2R - 369

REPORT
Dec 2010

2R269

Basin Environmental Service Technologies, LLC

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REMEDIATION SUMMARY

AND SITE

CLOSURE STRATEGY

BOPCO, LP
G.H. Cobb Federal #1
Eddy County, New Mexico
UNIT LTR "M" (SW ¼ SW ¼), 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:

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

December 2010

Joel Lowry

Joel Lowry
Project Manager

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1.0 INTRODUCTION AND BACKGROUND INFORMATION

Basin Environmental Service Technologies, LLC (Basin), on behalf of BOPCO, LP (BOPCO), has prepared this *Remediation Summary and Site Closure Strategy* for the release site known as G.H. Cobb Federal #1. The legal description of the release site is Unit Letter "M" (SW ¼ SW ¼), Section 23, Township 20 South, Range 31 East, in Eddy County, New Mexico. The property affected by the release is owned and administered by the United States Department of the Interior, Bureau of Land Management (BLM). The release site GPS coordinates are 32° 33' 11.412" North and 103° 50' 44.304" West. Please reference Figure 1 for a Site Location Map and Figure 2 for a Site and Sample Location Map.

On December 07, 2009, BOPCO submitted notification to the New Mexico Oil Conservation Division (NMOCD) and the BLM, of BOPCO's intention to conduct closure activities at the permanent pit located at the G.H. Cobb Federal #1 well site. The pit was to be excavated to approximately ten (10) feet below ground surface (bgs). All excavated soil was transported to Controlled Recovery Incorporated (CRI) (NM Permit R-9166). The final dimensions of the excavation were approximately one hundred fifty-five (155) feet in width and one-hundred sixty one (161) feet in length and approximately thirty-five (35) feet in depth. The soil beneath the permanent pit was analyzed to determine if a release had occurred. On July 1, 2009, BOPCO submitted a Pit, Closed-Loop System, Below-Grade Tank, or Proposed Alternative Method Permit of Closure Plan Application (Form C-144) to the NMOCD for the permanent pit closure. On December 7, 2009, BOPCO submitted a Release Notification and Corrective Action (Form C-141) to the NMOCD. The Forms C-144 and C-141 are provided as Appendix D.

On November 13, 2009, BOPCO requested Basin assume remediation oversight at 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. 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 and the excavation would be backfilled around the conduit. This would allow drilling activities to be conducted in the floor of the excavation.

2.0 NMOCD SITE CLASSIFICATION

According to data obtained from the New Mexico Office of the State Engineer (NMOSE), no water wells are registered in Section 23, Township 20 S, Range 31 E. A depth to groundwater reference map utilized by the NMOCD indicates groundwater should be encountered at approximately seventy-five (75) bgs. BOPCO installed six (6) monitor wells which indicated 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 criteria.

A water well database, maintained by the NMOSE, indicated there are no water wells less than 1,000 feet from the release, resulting in zero (0) points being assigned to this site as a result of this criteria.

There are no surface water bodies located 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 the criteria.

The NMOCD guidelines indicate the G.H. Cobb Federal #1 release site has an initial ranking score of twenty (20). Based on this score, 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)

NMOCD chloride clean-up level concentrations are site specific and are set by the NMOCD.

3.0 DISTRIBUTION OF CONTAMINANTS IN THE UNSATURATED ZONE

3.1 Summary of Soil Analytical Results

On 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 boring logs are provided as Appendix A. Soil samples were collected at five (5) foot drilling intervals and field screened using a Photo-Ionization Detector (PID) and chloride field screening kit. Selected soil samples were submitted to the laboratory 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 848-8015M and EPA Method 4500 Cl-B, respectively. A summary of Concentrations of TPH, BTEX and Chlorides in Soil is provided as Table 1. Selected soil samples were also analyzed for concentrations of potassium, arsenic and magnesium utilizing SW846 6010B. A summary of Concentrations of Potassium, Arsenic and Magnesium in Soil is provided as Table 4. Laboratory analytical reports are provided as Appendix B. A Stratigraphic Cross Section is provided as Figure 3.

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 bgs to 8,200 mg/kg for the soil sample collected at 65 feet bgs. Laboratory analytical results indicated TPH concentrations were less than the appropriate 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 constituent 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 inside the excavation on the north side 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 constituent concentration was 15.6 mg/kg.

Soil boring SB-4 was advanced approximately one hundred 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 constituent 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 constituent 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 constituent concentrations less than the appropriate laboratory MDL.

Soil boring SB-7 was advanced approximately one hundred 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 eighty (380) feet to the south of the excavation. The soil boring was advanced to a total depth of approximately one hundred 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 samples 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 samples 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 constituent concentration was 42.7 mg/kg.

Soil boring SB-11 was advanced approximately two hundred 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 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 were 256 mg/kg for soil sample Northwest S/W @ 10', 1,220 mg/kg for soil sample Northeast S/W @ 10', 4,600 mg/kg for soil sample West S/W @ 10', 9,900 mg/kg for soil sample East S/W @ 10', 8,500 mg/kg for soil sample South S/W @ 10', 192 mg/kg for soil sample Northwest Corner @ 10', 3,680 mg/kg for soil sample Northeast Corner @ 10', 896 mg/kg for soil sample Southwest Corner @ 10' and 6,900 mg/kg for soil sample Southeast Corner @ 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 ranged from 112 mg/kg in soil sample West S/W A @ 10' to 496 mg/kg in soil sample Southwest Corner A @ 10'. Review of the analytical results indicated chloride concentrations were less than the NMOCD-approved level of 1,000 mg/kg in all the submitted soil samples.

3.2 Soil Closure Proposal

Based on analytical results of the soil samples collected during excavation activities and advancement of the soil borings, BOPCO proposes to conduct a risk-based closure at the site. Due to the depth of impact below and adjacent to the release point, excavation of the impacted soil would be cost-prohibitive and impractical given proximity to active oilfield production facilities and a widely used oilfield access road.

With NMOCD approval, BOPCO proposes to install a 20 mil polyurethane liner at approximately ten (10) to twelve (12) feet bgs in the existing excavation. Approximately one (1) foot of non-impacted cushion sand will be installed above and below the liner to protect the liner from damage during installation and backfilling activities. The excavation will be backfilled with locally purchased, non-impacted soil and compacted in twelve (12) inch lifts. Following backfilling activities, the site will be contoured to fit the surrounding topography and seeded with a BLM-approved seed mixture.

4.0 DISTRIBUTION OF CONTAMINANTS IN THE SATURATED ZONE

4.1 Site Characteristics and Background Information

A search of the New Mexico Office of the State Engineer's database indicates that there are no registered water wells in any of the sections adjacent to the G.H. Cobb Federal #1. According to information obtained from the New Mexico Environment Department – Drinking Water Bureau, none of the six (6) active public water systems in the area obtain their drinking water locally. The Intrepid Potash North mining facility, located 1.5 miles to the northeast of the site, obtains its drinking water from wells located approximately forty (40) miles east of the site in Buckeye, New Mexico. B&B Half Way Bar and Grill, a nearby business, trucks in its drinking water from Carlsbad, New Mexico. An Aerial Photograph is provided as Figure 5.

G.H. Cobb Federal #1 is located within the Permian Rustler Formation in an area that could be described as "karst". The remediation site is located in close proximity to three active potash mining facilities, two NMOCD permitted landfills, a nuclear waste repository and several naturally occurring salt lakes. An Environmental Impact Statement (EIS) obtained from Intrepid Potash, dated March 2010, proposes the use of groundwater extracted from the Rustler Formation to conduct in-situ solution mining within inactive mine workings approximately five (5) miles to the west of the site. Intrepid has indicated that brine water extracted from certain areas within the Rustler Formation is of particular value for in-situ solution mining, as it forms an advantageous injectate solution and is not suitable for human consumption or use in agriculture.

Brine water aquifers are not uncommon in the region. In a publication released by the New Mexico Geological Society in 2006, *Caves and Karst of Southeastern New Mexico,* Carol Hill describes brine and fresh water intermingling in an area south of G.H. Cobb Federal #1. Laboratory analytical results from groundwater extracted from monitor wells installed in the vicinity of the Waste Isolation Pilot Plant (WIPP) indicate chloride concentrations range from 2,800 to 29,000 mg/L within a one square mile radius (Hill 2006). Hydrology within the area is further complicated due to lateral and horizontal variations in lithologies, the potential for subterranean saline springs, and the occurrence of fractured and brecciated strata, which can create a complex system of fresh and saline water paths. Further investigation is needed to characterize the area's hydrology and determine if there are any additional groundwater inputs that should be considered at the G.H. Cobb Federal #1 remediation site.

On April 9, 2010, Basin conducted a drawdown test on monitor well MW-4. Data collected from the drawdown test indicated that monitor well MW-4 exhibited a recharge rate of .04 gal/Min after being pumped dry. Based on data collected from the drawdown test and field observations made during quarterly sampling events, BOPCO believes that monitor wells MW-1, MW-4, MW-5 and MW-6 do not exhibit sufficient recharge rates to make groundwater recovery viable at this time.

On April 14, 2010, Basin conducted a similar drawdown test on monitor well MW-2. Data collected from the drawdown test indicated that monitor well MW-2 exhibited a recharge rate sufficient to conduct limited groundwater recovery.

4.2 Summary of Quarterly Groundwater Monitoring and Sampling Results

Groundwater was observed at depths ranging from 58 to 102 feet bgs in the on-site monitor wells. Groundwater elevation data collected during the September 19, 2010 sampling event indicated an inferred groundwater gradient of generally 0.007 feet/foot to the northwest. Locations of the groundwater monitor wells are depicted on Figure 2. Groundwater Elevation Data is provided as Table 2. Inferred Groundwater Gradient Maps are provided as Figures 4a and 4b.

The six (6) groundwater monitor wells (MW-1, MW-2, MW-3, MW-4, MW-5 and MW-6) were gauged, purged and sampled for chloride concentrations during the 1st, 2nd, and 3rd quarters of 2010. Quarterly groundwater samples were collected from the monitor wells and delivered to Cardinal Laboratories of Hobbs, New Mexico, for determination of chloride concentrations utilizing EPA Method 4500 Cl-B. Groundwater samples were analyzed for total dissolved solids (TDS) using EPA Method 160.1 during the 1st quarter of 2010. Pursuant to an NMOCD request, additional water samples were collected from monitor well MW-2 and an on-site produced water storage tank on March 24, 2010, and analyzed for constituent concentrations of BTEX and heavy metals. BTEX and heavy metal concentrations from the March 24th sampling event were analyzed by Xenco Laboratories of Odessa, Texas, utilizing EPA Method 8021B SW8021BM for BTEX and TCLP Metals by SW846 6010B SW6010B and TCLP Mercury by SW7470A SW7470A for heavy metals. A summary of Concentrations of Benzene, BTEX, Chlorides, Metals and TDS in Groundwater is presented in Table 3.

Monitor well MW-1 was sampled during the 1st, 2nd, and 3rd quarters of 2010. Laboratory analytical results indicated chloride concentrations ranged from 41,000 mg/L in the 1st quarterly

sampling event to 46,000 mg/L during the 2nd quarterly sampling event. Laboratory analytical results indicated the concentration of TDS was 63,200 mg/L in the 1st quarter of 2010.

Monitor well MW-2 was sampled on during the 1st, 2nd, and 3rd quarters of 2010. Laboratory analytical results indicated chloride concentrations ranged from 41,000 mg/L in the 1st and 2nd quarterly sampling events to 140,000 mg/L in the 2nd quarterly sampling event. Laboratory analytical results indicated the concentration of TDS was 215,000 mg/L during the 1st quarter of 2010.

Monitor well MW-3 was sampled during the 1st, 2nd, and 3rd quarters of 2010. Laboratory analytical results indicated chloride concentrations ranged from 124 mg/L during the 1" quarterly sampling event to 220 mg/L during the 2nd quarterly sampling event. Laboratory analytical results indicated the concentration of TDS was 773 mg/L in the 1st quarter of 2010.

Monitor well MW-4 was sampled during the 1st, 2nd, and 3rd quarters of 2010. Laboratory analytical results indicated chloride concentrations ranged from 48,000 mg/L during the 3rd quarterly sampling event to 51,000 mg/L in the 1st quarterly sampling event. Laboratory analytical results indicated the concentration of TDS was 72,500 mg/L in the 1st quarter of 2010.

Monitor well MW-5 was sampled during the 1st, 2nd, and 3rd quarters of 2010. Laboratory analytical results indicated chloride concentrations ranged from 70,000 mg/L during the 2nd quarterly sampling event to 83,000 mg/L in the 2nd quarterly sampling event. Laboratory analytical results indicated the concentration of TDS was 118,000 mg/L in the 1st quarter of 2010.

Monitor well MW-6 was sampled during the 1st, 2nd, and 3rd quarters of 2010. Laboratory analytical results indicated chloride concentrations ranged from 424 mg/L in the 1st quarterly sampling event to 500 mg/L during the 2nd quarterly sampling event. Laboratory analytical results indicated the concentration of TDS was 1,440 mg/L in the 1st quarter of 2010.

Currently, there are six (6) groundwater monitor wells (MW-1, MW-2, MW-3, MW-4, MW-5 and MW-6) on-site. Analytical results from the three (3) quarterly groundwater sampling events indicated chloride and TDS concentrations are less than the NMOCD regulatory guidelines in one (1) of the on-site monitor wells (MW-3). Analytical results indicate chloride and TDS concentrations in monitor wells MW-1, MW-2, MW-4, MW-5, and MW-6 exceed NMOCD regulatory guidelines.

4.3 Groundwater Remediation Strategy

Based on insufficient recharge rates exhibited in monitor wells MW-1, MW-4, MW-5, and MW-6, BOPCO requests NMOCD approval to conduct limited groundwater recovery in the area of monitor well MW-2. Weekly recovery will be conducted utilizing a submersible pump and a trailer-mounted polystyrene tank. Impacted groundwater will be transported to an NMOCD-approved disposal facility. Field observations made during recovery activities and data collected during quarterly gauging and sampling events will be analyzed to further characterize the remediation site. Results from quarterly groundwater monitoring will be compiled in an *Annual Monitoring Report and* submitted to the NMOCD by April 1st of each year.

5.0 REPORTING

On approval and completion of the proposed closure activities, BOPCO will submit a *Remediation Summary and Site Closure Request* for NMOCD and BLM approval.

6.0 LIMITATIONS

Basin Environmental Service Technologies, LLC, has prepared this *Remediation Summary and Site Closure Strategy* to the best of its ability. No other warranty, expressed or implied, is made or intended.

Basin Environmental Service Technologies, LLC, has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. Basin Environmental Service Technologies, LLC, has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. Basin Environmental Service Technologies, LLC, has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin Environmental Service Technologies, LLC, also 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 written consent of Basin Environmental Service Technologies, LLC, and/or BOPCO, LP.

7.0 DISTRIBUTION:

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Figures

1200 600 0 600 1200

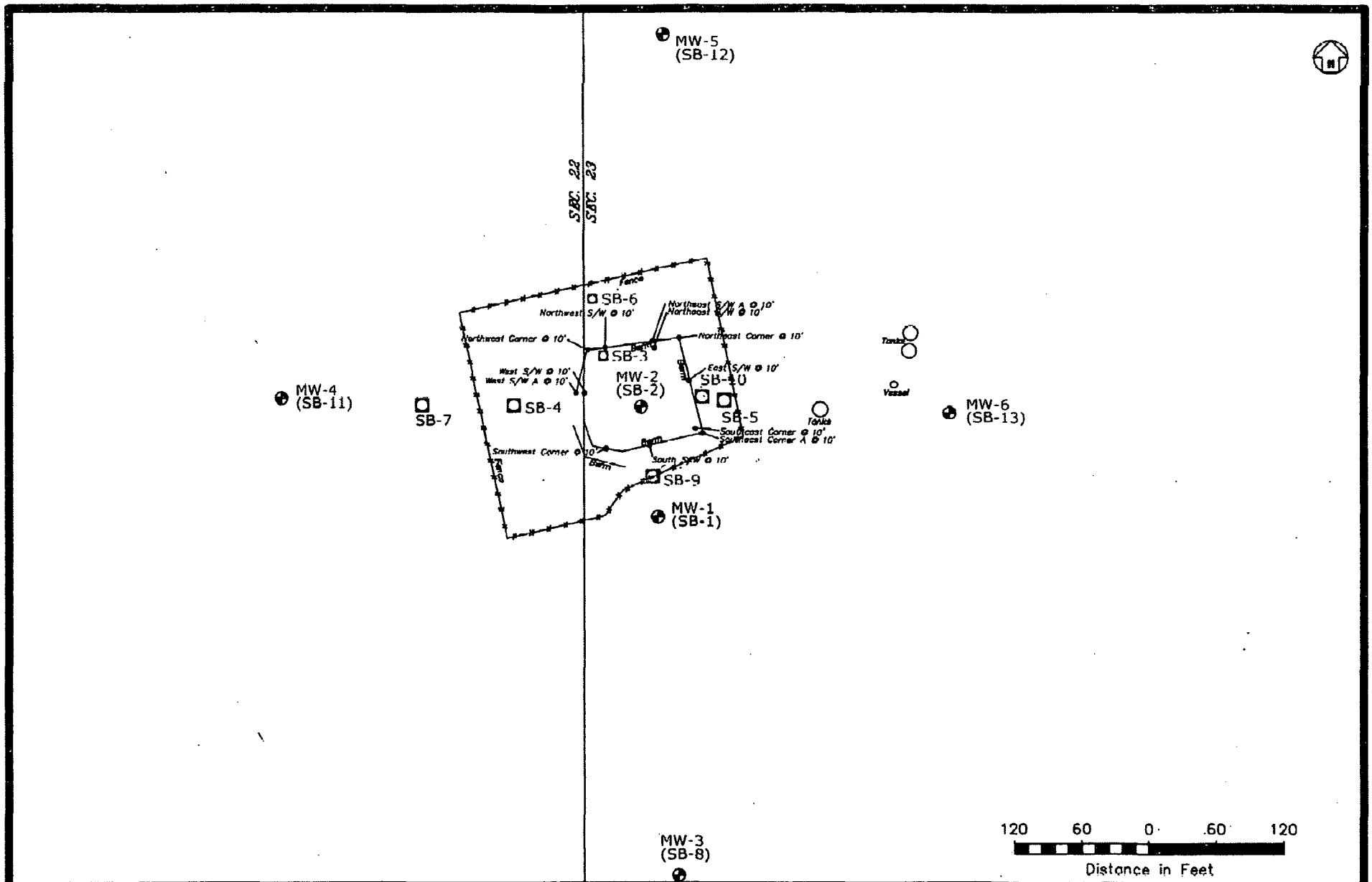
Distance in Feet

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'



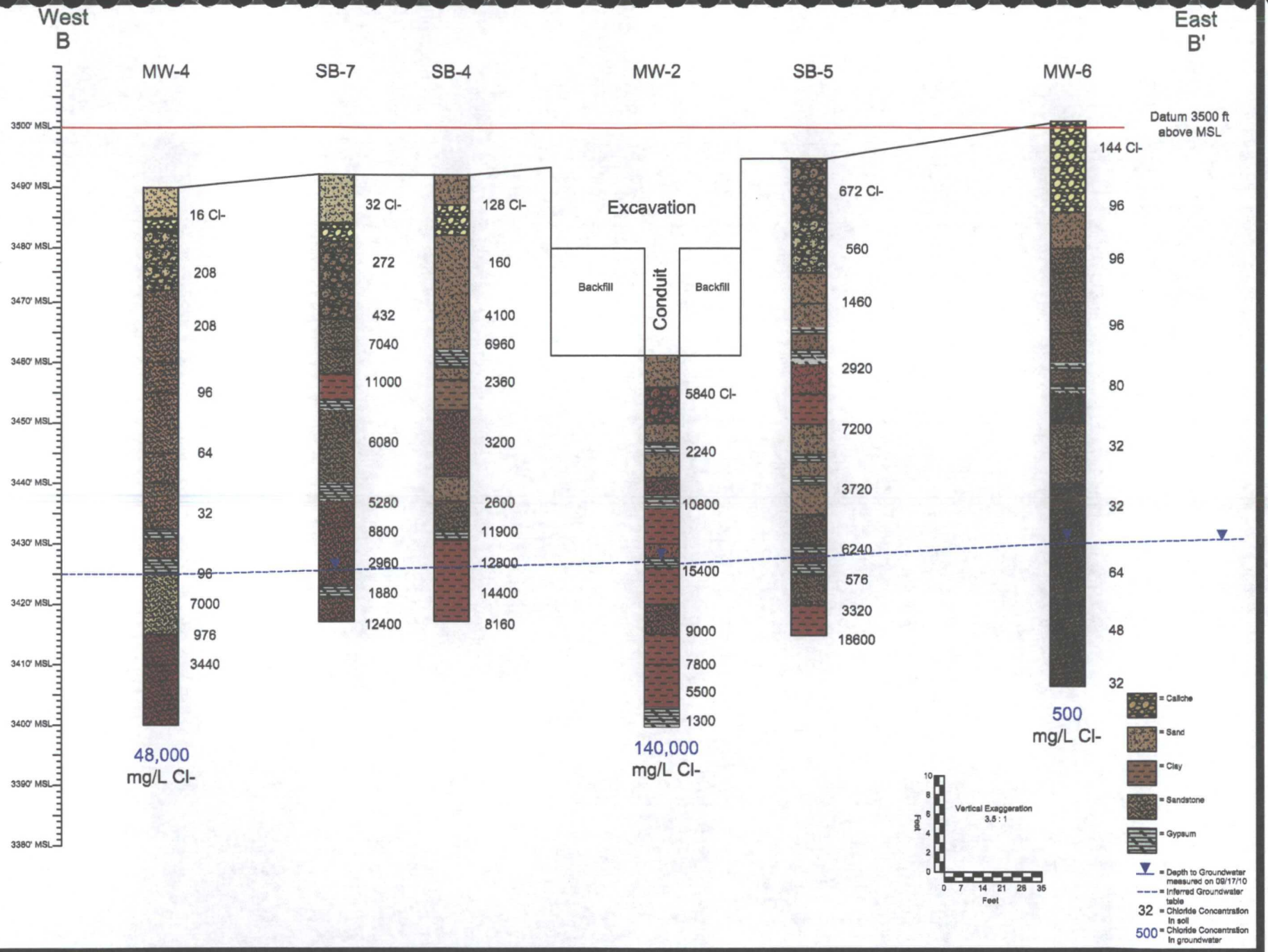
Legend:

- 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

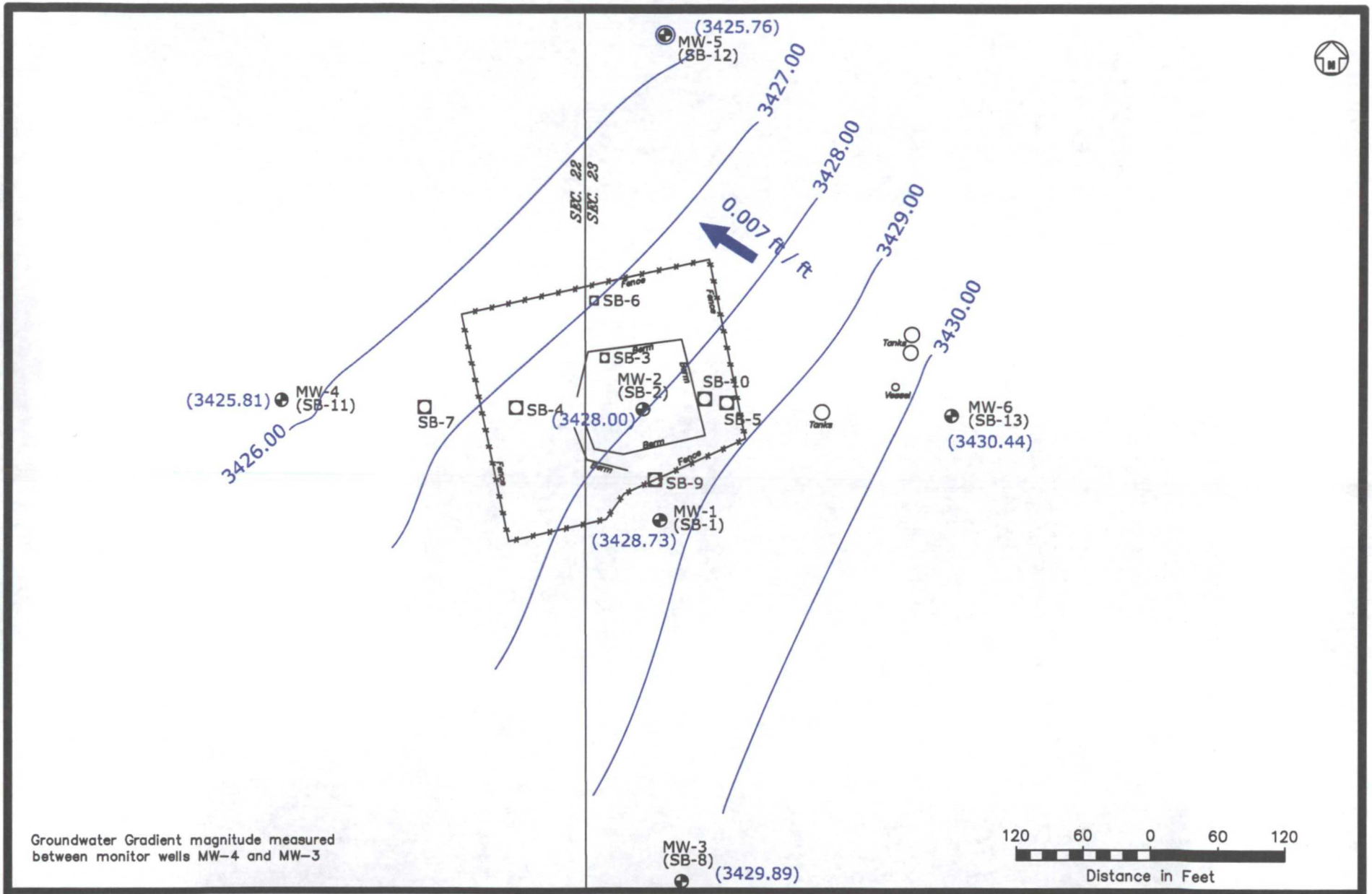
Prep By: CDS	Checked By: CJB
March 3, 2010	Scale 1"=120'



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



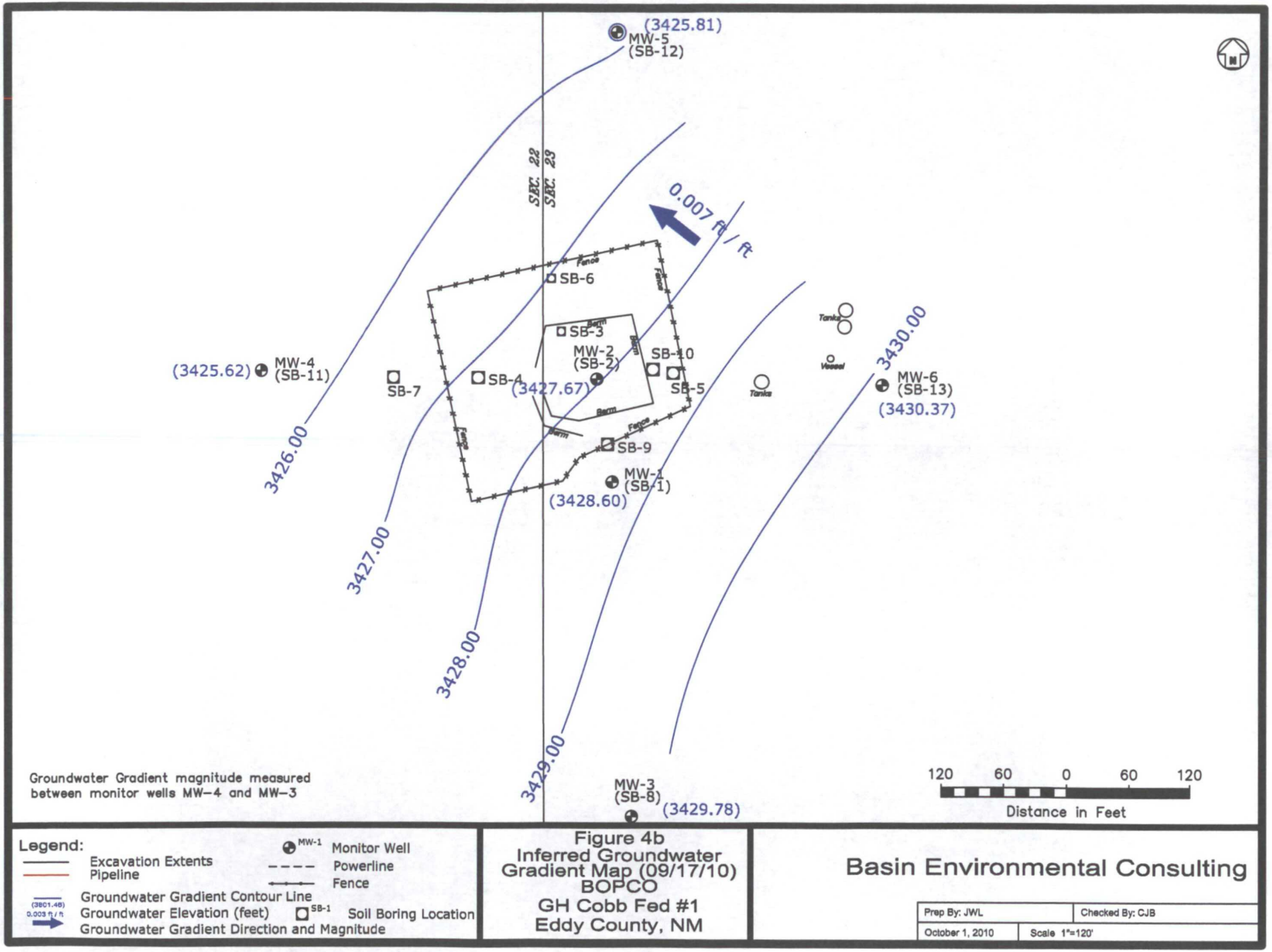
Legend:

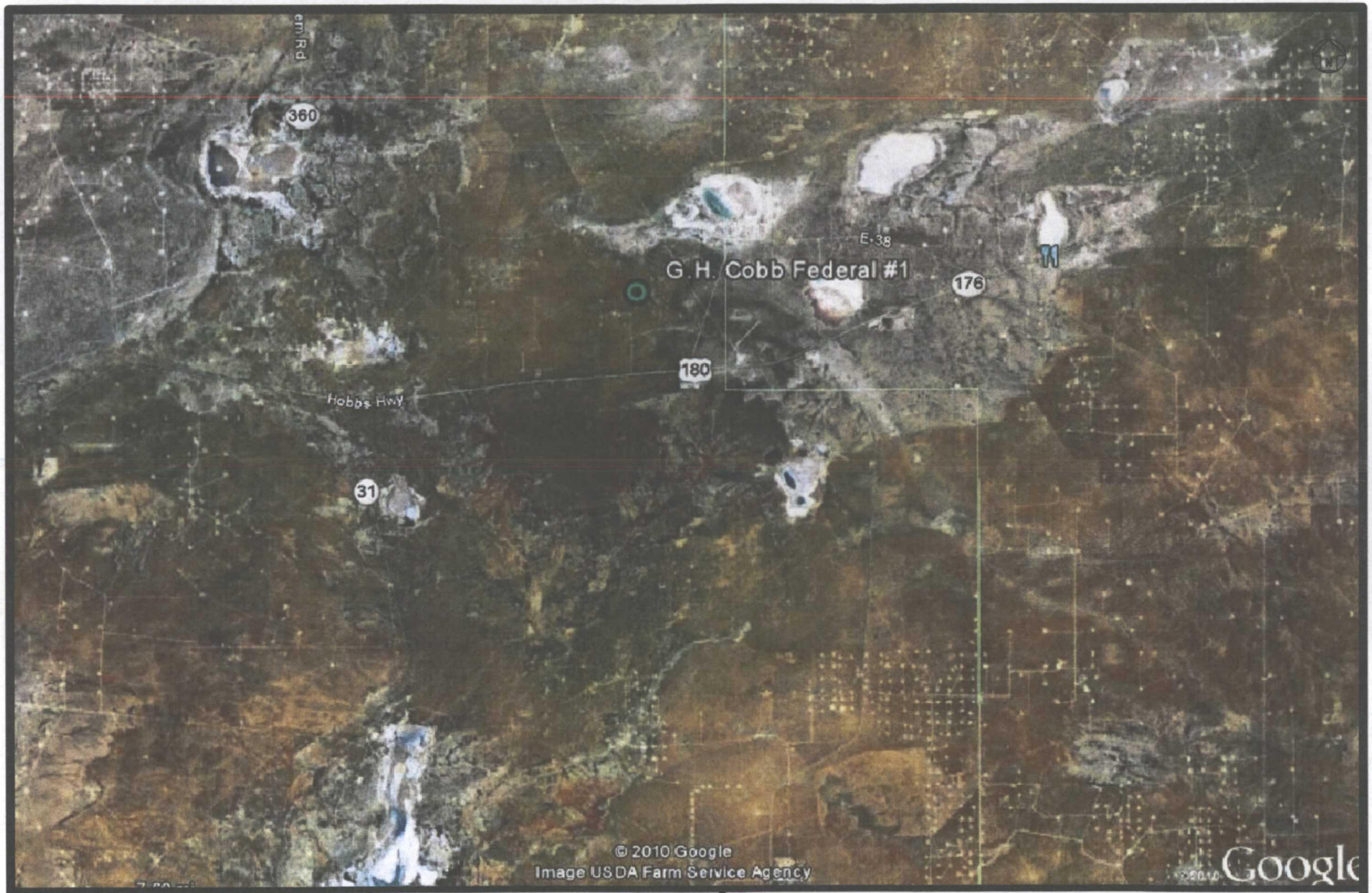
- MW-1 Monitor Well
- Excavation Extents
- Pipeline
- Powerline
- Fence
- (3801.46) 0.003 ft / ft Groundwater Gradient Contour Line
- Groundwater Elevation (feet)
- SB-1 Soil Boring Location
- Groundwater Gradient Direction and Magnitude

Figure 4a
Inferred Groundwater Gradient Map (03/02/10)
BOPCO
GH Cobb Fed #1
Eddy County, NM

Basin Environmental Consulting

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


(3425.81)
MW-5
(SB-12)
SEC. 22
SEC. 23
0.007 ft / ft
Fence
SB-6
Berm
SB-3
MW-2
(SB-2)
SB-10
(3425.62)
MW-4
(SB-11)
SB-7
SB-4
(3427.67)
SB-5
Tanks
Vessel
3430.00
MW-6
(SB-13)
(3430.37)
3426.00
Berm
Fence
SB-9
MW-1
(SB-1)
(3428.60)
3427.00
3428.00
3429.00
MW-3
(SB-8)
(3429.78)
Groundwater Gradient magnitude measured
between monitor wells MW-4 and MW-3
120 60 0 60 120
Distance in Feet
Legend:
MW-1 Monitor Well
Excavation Extents
Pipeline
Powerline
Fence
Groundwater Gradient Contour Line
(3801.48)
0.003 ft / ft
Groundwater Elevation (feet)
SB-1 Soil Boring Location
Groundwater Gradient Direction and Magnitude
Figure 4b
Inferred Groundwater
Gradient Map (09/17/10)
BOPCO
GH Cobb Fed #1
Eddy County, NM
Basin Environmental Consulting
Prep By: JWL
Checked By: CJB
October 1, 2010
Scale 1"=120'



1200 600 0 600 1200

Distance in Feet

Figure 5
Aerial Photograph
BOPCO, LP
GH Cobb Federal #1
Eddy County, New Mexico

2RP-369

Basin Environmental Services Technologies

Prep By: JWL	Checked By: BJA
October 04, 2010	

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
GROUNDWATER ELEVATION DATA

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

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO WATER	CORRECTED GROUNDWATER ELEVATION
MW -1	01/19/10	3,504.04	74.54	3,429.50
MW-1	01/26/10	3,504.04	75.05	3,428.99
MW-1	02/08/10	3,504.04	74.96	3,429.08
MW-1	02/15/10	3,504.04	75.38	3,428.66
MW-1	02/23/10	3,504.04	75.25	3,428.79
MW-1	03/02/10	3,504.04	75.31	3,428.73
MW-1	03/09/10	3,504.04	74.94	3,429.10
MW-1	03/16/10	3,504.04	75.55	3,428.49
MW-1	03/24/10	3,504.04	75.50	3,428.54
MW-1	03/24/10	3,504.04	78.38	3,425.66
MW-1	03/25/10	3,504.04	75.37	3,428.67
MW-1	03/24/10	3,504.04	78.38	3,425.66
MW-1	06/03/10	3,504.04	79.12	3,424.92
MW-1	09/17/10	3,504.04	75.44	3,428.60
MW-2	01/19/10	3,488.72	58.78	3,429.94
MW-2	01/26/10	3,488.72	58.92	3,429.80
MW-2	02/08/10	3,488.72	59.81	3,428.91
MW-2	02/15/10	3,488.72	61.75	3,426.97
MW-2	02/23/10	3,488.72	60.58	3,428.14
MW-2	03/02/10	3,488.72	60.72	3,428.00
MW-2	03/09/10	3,488.72	60.41	3,428.31
MW-2	03/16/10	3,488.72	60.97	3,427.75
MW-2	03/24/10	3,488.72	60.55	3,428.17
MW-2	03/24/10	3,488.72	60.73	3,427.99
MW-2	03/25/10	3,488.72	60.80	3,427.92
MW-2	06/03/10	3,488.72	60.67	3,428.05
MW-2	09/17/10	3,488.72	61.05	3,427.67
MW-3	01/19/10	3,511.20	-	-
MW-3	01/26/10	3,511.20	94.07	3,417.13
MW-3	02/08/10	3,511.20	82.34	3,428.86
MW-3	02/15/10	3,511.20	81.37	3,429.83
MW-3	02/23/10	3,511.20	81.32	3,429.88
MW-3	03/02/10	3,511.20	81.31	3,429.89
MW-3	03/09/10	3,511.20	81.09	3,430.11
MW-3	03/16/10	3,511.20	81.43	3,429.77
MW-3	03/24/10	3,511.20	81.08	3,430.12
MW-3	03/24/10	3,511.20	102.65	3,408.55
MW-3	03/25/10	3,511.20	100.00	3,411.20
MW-3	06/03/10	3,511.20	81.21	3,429.99

TABLE 2
GROUNDWATER ELEVATION DATA

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

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO WATER	CORRECTED GROUNDWATER ELEVATION
MW-3	09/17/10	3,511.20	81.42	3,429.78
MW-4	01/19/10	3,495.59	69.49	3,426.10
MW-4	01/26/10	3,495.59	69.64	3,425.95
MW-4	02/08/10	3,495.59	69.43	3,426.16
MW-4	02/15/10	3,495.59	69.81	3,425.78
MW-4	02/23/10	3,495.59	69.65	3,425.94
MW-4	03/02/10	3,495.59	69.78	3,425.81
MW-4	03/09/10	3,495.59	69.44	3,426.15
MW-4	03/09/10	3,495.59	69.44	3,426.15
MW-4	03/16/10	3,495.59	70.06	3,425.53
MW-4	03/24/10	3,495.59	69.56	3,426.03
MW-4	03/24/10	3,495.59	70.47	3,425.12
MW-4	03/25/10	3,495.59	69.66	3,425.93
MW-4	06/03/10	3,495.59	69.46	3,426.13
MW-4	09/17/10	3,495.59	69.97	3,425.62
MW-5	01/19/10	3,494.38	68.67	3,425.71
MW-5	01/26/10	3,494.38	68.74	3,425.64
MW-5	02/08/10	3,494.38	68.39	3,425.99
MW-5	02/15/10	3,494.38	68.76	3,425.62
MW-5	02/23/10	3,494.38	68.61	3,425.77
MW-5	03/02/10	3,494.38	68.62	3,425.76
MW-5	03/09/10	3,494.38	68.21	3,426.17
MW-5	03/16/10	3,494.38	68.75	3,425.63
MW-5	03/24/10	3,494.38	68.30	3,426.08
MW-5	03/24/10	3,494.38	69.18	3,425.20
MW-5	03/25/10	3,494.38	68.90	3,425.48
MW-5	06/03/10	3,494.38	68.31	3,426.07
MW-5	09/17/10	3,494.38	68.57	3,425.81
MW-6	01/19/10	3,506.82	75.88	3,430.94
MW-6	01/26/10	3,506.82	76.91	3,429.91
MW-6	02/08/10	3,506.82	75.98	3,430.84
MW-6	02/15/10	3,506.82	76.42	3,430.40
MW-6	02/23/10	3,506.82	76.30	3,430.52
MW-6	03/02/10	3,506.82	76.38	3,430.44
MW-6	03/09/10	3,506.82	76.00	3,430.82
MW-6	03/16/10	3,506.82	76.61	3,430.21
MW-6	03/24/10	3,506.82	76.04	3,430.78
MW-6	03/24/10	3,506.82	77.92	3,428.90
MW-6	03/25/10	3,506.82	76.54	3,430.28
MW-6	06/03/10	3,506.82	76.19	3,430.63
MW-6	09/17/10	3,506.82	76.45	3,430.37

TABLE 3

CONCENTRATIONS OF BENZENE, BTEX , METALS, CHLORIDE AND TDS IN GROUNDWATER

BOPCO, LP
GH COBB FEDERAL #1
EDDY COUNTY, NEW MEXICO
NMOCD REFERENCE NO: 2RP-369

SAMPLE LOCATION	SAMPLE DATE	EPA 8021B						TCLP SW846 6010B							TCPL SW 7470A	E 4500	EPA160.1
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P-XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL BTEX (mg/L)	LEAD (mg/L)	ARSENIC (mg/L)	CADMIUM (mg/L)	CHROMIUM (mg/L)	SELENIUM (mg/L)	SILVER (mg/L)	BARIUM (mg/L)	MERCURY (mg/L)	CHLORIDES (mg/L)	TDS (mg/L)
MW-1	01/26/10	-	-	-	-	-	-	--	--	--	--	--	--	--	--	41,000	63,200
MW-1	06/03/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	46,000	--
MW-1	09/17/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	43,000	--
MW-2	01/26/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	134,000	215,000
MW-2	03/24/10	0.0208	<0.0400	<0.0200	0.0432	<0.200	0.064	<2.22	<2.22	<0.111	<0.556	<2.22	<0.444	1.43	<0.0001	--	--
MW-2	06/03/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	134,000	--
MW-2	09/17/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	140,000	--
MW-3	01/26/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	124	773
MW-3	06/03/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	200	--
MW-3	09/17/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	220	--
MW-4	01/26/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	51,000	72,500
MW-4	06/03/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	49,500	--
MW-4	09/17/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	48,000	--
MW-5	01/26/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	83,000	118,000
MW-5	06/03/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	70,000	--
MW-5	09/17/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	76,000	--
MW-6	01/26/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	424	1,440
MW-6	06/03/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	456	--
MW-6	09/17/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	500	--
Produced Water Tank	03/24/10	0.0798	<0.0400	0.1028	<0.0400	<0.0200	0.1826	<2.22	<2.22	<0.111	<0.556	<2.22	<0.444	2.06	<0.0001	--	--
REGULATORY STANDARD		0.01	0.75	0.75	TOTAL XYLENES 0.62			1.00	1.00	0.2	1.00	1.00	1.00	20	0.04	250	10,000

TABLE 4

CONCENTRATIONS OF POTASSIUM, ARSENIC AND MAGNESIUM IN SOIL

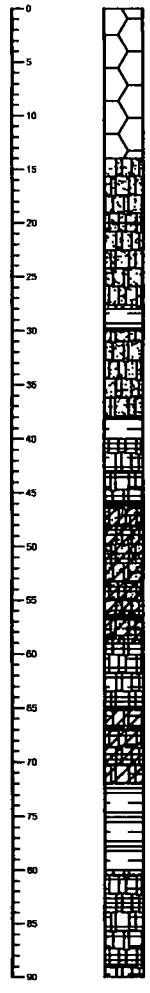
BOPCO, LP
G.H. COBB FEDERAL #1
EDDY COUNTY, NEW MEXICO

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	-

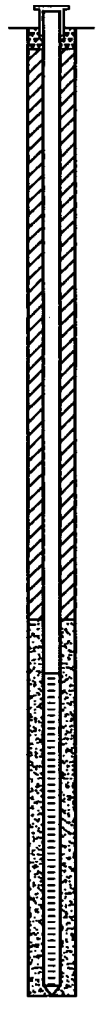
Appendices

Appendix A
Soil Boring & Monitor Well Logs

Monitor Well MW-1



Depth below ground surface	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



Grout Surface Seal

Bentonite Pellet Seal

Sand Pack

Screen

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.

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.

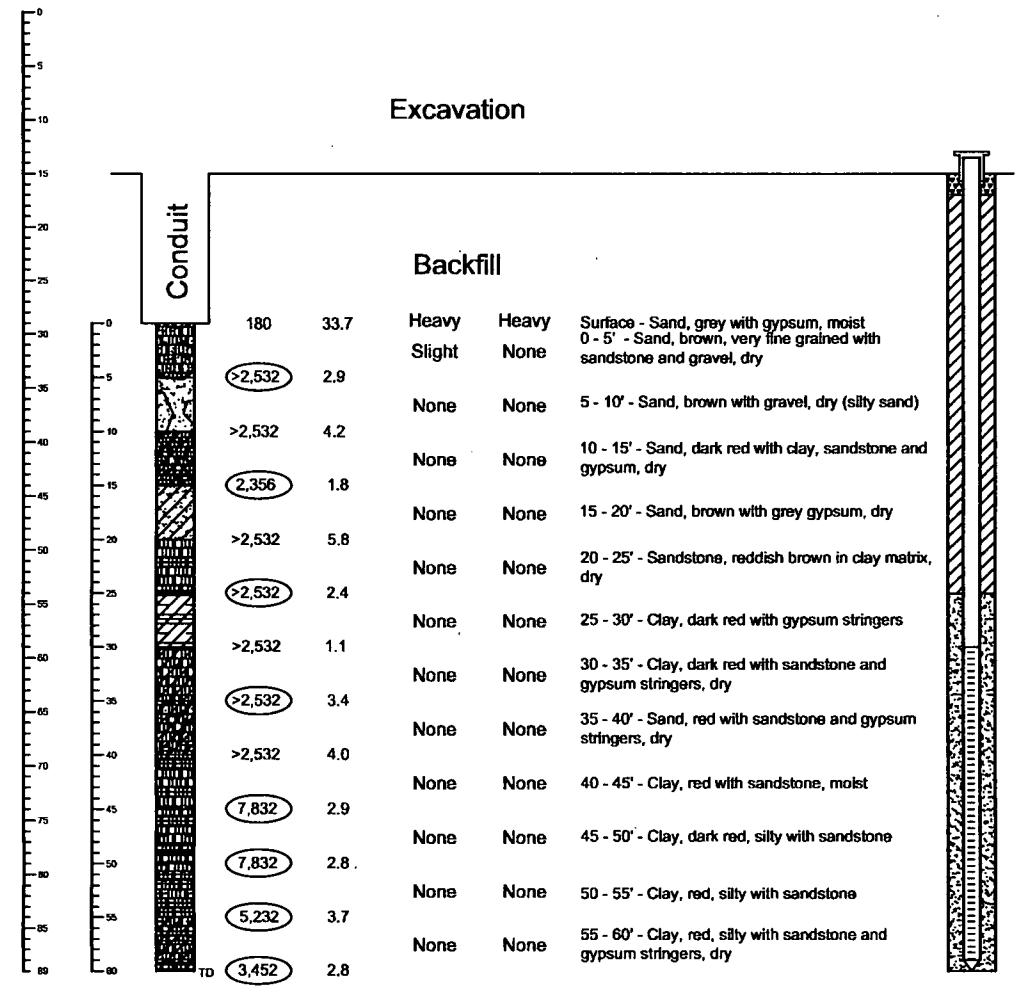
Monitor Well Details
MW-1
Soil Boring SB-1

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

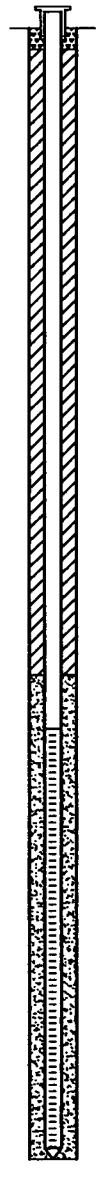
BOPCO
GH Cobb Fed #1
Eddy County, New Mexico

Basin Environmental Consulting

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

Monitor Well MW-3

Depth below ground surface	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
0	356		None	None	Surface - 2' - Sand, brown, clayey, moist
			None	None	
5	856				2 - 8' - Caliche, white, soft, dry
			None	None	
10	ND				8 - 10' - Sand, brown with caliche nodules, dry
			None	None	10 - 12' - Caliche, white, sandy, soft, dry 12 - 15' - Sand, brown fine grained with caliche nodules
15	188				
			None	None	
20	ND				15 - 25' - Caliche, white, soft, sandy, dry
			None	None	
25	356				
			None	None	25 - 35' - Sand and sandstone, brown with some caliche nodules, harder at 27' bgs
30	436				
			None	None	
35	ND				35 - 40' - Sand and sandstone, brown with some clay
			None	None	
40	188				40 - 45' - Sand and sandstone, brown to grey with some clay and some gypsum stringers
			None	None	
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	
85	ND				
			None	None	75 - 105' - Sandstone, light brown with some gypsum stringers in red clay matrix
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	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
	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
			None	None	
90	3,452				

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

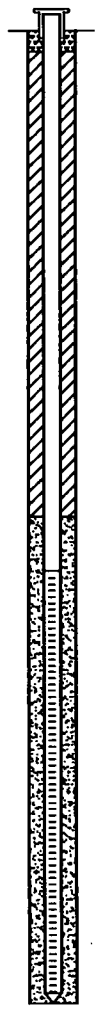
BOPCO
GH Cobb Fed #1
Eddy County, New Mexico

Basin Environmental Consulting

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

Monitor Well MW-5

Depth below ground surface	Soil Columns	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
0		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	60 - 80' - Sandstone, red with sandy clay, damp
70		1,412		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

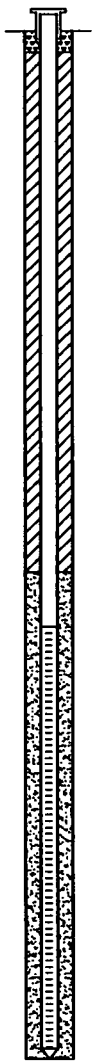
BOPCO
GH Cobb Fed #1
Eddy County, New Mexico

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	
55		ND	X			50 - 60' - Sandstone, brown, dry
				None	None	
60		ND	X			
				None	None	
65		ND	X			
				None	None	
70		ND	X			60 - 80' - Sandstone, reddish brown with some clay, dry, damp to moist
				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
	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.

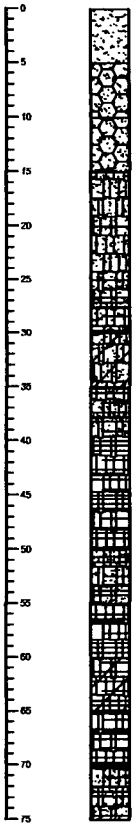
Soil Boring SB-3

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

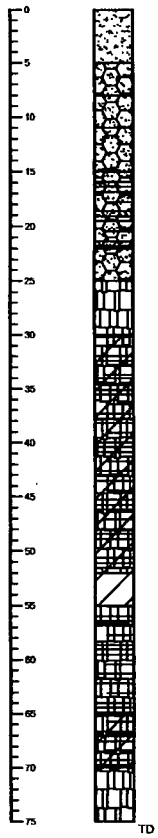
Soil Boring SB-6

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	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
			None	None	
		2.9	None	None	0 - 5' - Sand, tan to grey, very fine grained, moist (snow melt), dry at 6-inches
5	ND				
		2.5	None	None	5 - 8' - Sand, tan to grey, very fine grained with some caliche nodules, dry
10	ND				8 - 11' - Caliche, white, dry, sandy
		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	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
5				None	None
10				None	None
15				None	None
20	TD			None	None

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 B

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

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:	[signature]	Fax #:	

ANALYSIS REQUEST

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) STANDARD TAT	Potassium (RUSH)	Arsenic (RUSH)	Magnesium (RUSH)	TPH (8015M EXTENDED) STANDARD
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	↓

Sampler Relinquished: [signature]	Date: 12/31/09 Time: 0900	Received By: [signature]	Phone Result: ☐ No — Add'l Phone #:
Relinquished By: [signature]	Date: 12/31/09 Time: 9:50	Received By: Hope S. Moreno	Fax Result: ☐ No — Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Temp. 4.0C	Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No	CHECKED BY: (Initials) [initials]

REMARKS: 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

STANDARD TAT

STRICT TAT

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/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:	CAMILLE BRYANT	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	Chloride (4500)	TPH (8015M Extended)
H18968-11	SB-1@80'	G	1			X					X		12/30	1700	X	X
-12	SB-1@85'	G	1			X					X		12/30	1745	X	X
-13	SB-1@90'	G	1			X					X		12/30	1825	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 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.

#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

		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:	CHRIS		

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	Chloride (4500) STANDARD TAT	Potassium (RUSH)	Arsenic (RUSH)	Magnesium (RUSH)	TPH (8015M Extended) STANDARD
H18968-1	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	

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: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No	CHECKED BY: (Initials)		
Sampler - UPS - Bus - Other:	4.0C				

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:	[illegible]	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 Extended)
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: [signature]	Date: 12/31/09 Time: 0900	Received By: [signature]	Phone Result: ☐ No Add'l Phone #:
Relinquished By: [signature]	Date: 12/31/09 Time: 9:50	Received By: [signature]	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) [initials]

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 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-Cl^-B

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-Cl⁻B

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°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. BRYANT for C.S. BRYANT	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												
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:	Date: 1/7/10	Received By:	Phone Result: ☐	No	Add'l Phone #:
Relinquished By:	Time: 0925	Received By:	Fax Result: ☐	No	Add'l Fax #:
Delivered By: (Circle One)	Date: 1/7/10 Time: 1025		REMARKS:		
Sampler - UPS - Bus - Other:	Temp. 5.5°C	Sample Condition Cool & Intact ☑ Yes ☑ Yes ☐ No ☐ No	CHECKED BY: (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:	2000 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:	TD Ramsey for C.S. BRYANT	Fax #:	

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 DATE	SAMPLING 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			

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:	
Relinquished By:	Date: 1/7/10 Time: 10:25	Received By:	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Temp. 5.5°C	Sample Condition: Cool: Yes / No; Intact: Yes / No	CHECKED BY: (Initials) CH

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.

#24

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. BRYANT	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	SAMPLING TIME	X Chloride 4500	TPH 8015M Ext.	BTEX 8021B
H19001-21	SB-4@35'	G	1			X					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			

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:	
Relinquished By:	Date: 1/7/10 Time: 10:25	Received By:	
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.

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 H19000, received by the laboratory on 01/07/10 at 10:35 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: 01/07/10
Reporting Date: 01/08/10
Project Number: 24511 (BOPCO, LP)
Project Name: COBB FEDERAL #1
Project Location: EDDY CO., NM

Analysis Date: 01/08/10
Sampling Date: 01/05/10 & 01/06/10
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 5.5°C
Sample Received By: JH
Analyzed By: HM

LAB NO.	SAMPLE ID	Cl^- (mg/kg)
H19000-1	SB-5 @ 5'	672
H19000-2	SB-5 @ 15'	560
H19000-3	SB-5 @ 25'	1,460
H19000-4	SB-5 @ 35'	2,920
H19000-5	SB-5 @ 45'	7,200
H19000-6	SB-5 @ 55'	3,720
H19000-7	SB-5 @ 65'	6,240
H19000-8	SB-5 @ 70'	576
H19000-9	SB-5 @ 75'	3,320
H19000-10	SB-5 @ 80'	18,600
Quality Control		510
True Value QC		500
% Recovery		102
Relative Percent Difference		2.0

METHOD: Standard Methods	4500-Cl^-B

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

Chemist

01/13/10
Date

H19000 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: 01/08/10
Project Number: 24511 (BOPCO, LP)
Project Name: COBB FEDERAL #1
Project Location: EDDY CO., NM

Analysis Date: 01/08/10
Sampling Date: 01/06/10
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 5.5°C
Sample Received By: JH
Analyzed By: HM

LAB NO.	SAMPLE ID	Cl^- (mg/kg)
H19000-11	SB-6 @ 5'	432
H19000-12	SB-6 @ 15'	304
H19000-13	SB-6 @ 25'	704
H19000-14	SB-6 @ 35'	7,520
H19000-15	SB-6 @ 45'	4,320
H19000-16	SB-6 @ 55'	5,760
H19000-17	SB-6 @ 60'	8,560
H19000-18	SB-6 @ 65	13,400
H19000-19	SB-6 @ 70'	12,400
Quality Control		510
True Value QC		500
% Recovery		102
Relative Percent Difference		2.0

METHOD: Standard Methods	4500-Cl^-B

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

Chemist

01/13/10
Date

H19000 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 (24 511)
Project Name: COBB FEDERAL #1
Project Location: EDDY CO., 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: 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
H19000-1 SB-5 @ 5'	<10.0	17.2	<10.0	<0.050	<0.050	<0.050	<0.300
H19000-11 SB-6 @ 5'	<10.0	<10.0	<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

H19000 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, LP
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 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	SAMPLING TIME	Chloride 4500	TPH 8015M Extended	BTEX 8021B
H19000-1	SB-5 @ 5'	G	1			X					X		1/5	1400	X	X	X
-2	SB-5 @ 15'												1/5	1420	X		
-3	SB-5 @ 25'												1/5	1500	X		
-4	SB-5 @ 35'												1/6	0840	X		
-5	SB-5 @ 45'												1/6	0915	X		
-6	SB-5 @ 55'												1/6	1000	X		
-7	SB-5 @ 65'												1/6	1030	X		
-8	SB-5 @ 70'												1/6	1100	X		
-9	SB-5 @ 75'												1/6	1130	X		
-10	SB-5 @ 80'												1/6	1200	X		

Sampler Relinquished: Camille Bryant	Date: 1/7/10 Time: 1035	Received By:		Phone Result: ☐	No Add'l Phone #:
Relinquished By:	Date: 1/7/10 Time: 10:35	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)	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, LP
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 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	SAMPLING TIME	Chloride 4500	TPH 8015M Extended	BTEX 8021B
H600-11	SB-6 @ 5'	G	1			X					X		1/6	1230	X	X	X
-12	SB-6 @ 15'													1240	X		
13	SB-6 @ 25'													1300	X		
-14	SB-6 @ 35'													1320	X		
-15	SB-6 @ 45'													1350	X		
-16	SB-6 @ 55'													1420	X		
17	SB-6 @ 60'													1450	X		
-18	SB-6 @ 65'													1520	X		
-19	SB-6 @ 70'	↓	↓			↓					↓		↓	1550	X		

Sampler Relinquished: Camille Bryant	Date: 1/7/10 Time: 1031	Received By:		Phone Result: ☐	No Add'l Phone #:
Relinquished By:	Date: 1/7/10 Time: 11:35	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) CHH	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 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**	ANALYSIS REQUEST
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	Fax #:	

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											

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: 1625		REMARKS:		
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:	T.D. Tay for C.S. BRYANT	Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY		MATRIX								PRESERV.		SAMPLING		Potassium	Arsenic	Magnesium
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			
													2010				
-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@68'													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			

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	Received By:	Phone Result: ☐	No	Add'l Phone #:
	Time: 0925		Fax Result: ☐	No	Add'l Fax #:
Relinquished By:	Date: 1/7/10	Received By:	REMARKS:		
	Time: 1095				
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:	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
-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	Received By:	Phone Result:	☐	No Add'l Phone #:
Relinquished By:	Time: 0925	Received By:	Fax Result:	☐	No Add'l Fax #:
Delivered By: (Circle One)	Date: 1-7-10	Joan Henson	REMARKS:		
Sampler - UPS - Bus - Other:	Time: 1025	Temp. 5.5°C	Sample Condition Cool ☑ Yes ☐ No	Intact ☑ Yes ☐ No	CHECKED BY: (Initials)

† 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-Cl^-B

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. 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, 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 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	TPH 8015M extended	BTEX 8021B
H19019-1	Northwest S/W @ 10'	G	1			X							11/8/10	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:	Date: 11/8/10	Received By:	
Camille Bryant	Time: 4:55		
Relinquished By:	Date: 11/8/10	Received By:	
	Time: 4:55	Jodi Henson	
Delivered By: (Circle One)	Temp:	Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No	CHECKED BY: (Initials)
Sampler - UPS - Bus - Other:	5°C		JA

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 22, 2010

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

Re: Cobb Federal #1 (BOPCO 24511)

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: 14 (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: 01/20/10
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°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		01/20/10	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

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 & 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:	C. BRYANT	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												
H24090-1	SB-7 @ 5'		1			X					X		1/11	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: 1/18/10	Received By:	Phone Result:	☐ No	Add'l Phone #:
	Time: 1613	Camille Bryant	Fax Result:	☐ No	Add'l Fax #:
Relinquished By:	Date: 1/19/10	Received By:	REMARKS:		
Camille Bryant	Time: 8:30	Jodi Henson			
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:	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. HOSE	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 2010	TIME												
H19090-11	SB-7@75'		1			X					X		11/11	1650	X										
-12	SB-8@5'												11/12	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: 11/18/10	Received By:	Phone Result: ☐ No	Add'l Phone #:	
C. HOSE	Time: 1613	Camille Bryant	Fax Result: ☐ No	Add'l Fax #:	
Relinquished By:	Date:	Received By:	REMARKS:		
Camille Bryant	Time:	Jodi Henson			
Delivered By: (Circle One)	Temp.	Sample Condition: Cool ☑ Yes ☐ No / Intact ☑ Yes ☐ No	CHECKED BY: (Initials)		
Sampler - UPS - Bus - Other:	4°C		JHH		

† 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 SAURIE
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.D.S.	Fax #:	

FOR LAB USE ONLY				MATRIX							PRESERV.			SAMPLING		ANALYSIS REQUEST		
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	2010 DATE	TIME	Chloride (4500)	TPH (8015M 3GT)	BTEX (8021B)
H19090-21	SB-8@85'		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			
-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:	Date: 1/12/10	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	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:	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:		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	Chloride (4500)	TPH (8015M 3x)	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	Received By:	Phone Result: ☐ No	Add'l Phone #:	
	Time: 1613		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 ☑ 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.

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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:	CHS

BILL TO

P.O. #:	24511
Company:	BOPCO
Attn:	TONY SAVOIE
Address:	
City:	
State: Zip:	
Phone #:	
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	Chloride (4500)	TPH (8015M Ext)	BTEX (8021B)
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: CHS	Date: 1/18/10 Time: 1613	Received By: Camille Bryant
Relinquished By: Camille Bryant	Date: 1/19/10 Time: 8:30	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) 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

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. TOSCH	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 (2010)	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 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

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°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		01/20/10	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

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 & 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:		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	Chloride (4500)	TPH (8015M Ext)	BTEX (8021B)
H19090-1	SB-7 @ 5'		1			X					X		1/11	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: 1/12/10 Time: 1613	Received By:	Camille Bryant
Relinquished By:	Date: 1/19/10 Time: 8:30	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:

* 1/22/10 Curt Called & added BTEX, TPH to SB 10 @ 5' H19090-25. ch

† 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. H. D. S.	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	Chloride (4500)	TPH (8015M)	BTEX (8021B)
H19090-11	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 #:
C. H. D. S.	Time: 1613	Camille Bryant		Fax Result: ☐	No Add'l Fax #:
Relinquished By:	Date:	Received By:		REMARKS:	
Camille Bryant	Time:	Jodi Henson			
Delivered By: (Circle One)	Temp.	Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No	CHECKED BY: (Initials)		
Sampler - UPS - Bus - Other:	4°C		JH		

† 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:		Fax #:	

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)
H19090-21	SB-8@85'		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)
-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			

added as per Curt 1/22/10

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: 1/12/10	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. 4°C	Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No	CHECKED BY: (Initials)		
Sampler - UPS - Bus - Other:					

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

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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:			

ANALYSIS REQUEST: Chloride (4500) | TPH (8015M 3ct) | 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: DATE	TIME	Chloride (4500)	TPH (8015M 3ct)	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:	Phone Result: ☐ No	Add'l Phone #:
Relinquished By:	Date: 1/19/10 Time: 8:30	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.

#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 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 COUNTY, NM	Fax #:	
Sampler Name:	CAMILLE BRYANT		

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST		
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME	Chloride (4500)	TPH (8015M)	BTEX (8021B)
H19090-41	SB-12@35'		1			X					X		1/15/2010	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			

Sampler Relinquished:	Date: 1/18/10	Received By:	Phone Result: ☐ No	Add'l Phone #:	
	Time: 1623		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	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:	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	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												
H19090-51	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'													1610												
-57	SB-13@85'													1645												
-58	SB-13@95'													1705												

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

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-Cl^-B

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) 600-7210 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 Lowery	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

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 Lowery	Date: 2/12/10 Time: 4:45	Received By:		Phone Result: ☐	No Add'l Phone #:
Relinquished By:	Date: 2/12/10 Time: 4:45	Received By: Jodi Henson		Fax Result: ☐	No Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Temp. 3°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.

#26

CARDINAL LABORATORIES

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

January 29, 2010

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

Re: Cobb Federal #1 (BOPCO 24511)

Enclosed are the results of analyses for sample number H19089, received by the laboratory on 01/19/10 at 8:25 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: 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
ATTN: CAMILLE BRYANT
P.O. BOX 381
LOVINGTON, NM 88260

Receiving Date: 01/19/10
Reporting Date: 01/28/10
Project Owner: BOPCO (24511)
Project Name: COBB FEDERAL #1
Project Location: EDDY CO., NM

Sampling Date: 01/14/10
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT @ 0°C
Sample Received By: JH
Analyzed By: JM

TOTAL METALS

LAB NO.	SAMPLE ID	*As (mg/L)	*Mg (mg/L)	*K (mg/L)	Cl (mg/L)
ANALYSIS DATE:		01/26/10	01/26/10	01/26/10	01/21/10
H19089-1	PROD WATER	2.50	3,630	1,500	170,000
Quality Control		5.08	4.93	10.3	500
True Value QC		5.00	5.00	10.0	500
% Recovery		102	98.6	103	100
Relative Standard Deviation		2.5	1.5	1.4	< 0.1
METHODS: EPA 600/4-91/010		200.7	200.7	200.7	SM4500-Cl B

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

Chemist

01/29/10
Date

H19089M 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 SAVAGE
Phone #:	575-605-7210 Fax #: 575-396-4429	Address:	
Project #:	24511 Project Owner: BOPCO	City:	
Project Name:	CORBEE FEDERAL #1	State: Zip:	
Project Location:	EDDY CO. NM	Phone #:	
Sampler Name:	C. HOLT	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	Chloride (4500)	Potassium (Total) K	Magnesium (Total) Mg	Arsenic (Total) As
H19059-1	PROD WATER		1	X							X		1/14 2010	1300	X	X	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: 1/18/10	Received By:	Camille Bryant
	Time: 1613		
Relinquished By:	Date: 1/19/10	Received By:	
	Time: 8:25		
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Temp: 0°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

February 2, 2010

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

Re: Cobb Federal #1 (BOPCO 24 511)

Enclosed are the results of analyses for sample number H19163, received by the laboratory on 01/28/10 at 9:00 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: 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
ATTN: CAMILLE BRYANT
P.O. BOX 381
LOVINGTON, NM 88260
FAX TO: (575) 396-1429

Receiving Date: 01/28/10
Reporting Date: 02/01/10
Project Number: 24 511 (BOPCO, LP)
Project Name: COBB FEDERAL #1
Project Location: EDDY CO., NM

Sampling Date: 01/26/10
Sample Type: WATER
Sample Condition: COOL & INTACT @ 1°C
Sample Received By: JH
Analyzed By: HM

LAB NO.	SAMPLE ID	Cl^- (mg/L)	TDS (mg/L)
Analysis Date:		01/31/10	01/29/10
H19163-1	MW-1	41,000	63,200
H19163-2	MW-2	134,000	215,000
H19163-3	MW-3	124	773
H19163-4	MW-4	51,000	72,500
H19163-5	MW-5	83,000	118,000
H19163-6	MW-6	424	1,440
Quality Control		500	NR
True Value QC		500	NR
% Recovery		100	NR
Relative Percent Difference		2.0	0.5

METHOD: Standard Methods, EPA	4500-Cl^-B	160.1

Chemist

02/02/10
Date

H19163 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, LP
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 for Coby Reynolds	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	Chloride 4500	TDS
H19163-1	MW-1		1	X							X		1/26	1600	X	X
-2	MW-2												1/26	1045	X	X
3	MW-3												1/26	930	X	X
4	MW-4												1/26	1130	X	X
5	MW-5												1/26	1245	X	X
6	MW-6												1/26	1:45	X	X

2010

Sampler Relinquished: for Coby Reynolds Camille Bryant	Date: 1/28/10 Time: 1:45	Received By:	Phone Result: ☐ No Add'l Phone #:
Relinquished By:	Date: 1/28/10 Time: 9:00	Received By: Jodi Henson	Fax Result: ☐ No Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Temp: 1°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

Analytical Report 367139

for

Basin Environmental Consulting, LLC

Project Manager: Camille Bryant

GH Cobb Federal #1

24511

07-APR-10

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-TX), Arizona (AZ0738), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370)
Xenco-Boca Raton (EPA Lab Code: FL00449):
Florida(E86240),South Carolina(96031001), Louisiana(04154), Georgia(917)
North Carolina(444), Texas(T104704468-TX), Illinois(002295)

07-APR-10

Project Manager: **Camille Bryant**
Basin Environmental Consulting, LLC
P.O. Box 381
Lovington, NM 88260

Reference: XENCO Report No: **367139**
GH Cobb Federal #1
Project Address: Eddy County, NM

Camille Bryant:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 367139. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 367139 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

Sample Cross Reference 367139

Basin Environmental Consulting, LLC, Lovington, NM

GH Cobb Federal #1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Produced Water Tank	W	Mar-24-10 10:50		367139-001
MW-2	W	Mar-24-10 13:30		367139-002

CASE NARRATIVE

Client Name: Basin Environmental Consulting, LLC
Project Name: GH Cobb Federal #1

Project ID:	*24511*	*Report Date:*	*07-APR-10*
Work Order Number:	*367139*	*Date Received:*	*03/29/2010*

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-800413 BTEX by EPA 8021B
SW8021BM

Batch 800413, 4-Bromofluorobenzene recovered below QC limits . Matrix interferences is suspected; data not confirmed by re-analysis
Samples affected are: 366845-004 S,366845-004 SD.

Batch: LBA-800960 TCLP Metals by SW846 6010B
SW6010B

Batch 800960, Selenium recovered below QC limits in the Matrix Spike Duplicate.
Samples affected are: 367139-001, -002.
The Laboratory Control Sample for Selenium is within laboratory Control Limits

Batch: LBA-801218 TCLP Mercury by SW 7470A
SW7470A

Batch 801218, Mercury recovered above QC limits in the Matrix Spike.
Samples affected are: 367139-001, -002.
The Laboratory Control Sample for Mercury is within laboratory Control Limits

Certificate of Analysis Summary 367139

Basin Environmental Consulting, LLC, Lovington, NM

Project Name: GH Cobb Federal #1

Project Id: 24511
Contact: Camille Bryant
Project Location: Eddy County, NM

Date Received in Lab: Mon Mar-29-10 08:50 am
Report Date: 07-APR-10
Project Manager: Brent Barron, II

Analysis Requested								
	Lab Id:	367139-001		367139-002				
	Field Id:	Produced Water Tank		MW-2				
	Depth:							
	Matrix:	WATER		WATER				
	Sampled:	Mar-24-10 10:50		Mar-24-10 13:30				
BTEX by EPA 8021B	*Extracted:*	Mar-30-10 08:00		Mar-30-10 08:00				
	Analyzed:	Mar-30-10 20:53		Mar-30-10 21:14				
	Units/RL:	mg/L	RL	mg/L	RL			
Benzene		0.0798	0.0200	0.0208	0.0200			
Toluene		ND	0.0400	ND	0.0400			
Ethylbenzene		0.1028	0.0200	ND	0.0200			
m,p-Xylenes		ND	0.0400	0.0432	0.0400			
o-Xylene		ND	0.0200	ND	0.0200			
Total Xylenes		ND	0.0200	0.0432	0.0200			
Total BTEX		0.1826	0.0200	0.0640	0.0200			
TCLP Mercury by SW 7470A	*Extracted:*	Apr-06-10 09:30		Apr-06-10 09:30				
	Analyzed:	Apr-06-10 16:37		Apr-06-10 16:37				
	Units/RL:	mg/L	RL	mg/L	RL			
Mercury		ND	0.0001	ND	0.0001			
TCLP Metals by SW846 6010B	*Extracted:*	Mar-30-10 09:00		Mar-30-10 09:00				
	Analyzed:	Mar-31-10 09:17		Mar-31-10 09:17				
	Units/RL:	mg/L	RL	mg/L	RL			
Lead		ND	2.22	ND	2.22			
Arsenic		ND	2.22	ND	2.22			
Cadmium		ND	0.111	ND	0.111			
Chromium		ND	0.556	ND	0.556			
Selenium		ND	2.22	ND	2.22			
Silver		ND	0.444	ND	0.444			
Barium		2.06	0.222	1.43	0.222			

Brent Barron, II
Odessa Laboratory Manager

Final Ver. 1.000

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

* Outside XENCO's scope of NELAC Accreditation.

Form 2 - Surrogate Recoveries

Project Name: GH Cobb Federal #1

Work Orders : 367139,

Project ID: 24511

Lab Batch #: 800413 **Sample:** 559446-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/30/10 07:58

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0313	0.0300	104	80-120	
4-Bromofluorobenzene	0.0278	0.0300	93	80-120	

Lab Batch #: 800413 **Sample:** 559446-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/30/10 08:19

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0294	0.0300	98	80-120	
4-Bromofluorobenzene	0.0267	0.0300	89	80-120	

Lab Batch #: 800413 **Sample:** 559446-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/30/10 09:21

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0281	0.0300	94	80-120	
4-Bromofluorobenzene	0.0272	0.0300	91	80-120	

Lab Batch #: 800413 **Sample:** 367139-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/30/10 20:53

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0264	0.0300	88	80-120	
4-Bromofluorobenzene	0.0273	0.0300	91	80-120	

Lab Batch #: 800413 **Sample:** 367139-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/30/10 21:14

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0276	0.0300	92	80-120	
4-Bromofluorobenzene	0.0303	0.0300	101	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

*Surrogate Recovery [D] = 100 * A / B*

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: GH Cobb Federal #1

Work Orders : 367139,

Project ID: 24511

Lab Batch #: 800413 **Sample:** 366845-004 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/30/10 21:35

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0297	0.0300	99	80-120	
4-Bromofluorobenzene	0.0221	0.0300	74	80-120	*

Lab Batch #: 800413 **Sample:** 366845-004 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/30/10 21:55

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0225	0.0300	75	80-120	*

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

BS / BSD Recoveries

Project Name: GH Cobb Federal #1

Work Order #: 367139 **Project ID:** 24511

Analyst: ASA **Date Prepared:** 03/30/2010 **Date Analyzed:** 03/30/2010

Lab Batch ID: 800413 **Sample:** 559446-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.0824	82	0.1	0.0877	88	6	70-125	25	
Toluene	ND	0.1000	0.0832	83	0.1	0.0889	89	7	70-125	25	
Ethylbenzene	ND	0.1000	0.0848	85	0.1	0.0905	91	7	71-129	25	
m,p-Xylenes	ND	0.2000	0.1744	87	0.2	0.1855	93	6	70-131	25	
o-Xylene	ND	0.1000	0.0866	87	0.1	0.0924	92	6	71-133	25	

Analyst: LATCOR **Date Prepared:** 04/06/2010 **Date Analyzed:** 04/06/2010

Lab Batch ID: 801218 **Sample:** 559946-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TCLP Mercury by SW 7470A Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Mercury	ND	0.0010	0.0012	120	0.001	0.0011	110	9	75-125	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: GH Cobb Federal #1

Work Order #: 367139 **Project ID:** 24511

Analyst: LATCOR **Date Prepared:** 03/30/2010 **Date Analyzed:** 03/31/2010

Lab Batch ID: 800960 **Sample:** 559493-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TCLP Metals by SW846 6010B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Arsenic	ND	0.800	0.719	90	0.8	0.694	87	4	80-120	20	
Barium	ND	0.150	0.155	103	0.15	0.154	103	1	80-120	20	
Cadmium	ND	0.200	0.168	84	0.2	0.167	84	1	80-120	20	
Chromium	ND	0.200	0.161	81	0.2	0.160	80	1	80-120	20	
Lead	ND	1.10	0.951	86	1.1	0.948	86	0	80-120	20	
Selenium	ND	0.300	0.313	104	0.3	0.301	100	4	80-120	20	
Silver	ND	0.080	0.074	93	0.08	0.069	86	7	80-120	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS / MSD Recoveries

Project Name: GH Cobb Federal #1

Work Order # : 367139 **Project ID:** 24511

Lab Batch ID: 800413 **QC- Sample ID:** 366845-004 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 03/30/2010 **Date Prepared:** 03/30/2010 **Analyst:** ASA

Reporting Units: mg/L

BTEX by EPA 8021B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.0808	81	0.1000	0.0794	79	2	70-125	25	
Toluene	ND	0.1000	0.0810	81	0.1000	0.0806	81	0	70-125	25	
Ethylbenzene	ND	0.1000	0.0833	83	0.1000	0.0827	83	1	71-129	25	
m,p-Xylenes	ND	0.2000	0.1694	85	0.2000	0.1674	84	1	70-131	25	
o-Xylene	ND	0.1000	0.0852	85	0.1000	0.0850	85	0	71-133	25	

Lab Batch ID: 801218 **QC- Sample ID:** 367223-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/06/2010 **Date Prepared:** 04/06/2010 **Analyst:** LATCOR

Reporting Units: mg/L

TCLP Mercury by SW 7470A Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Mercury	ND	0.0010	0.0013	130	0.0010	0.0012	120	8	75-125	20	X

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Form 3 - MS / MSD Recoveries

Project Name: GH Cobb Federal #1

Work Order # : 367139 **Project ID:** 24511

Lab Batch ID: 800960 **QC- Sample ID:** 366845-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 03/31/2010 **Date Prepared:** 03/30/2010 **Analyst:** LATCOR

Reporting Units: mg/L

TCLP Metals by SW846 6010B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Barium	0.044	0.200	0.218	87	0.200	0.218	87	0	80-120	20	
Silver	ND	0.080	0.067	84	0.080	0.067	84	0	80-120	20	
Arsenic	ND	0.800	0.745	93	0.800	0.739	92	1	80-120	20	
Cadmium	ND	0.200	0.168	84	0.200	0.166	83	1	80-120	20	
Chromium	0.328	0.200	0.500	86	0.200	0.497	85	1	80-120	20	
Lead	ND	1.10	0.912	83	1.10	0.905	82	1	80-120	20	
Selenium	ND	0.400	0.324	81	0.400	0.305	76	6	80-120	20	X

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Sample Duplicate Recovery

Project Name: GH Cobb Federal #1

Work Order #: 367139

Lab Batch #: 800960 **Project ID:** 24511

Date Analyzed: 03/31/2010 **Date Prepared:** 03/30/2010 **Analyst:** LATCOR

QC- Sample ID: 366845-001 D **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

TCLP Metals by SW846 6010B	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Arsenic	ND	ND	NC	25	
Barium	0.044	0.045	2	25	
Cadmium	ND	ND	NC	25	
Silver	ND	ND	NC	25	
Lead	ND	ND	NC	25	
Selenium	ND	ND	NC	25	
Chromium	0.328	ND	NC	25	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.
BRL - Below Reporting Limit

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Camille Bryant PAGE 01 OF 01 Project Name: GH Cobb Federal #1

Company Name: Basin Environmental Consulting, Project #: 24511

Company Address: P.O. Box 381 Project Loc: Eddy County, NM

City/State/Zip: Lovington, NM 88260 PO #:

Telephone No: (575)605-7210 Fax No: (505) 396-1429 Report Format: [X] Standard [ ] TRRP [ ] NPDES

Sampler Signature: C.J. Bryant for C.J. Bryant e-mail: cjbryant@basin-consulting.com

(lab use only) ORDER #: 367139

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW – Drinking Water SL – Sludge; GW – Groundwater S – Soil/Solid; NP – Non-Potable Specify Other	Analyze For: TPH: 418.1 8015M	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se (TCLP: X)	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260 (TOTAL: X)	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
-001	Produced Water Tank			3/24/2010	1050		4	X		X						GW						X			X				X
002	MW-2			3/24/2010	1:30		4	X		X						GW						X			X				X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	3/26/10	3:41	[signature]	3/26/10	3:41
[signature]	3/29/10	0850			
			Received by ELOT: Jesse Fitch	03-29-10	0850

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)?	Y	N
Custody seals on container(s) / Level	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered by Sampler / Client Rep.?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 1.6 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Basin Env.

Date/ Time: 03-29-10 C 0850

Lab ID #: 367139

Initials: JMF

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	1.6 °C	
#2	Shipping container in good condition?	(Yes)	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	(Not Present)	
#4	Custody Seals intact on sample bottles/ container? (Label)	(Yes)	No	Not Present	
#5	Chain of Custody present?	(Yes)	No		
#6	Sample instructions complete of Chain of Custody?	(Yes)	No		
#7	Chain of Custody signed when relinquished/ received?	(Yes)	No		
#8	Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	(Yes)	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		
#11	Containers supplied by ELOT?	(Yes)	No		
#12	Samples in proper container/ bottle?	(Yes)	No	See Below	
#13	Samples properly preserved?	(Yes)	No	See Below	
#14	Sample bottles intact?	(Yes)	No		
#15	Preservations documented on Chain of Custody?	(Yes)	No		
#16	Containers documented on Chain of Custody?	(Yes)	No		
#17	Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18	All samples received within sufficient hold time?	(Yes)	No	See Below	
#19	Subcontract of sample(s)?	Yes	(No)	Not Applicable	
#20	VOC samples have zero headspace?	(Yes)	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken:

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

CARDINAL LABORATORIES

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

June 9, 2010

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

Re: 24511 (BOPCO)

Enclosed are the results of analyses for sample number H20054, received by the laboratory on 06/08/10 at 8:20 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: 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: 06/08/10
Reporting Date: 06/09/10
Project Owner: BOPCO (24511)
Project Name: GH COBB FEDERAL #1
Project Location: EDDY CO., NM

Analysis Date: 06/08/10
Sampling Date: 06/03/10
Sample Type: WATER
Sample Condition: COOL & INTACT @ 6°C
Sample Received By: JH
Analyzed By: AB

LAB NO.	SAMPLE ID	Cl^- (mg/L)
H20054-1	MW-1	46,000
H20054-2	MW-2	134,000
H20054-3	MW-3	200
H20054-4	MW-4	49,500
H20054-5	MW-5	70,000
H20054-6	MW-6	456
Quality Control		500
True Value QC		500
% Recovery		100
Relative Percent Difference		1.9

METHOD: Standard Methods	4500-Cl^-B

Chemist

06/09/10
Date

H20054 Basin Environmental

CARDINAL LABORATORIES

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

Page ____ of ____

Company Name:	Basin Environmental Consulting	BILL TO	
Project Manager:	Camille Bryant	P.O. #:	
Address:	2800 Plains Hwy	Company:	BOPCO
City:	Loriston State: NM Zip: 88260	Attn:	Tony Savoie
Phone #:	(575) 605-7210 Fax #: (575) 396-1429	Address:	
Project #:	24511 Project Owner: BOPCO	City:	
Project Name:	GH Cobb Federal #1	State: Zip:	
Project Location:	Eddy Co, NM	Phone #:	
Sampler Name:	Lance Reynolds	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	SAMPLING TIME	Chlorides 4500
H20054-1	MW-1		1	X							X		6/3	1545	X
2	MW-2													1630	
3	MW-3													1515	
4	MW-4													1615	
5	MW-5													1600	
6	MW-6													1530	

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 Lance Reynolds	Date: 6/3/10 Time: 0900	Received By: Bobby L Blakewood	
Relinquished By: Bobby L Blakewood	Date: 6-8-10 Time: 8:20	Received By: Jodi Henson	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Temp. 6°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

September 23, 2010

CAMILLE BRYANT

BASIN ENVIRONMENTAL CONSULTING

P. O. BOX 381

LOVINGTON, NM 88260

RE: G H COBB FEDERAL #1

Enclosed are the results of analyses for samples received by the laboratory on 09/21/10 12:16.

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 Hydorcarbons

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene
Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

BASIN ENVIRONMENTAL CONSULTING
CAMILLE BRYANT
P. O. BOX 381
LOVINGTON NM, 88260
Fax To: (575) 396-1429

Received:	09/21/2010	Sampling Date:	09/17/2010
Reported:	09/23/2010	Sampling Type:	Water
Project Name:	G H COBB FEDERAL #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: MW - 1 (H020891-01)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**43000**	4.00	09/22/2010	ND	104	104	100	3.77	

Sample ID: MW - 2 (H020891-02)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**140000**	4.00	09/22/2010	ND	104	104	100	3.77	

Sample ID: MW - 3 (H020891-03)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**220**	4.00	09/22/2010	ND	104	104	100	3.77	

Sample ID: MW - 4 (H020891-04)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48000**	4.00	09/22/2010	ND	104	104	100	3.77	

Sample ID: MW - 5 (H020891-05)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**76000**	4.00	09/22/2010	ND	104	104	100	3.77	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

BASIN ENVIRONMENTAL CONSULTING
CAMILLE BRYANT
P. O. BOX 381
LOVINGTON NM, 88260
Fax To: (575) 396-1429

Received:	09/21/2010	Sampling Date:	09/17/2010
Reported:	09/23/2010	Sampling Type:	Water
Project Name:	G H COBB FEDERAL #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: MW - 6 (H020891-06)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**500**	4.00	09/22/2010	ND	104	104	100	3.77	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240

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

Company Name:	Basin Environmental Consulting	**BILL TO**	
Project Manager:	Camille Bryant	P.O. #:	
Address:	2300 Plains Hwy	Company:	BOPCO
City:	Lovington State: NM Zip: 88260	Attn:	Tony Savoie
Phone #:	(575) 396-2378 Fax #: (575) 396-1429	Address:	
Project #:	Project Owner: BOPCO	City:	
Project Name:	GH Cobb Federal #1	State: Zip:	
Project Location:	Eddy Co. NM	Phone #:	
Sampler Name:	Joe Lowry	Fax #:	

ANALYSIS REQUEST: chlorides 4500

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:	2010 DATE	TIME	
H20891-1	MW-1		1	X							X		9/17	1400	X
2	MW-2													1430	
3	MW-3													1130	
4	MW-4													1330	
5	MW-5													1300	
6	MW-6													1230	

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:	Received By:		Phone Result: ☐	No Add'l Phone #:
Joe Lowry	Time:			Fax Result: ☐	No Add'l Fax #:
Relinquished By:	Date: 9/21/10	Received By:		REMARKS:	
	Time: 12:16				
Delivered By: (Circle One)	Temp.	Sample Condition	CHECKED BY:		
Sampler - UPS - Bus - Other:	3.5°C	Cool: ☑ Yes ☐ No	Intact: ☑ Yes ☐ No	(Initials)	

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

#26

Appendix C

Photographs

Photograph (looking East) of initial excavation with conduit riser at G.H. Cobb Federal #1.

Photograph (looking East) of backfilling activities to allow for drilling at G.H. Cobb Federal #1.

Photograph (looking East) of current excavation at G.H. Cobb Federal #1.

Photograph (looking Southeast) of drilling activities at G.H. Cobb Federal #1.

Appendix D

Release Notification & Corrective Action (Form C-141) & 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

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: 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
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: SJohnson 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:

BOPCO, L.P.
GH Cobb Federal #1
Section 23, T-20-S, R-31-E
Eddy County, NM

API# 30-015-05829

CLOSURE PLAN

The New Mexico OCD and Bureau of Land Management were both sent notification of closure on June 15, 2009. BOPCO, L.P. will excavate to ten feet below ground surface to the bottom of the pit removing any dried sludge. The pit was unlined so no liner will need to be removed. No free liquids are presently in the pit and there is not any associated equipment in or around the pit that will need to be removed. All excavated dried sludge will be hauled and disposed of at CRI (Controlled Recovery Incorporated - Permit R-9166). BOPCO, L.P. will test the soils beneath the permanent pit to determine whether a release has occurred. BOPCO, L.P. will collect, at a minimum, a five point, composite sample; collect individual grab samples from any area that is wet, discolored or showing other evidence of a release; and analyze for BTEX, TPH and chlorides to demonstrate that the benzene concentration, as determined by EPA SW-846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 0.2 mg/kg; total BTEX concentration, as determined by EPA SW-846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 50 mg/kg; the TPH concentration, as determined by EPA method 418.1 or other EPA method that the division approves, does not exceed 100 mg/kg; and the chloride concentration, as determined by EPA method 300.1 or other EPA method that the division approves, does not exceed 250 mg/kg, or the background concentration, whichever is greater. BOPCO, L.P. will notify the division of its results on form C-141 in accordance with NMAC 19.15.17.13(c) *Closure method for permanent pits.* If the BOPCO or the division determines that a release has occurred, then the BOPCO shall comply with 19.15.29 NMAC and 19.15.30 NMAC, as appropriate. If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Paragraph (3) of Subsection C of 19.15.17.13 NMAC, then the BOPCO, L.P. will backfill the excavation with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site. The division-prescribed soil cover, recontouring and re-vegetation requirements will comply with Subsections G, H and I of 19.15.17.13 NMAC per our Site Reclamation Plan. BOPCO, L.P. will commence closure of the site within one week of approval from the NMOCD. It will take BOPCO, L.P. approximately 2 days to excavate to ten feet and one day to sample the excavation. It will take five days to receive the results from the lab. Approximately three days to backfill the excavation and recontour the site with the existing topography. It will take one day to reseed the area. Within 60 days of closure completion, BOPCO, L.P. will submit a closure report on form C-144, with necessary attachments to document all closure activities including sampling results; information required by 19.15.17 NMAC; a plot plan; and details on back-filling, capping and covering, where applicable. In the closure report, BOPCO, L.P. will certify that all information in the report and attachments is correct and that BOPCO, L.P. has complied with all applicable closure requirements and conditions specified in the approved closure plan.