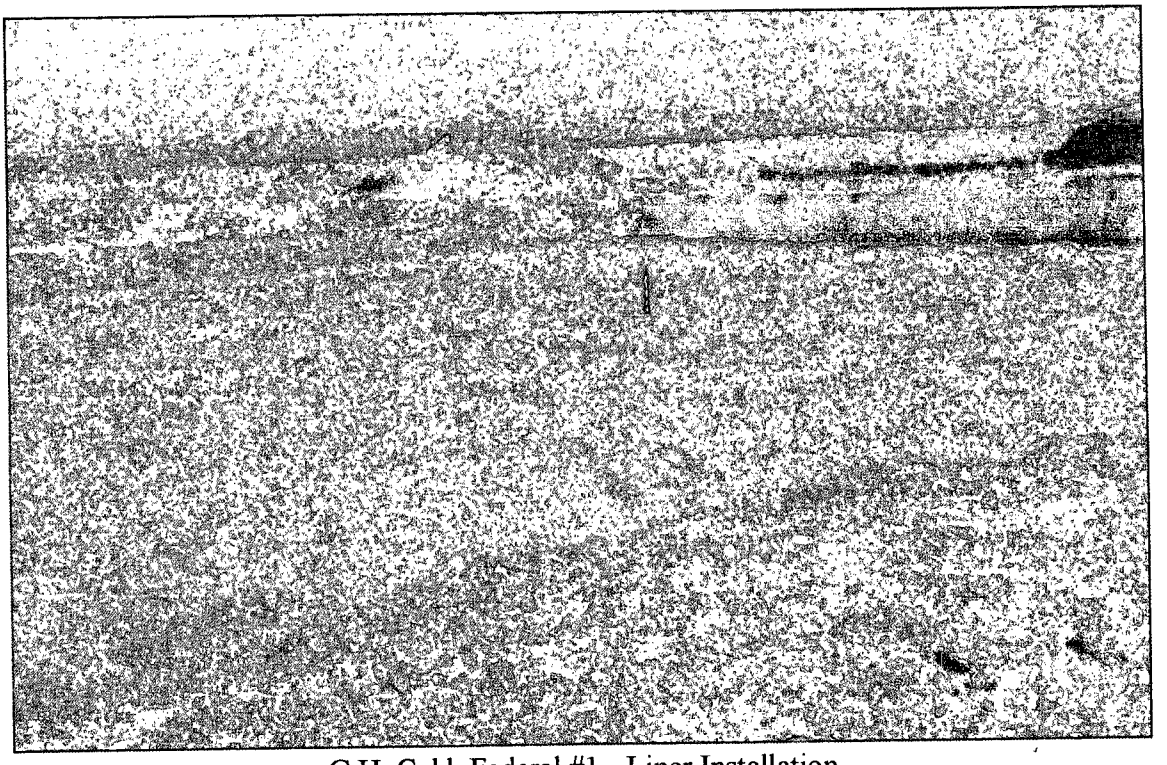
G.H. Cobb Federal #1 - Excavation (prior to backfilling)



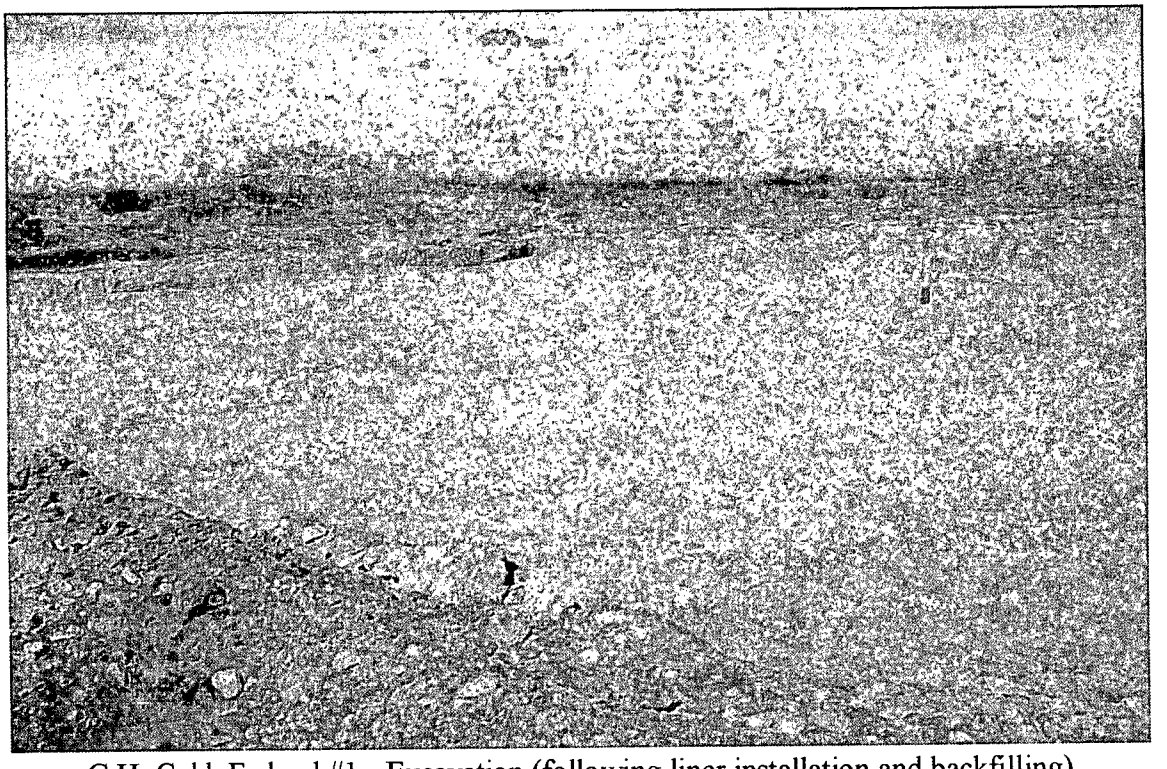
G.H. Cobb Federal #1 - Drilling Event (looking Southeast)



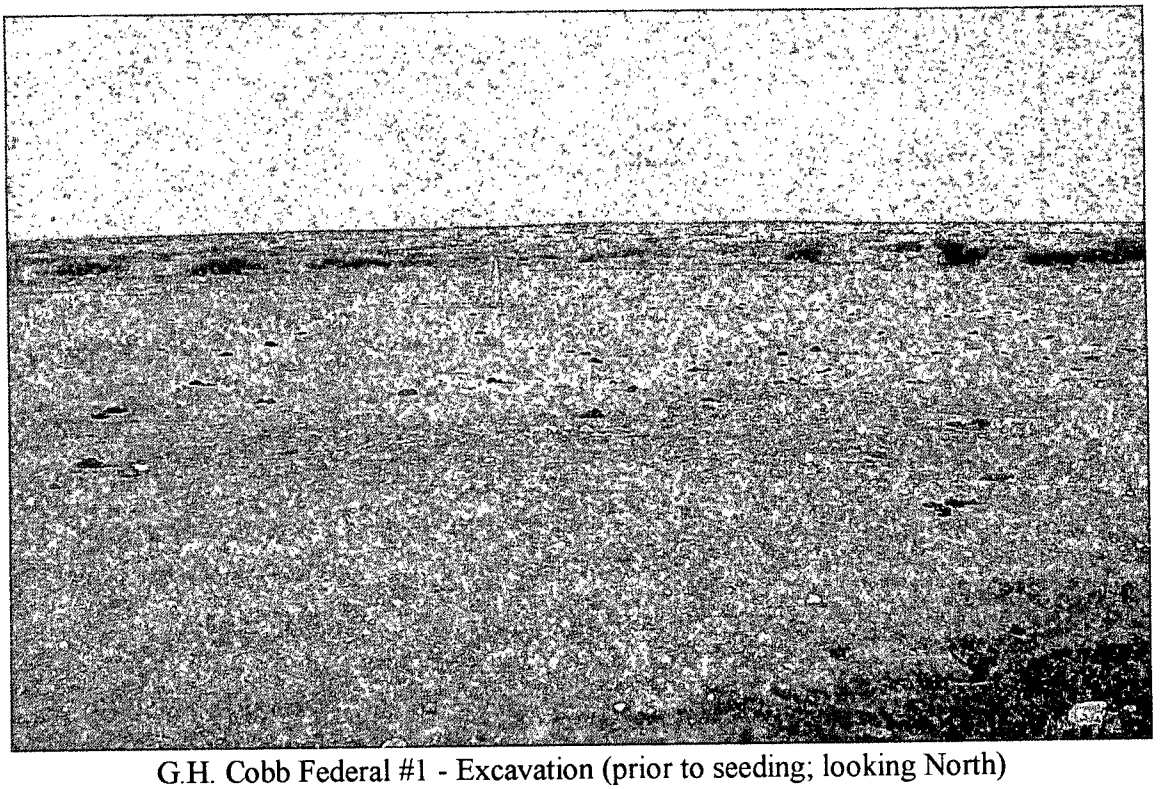
G.H. Cobb Federal #1 - Backfilling & Installation of Pad Sand



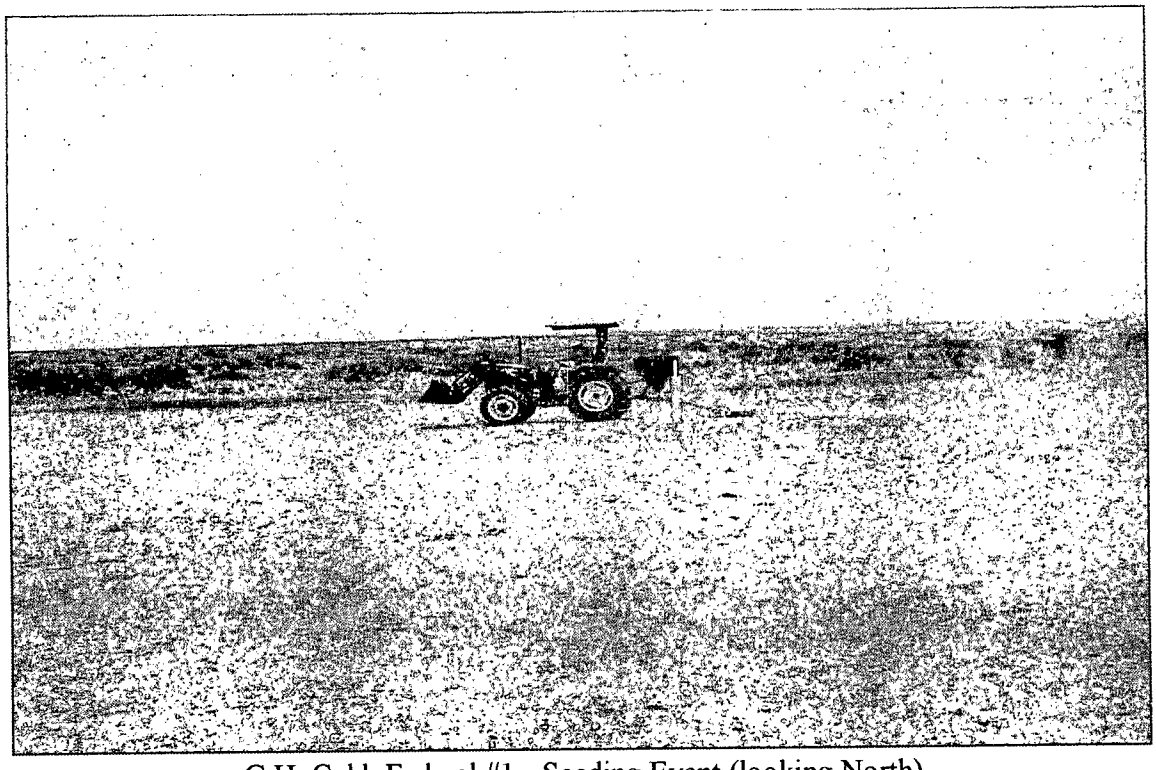
G.H. Cobb Federal #1 - Liner Installation



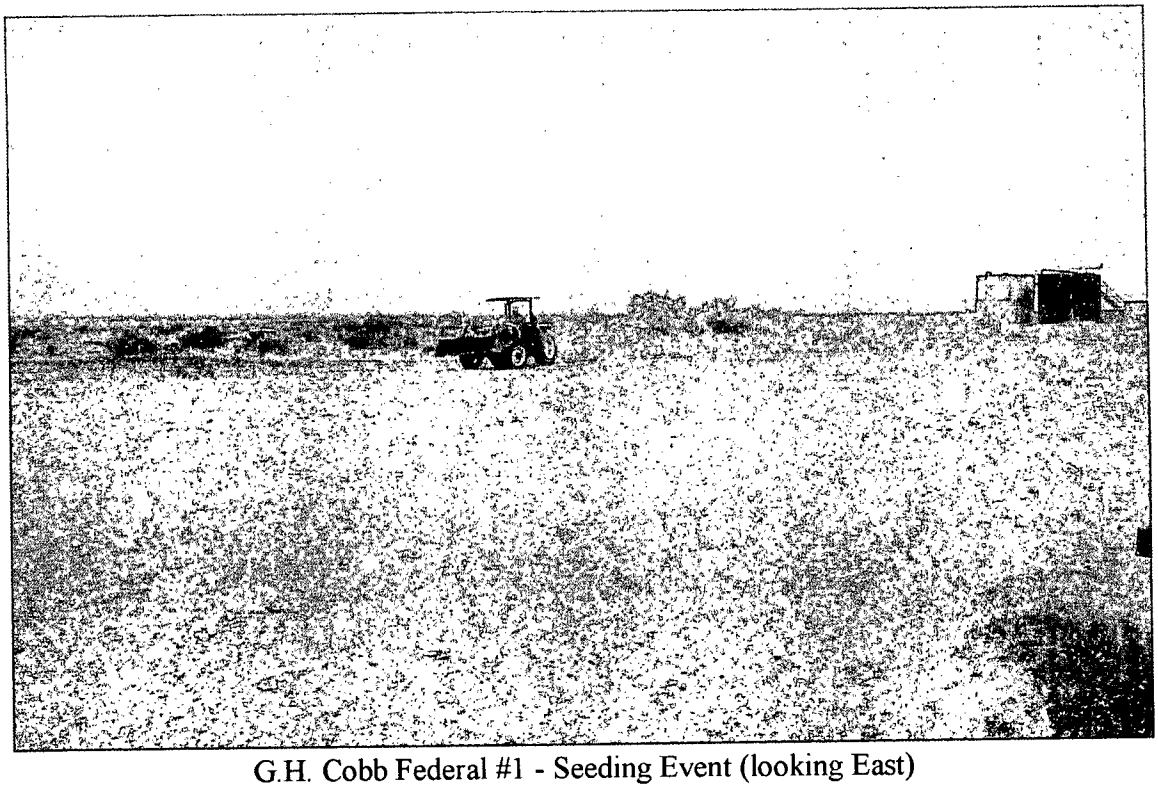
G.H. Cobb Federal #1 - Excavation (following liner installation and backfilling)



G.H. Cobb Federal #1 - Excavation (prior to seeding; looking North)



G.H. Cobb Federal #1 - Seeding Event (looking North)



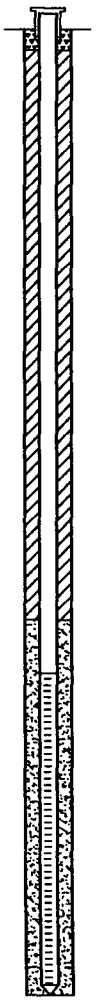
G.H. Cobb Federal #1 - Seeding Event (looking East)

Appendix D

Soil Boring & Monitor Well Logs

Monitor Well MW-1

Depth below ground surface	Soil Columns	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
		ND		None	None	Surface - Sand, brown, some organics, moist
				None	None	
		368				
				None	None	0 - 14' - Caliche, tan, dry
		368	7.2			
				None	None	
		180	9.3			
				None	None	14 - 20' - Sand, brown, very fine grained with sandstone, dry
		180	2.8			
				None	None	20 - 28' - Sand, brown, coarse grained with sandstone,dry
		368	0.7			
				None	None	28 - 30' - Clay, dark red
		520				
				None	None	30 - 38' - Sand and Sandstone, brown, dry
		1,084				
				None	None	38 - 40' - Clay, red
		708				
				None	None	40 - 46' - Sandstone, light red in clay matrix, dry
		180				
				None	None	
		152	5.2			
				None	None	46 - 59' - Sand and sandstone, light red to light grey with some gypsum in red clay matrix, dry, layers alternating
		180	3.1			
				None	None	
		244	2.0			
				None	None	59 - 65' - Clay, red, silty with some sandstone at 63'
		7,832	3.1			
				None	None	65 - 72' - Sandstone, red in clay matrix with some white gypsum stringers
		4,092	3.0			
				None	None	
		1,452	2.9			
				None	None	72 - 80 - Clay, red to grey, silty, layers alternating
		848	3.6			
				None	None	
		580	3.3			
				None	None	80 - 90' - Clay and sandstone, red to grey, layers alternating, wet



Monitor Well MW-1

Date Drilled December 30, 2009
Thickness of Bentonite Seal 53 Ft
Depth of Exploratory Boring 90 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.

- Grout Surface Seal
- Bentonite Pellet Seal
- Sand Pack
- Screen

Completion Notes

1.) The monitor well was advanced on date using air rotary drilling techniques.
2.) The well was constructed with 2" ID, 0.010 inch factory slotted, threaded joint, schedule 40 PVC pipe.
3.) The well is protected with a locked stick up steel cover and compression cap.
4.) The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.

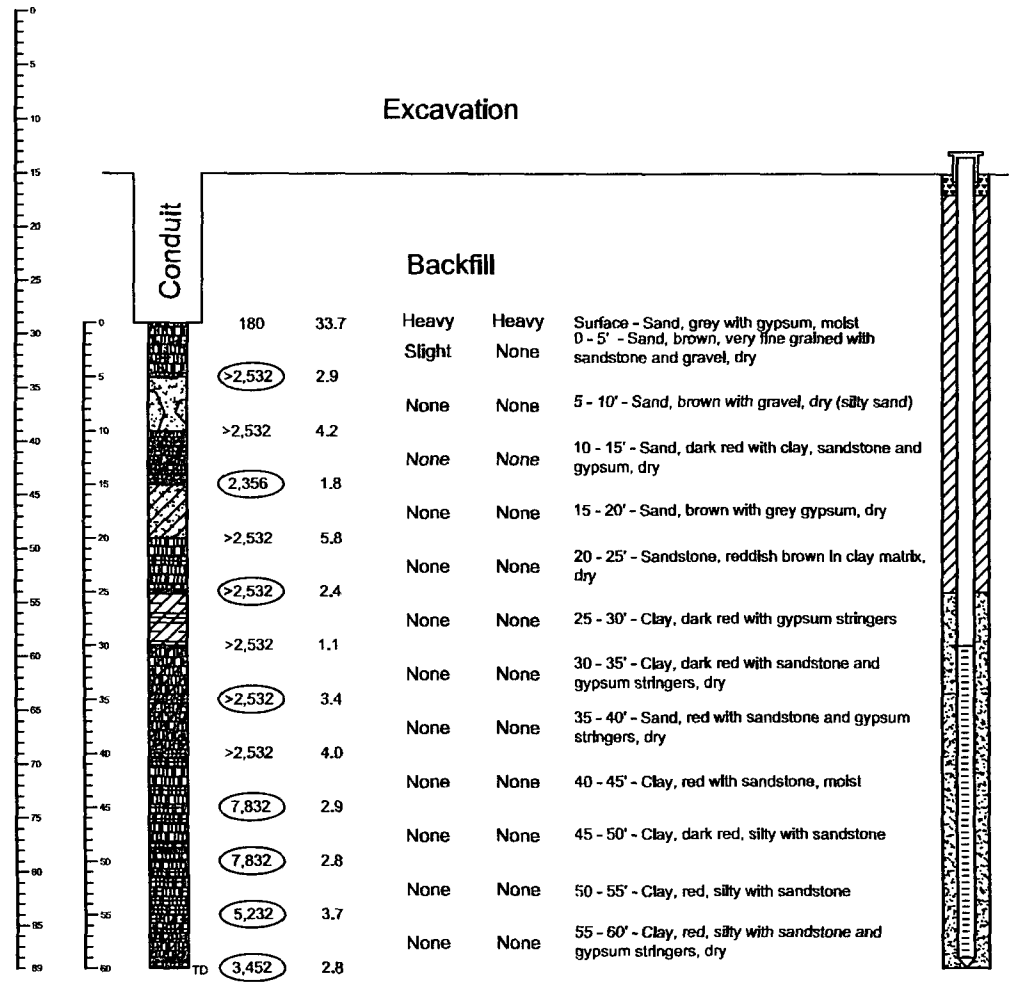
Monitor Well Details
MW-1
Soil Boring SB-1

BOPCO
GH Cobb Fed #1
Eddy County, New Mexico

Basin Environmental Consulting

Prep By: CDS	Checked By: CJB
May 12, 2010	

Monitor Well MW-2



Depth below ground surface	Drilling Depth	Soil Columns	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
			180	33.7	Heavy	Heavy	Surface - Sand, grey with gypsum, moist
			>2,532	2.9	Slight	None	0 - 5' - Sand, brown, very fine grained with sandstone and gravel, dry
			>2,532	4.2	None	None	5 - 10' - Sand, brown with gravel, dry (silty sand)
			2,356	1.8	None	None	10 - 15' - Sand, dark red with clay, sandstone and gypsum, dry
			>2,532	5.8	None	None	15 - 20' - Sand, brown with grey gypsum, dry
			>2,532	2.4	None	None	20 - 25' - Sandstone, reddish brown in clay matrix, dry
			>2,532	1.1	None	None	25 - 30' - Clay, dark red with gypsum stringers
			>2,532	3.4	None	None	30 - 35' - Clay, dark red with sandstone and gypsum stringers, dry
			>2,532	4.0	None	None	35 - 40' - Sand, red with sandstone and gypsum stringers, dry
			7,832	2.9	None	None	40 - 45' - Clay, red with sandstone, moist
			7,832	2.8	None	None	45 - 50' - Clay, dark red, silty with sandstone
			5,232	3.7	None	None	50 - 55' - Clay, red, silty with sandstone
			3,452	2.8	None	None	55 - 60' - Clay, red, silty with sandstone and gypsum stringers, dry

Monitor Well MW-2

Date Drilled: December 30, 2009
Thickness of Bentonite Seal: 53 Ft
Depth of Exploratory Boring: 60 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.

- Grout Surface Seal
- Bentonite Pellet Seal
- Sand Pack
- Screen

Completion Notes

1.) The monitor well was advanced on date using air rotary drilling techniques.
2.) The well was constructed with 2" ID, 0.010 inch factory slotted, threaded joint, schedule 40 PVC pipe.
3.) The well is protected with a locked stick up steel cover and compression cap.
4.) The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.

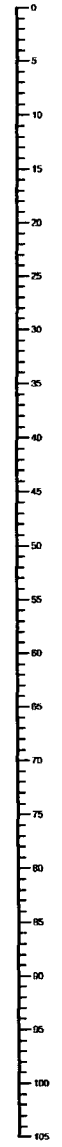
Monitor Well Details
MW-2
Soil Boring SB-2

BOPCO
GH Cobb Fed #1
Eddy County, New Mexico

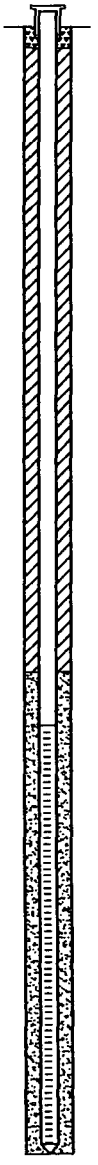
Basin Environmental Consulting

Prep By: CDS	Checked By: CJB
May 13, 2010	

Monitor Well MW-3



Depth below ground surface	Soil Columns	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
0		356		None	None	Surface - 2' - Sand, brown, clayey, moist
5		856		None	None	2 - 8' - Caliche, white, soft, dry
10		ND		None	None	8 - 10' - Sand, brown with caliche nodules, dry
15		188		None	None	10 - 12' - Caliche, white, sandy, soft, dry 12 - 15' - Sand, brown fine grained with caliche nodules
20		ND		None	None	15 - 25' - Caliche, white, soft, sandy, dry
25		356		None	None	
30		436		None	None	25 - 35' - Sand and sandstone, brown with some caliche nodules, harder at 27' bgs
35		ND		None	None	35 - 40' - Sand and sandstone, brown with some clay
40		188		None	None	40 - 45' - Sand and sandstone, brown to grey with some clay and some gypsum stringers
45		ND		None	None	45 - 55' - Sand and sandstone,light brown with some clay and some gypsum stringers
50		ND		None	None	
55		252		None	None	
60		ND		None	None	55 - 75' - Sandstone, light brown with some gypsum stringers
65		ND		None	None	
70		ND		None	None	
75		ND		None	None	
80		ND		None	None	75 - 105' - Sandstone, light brown with some gypsum stringers in red clay matrix
85		ND		None	None	
90				None	None	
95				None	None	
100				None	None	
105				None	None	



Monitor Well MW-3

Date Drilled January 12, 2010
Thickness of Bentonite Seal 58 Ft
Depth of Exploratory Boring 105 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.

Grout Surface Seal
Bentonite Pellet Seal
Sand Pack
Screen

Completion Notes

1.) The monitor well was advanced on date using air rotary drilling techniques.
2.) The well was constructed with 2" ID, 0.010 inch factory slotted, threaded joint, schedule 40 PVC pipe.
3.) The well is protected with a locked stick up steel cover and compression cap.
4.) The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.

Monitor Well Details
MW-3
Soil Boring SB-8

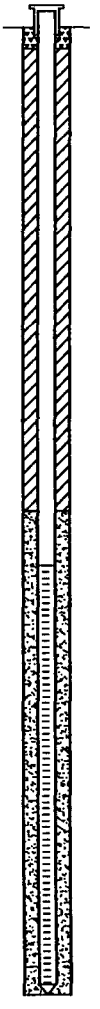
BOPCO
GH Cobb Fed #1
Eddy County, New Mexico

Basin Environmental Consulting

Prep By: CDS	Checked By: CJB
May 12, 2010	

Monitor Well MW-4

Depth below ground surface	Soil Columns	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
0		ND	9.3	None	None	Surface - Sand, brown, clayey, moist
				None	None	0 - 5' - Sand, light brown, very fine grained, soft
5		(ND)	7.8			5 - 7' - Caliche, white, soft, dry
				None	None	
10		ND	6.2			
				None	None	7 -18' - Sand, light brown with caliche nodules
15		(180)	5.6			
				None	None	
20		128	7.2			
				None	None	18 -30' - Sandstone, white to light red
25		(212)	6.4			
				None	None	
30		ND	5.6			
				None	None	30 - 35' - Sandstone, white to light red in red clay matrix
35		(ND)	4.2			
				None	None	
40		ND	5.5			35 - 45' - Sandstone, light red with some hard intervals
				None	None	
45		(ND)	5.7			
				None	None	45 - 50' - Sandstone, light red with some hard intervals in clay matrix
50		ND	5.2			
				None	None	
55		(ND)	6.2			
				None	None	50 - 65' - Sandstone, light red with some hard intervals in clay matrix and some gypsum intervals
60		ND	6.3			
				None	None	
65		(ND)	2.5			
				None	None	65 - 75' - Sandstone, light brown to light red, silty, some very hard intervals, moist at 70 feet bgs
70		(5,672)	4.6			
				None	None	
75		(848)	4.8			
				None	None	75 - 80 - Sandstone, red, silty, hard
80		(3,452)	4.9			
				None	None	
85		>2,424	3.3			80 - 90' - Sandstone, red to brown, hard with clay, moist
90		3,452		None	None	



Monitor Well MW-4

Date Drilled: January 13, 2010
Thickness of Bentonite Seal: 43 Ft
Depth of Exploratory Boring: 90 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.

Grout Surface Seal
Bentonite Pellet Seal
Sand Pack
Screen

Completion Notes

1.) The monitor well was advanced on date using air rotary drilling techniques.
2.) The well was constructed with 2" ID, 0.010 inch factory slotted, threaded joint, schedule 40 PVC pipe.
3.) The well is protected with a locked stick up steel cover and compression cap.
4.) The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.

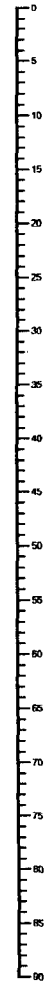
Monitor Well Details
MW-4
Soil Boring SB-11

BOPCO
GH Cobb Fed #1
Eddy County, New Mexico

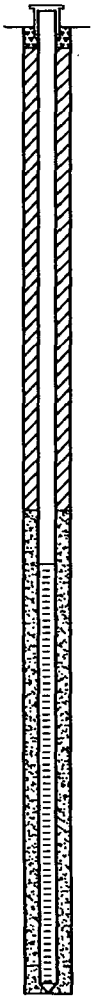
Basin Environmental Consulting

Prep By: CDS	Checked By: CJB
May 12, 2010	

Monitor Well MW-5



Depth below ground surface	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
	ND		None	None	Surface - Sand, brown with organics, damp
			None	None	
5	ND				0 - 10' - Sand, tan very fine grained with caliche, soft, dry
			None	None	
10	ND				
			None	None	10 - 15' - Sand, brown, very fine grained with *caliche nodules and sandstone, dry*
15	188				
			None	None	15 - 20' - Sand, brown, very fine grained with sandstone, soft, dry, hard tan sandstone at 22' bgs
20	220				
			None	None	20 - 25' - Sandstone, tan with red clay, dry with gypsum stringers
25	160				
			None	None	25 - 30' - Sand, red to tan with limited clay and sandstone, dry
30	220				
			None	None	30 - 35' - Sand, brown with dense sandstone, dry
35	ND				
			None	None	35 - 40' - Sandstone, brown to reddish brown, dry
40	ND				
			None	None	
45	ND				40 - 50' - Sand, brown with sandstone, dry
			None	None	
50	ND				
			None	None	50 - 55' - Sandstone, brown with some red clay, damp
55	160				
			None	None	55 - 60' - Sandstone, *reddish brown with clay, sandy at 61' bgs*
60	3,164				
			None	None	
65	3,760				
			None	None	
70	1,412				60 - 80' - Sandstone, red with sandy clay, damp
			None	None	
75	2,080				
			None	None	
80	4,860				
			None	None	80 - 85' - Sandstone, dark red with silty sandstone
85	2,632				
			None	None	85 - 90' - Sandstone, dark red, silty
90	1,120				



Monitor Well MW-5

Date Drilled January 14, 2010
Thickness of Bentonite Seal 43 Ft
Depth of Exploratory Boring 90 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.

Grout Surface Seal
Bentonite Pellet Seal
Sand Pack
Screen

Completion Notes

1.) The monitor well was advanced on date using air rotary drilling techniques.
2.) The well was constructed with 2" ID, 0.010 inch factory slotted, threaded joint, schedule 40 PVC pipe.
3.) The well is protected with a locked stick up steel cover and compression cap.
4.) The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.

Monitor Well Details
MW-5
Soil Boring SB-12

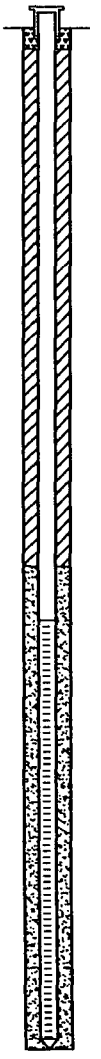
BOPCO
GH Cobb Fed #1
Eddy County, New Mexico

Basin Environmental Consulting

Prep By: CDS	Checked By: CJB
May 12, 2010	

Monitor Well MW-6

Depth below ground surface	Soil Columns	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
0		ND	X	None	None	Surface - Sand, brown, some organics, dry
				Slight	None	
5		160	X			
				Slight	None	0 - 14' - Caliche, white, soft, dry
10		160	X			
				Slight	None	
15		ND	X			
				Slight	None	14 - 20' - Sand, brown with sandstone, soft, dry
20		ND	X			
				None	None	20 - 25' - Sandstone, brown, dry
25		ND	X			
				None	None	25 - 30' - Sandstone, reddish brown to tan, silty, dry
30		ND	X			
				None	None	30 - 35' - Sandstone, reddish brown to brown, dry with some clay
35		132	X			
				None	None	35 - 40' - Sandstone, reddish brown, silty, dry
40		ND	X			
				None	None	40 - 45' - Sandstone, reddish brown with some clay and gypsum stringers, dry
45		132	X			
				None	None	45 - 50' - Sandstone, reddish brown to tan, dry
50		ND	X			
				None	None	50 - 60' - Sandstone, brown, dry
55		ND	X			
				None	None	
60		ND	X			
				None	None	
65		ND	X			
				None	None	60 - 80' - Sandstone, reddish brown with some clay, dry, damp to moist
70		ND	X			
				None	None	
75		ND	X			
				None	None	
80		ND	X			
				None	None	
85		ND	X			
				None	None	80 - 95' - Sandstone, reddish brown to dark red, silty
90		ND	X			
				None	None	
95		ND	X			



Monitor Well MW-6

Date Drilled: January 15, 2010
Thickness of Bentonite Seal: 47 Ft
Depth of Exploratory Boring: 95 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.

- Grout Surface Seal
- Bentonite Pellet Seal
- Sand Pack
- Screen

Completion Notes

1.) The monitor well was advanced on date using air rotary drilling techniques.
2.) The well was constructed with 2" ID, 0.010 inch factory slotted, threaded joint, schedule 40 PVC pipe.
3.) The well is protected with a locked stick up steel cover and compression cap.
4.) The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.

Monitor Well Details
MW-6
Soil Boring SB-13

BOPCO
GH Cobb Fed #1
Eddy County, New Mexico

Basin Environmental Consulting

Prep By: CDS	Checked By: CJB
May 12, 2010	

Soil Boring SB-3

Depth below ground surface	Drilling Depth	Soil Columns	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
							Excavation
	0		708	4.5	None	None	Surface - Caliche, tan, sandy, dry
					None	None	0 - 5' - Sand, brown, very fine grained with sandstone, dry
	5		(416)	3.0			
					None	None	5 -10' - Sandstone, brown, silty, dry
	10		416	2.7			
					None	None	10 - 15' - Sand, brown with sandstone, dry
	15		(416)	4.8			
					None	None	15 - 25' - Sand, brown, very fine grained with sandstone, dry
	20		7,224	3.9			
					None	None	
	25		(3,452)	3.8			
					None	None	
	30		3,452	2.3			25 - 35' - Clay, red, silty with sandstone, dry
					None	None	
	35		(6,664)	6.8			
					None	None	35 - 40' - Clay, red with sandstone and some gypsum, some moisture
	40		(9,232)	6.4			
					None	None	40 - 45' - Clay, dark red, silty with sandstone and gypsum stringers
	45		(6,664)	3.3			
					None	None	45 - 50' - Clay, dark red, silty with sandstone,moist
	50		2,892	2.9			
					None	None	50 - 55' - Clay, dark red, damp
	55		(3,452)	2.7			
					None	None	55 - 60' - Clay, dark red with gypsum stringers, damp
	60	TD	(3,452)	2.5			

Soil Boring SB-3

Date Drilled January 5, 2010
Thickness of Bentonite Seal 60 Ft
Depth of Exploratory Boring 60 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

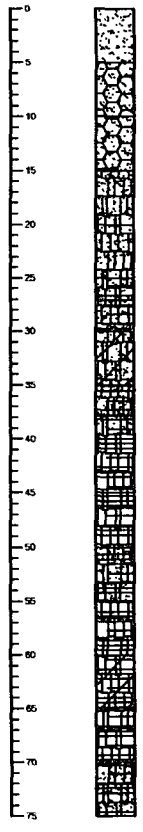
1.) The monitor well was advanced on date using air rotary drilling techniques.
2.) The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.

Soil Boring SB-3
BOPCO
GH Cobb Fed #1
Eddy County, New Mexico

Basin Environmental Consulting

Prep By: CDS	Checked By: CJB
May 14, 2010	

Soil Boring SB-4



Depth below ground surface	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
	ND	1.7	None	None	
		1.8	None	None	Surface - 5' - Sand, brown, very fine grained
		1.5	None	None	5 - 10' - Caliche, tan, sandy, dry
	128				
		1.8	None	None	10 - 15' - Sand, brown, very fine grained, with caliche, dry
	180				
		2.5	None	None	15 - 20' - Sand, brown, with sandstone, dry
	212				
		3.8	None	None	20 - 25' - Sand, brown, very fine grained with sandstone, dry
	3,452				
		4.1	None	None	25 - 30' - Sand, brown, very fine grained with some clay and sandstone,dry
	6,148				
		2.2	None	None	30 - 35' - Sand and sandstone, brown with gypsum stringers, dry
	1,960				
		2.3	None	None	35 - 40' - Clay, reddish brown, sandy with sandstone, dry
	5,232				
		3.7	None	None	40 - 45' - Sandstone, reddish brown, dense, hard with clay
	2,636				
		5.9	None	None	45 - 50' - Sandstone, red in clay matrix, dry
	6,148				
		4.3	None	None	50 - 55' - Sand, brown with sandstone and some clay, dry
	2,396				
		3.6	None	None	55 - 60' - Sandstone, reddish brown, coarse grained with clay matrix
	13,028				
		2.0	None	None	60 - 65' - Clay, red, silty with sandstone and grey gypsum, damp
	11,920				
		4.0	None	None	65 - 70' - Clay, dark red with sandstone, damp
	11,920				
		2.4	None	None	70 - 75' - Clay, dark red, silty with sandstone, wet
	5,672				

Boring SB-4

Date Drilled: January 5, 2010
Thickness of Bentonite Seal: 75 Ft
Depth of Exploratory Boring: 75 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 monitor well 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.

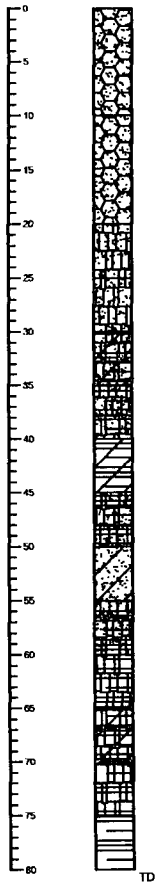
Soil Boring SB-4

BOPCO
GH Cobb Fed #1
Eddy County, New Mexico

Basin Environmental Consulting

Prep By: CDS	Checked By: CJB
May 14, 2010	

Soil Boring SB-5



Depth below ground surface	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
0	ND	1.2	None	None	Surface - Sand, brown with organics, dry
		1.8	None	None	
5	676				0 - 10' - Sand, tan with caliche nodules, dry
		1.7	None	None	
10	676				
		1.2	None	None	
15	572				10 - 20' - Sand, tan, very fine grained, with caliche, dry
		1.9	None	None	
20	396				
		1.9	None	None	20 - 25' - Sand, brown with sandstone, dry
25	1,340				
		0.7	None	None	25 - 30' - Sand, brown, very fine grained with sandstone,dry
30	436				
		1.5	None	None	30 - 35' - Sand, reddish brown with clay, sandstone and gypsum stringers, layering, dry
35	1,244				
		2.2	None	None	35 - 40' - Sand, red with limited clay and sandstone, dry
40	1,340				
		1.9	None	None	40 - 45' - Clay, red with gypsum, dry
45	5,232				
		2.1	None	None	45 - 50' - Sand, reddish brown with clay and sandstone, dry
50	4,092				
		2.3	None	None	50 - 55' - Sand, brown, very fine grained with grey gypsum, layering, dry
55	3,164				
		1.7	None	None	55 - 60' - Sand, brown, very fine grained with sandstone and some clay, dry
60	4,444				
		1.9	None	None	60 - 65' - Sandstone, reddish brown in clay matrix, dry
65	6,664				
		2.0	None	None	65 - 70' - Sandstone, dark red with clay and grey gypsum, layered, dry
70	856				
		1.5	None	None	70 - 75' - Sandstone, reddish brown in silty clay, dry
75	3,164				
		1.1	None	None	75 - 80' - Clay, dark red, moist
80	TD 13,028				

Boring SB-5

Date Drilled: January 5, 2010
Thickness of Bentonite Seal: 80 Ft
Depth of Exploratory Boring: 80 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.

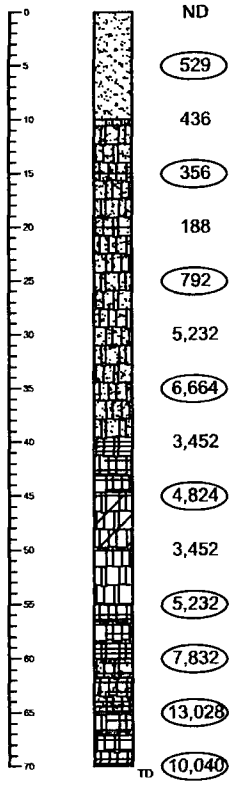
Completion Notes

1.) The monitor well 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
GH Cobb Fed #1
Eddy County, New Mexico
Basin Environmental Consulting

Prep By: CDS	Checked By: CJB
May 14, 2010	

Soil Boring SB-6



Depth below ground surface	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
0	ND	1.2	None	None	Surface - Sand, reddish brown, with caliche nodules
		2.9	None	None	
5	529				0 - 10' - Sand, tan with soft caliche, dry
		2.5	None	None	
10	436				
		3.7	None	None	10 - 15' - Sand, brown with sandstone, dry
15	356				
		4.5	None	None	15 - 20' - Sand, tan to brown, very fine grained with sandstone, dry
20	188				
		5.2	None	None	
25	792				
		3.6	None	None	20 - 40' - Sand, brown, very fine grained with sandstone, dry
30	5,232				
		2.8	None	None	
35	6,664				
		7.9	None	None	
40	3,452				
		2.3	None	None	40 - 45' - Sandstone, dark red in clay mattix, dry
45	4,824				
		3.1	None	None	45 - 50' - Sandstone, layered brown to grey, with gypsum, dry
50	3,452				
		3.1	None	None	50 - 55' - Sandstone, brown, very fine grained, dry
55	5,232				
		5.2	None	None	55 - 60' - Clay, reddish brown, silty with sandstone, dry
60	7,832				
		4.4	None	None	60 - 65' - Clay, dark red, sandy with sandstone, dry
65	13,028				
		1.9	None	None	65 - 70' - Clay, dark red, sandstone layering, moist
TD	10,040				

Soil Boring SB-6

Date Drilled: January 6, 2010
Thickness of Bentonite Seal: 70 Ft
Depth of Exploratory Boring: 70 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 monitor well 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-6

BOPCO
GH Cobb Fed #1
Eddy County, New Mexico

Basin Environmental Consulting

Prep By: CDS	Checked By: CJB
May 14, 2010	

Soil Boring SB-7

Depth below ground surface	Soil Columns	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
0				None	None	
			2.9	None	None	0 - 5' - Sand, tan to grey, very fine grained, moist (snow melt), dry at 6-Inches
5		ND				5 - 8' - Sand, tan to grey, very fine grained with some caliche nodules, dry
			2.5	None	None	8 - 11' - Caliche, white, dry, sandy
10		ND				
			3.7	None	None	11 - 15' - Sand, brown with some caliche layers
15		180				
			4.5	None	None	15 - 22' - Sand, brown with some caliche and red clay
20		180				
			5.2	None	None	22 - 25' - Sand, brown with some caliche
25		324				
			3.6	None	None	25 - 30' - Sandstone, brown, moderately hard
30		6,664				
			2.8	None	None	30 - 34' - Sandstone, brown, moderately hard with some gypsum and clay
35		9,232				
			7.9	None	None	34 - 40' - Clay, red and sandstone, red, very hard with some gypsum
40		3,760				
			2.3	None	None	40 - 52' - Sandstone, brown to red in red clay mattrix, moderate to very hard, thin layering with some gypsum
45		5,232				
			3.1	None	None	
50		3,760				
			3.1	None	None	52 - 55' - Gypsum, white to grey
55		4,444				
			5.2	None	None	55 - 65' - Sandstone, red, moderately hard with red clay mattrix
60		8,500				
			4.4	None	None	
65		2,636				
			1.9	None	None	65 - 70' - Sandstone, red, moderately hard with red clay mattrix and some gypsum stringers
70		2,172				
			1.9			70 - 75' - Sandstone, red, hard, moist
75	TD	10,040				

Soil Boring SB-7

Date Drilled January 11, 2010
Thickness of Bentonite Seal 75 Ft
Depth of Exploratory Boring 75 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 monitor well 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-7

BOPCO
GH Cobb Fed #1
Eddy County, New Mexico

Basin Environmental Consulting

Prep By: CDS	Checked By: CJB
May 14, 2010	

Soil Boring SB-9

Depth below ground surface	Soil Columns	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
				None	None	Surface - Caliche lease road
5		1,000	6.5	None	None	0 - 7' - Caliche, white
10		520	3.7	None	None	7 - 12' - Sand, brown, dry
15		132	4.2	None	None	12 - 15' - Sand, brown with caliche nodules
20 TD		128	3.7	None	None	15 - 20' - Caliche, white and sand, brown with some brown clay

Soil Boring SB-9

Date Drilled January 12, 2010
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 monitor well 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-9	BOPCO GH Cobb Fed #1 Eddy County, New Mexico	Basin Environmental Consulting
	Prep By: CDS	Checked By: CJB
	May 14, 2010	

Soil Boring SB-10

Depth below ground surface	Soil Columns	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain
0				None	None
				None	None
5					
				None	None
10					
				None	None
15					
				None	None
20	TD				

Soil Description

Surface - Sand, light brown, very fine grained with some clay

0 - 20' - Sand, white to light brown to brown with sandstone

Soil Boring SB-10

Date Drilled January 12, 2010
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 monitor well 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-10
BOPCO
GH Cobb Fed #1
Eddy County, New Mexico

Basin Environmental Consulting

Prep By: CDS	Checked By: CJB
May 14, 2010	

Appendix E

Laboratory Analytical Reports

CARDINAL LABORATORIES

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

January 5, 2010

Camille Bryant
Basin Environmental Consulting, LLC.
P.O. Box 381
Lovington, NM 88260

Re: BOPCO 24 511 (Cobb Federal #1)

Enclosed are the results of analyses for sample number H18968, received by the laboratory on 12/31/09 at 9:50 am.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accredited though 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 524.2	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Total Number of Pages of Report: 6 (includes Chain of Custody)

Sincerely,

Celey D. Keene
Laboratory Director

This report conforms with NELAP requirements.

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
BASIN ENVIRONMENTAL CONSULTING, LLC
ATTN: CAMILLE BRYANT
P.O. BOX 381
LOVINGTON, NM 88260
FAX TO: (575) 396-1429

Receiving Date: 12/30/09
Reporting Date: 01/05/10
Project Owner: BOPCO (24511)
Project Name: COBB FEDERAL #1
Project Location: EDDY COUNTY, NM

Sampling Date: 12/30/09
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 4.0°C
Sample Received By: HM
Analyzed By: AB

LAB NUMBER	SAMPLE ID	GRO (C_6-C_{10}) (mg/kg)	DRO (>C_{10}-C_{28}) (mg/kg)	DRO ext. (>C_{28}-C_{35}) (mg/kg)
ANALYSIS DATE		01/04/10	01/04/10	01/04/10
H18968-1	SB-1 @ 5'	<10.0	<10.0	<10.0
H18968-2	SB-1 @ 15'	<10.0	<10.0	<10.0
H18968-3	SB-1 @ 25'	<10.0	40.3	<10.0
H18968-4	SB-1 @ 35'	<10.0	<10.0	<10.0
H18968-5	SB-1 @ 45'	<10.0	<10.0	<10.0
H18968-6	SB-1 @ 55'	<10.0	<10.0	<10.0
H18968-7	SB-1 @ 60'	<10.0	<10.0	<10.0
H18968-8	SB-1 @ 65'	<10.0	<10.0	<10.0
H18968-9	SB-1 @ 70'	<10.0	<10.0	<10.0
H18968-10	SB-1 @ 75'	<10.0	<10.0	<10.0
H18968-11	SB-1 @ 80'	<10.0	<10.0	<10.0
H18968-12	SB-1 @ 85'	<10.0	<10.0	<10.0
H18968-13	SB-1 @ 90'	<10.0	<10.0	<10.0
Quality Control		500	479	-
True Value QC		500	500	-
% Recovery		100	95.8	-
Relative Percent Difference		13.6	1.2	-

METHODS: TPH GRO & DRO: EPA SW-846 8015 M extended. Reported on wet weight.

Lab Director

01/05/10
Date

H18968 TPHEXT BASIN

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
BASIN ENVIRONMENTAL CONSULTING, LLC
ATTN: CAMILLE BRYANT
P.O. BOX 381
LOVINGTON, NM 88260
FAX TO: (575) 396-1429

Receiving Date: 12/31/09
Reporting Date: 01/04/10
Project Number: 24511 (BOPCO)
Project Name: COBB FEDERAL #1
Project Location: EDDY CO., NM

Analysis Date: 01/04/10
Sampling Date: 12/30/09
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 4°C
Sample Received By: HM
Analyzed By: HM

LAB NO.	SAMPLE ID	Cl^- (mg/kg)
H18968-1	SB-1 @ 5'	320
H18968-2	SB-1 @ 15'	128
H18968-3	SB-1 @ 25'	304
H18968-4	SB-1 @ 35'	1,090
H18968-5	SB-1 @ 45'	80
H18968-6	SB-1 @ 55'	64
H18968-7	SB-1 @ 60'	112
H18968-8	SB-1 @ 65'	8,200
H18968-9	SB-1 @ 70'	4,480
H18968-10	SB-1 @ 75'	1,230
H18968-11	SB-1 @ 80'	896
H18968-12	SB-1 @ 85'	624
H18968-13	SB-1 @ 90'	144
Quality Control		500
True Value QC		500
% Recovery		100
Relative Percent Difference		< 0.1

METHOD: Standard Methods	4500-Cl B

Note: Analyses performed on 1:4 w:v aqueous extracts.

Chemist

01/05/10
Date

H18968 Basin Environmental

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
BASIN ENVIRONMENTAL CONSULTING, LLC
ATTN: CAMILLE BRYANT
P.O. BOX 381
LOVINGTON, NM 88260
FAX TO: (575) 396-1429

Receiving Date: 12/31/09
Reporting Date: 01/04/10
Project Owner: BOPCO (24511)
Project Name: COBB FEDERAL #1
Project Location: EDDY CO., NM

Sampling Date: 12/30/09
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 4°C
Sample Received By: HM
Analyzed By: JM

TOTAL METALS

LAB NO.	SAMPLE ID	Potassium (mg/kg)	Arsenic (mg/kg)	Magnesium (mg/kg)
ANALYSIS DATE:		01/03/10	01/03/10	01/03/10
H18968-7	SB-1 @ 60'	459	<5.00	3,340
H18968-8	SB-1 @ 65'	494	<5.00	4,600
H18968-9	SB-1 @ 70'	600	<5.00	7,140
H18968-10	SB-1 @ 75'	2,150	7.20	12,200
Quality Control		10.6	5.04	4.91
True Value QC		10.0	5.00	5.00
% Recovery		106	101	98.2
Relative Standard Deviation		8.9	6.8	8.2
METHODS: EPA 600/4-91/010, 3050		6010	6010	6010

Analyses subcontracted to Green Analytical Laboratories, a subsidiary of Cardinal Laboratories.

Chemist

01/04/10
Date

H18968M BASIN

CARDINAL LABORATORIES

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

Page 1 of 2

		BILL TO	
Company Name:	BASIN ENV. CONSULTING	P.O. #:	24511
Project Manager:	CAMILLE BRYANT	Company:	BOPCO
Address:	2800 PLAINS HWY	Attn:	TONY SAVOIE
City:	LOVINGTON State: NM Zip: 88260	Address:	
Phone #:	575 605 7210 Fax #: 575-396-1429	City:	
Project #:	24511 Project Owner: BOPCO	State:	Zip:
Project Name:	COBB FEDERAL #1	Phone #:	
Project Location:	EDDY Co. NM	Fax #:	
Sampler Name:	CADE		

ANALYSIS REQUEST

STANDARD TAT

EXTENDED

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING DATE	TIME	Chloride (4500)	Potassium (RUSH)	Arsenic (RUSH)	Magnesium (RUSH)	TPH (8015M Extended)
H18963-1	SB-1 @ 5'	G	1			X					X		12/30	1100	X				X
-2	SB-1 @ 15'													1140					
-3	SB-1 @ 25'													1230					
-4	SB-1 @ 35'													1305					
-5	SB-1 @ 45'													1445					
-6	SB-1 @ 55'													1520					
-7	SB-1 @ 60'													1540	X	X	X		
-8	SB-1 @ 65'													1600	X	X	X		
-9	SB-1 @ 70'													1620	X	X	X		
-10	SB-1 @ 75'													1640	X	X	X		

2009

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.

Sampler Relinquished:	Date: 12/31/09	Received By:		Phone Result: ☐	No Add'l Phone #:
	Time: 0900			Fax Result: ☐	No Add'l Fax #:
Relinquished By:	Date: 12/31/09	Received By:		REMARKS:	
	Time: 9:50				
Delivered By: (Circle One)	Temp.	Sample Condition	CHECKED BY:		
Sampler - UPS - Bus - Other:	4.0C	Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	(Initials)	Curt, Camille, Eb e-mail	

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

AT 2.6

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240

(575) 393-2326 Fax (575) 393-2476

Page 2 of 2

		BILL TO	
Company Name:	BASIN ENV. CONSULTING	P.O. #:	24511
Project Manager:	CAMILLE BRYANT	Company:	BOPCO
Address:	2800 PLAINS HWY	Attn:	TONY SAVOIE
City:	LOVINGTON State: NM Zip: 88260	Address:	
Phone #:	575-605-7210 Fax #: 575-396-1429	City:	
Project #:	24511 Project Owner: BOPCO	State:	Zip:
Project Name:	COBB FEDERAL #1	Phone #:	
Project Location:	EDDY Co. NM	Fax #:	
Sampler Name:	CAMILLE BRYANT		

ANALYSIS REQUEST

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		Chloride (4500) STANDARD TAT	TPH (8015M Extended) STANDARD TAT											
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													
H18962-11	SB-1@8d	G	1			X					X		12/30	1700	X	X											
-12	SB-1@85'		1			X					X		12/30	1745	X	X											
-13	SB-1@90'		1			X					X		12/30	1825	X	X											

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

Sampler Relinquished:	Date: 12/31/09 Time: 0900	Received By:	Phone Result:	☐	No Add'l Phone #:
Relinquished By:	Date: 12/31/09 Time: 9:50	Received By:	Fax Result:	☐	No Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Temp: 4°C	Sample Condition Cool: ☑ Yes ☐ No Intact: ☐ Yes ☐ No	CHECKED BY: (Initials)	REMARKS:	

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

I526

CARDINAL LABORATORIES

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

January 13, 2010

Camille Bryant
Basin Environmental Consulting, LLC.
P.O. Box 381
Lovington, NM 88260

Re: BOPCO 24 511 (Cobb Federal #1)

Enclosed are the results of analyses for sample number H19001, received by the laboratory on 01/07/10 at 10:25 am.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accredited though 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 524.2	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Total Number of Pages of Report: 7 (includes Chain of Custody)

Sincerely,

Celey D. Keene
Laboratory Director

This report conforms with NELAP requirements.

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
BASIN ENVIRONMENTAL CONSULTING, LLC
ATTN: CAMILLE BRYANT
P.O. BOX 381
LOVINGTON, NM 88260
FAX TO: (575) 396-1429

Receiving Date: 01/07/10
Reporting Date: 01/11/10
Project Number: 24511 (BOPCO, LP)
Project Name: COBB FEDERAL #1
Project Location: EDDY CO., NM

Analysis Date: 01/11/10
Sampling Date: 01/04/10
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 5.5°C
Sample Received By: CK
Analyzed By: HM

LAB NO.	SAMPLE ID	Cl^- (mg/kg)
H19001-1	SB-2 @ 5'	5,840
H19001-2	SB-2 @ 15'	2,240
H19001-3	SB-2 @ 25'	10,800
H19001-4	SB-2 @ 35'	15,400
H19001-5	SB-2 @ 45'	9,000
H19001-6	SB-2 @ 50'	7,800
H19001-7	SB-2 @ 55'	5,500
H19001-8	SB-2 @ 60'	1,300
H19001-9	SB-3 @ 5'	528
H19001-10	SB-3 @ 15'	384
H19001-11	SB-3 @ 25'	4,800
H19001-12	SB-3 @ 35'	6,800
H19001-13	SB-3 @ 40'	12,000
Quality Control		500
True Value QC		500
% Recovery		100
Relative Percent Difference		2.0

METHOD: Standard Methods	4500-ClˉB

Note: Analyses performed on 1:4 w:v aqueous extracts.
Not accredited for Chloride.

Chemist

01/13/10
Date

H19001 Basin Environmental

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
BASIN ENVIRONMENTAL CONSULTING, LLC
ATTN: CAMILLE BRYANT
P.O. BOX 381
LOVINGTON, NM 88260
FAX TO: (575) 396-1429

Receiving Date: 01/07/10
Reporting Date: 01/11/10
Project Number: 24511 (BOPCO, LP)
Project Name: COBB FEDERAL #1
Project Location: EDDY CO., NM

Analysis Date: 01/11/10
Sampling Date: 01/04/10 & 01/05/10
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 5.5°C
Sample Received By: JH
Analyzed By: HM

LAB NO.	SAMPLE ID	Cl^- (mg/kg)
H19001-14	SB-3 @ 45'	9,500
H19001-15	SB-3 @ 55'	6,300
H19001-16	SB-3 @ 60'	5,200
H19001-17	SB-4 @ 5'	128
H19001-18	SB-4 @ 15'	160
H19001-19	SB-4 @ 25'	4,100
H19001-20	SB-4 @ 30'	6,960
H19001-21	SB-4 @ 35'	2,360
H19001-22	SB-4 @ 45'	3,200
H19001-23	SB-4 @ 55'	2,600
H19001-24	SB-4 @ 60'	11,900
H19001-25	SB-4 @ 65'	12,800
H19001-26	SB-4 @ 70'	14,400
H19001-27	SB-4 @ 75'	8,160
Quality Control		510
True Value QC		500
% Recovery		102
Relative Percent Difference		2.0

METHOD: Standard Methods	4500-ClB

Note: Analyses performed on 1:4 w:v aqueous extracts.
Not accredited for Chloride.

Chemist

01/13/10
Date

H19001 Basin Environmental

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
BASIN ENVIRONMENTAL CONSULTING
ATTN: CAMILLE BRYANT
2800 PLAINS HWY
LOVINGTON, NM 88260
FAX TO: (575) 396-1429

Receiving Date: 01/07/10
Reporting Date: 01/08/10
Project Number: BOPCO, LP (24511)
Project Name: COBB FEDERAL #1
Project Location: EDDY CO., NM

Sampling Date: 01/04/10 & 01/05/10
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 5.5^{0}C
Sample Received By: JH
Analyzed By: AB/ZL

LAB NO. SAMPLE ID	GRO (C_6-C_{10}) (mg/kg)	DRO (>C_{10}-C_{28}) (mg/kg)	DRO ext. (>C_{28}-C_{35}) (mg/kg)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)
ANALYSIS DATE:	01/07/10	01/07/10	01/07/10	01/08/10	01/08/10	01/08/10	01/08/10
H19001-1 SB-2 @ 5'	<10.0	15.6	<10.0	<0.050	<0.050	<0.050	<0.300
H19001-9 SB-3 @ 5'	<10.0	14.8	<10.0	<0.050	<0.050	<0.050	<0.300
H19001-17 SB-4 @ 5'	<10.0	16.6	<10.0	<0.050	<0.050	<0.050	<0.300
Quality Control	450	443	-	0.048	0.047	0.049	0.135
True Value QC	500	500	-	0.050	0.050	0.050	0.150
% Recovery	90.0	88.6	-	96.0	94.0	98.0	90.0
Relative Percent Difference	5.1	10.3	-	2.0	2.1	2.0	2.6

METHODS: TPH GRO & DRO - EPA SW-846 8015 M; BTEX - SW-846 8021B.

TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES. Reported on wet weight. Not accredited for GRO/DRO/DRO ext.

Lab Director

01/13/10
Date

H19001 TPHextBTEX BASIN

CARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240
(575) 393-2326 Fax (575) 393-2476

Company Name: BASIN ENV. CONSULTING		**BILL TO**	
Project Manager: CAMILLE BRYANT		P.O. #: 24511	
Address: 2800 PLAINS HWY		Company: BOPCO	
City: LOVINGTON	State: NM Zip: 88260	Attn: TONY SAVOIE	
Phone #: 575-605-7210	Fax #: 575-396-1429	Address:	
Project #: 24511	Project Owner: BOPCO	City:	
Project Name: COBB FEDERAL #1		State:	Zip:
Project Location: EDDY COUNTY, NM		Phone #:	
Sampler Name: C. D. Gray for C. S. Bryant		Fax #:	

ANALYSIS REQUEST: Chloride 4500; TPH 8015M Ext.; BTEX 8021b

Lab I.D. (FOR LAB USE ONLY)	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE (2010)	TIME	Chloride 4500	TPH 8015M Ext.	BTEX 8021b
H19001-1	SB-2 @ 5'	G	1			X					X		1/4	0800	X	X	X
-2	SB-2 @ 15'	↓	↓			↓					↓		↓	0830	↓		
-3	SB-2 @ 25'	↓	↓			↓					↓		↓	0900	↓		
-4	SB-2 @ 35'	↓	↓			↓					↓		↓	0950	↓		
-5	SB-2 @ 45'	↓	↓			↓					↓		↓	1025	↓		
-6	SB-2 @ 50'	↓	↓			↓					↓		↓	1130	↓		
-7	SB-2 @ 55'	↓	↓			↓					↓		↓	1205	↓		
-8	SB-2 @ 60'	↓	↓			↓					↓		↓	1235	↓		
-9	SB-3 @ 5'	↓	↓			↓					↓		↓	1350	↓	X	X
-10	SB-3 @ 15'	↓	↓			↓					↓		↓	1420	↓		

Sampler Relinquished: [signature]	Date: 1/7/10 Time: 0925	Received By: Camille Bryant	Phone Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By: Camille Bryant	Date: 1/7/10 Time: 1025	Received By: [signature]	Fax Result: ☐ Yes ☐ No Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Temp. 5.5°C	Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials) [initials]

REMARKS:

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

#26

CARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240
(575) 393-2326 Fax (575) 393-2476

Company Name:	BASIN ENV. CONSULTING	**BILL TO**	
Project Manager:	CAMILLE BRYANT	P.O. #:	24511
Address:	2800 PLAINS HWY	Company:	BOPCO
City: LOVINGTON	State: NM Zip: 88260	Attn:	TONY SAVOIE
Phone #: 575-605-7210	Fax #: 575-396-1429	Address:	
Project #: 24511	Project Owner: BOPCO	City:	
Project Name:	COBB FEDERAL #1	State: Zip:	
Project Location:	EDDY COUNTY, NM	Phone #:	
Sampler Name:	C.D. Slay for C.S. BRYANT	Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE (2010)	TIME	Chloride 4500	TPH 8015M EXT.	BTEX 8021B
H19001-11	SB-3 @ 25'	G	1			X					X		1/4	1455	X		
-12	SB-3 @ 35'	↓	↓			↓					↓		↓	1540	↓		
-13	SB-3 @ 40'	↓	↓			↓					↓		↓	1605	↓		
-14	SB-3 @ 45'	↓	↓			↓					↓		↓	1625	↓		
-15	SB-3 @ 55'	↓	↓			↓					↓		↓	1700	↓		
-16	SB-3 @ 60'	↓	↓			↓					↓		↓	1720	↓		
-17	SB-4 @ 5'	↓	↓			↓					↓		1/5	0830	X	X	X
-18	SB-4 @ 15'	↓	↓			↓					↓		↓	0855	↓		
-19	SB-4 @ 25'	↓	↓			↓					↓		↓	0935	↓		
20	SB-4 @ 30'	↓	↓			↓					↓		↓	1005	↓		

Sampler Relinquished: [signature]	Date: 1/7/10 Time: 0925	Received By:	Phone Result: ☐ No Add'l Phone #:
Relinquished By:	Date: 1/7/10 Time: 10:25	Received By: [signature]	Fax Result: ☐ No Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Temp. 5.5°C	Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No	CHECKED BY: (Initials) Cod
REMARKS:			

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

#24

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240

(575) 393-2326 Fax (575) 393-2476

Company Name:	BASIN ENV. CONSULTING
Project Manager:	CAMILLE BRYANT
Address:	2800 PLAINS HWY
City:	LOVINGTON State: NM Zip: 88260
Phone #:	575-605-7210 Fax #: 575-396-1429
Project #:	24511 Project Owner: BOPCO
Project Name:	COBB FEDERAL #1
Project Location:	EDDY COUNTY, NM
Sampler Name:	C.H. Day for C.S. BRYANT

BILL TO

P.O. #:	24511
Company:	BOPCO
Attn:	TONY SAVOIE
Address:	
City:	
State: Zip:	
Phone #:	
Fax #:	

ANALYSIS REQUEST: Chloride 4500; TPH 8015M Ext; BTEX 8021b

Lab I.D. (FOR LAB USE ONLY)	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE (2010)	TIME	Chloride 4500	TPH 8015M Ext	BTEX 8021b
H19001-21	SB-4@35'	G	1			✓					X		1/5	1025	X		
-22	SB-4@45'	↓	↓			↓					↓		↓	1120	↓		
-23	SB-4@55'	↓	↓			↓					↓		↓	1150	↓		
-24	SB-4@60'	↓	↓			↓					↓		↓	1220	↓		
-25	SB-4@65'	↓	↓			↓					↓		↓	1250	↓		
-26	SB-4@70'	↓	↓			↓					↓		↓	1305	↓		
-27	SB-4@75'	↓	↓			↓					↓		↓	1320	↓		

Sampler Relinquished: [signature] Date: 1/7/10 Time: 0925 Received By:

Relinquished By: Date: 1/7/10 Time: 10:25 Received By: [signature]

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

Temp. 5.5°C

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

CHECKED BY: (Initials) [initials]

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

Fax Result: ☐ Yes ☐ No Add'l Fax #:

REMARKS:

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

CARDINAL LABORATORIES

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

January 19, 2010

Camille Bryant
Basin Environmental Consulting, LLC.
P.O. Box 381
Lovington, NM 88260

Re: Cobb Federal #1 (24511 BOPCO)

Enclosed are the results of analyses for sample number H19002, received by the laboratory on 01/07/10 at 10:25 am.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accredited though 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 524.2	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Total Number of Pages of Report: 6 (includes Chain of Custody)

Sincerely,

Celey D. Keene
Laboratory Director

This report conforms with NELAP requirements.

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
BASIN ENVIRONMENTAL CONSULTING
ATTN: CAMILLE BRYANT
P.O. BOX 381
LOVINGTON, NM 88260

Receiving Date: 01/07/10
Reporting Date: 01/19/10
Project Owner: BOPCO (24511)
Project Name: COBB FEDERAL #1
Project Location: EDDY COUNTY, NM

Sampling Date: 01/04/10 - 01/05/10
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 5.5°C
Sample Received By: JH
Analyzed By: JM

TOTAL METALS

LAB NO.	SAMPLE ID	As (mg/kg)	Mg (mg/kg)	K (mg/kg)
ANALYSIS DATE:		01/18/10	01/18/10	01/18/10
H19002-1	SB-2 @ SURFACE	10.8	3,170	701
H19002-2	SB-2 @ 5'	<10.0	8,900	730
H19002-3	SB-2 @ 35'	<10.0	7,110	1,060
H19002-4	SB-2 @ 40'	16.0	18,800	1,330
H19002-5	SB-2 @ 45'	<10.0	6,740	684
H19002-6	SB-2 @ 50'	11.2	12,300	884
H19002-7	SB-3 @ SURFACE	<10.0	7,290	1,030
H19002-8	SB-3 @ 5'	<10.0	4,150	455
H19002-9	SB-3 @ 50'	<10.0	9,930	1,610
H19002-10	SB-3 @ 55'	12.1	14,800	1,490
H19002-11	SB-3 @ 60'	13.9	16,600	1,990
H19002-12	SB-4 @ 25'	11.9	3,660	452
H19002-13	SB-4 @ 60'	<10.0	7,960	927
Quality Control		5.05	4.95	10.5
True Value QC		5.00	5.00	10.0
% Recovery		101	99	105
Relative Standard Deviation		0.4	1.4	0.5
METHODS: EPA 600/4-91/010		6010	6010	6010

Analyses subcontracted to Green Analytical Laboratories, a subsidiary of Cardinal Laboratories.
Reported on wet weight.

Chemist

01/19/10
Date

H19002M BASIN

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
BASIN ENVIRONMENTAL CONSULTING
ATTN: CAMILLE BRYANT
P.O. BOX 381
LOVINGTON, NM 88260

Receiving Date: 01/07/10
Reporting Date: 01/19/10
Project Owner: BOPCO (24511)
Project Name: COBB FEDERAL #1
Project Location: EDDY COUNTY, NM

Sampling Date: 01/05/10 - 01/06/10
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 5.5°C
Sample Received By: JH
Analyzed By: JM

TOTAL METALS

LAB NO. SAMPLE ID	As (mg/kg)	Mg (mg/kg)	K (mg/kg)
ANALYSIS DATE:	01/18/10	01/18/10	01/18/10
H19002-14 SB-4 @ 65'	12.7	18,400	1,420
H19002-15 SB-4 @ 70'	10.0	13,000	1,350
H19002-16 SB-4 @ 75'	14.3	15,800	1,010
H19002-17 SB-5 @ 25'	<10.0	6,670	752
H19002-18 SB-5 @ 65'	<10.0	5,100	1,150
H19002-19 SB-5 @ 70'	15.1	18,100	1,290
H19002-20 SB-5 @ 75'	<10.0	3,260	630
H19002-21 SB-5 @ 80'	<10.0	9,770	1,200
H19002-22 SB-6 @ 25'	<10.0	6,260	887
H19002-23 SB-6 @ 35'	<10.0	18,000	985
H19002-24 SB-6 @ 60'	<10.0	6,990	1,570
H19002-25 SB-6 @ 65'	10.4	11,000	1,220
H19002-26 SB-6 @ 70'	<10.0	2,870	748
Quality Control	9.80	9.52	25.1
True Value QC	10.0	10.0	25.0
% Recovery	98.0	95.2	100
Relative Standard Deviation	0.1	0.2	<0.1
METHODS: EPA 600/4-91/010	6010	6010	6010

Analyses subcontracted to Green Analytical Laboratories, a subsidiary of Cardinal Laboratories.
Reported on wet weight.

Chemist

01/19/10
Date

H19002M BASIN

CARDINAL LABORATORIES

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

Company Name:	BASIN ENV. CONSULTING	**BILL TO**	
Project Manager:	CAMILLE BRYANT	P.O. #:	24511
Address:	2800 PLAINS HWY	Company:	BOPCO
City:	LOVINGTON State: NM Zip: 88260	Attn:	TONY SAVOIE
Phone #:	575-605-7210 Fax #: 575-396-1429	Address:	
Project #:	24511 Project Owner: BOPCO	City:	
Project Name:	COBB FEDERAL #1	State: Zip:	
Project Location:	EDDY COUNTY, NM	Phone #:	
Sampler Name:	C. BRYANT for C.S. BRYANT	Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY				MATRIX						PRESERV.		SAMPLING					
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	POTASSIUM	ARSENIC	MAGNESIUM
H19002-1	SB-2@SURFACE	G	1			X					X		1/4	0745	X	X	X
-2	SB-2@5'													0800			
-3	SB-2@35'													0950			
-4	SB-2@40'													1005			
-5	SB-2@45'													1025			
-6	SB-2@50'													1130			
-7	SB-3@SURFACE													1250			
-8	SB-3@5'													1350			
-9	SB-3@50'													1640			
-10	SB-3@55'													1700			

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.

Sampler Relinquished:	Date: 11/7/10	Received By:	Phone Result:	☐	No Add'l Phone #:
Relinquished By:	Date: 11/7/10	Received By:	Fax Result:	☐	No Add'l Fax #:
	Time: 0925		REMARKS:		
	Time: 1625				
Delivered By: (Circle One)	Temp.	Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No	CHECKED BY: (Initials)		
Sampler - UPS - Bus - Other:	5.5°C				

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

#26

CARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240
(575) 393-2326 Fax (575) 393-2476

Company Name:	BASIN ENV. CONSULTING	BILL TO	
Project Manager:	CAMILLE BRYANT	P.O. #:	24511
Address:	2800 PLAINS HWY	Company:	BOPCO
City: LOVINGTON	State: NM Zip: 88260	Attn:	TONY SAVOIE
Phone #: 575-605-7210	Fax #: 575-396-1429	Address:	
Project #: 24511	Project Owner: BOPCO	City:	
Project Name:	COBB FEDERAL #1	State:	Zip:
Project Location:	EDDY COUNTY, NM	Phone #:	
Sampler Name:	[illegible] for C.S. BRYANT	Fax #:	

ANALYSIS REQUEST

Lab I.D. (FOR LAB USE ONLY)	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING DATE (2010)	TIME	POTASSIUM	ARSENIC	MAGNESIUM
-11	SB-3@60'	G	1			X					X		1/4	1720	X	X	X
-12	SB-4@25'	↓	↓			↓					↓		1/5	0935	↓	↓	↓
-13	SB-4@60'	↓	↓			↓					↓		↓	1220	↓	↓	↓
-14	SB-4@65'	↓	↓			↓					↓		↓	1250	↓	↓	↓
-15	SB-4@70'	↓	↓			↓					↓		↓	1305	↓	↓	↓
-16	SB-4@75'	↓	↓			↓					↓		↓	1320	↓	↓	↓
-17	SB-5@25'	↓	↓			↓					↓		1/6	0840	↓	↓	↓
-18	SB-5@65'	↓	↓			↓					↓		↓	1030	↓	↓	↓
-19	SB-5@70'	↓	↓			↓					↓		↓	1100	↓	↓	↓
-20	SB-5@75'	↓	↓			↓					↓		↓	1130	↓	↓	↓

Sampler Relinquished: [signature]	Date: 1/7/10 Time: 0925	Received By: [signature]	Phone Result: ☐ No Add'l Phone #:
Relinquished By: [signature]	Date: 1/7/10 Time: 1025	Received By: Jodi Henson	Fax Result: ☐ No Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Temp. 5.5°C	Sample Condition: Cool ☒ Yes ☐ No; Intact ☒ Yes ☐ No	CHECKED BY: (Initials) [initials]

REMARKS:

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

#26

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240

(575) 393-2326 Fax (575) 393-2476

Company Name:	BASIN ENV. CONSULTING	**BILL TO**	
Project Manager:	CAMILLE BRYANT	P.O. #:	24511
Address:	2800 PLAINS HWY	Company:	BOPCO
City:	LOVINGTON State: NM Zip: 88260	Attn:	TONY SAVOIE
Phone #:	575-605-7210 Fax #: 575-396-1429	Address:	
Project #:	24511 Project Owner: BOPCO	City:	
Project Name:	COBB FEDERAL #1	State: Zip:	
Project Location:	EDDY COUNTY, NM	Phone #:	
Sampler Name:	JD Tag for C.S. BRYANT	Fax #:	

ANALYSIS REQUEST: Potassium; Arsenic; Magnesium

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING DATE	TIME	Potassium	Arsenic	Magnesium
-21	SB-5@80'	G	1			X					X		1/6	1200	X	X	X
-22	SB-6@25'													1300			
-23	SB-6@35'													1320			
-24	SB-6@60'													1450			
-25	SB-6@65'													1520			
-26	SB-6@70'													1550			

2010

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.

Sampler Relinquished:	Date: 1/7/10 Time: 0925	Received By:	Camille Bryant
Relinquished By: Camille Bryant	Date: 1/7/10 Time: 1025	Received By:	Joni Henson
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Temp: 5.5°C	Sample Condition: Cool: Yes / No; Intact: Yes / No	CHECKED BY: (Initials)

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

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

#26

CARDINAL LABORATORIES

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

January 27, 2010

Camille Bryant
Basin Environmental Consulting, LLC.
P.O. Box 381
Lovington, NM 88260

Re: Cobb Federal #1 (BOPCO 24511) (Revised)

Enclosed are the results of analyses for sample number H19090, received by the laboratory on 01/19/10 at 8:30 am.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accredited though 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 524.2	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Total Number of Pages of Report: 16 (includes Chain of Custody)

Sincerely,

Celey D. Keene
Laboratory Director

This report conforms with NELAP requirements.

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
BASIN ENVIRONMENTAL CONSULTING
ATTN: CAMILLE BRYANT
2800 PLAINS HWY
LOVINGTON, NM 88260
FAX TO: (575) 396-1429

Receiving Date: 01/19/10
Reporting Date: 01/25/10
Project Number: BOPCO (24511)
Project Name: COBB FEDERAL #1
Project Location: EDDY CO., NM

Sampling Date: 01/12/10
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 4 °C
Sample Received By: JH
Analyzed By: ZL

LAB NUMBE SAMPLE ID	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)
ANALYSIS DATE	01/22/10	01/22/10	01/22/10	01/22/10
H19090-25 SB-10 @ 5'	<0.050	<0.050	<0.050	<0.300
Quality Control	0.041	0.041	0.042	0.125
True Value QC	0.050	0.050	0.050	0.150
% Recovery	82.0	82.0	84.0	83.3
Relative Percent Difference	4.5	4.5	2.2	3.7

METHOD: EPA SW-846 8021B

TEXAS NELAP CERTIFICATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES. Reported on wet weight.

Chemist

01/27/10
Date

H19090-25 Basin

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
BASIN ENVIRONMENTAL CONSULTING
ATTN: CAMILLE BRYANT
2800 PLAINS HWY
LOVINGTON, NM 88260
FAX TO: (575) 396-1429

Receiving Date: 01/19/10
Reporting Date: 01/27/10
Project Owner: BOPCO (24511)
Project Name: COBB FEDERAL #1
Project Location: EDDY COUNTY, NM

Sampling Date: 01/12/10
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 4°C
Sample Received By: JH
Analyzed By: AB

LAB NUMBER SAMPLE ID	GRO (C_6-C_{10}) (mg/kg)	DRO (>C_{10}-C_{28}) (mg/kg)	DRO ext. (>C_{28}-C_{35}) (mg/kg)
ANALYSIS DATE	01/25/10	01/25/10	01/25/10
H19090-25 SB-10 @ 5'	<10.0	42.7	<10.0
Quality Control	499	479	-
True Value QC	500	500	-
% Recovery	99.8	95.8	-
Relative Percent Difference	7.5	6.5	-

METHODS: TPH GRO & DRO: EPA SW-846 8015 M extended
Reported on wet weight. Not accredited for GRO/DRO/DRO Ext.

Lab Director

01/27/10
Date

H19090-25 TPHEXT BASIN

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
BASIN ENVIRONMENTAL CONSULTING
ATTN: CAMILLE BRYANT
2800 PLAINS HWY
LOVINGTON, NM 88260
FAX TO: (575) 396-1429

Receiving Date: 01/19/10
Reporting Date: 01/20/10
Project Number: BOPCO (24511)
Project Name: COBB FEDERAL #1
Project Location: EDDY CO., NM

Sampling Date: 01/11/10 - 01/15/10
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 4 °C
Sample Received By: JH
Analyzed By: ZL

LAB NUMBE SAMPLE ID	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)
ANALYSIS DATE	01/19/10	01/19/10	01/19/10	01/19/10
H19090-1 SB-7 @ 5'	<0.050	<0.050	<0.050	<0.300
H19090-12 SB-8 @ 5'	<0.050	<0.050	<0.050	<0.300
H19090-22 SB-9 @ 5'	<0.050	<0.050	<0.050	<0.300
H19090-28 SB-11 @ 5'	<0.050	<0.050	<0.050	<0.300
H19090-38 SB-12 @ 5'	<0.050	<0.050	<0.050	<0.300
H19090-49 SB-13 @ 5'	<0.050	<0.050	<0.050	<0.300
Quality Control	0.050	0.051	0.052	0.153
True Value QC	0.050	0.050	0.050	0.150
% Recovery	100	102	104	102
Relative Percent Difference	2.0	1.9	1.9	5.8

METHOD: EPA SW-846 8021B

TEXAS NELAP CERTIFICATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES. Reported on wet weight.

Chemist

01/22/10
Date

H19090 B Basin

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
BASIN ENVIRONMENTAL CONSULTING
ATTN: CAMILLE BRYANT
2800 PLAINS HWY
LOVINGTON, NM 88260
FAX TO: (575) 396-1429

Receiving Date: 01/19/10
Reporting Date: 01/21/10
Project Owner: BOPCO (24511)
Project Name: COBB FEDERAL #1
Project Location: EDDY COUNTY, NM

Sampling Date: 01/11/10 - 01/15/10
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 4^0C
Sample Received By: JH
Analyzed By: AB

LAB NUMBER	SAMPLE ID	GRO (C_6-C_{10}) (mg/kg)	DRO (>C_{10}-C_{28}) (mg/kg)	DRO ext. (>C_{28}-C_{35}) (mg/kg)
ANALYSIS DATE		01/20/10	01/20/10	01/20/10
H19090-1	SB-7 @ 5'	<10.0	<10.0	<10.0
H19090-12	SB-8 @ 5'	<10.0	<10.0	<10.0
H19090-22	SB-9 @ 5'	<10.0	<10.0	<10.0
H19090-28	SB-11 @ 5'	<10.0	<10.0	<10.0
H19090-38	SB-12 @ 5'	<10.0	<10.0	<10.0
H19090-49	SB-13 @ 5'	<10.0	<10.0	<10.0
Quality Control		491	426	-
True Value QC		500	500	-
% Recovery		98.2	85.2	-
Relative Percent Difference		1.1	9.6	-

METHODS: TPH GRO & DRO: EPA SW-846 8015 M extended
Reported on wet weight. Not accredited for GRO/DRO/DRO Ext.

Lab Director

01/22/10
Date

H19090 TPHEXT BASIN

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
BASIN ENVIRONMENTAL CONSULTING, LLC
ATTN: CAMILLE BRYANT
P.O. BOX 381
LOVINGTON, NM 88260
FAX TO: (575) 396-1429

Receiving Date: 01/19/10
Reporting Date: 01/21/10
Project Number: 24511 (BOPCO, LP)
Project Name: COBB FEDERAL #1
Project Location: EDDY COUNTY, NM

Analysis Date: 01/20/10
Sampling Date: 01/11/10 & 01/12/10
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 4°C
Sample Received By: JH
Analyzed By: HM

LAB NO.	SAMPLE ID	Cl^- (mg/kg)
H19090-1	SB-7 @ 5'	32
H19090-2	SB-7 @ 15'	272
H19090-3	SB-7 @ 25'	432
H19090-4	SB-7 @ 30'	7,040
H19090-5	SB-7 @ 35'	11,000
H19090-6	SB-7 @ 45'	6,080
H19090-7	SB-7 @ 55'	5,280
H19090-8	SB-7 @ 60'	8,800
H19090-9	SB-7 @ 65'	2,960
H19090-10	SB-7 @ 70'	1,880
H19090-11	SB-7 @ 75'	12,400
H19090-12	SB-8 @ 5'	560
H19090-13	SB-8 @ 15'	240
Quality Control		500
True Value QC		500
% Recovery		100
Relative Percent Difference		<0.1

METHOD: Standard Methods	4500-Cl^-B

Note: Analyses performed on 1:4 w:v aqueous extracts.
Not accredited for Chloride.

Chemist

01/22/10
Date

H19090 Basin Environmental

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
BASIN ENVIRONMENTAL CONSULTING, LLC
ATTN: CAMILLE BRYANT
P.O. BOX 381
LOVINGTON, NM 88260
FAX TO: (575) 396-1429

Receiving Date: 01/19/10
Reporting Date: 01/21/10
Project Number: 24511 (BOPCO, LP)
Project Name: COBB FEDERAL #1
Project Location: EDDY COUNTY, NM

Analysis Date: 01/20/10
Sampling Date: 01/12/10
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 4°C
Sample Received By: JH
Analyzed By: HM

LAB NO.	SAMPLE ID	Cl^- (mg/kg)
H19090-14	SB-8 @ 25'	288
H19090-15	SB-8 @ 35'	80
H19090-16	SB-8 @ 45'	48
H19090-17	SB-8 @ 55'	32
H19090-18	SB-8 @ 65'	32
H19090-19	SB-8 @ 75'	32
H19090-20	SB-8 @ 80'	48
H19090-21	SB-8 @ 85'	48
H19090-22	SB-9 @ 5'	1,140
H19090-23	SB-9 @ 15'	144
H19090-24	SB-9 @ 20'	192
H19090-25	SB-10 @ 5'	1,360
H19090-26	SB-10 @ 15'	416
H19090-27	SB-10 @ 20'	224
Quality Control		500
True Value QC		500
% Recovery		100
Relative Percent Difference		<0.1

METHOD: Standard Methods	4500-Cl^-B

Note: Analyses performed on 1:4 w:v aqueous extracts.
Not accredited for Chloride.

Chemist

01/22/10
Date

H19090 Basin Environmental

CARDINAL LABORATORIES

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ANALYTICAL RESULTS FOR
BASIN ENVIRONMENTAL CONSULTING, LLC
ATTN: CAMILLE BRYANT
P.O. BOX 381
LOVINGTON, NM 88260
FAX TO: (575) 396-1429

Receiving Date: 01/19/10
Reporting Date: 01/21/10
Project Number: 24511 (BOPCO, LP)
Project Name: COBB FEDERAL #1
Project Location: EDDY COUNTY, NM

Analysis Date: 01/20/10 & 01/21/10
Sampling Date: 01/13/10 & 01/15/10
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 4°C
Sample Received By: JH
Analyzed By: HM

LAB NO.	SAMPLE ID	Cl^- (mg/kg)
H19090-28	SB-11 @ 5'	16
H19090-29	SB-11 @ 15'	208
H19090-30	SB-11 @ 25'	208
H19090-31	SB-11 @ 35'	96
H19090-32	SB-11 @ 45'	64
H19090-33	SB-11 @ 55'	32
H19090-34	SB-11 @ 65'	96
H19090-35	SB-11 @ 70'	7,000
H19090-36	SB-11 @ 75'	976
H19090-37	SB-11 @ 80'	3,440
H19090-38	SB-12 @ 5'	48
H19090-39	SB-12 @ 15'	208
H19090-40	SB-12 @ 25'	240
Quality Control		500
True Value QC		500
% Recovery		100
Relative Percent Difference		< 0.1

METHOD: Standard Methods	4500-Cl^-B

Note: Analyses performed on 1:4 w:v aqueous extracts.
Not accredited for Chloride.

Chemist

01/22/10
Date

H19090 Basin Environmental

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
BASIN ENVIRONMENTAL CONSULTING, LLC
ATTN: CAMILLE BRYANT
P.O. BOX 381
LOVINGTON, NM 88260
FAX TO: (575) 396-1429

Receiving Date: 01/19/10
Reporting Date: 01/21/10
Project Number: 24511 (BOPCO, LP)
Project Name: COBB FEDERAL #1
Project Location: EDDY COUNTY, NM

Analysis Date: 01/21/10
Sampling Date: 01/15/10
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 4°C
Sample Received By: JH
Analyzed By: HM

LAB NO.	SAMPLE ID	Cl^- (mg/kg)
H19090-41	SB-12 @ 35'	48
H19090-42	SB-12 @ 45'	128
H19090-43	SB-12 @ 55'	144
H19090-44	SB-12 @ 65'	4,000
H19090-45	SB-12 @ 75'	2,640
H19090-46	SB-12 @ 80'	5,680
H19090-47	SB-12 @ 85'	2,680
H19090-48	SB-12 @ 90'	992
H19090-49	SB-13 @ 5'	144
H19090-50	SB-13 @ 15'	96
H19090-51	SB-13 @ 25'	96
H19090-52	SB-13 @ 35'	96
H19090-53	SB-13 @ 45'	80
Quality Control		500
True Value QC		500
% Recovery		100
Relative Percent Difference		< 0.1

METHOD: Standard Methods	4500-Cl^-B

Note: Analyses performed on 1:4 w:v aqueous extracts.
Not accredited for Chloride.

Chemist

01/22/10
Date

H19090 Basin Environmental

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
BASIN ENVIRONMENTAL CONSULTING, LLC
ATTN: CAMILLE BRYANT
P.O. BOX 381
LOVINGTON, NM 88260
FAX TO: (575) 396-1429

Receiving Date: 01/19/10
Reporting Date: 01/21/10
Project Number: 24511 (BOPCO, LP)
Project Name: COBB FEDERAL #1
Project Location: EDDY COUNTY, NM

Analysis Date: 01/21/10
Sampling Date: 01/15/10
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 4°C
Sample Received By: JH
Analyzed By: HM

LAB NO.	SAMPLE ID	Cl^- (mg/kg)
H19090-54	SB-13 @ 55'	32
H19090-55	SB-13 @ 65'	32
H19090-56	SB-13 @ 75'	64
H19090-57	SB-13 @ 85'	48
H19090-58	SB-13 @ 95'	32
Quality Control		500
True Value QC		500
% Recovery		100
Relative Percent Difference		< 0.1

METHOD: Standard Methods	4500-Cl B

Note: Analyses performed on 1:4 w:v aqueous extracts.
Not accredited for Chloride.

Chemist

01/22/10
Date

H19090 Basin Environmental

CARDINAL LABORATORIES

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

Company Name:	BASIN ENV. CONSULTING	**BILL TO**	
Project Manager:	CAMILLE BRYANT	P.O. #:	24511
Address:	2800 PLAINS HWY	Company:	BOPCO
City:	LOVINGTON State: NM Zip: 88260	Attn:	TONY SAVOIE
Phone #:	575-605-7210 Fax #: 575-396-1429	Address:	
Project #:	24511 Project Owner: BOPCO	City:	
Project Name:	COBB FEDERAL #1	State:	Zip:
Project Location:	EDDY COUNTY, NM	Phone #:	
Sampler Name:	CURT SCOTT	Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY				MATRIX						PRESERV.		SAMPLING		Chloride (4500)	TPH (8015M)	BTEX (8021B)										
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													
H19090-1	SB-7 @ 5'		1			X					X		11/11	1000	X	X	X									
-2	SB-7 @ 15'													1040												
-3	SB-7 @ 25'													1120												
-4	SB-7 @ 30'													1150												
-5	SB-7 @ 35'													1305												
-6	SB-7 @ 45'													1340												
-7	SB-7 @ 55'													1420												
-8	SB-7 @ 60'													1500												
-9	SB-7 @ 65'													1545												
10	SB-7 @ 70'													1630												

Sampler Relinquished:	Date: 11/12/10	Received By:		Phone Result: ☐ No	Add'l Phone #:
	Time: 1613			Fax Result: ☐ No	Add'l Fax #:
Relinquished By:	Date: 11/19/10	Received By:		REMARKS:	
	Time: 8:30			* 11/22/10 Curt Called & added BTEX, TPH to SB 10 @ 5' H19090-25. ch	
Delivered By: (Circle One)	Temp.	Sample Condition	CHECKED BY:		
Sampler - UPS - Bus - Other:	4°C	Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	(Initials)		

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

#26

CARDINAL LABORATORIES

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

Company Name:	BASIN ENV. CONSULTING	**BILL TO**	
Project Manager:	CAMILLE BRYANT	P.O. #:	24511
Address:	2800 PLAINS HWY	Company:	BOPCO
City:	LOVINGTON State: NM Zip: 88260	Attn:	TOM SHUGLE
Phone #:	575-605-7210 Fax #: 575-396-1429	Address:	
Project #:	24511 Project Owner: BOPCO	City:	
Project Name:	COBB FEDERAL #1	State:	Zip:
Project Location:	EDDY COUNTY, NM	Phone #:	
Sampler Name:	C. TO. JR	Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY				MATRIX						PRESERV.		SAMPLING		Chloride (4500)	TPH (8015M Ext)	BTEX (8021B)										
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													
H11090-11	SB-7 @ 75'		1			X					X		1/11	1650	X												
-12	SB-8 @ 5'												1/12	0910		X	X										
-13	SB-8 @ 15'													0945													
-14	SB-8 @ 25'													1020													
-15	SB-8 @ 35'													1055													
-16	SB-8 @ 45'													1140													
-17	SB-8 @ 55'													1225													
-18	SB-8 @ 65'													1310													
-19	SB-8 @ 75'													1350													
-20	SB-8 @ 80'													1440													

Sampler Relinquished:	Date: 1/18/10	Received By:	Phone Result: ☐ No	Add'l Phone #:	
	Time: 1613		Fax Result: ☐ No	Add'l Fax #:	
Relinquished By:	Date:	Received By:	REMARKS:		
	Time:				
Delivered By: (Circle One)	Temp.	Sample Condition: Cool ☒ Yes ☐ No / Intact ☒ Yes ☐ No	CHECKED BY: (Initials)		
Sampler - UPS - Bus - Other:	4°C				

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

#26

CARDINAL LABORATORIES

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

Company Name:	BASIN ENV. CONSULTING	**BILL TO**	ANALYSIS REQUEST
Project Manager:	CAMILLE BRYANT	P.O. #:	24511
Address:	2800 PLAINS HWY	Company:	BOPCO
City:	LOVINGTON State: NM Zip: 88260	Attn:	TONY SAVAGE
Phone #:	575-605-7210 Fax #: 575-396-1429	Address:	
Project #:	24511 Project Owner: BOPCO	City:	
Project Name:	COBB FEDERAL #1	State:	Zip:
Project Location:	EDDY COUNTY, NM	Phone #:	
Sampler Name:	C.A.F.D.	Fax #:	

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE	ICE / COOL	OTHER:	SAMPLING: 2010 DATE	TIME	Chloride (4500)	TPH (8015M Ext)	BTEX (8021B)	
H19089-21	SB-8@25'		1			X							1/12	1505	X			
-22	SB-9@5'													1520		X	X	
-23	SB-9@15'													1530				
-24	SB-9@20'													1540				
-25	SB-10@5'													1555		X	X	added as per Curt 1/22/10
-26	SB-10@15'													1605				
-27	SB-10@20'													1620				
-28	SB-11@5'												1/13	0920		X	X	
-29	SB-11@15'													0950				
-30	SB-11@25'													1015				

Sampler Relinquished: C.A.F.D.	Date: 1/12/10 Time: 1613	Received By: Camille Bryant	Phone Result: ☐	No	Add'l Phone #:
Relinquished By: Camille Bryant	Date: Time:	Received By: Jodi Henson	Fax Result: ☐	No	Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Temp. 4°C	Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials) JH		REMARKS:

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

#26

CARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240
(575) 393-2326 Fax (575) 393-2476

Company Name:	BASIN ENV. CONSULTING
Project Manager:	CAMILLE BRYANT
Address:	2800 PLAINS HWY
City:	LOVINGTON State: NM Zip: 88260
Phone #:	575-605-7210 Fax #: 575-396-1429
Project #:	24511 Project Owner: BOPCO
Project Name:	COBB FEDERAL #1
Project Location:	EDDY COUNTY, NM
Sampler Name:	C.R.D.

BILL TO

P.O. #:	24511
Company:	BOPCO
Attn:	TONY SAVOIE
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	Chlorides (4500)	TPH (8015M Ext)	BTEX (8021B)
H19090-31	SB-11@35'		1			X					X		1/13	1050	X		
-32	SB-11@45'													1115			
-33	SB-11@55'													1150			
-34	SB-11@65'													1220			
-35	SB-11@70'													1250			
-36	SB-11@75'													1320			
-37	SB-11@80'												1/15	0830			
-38	SB-12@5'													0900		X	X
-39	SB-12@15'													0920			
-40	SB-12@25'													0940			

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.

Sampler Relinquished:	Date: 1/18/10 Time: 1613	Received By:	Camille Bryant
Relinquished By:	Date: 1/19/10 Time: 830	Received By:	Jodi Henson
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Temp: 4°C	Sample Condition Cool: Yes / No Intact: Yes / No	CHECKED BY: (Initials)

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

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

#26

CARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240
(575) 393-2326 Fax (575) 393-2476

Company Name:	BASIN ENV. CONSULTING	**BILL TO**	
Project Manager:	CAMILLE BRYANT	P.O. #:	24511
Address:	2800 PLAINS HWY	Company:	BOPCO
City:	LOVINGTON State: NM Zip: 88260	Attn:	TONY SAVOIE
Phone #:	575-605-7210 Fax #: 575-396-1429	Address:	
Project #:	24511 Project Owner: BOPCO	City:	
Project Name:	COBB FEDERAL #1	State: Zip:	
Project Location:	EDDY COUNTY, NM	Phone #:	
Sampler Name:	CH	Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY				MATRIX							PRESERV.			SAMPLING		Chloride (4500)	TPH (8015M Ext)	BTEX (8021B)										
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													
H19090-41	SB-12@35'		1			X					X			1/15	1000	X												
-42	SB-12@45'														1020													
-43	SB-12@55'														1040													
-44	SB-12@65'														1100													
-45	SB-12@75'														1120													
-46	SB-12@80'														1140													
-47	SB-12@85'														1155													
-48	SB-12@90'														1230													
-49	SB-13@5'														1310		X	X										
-50	SB-13@15'														1330													

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.

Sampler Relinquished:	Date: 1/18/10	Received By:	Phone Result: ☐ No Add'l Phone #:
	Time: 1643		Fax Result: ☐ No Add'l Fax #:
Relinquished By:	Date: 1/19/10	Received By:	REMARKS:
	Time: 8:30		
Delivered By: (Circle One)	Temp.	Sample Condition Cool / Intact	CHECKED BY: (Initials)
Sampler - UPS - Bus - Other:	4°C	☑ Yes ☑ Yes ☐ No ☐ No	

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

#26

CARDINAL LABORATORIES

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

		BILL TO	
Company Name:	BASIN ENV. CONSULTING	P.O. #:	24511
Project Manager:	CAMILLE BRYANT	Company:	BOPCO
Address:	2800 PLAINS HWY	Attn:	TONY SWOLE
City:	LOVINGTON State: NM Zip: 88260	Address:	
Phone #:	575-605-7210 Fax #: 575-396-1429	City:	
Project #:	24511 Project Owner: BOPCO	State:	Zip:
Project Name:	COBB FEDERAL #1	Phone #:	
Project Location:	EDDY COUNTY, NM	Fax #:	
Sampler Name:	C+DS		

ANALYSIS REQUEST: Chloride (4500) | TPH (8015M Ext) | BTEX (8021B)

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: 2010 DATE	TIME	Chloride (4500)	TPH (8015M Ext)	BTEX (8021B)
H19090-51	SB-13@25'		1			X					X		1/15	1400	X		
-52	SB-13@35'													1420			
-53	SB-13@45'													1440			
-54	SB-13@55'													1510			
-55	SB-13@65'													1535			
-56	SB-13@75'													1600			
-57	SB-13@85'													1645			
-58	SB-13@95'													1705			

Sampler Relinquished:	Date: 1/18/10 Time: 1613	Received By:	Camille Bryant
Relinquished By:	Date: 1/19/10 Time: 8:30	Received By:	Jodi Henderson
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Temp: 4°C	Sample Condition: Cool: Yes / Intact: Yes; No / No	CHECKED BY: (Initials)

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

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

#26

CARDINAL LABORATORIES

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

January 13, 2010

Camille Bryant
Basin Environmental Consulting, LLC.
P.O. Box 381
Lovington, NM 88260

Re: BOPCO 24 511 (Cobb Federal #1)

Enclosed are the results of analyses for sample number H19019, received by the laboratory on 01/08/10 at 4:55 pm.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accredited though 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 524.2	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Total Number of Pages of Report: 4 (includes Chain of Custody)

Sincerely,

Celey D. Keene
Laboratory Director

This report conforms with NELAP requirements.

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
BASIN ENVIRONMENTAL CONSULTING, LLC
ATTN: CAMILLE BRYANT
P.O. BOX 381
LOVINGTON, NM 88260
FAX TO: (575) 396-1429

Receiving Date: 01/08/10
Reporting Date: 01/11/10
Project Number: 24511 (BOPCO, LP)
Project Name: COBB FEDERAL #1
Project Location: EDDY CO., NM

Analysis Date: 01/11/10
Sampling Date: 01/08/10
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 5°C
Sample Received By: JH
Analyzed By: HM

LAB NO.	SAMPLE ID	Cl^- (mg/kg)
H19019-1	NORTHWEST S/W @ 10'	256
H19019-2	NORTHEAST S/W 10'	1,220
H19019-3	WEST S/W @ 10'	4,600
H19019-4	EAST S/W @ 10'	9,900
H19019-5	SOUTH S/W @ 10'	8,500
H19019-6	NORTHWEST CORNER @10'	192
H19019-7	NORTHEAST CORNER @ 10'	3,680
H19019-8	SOUTHWEST CORNER @ 10'	896
H19019-9	SOUTHEAST CORNER @ 10'	6,900
Quality Control		510
True Value QC		500
% Recovery		102
Relative Percent Difference		2.0

METHOD: Standard Methods	4500-ClˉB

Note: Analyses performed on 1:4 w:v aqueous extracts.
Not accredited for Chloride.

Chemist

01/13/10
Date

H19019 Basin Environmental

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
BASIN ENVIRONMENTAL CONSULTING
ATTN: CAMILLE BRYANT
2800 PLAINS HWY
LOVINGTON, NM 88260
FAX TO: (575) 396-1429

Receiving Date: 01/08/10
Reporting Date: 01/12/10
Project Number: 24511 (BOPCO, LP)
Project Name: COBB FEDERAL #1
Project Location: EDDY CO., NM

Sampling Date: 01/08/10
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 5°C
Sample Received By: JH
Analyzed By: AB/ZL

LAB NO.	SAMPLE ID	GRO (C_6-C_{10}) (mg/kg)	DRO (>C_{10}-C_{28}) (mg/kg)	DRO ext. (>C_{28}-C_{35}) (mg/kg)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)
ANALYSIS DATE:		01/11/10	01/11/10	01/11/10	01/11/10	01/11/10	01/11/10	01/11/10
H19019-1	NORTHWEST S/W @ 10'	<10.0	<10.0	<10.0	<0.050	0.065	<0.050	<0.300
H19019-2	NORTHEAST S/W @ 10'	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300
H19019-3	WEST S/W @ 10'	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300
H19019-4	EAST S/W @ 10'	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300
H19019-5	SOUTH S/W @ 10'	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300
H19019-6	NORTHWEST CORNER @ 10'	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300
H19019-7	NORTHEAST CORNER @ 10'	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300
H19019-8	SOUTHWEST CORNER @ 10'	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300
H19019-9	SOUTHEAST CORNER @ 10'	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300
Quality Control		501	550	-	0.048	0.048	0.049	0.151
True Value QC		500	500	-	0.050	0.050	0.050	0.150
% Recovery		100	110	-	96.0	96.0	98.0	101
Relative Percent Difference		5.0	1.8	-	4.1	4.2	4.0	3.2

METHODS: TPH GRO & DRO - EPA SW-846 8015 M; BTEX - SW-846 8021B.

TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES. Reported on wet weight. Not accredited for GRO/DRO/DRO ext.

Lab Director

01/13/10
Date

H19019 TPHextBTEX BASIN

CARDINAL LABORATORIES

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

Company Name:	Basin Env. Consultants	**BILL TO**	
Project Manager:	Camille Bryant	P.O. #:	24511
Address:	2800 Plains Hwy	Company:	BOPCO
City:	Lovington State: NM Zip: 88260	Attn:	Tony Savoie
Phone #:	(575) 605-7210 Fax #: (575) 396-1429	Address:	
Project #:	24511 Project Owner: BOPCO, LP	City:	
Project Name:	Cobb Federal #1	State: Zip:	
Project Location:	Eddy Co, NM	Phone #:	
Sampler Name:	Camille Bryant	Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		Chloride 4500	TPH 8015M Extended	BTEX 8021B									
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												
H19019-1	Northwest S/W @ 10'	G	1			X							1/8/2010	1210	X	X	X									
-2	Northeast S/W @ 10'													1220	X	X	X									
-3	West S/W @ 10'													1230	X	X	X									
-4	East S/W @ 10'													1240	X	X	X									
-5	South S/W @ 10'													1250	X	X	X									
-6	Northwest Corner @ 10'													1300	X	X	X									
-7	Northeast Corner @ 10'													1310	X	X	X									
-8	Southwest Corner @ 10'													1320	X	X	X									
-9	Southeast Corner 10'													1330	X	X	X									

Sampler Relinquished:	Camille Bryant	Date: 1/8/10 Time: 455	Received By:		
Relinquished By:		Date: 1/8/10 Time: 4:55	Received By:	Jodi Henson	
Delivered By: (Circle One)	Sampler - UPS - Bus - Other:	Temp: 5°C	Sample Condition Cool: ☑ Yes ☐ No Intact: ☐ Yes ☐ No	CHECKED BY: (Initials)	JH

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

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476

#26

CARDINAL LABORATORIES

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

February 16, 2010

Camille Bryant
Basin Environmental Consulting, LLC.
P.O. Box 381
Lovington, NM 88260

Re: GE Cobb Federal #1 (24511 BOPCO)

Enclosed are the results of analyses for sample number H19257, received by the laboratory on 02/12/10 at 4:45 pm.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accredited though 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 524.2	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Total Number of Pages of Report: 3 (includes Chain of Custody)

Sincerely,

Celey D. Keene
Laboratory Director

This report conforms with NELAP requirements.

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
BASIN ENVIRONMENTAL CONSULTING, LLC
ATTN: CAMILLE BRYANT
P.O. BOX 381
LOVINGTON, NM 88260
FAX TO: (575) 396-1429

Receiving Date: 02/12/10
Reporting Date: 02/16/10
Project Number: 24511 (BOPCO)
Project Name: GE COBB FEDERAL #1
Project Location: EDDY CO., NM

Analysis Date: 02/16/10
Sampling Date: 02/11/10
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 3°C
Sample Received By: JH
Analyzed By: HM

LAB NO.	SAMPLE ID	Cl^- (mg/kg)
H19257-1	NORTHEAST S/W A @ 10'	1,060
H19257-2	SOUTHEAST CORNER A @ 10'	768
H19257-3	WEST S/W A @ 10'	672
Quality Control		500
True Value QC		500
% Recovery		100
Relative Percent Difference		< 0.1

METHOD: Standard Methods	4500-ClˉB

Note: Analyses performed on 1:4 w:v aqueous extracts.

Chemist

02/16/10
Date

H19257 Basin Environmental

CARDINAL LABORATORIES

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

Company Name:	Basin Env. Consulting	BILL TO	
Project Manager:	Camille Bryant	P.O. #:	24511
Address:	2800 Plains Hwy	Company:	BOPCO
City:	Lovington State: NM Zip: 88260	Attn:	Tony Savoie
Phone #:	(575) 605-7210 Fax #: (575) 396-1429	Address:	
Project #:	24511 Project Owner: BOPCO	City:	
Project Name:	GE Cobb Federal #1	State: Zip:	
Project Location:	Eddy Co. NM	Phone #:	
Sampler Name:	Joe L. Lowry	Fax #:	

ANALYSIS REQUEST: Chloride 4500

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Chloride 4500
H19257-1	Northeast S/WA @10'	G	1			X					X		2/11	1230	X
-2	Southeast Corner A @10'												2/11	1245	X
-3	West S/WA @10'												2/11	1300	X

2010

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.

Sampler Relinquished: Camille Bryant for Joe Lowry	Date: 2/12/10 Time: 4:45	Received By:	
Relinquished By:	Date: 2/12/10 Time: 4:45	Received By: Jodi Henson	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Temp. 3°C	Sample Condition: Cool Yes / No; Intact Yes / No	CHECKED BY: (Initials)

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

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

#26

CARDINAL LABORATORIES

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

January 4, 2010

Camille Bryant
Basin Environmental Consulting, LLC.
P.O. Box 381
Lovington, NM 88260

Re: BOPCO 24 511 (Cobb Federal #1)

Enclosed are the results of analyses for sample number H18968, received by the laboratory on 12/31/09 at 9:50 am.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accredited though 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 524.2	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Total Number of Pages of Report: 4 (includes Chain of Custody)

Sincerely,

Celey D. Keene
Laboratory Director

This report conforms with NELAP requirements.

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
BASIN ENVIRONMENTAL CONSULTING, LLC
ATTN: CAMILLE BRYANT
P.O. BOX 381
LOVINGTON, NM 88260
FAX TO: (575) 396-1429

Receiving Date: 12/31/09
Reporting Date: 01/04/10
Project Owner: BOPCO (24511)
Project Name: COBB FEDERAL #1
Project Location: EDDY CO., NM

Sampling Date: 12/30/09
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 4°C
Sample Received By: HM
Analyzed By: JM

TOTAL METALS

LAB NO.	SAMPLE ID	Potassium (mg/kg)	Arsenic (mg/kg)	Magnesium (mg/kg)
ANALYSIS DATE:		01/03/10	01/03/10	01/03/10
H18968-7	SB-1 @ 60'	459	<5.00	3,340
H18968-8	SB-1 @ 65'	494	<5.00	4,600
H18968-9	SB-1 @ 70'	600	<5.00	7,140
H18968-10	SB-1 @ 75'	2,150	7.20	12,200
Quality Control		10.6	5.04	4.91
True Value QC		10.0	5.00	5.00
% Recovery		106	101	98.2
Relative Standard Deviation		8.9	6.8	8.2
METHODS: EPA 600/4-91/010, 3050		6010	6010	6010

Analyses subcontracted to Green Analytical Laboratories, a subsidiary of Cardinal Laboratories.

Chemist

01/04/10
Date

H18968M BASIN

CARDINAL LABORATORIES

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

Page 1 of 2

		BILL TO	
Company Name:	BASIN ENV. CONSULTING	P.O. #:	24511
Project Manager:	CAMILLE BRYANT	Company:	BOPCO
Address:	2800 PLAINS HWY	Attn:	TONY/SANDIE
City:	LOVINGTON State: NM Zip: 88260	Address:	
Phone #:	575 605 7210 Fax #: 575-396-1429	City:	
Project #:	24511 Project Owner: BOPCO	State:	Zip:
Project Name:	COBB FEDERAL #1	Phone #:	
Project Location:	EDDY Co. NM	Fax #:	
Sampler Name:	CAMILLE BRYANT		

ANALYSIS REQUEST

STANDARD AT

STANDARD

FOR LAB USE ONLY				MATRIX							PRESERV.		SAMPLING		Chloride (4500)	Potassium (RUSH)	Arsenic (RUSH)	Magnesium (RUSH)	TPH (8015M Extended)									
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															
H18963-1	SB-1 @ 5'	G	1			X					X		12/30	1100	X				X										
-2	SB-1 @ 15'													1140															
-3	SB-1 @ 25'													1230															
-4	SB-1 @ 35'													1305															
-5	SB-1 @ 45'													1445															
-6	SB-1 @ 55'													1520															
-7	SB-1 @ 60'													1540		X	X	X											
-8	SB-1 @ 65'													1600		X	X	XX											
-9	SB-1 @ 70'													1620		X	X	XX											
-10	SB-1 @ 75'	V	V			V					V		V	1640	V	X	X	X	V										

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.

Sampler Relinquished:	Date: 12/31/09	Received By:		Phone Result: ☐	No Add'l Phone #:
	Time: 0900			Fax Result: ☐	No Add'l Fax #:
Relinquished By:	Date: 12/31/09	Received By:		REMARKS:	
	Time: 9:50				
Delivered By: (Circle One)	Temp.	Sample Condition	CHECKED BY:		
Sampler - UPS - Bus - Other:	4.0c	Cool: ☐ Yes ☐ No	Intact: ☑ Yes ☐ No	(Initials)	
				Curt, Camille, Eb e-mail	

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

FT26

CARDINAL LABORATORIES

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

Company Name:	BASIN ENV. CONSULTING	BILL TO	
Project Manager:	CAMILLE BRYANT	P.O. #:	24511
Address:	2800 PLAINS HWY	Company:	BOPCO
City:	LOVINGTON State: NM Zip: 88260	Attn:	TONY SAVOIE
Phone #:	575-605-7210 Fax #: 575-396-1429	Address:	
Project #:	24511 Project Owner: BOPCO	City:	
Project Name:	COBB FEDERAL #1	State: Zip:	
Project Location:	EDDY Co. NM	Phone #:	
Sampler Name:	C + DG	Fax #:	

ANALYSIS REQUEST: Chloride (4500) STANDARD TAT; TPH (8015M) EXTENDED STANDARD TAT

Lab I.D. (FOR LAB USE ONLY)	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE (2009)	TIME	Chloride (4500)	TPH (8015M)
H18968-11	SB-1@80'	G	1			X					X		12/30	1700	X	X
-12	SB-1@85'	↓	1			X					X		12/30	1745	X	↓
-13	SB-1@90'	↓	1			X					X		12/30	1825	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 consequental 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.

Sampler Relinquished:	Date: 12/31/09 Time: 0900	Received By: [signature]
Relinquished By: [signature]	Date: 12/31/09 Time: 9:50	Received By: [signature]

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

Temp.: 4°C
Sample Condition: Cool ☒ Yes ☐ No; Intact ☒ Yes ☐ No
CHECKED BY: (Initials) [initials]

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

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

#26