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REPORT Dec 2010

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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:

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December 2010

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, ethylbenzene 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 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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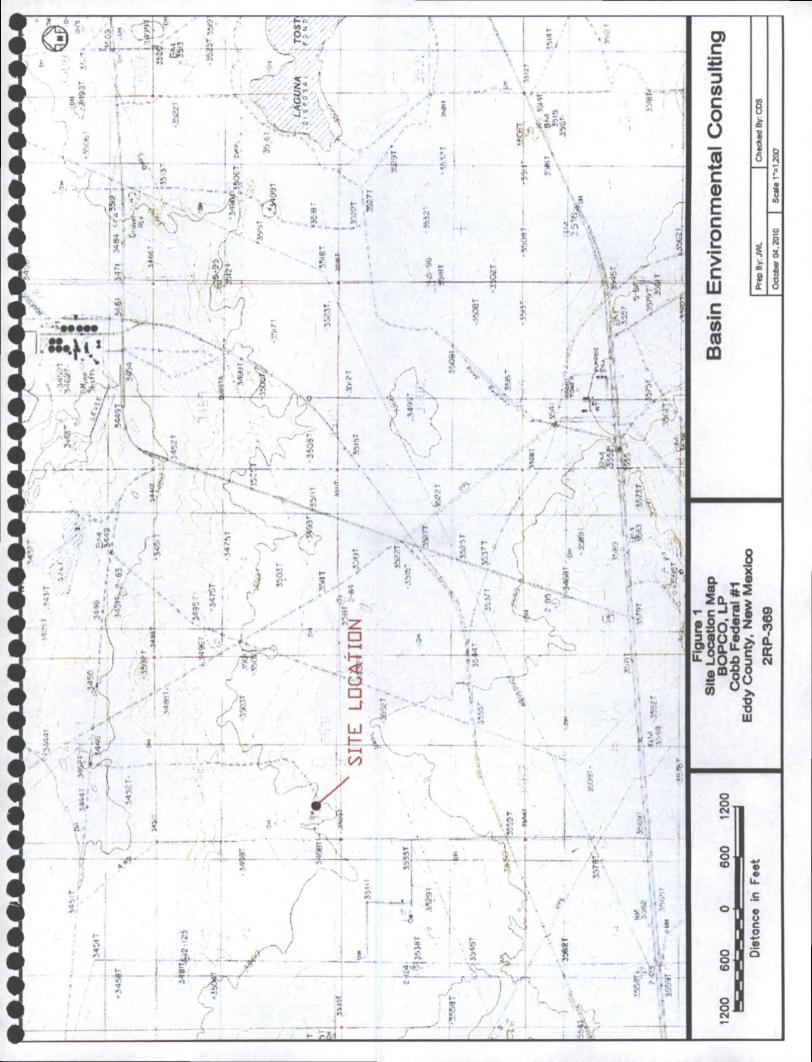
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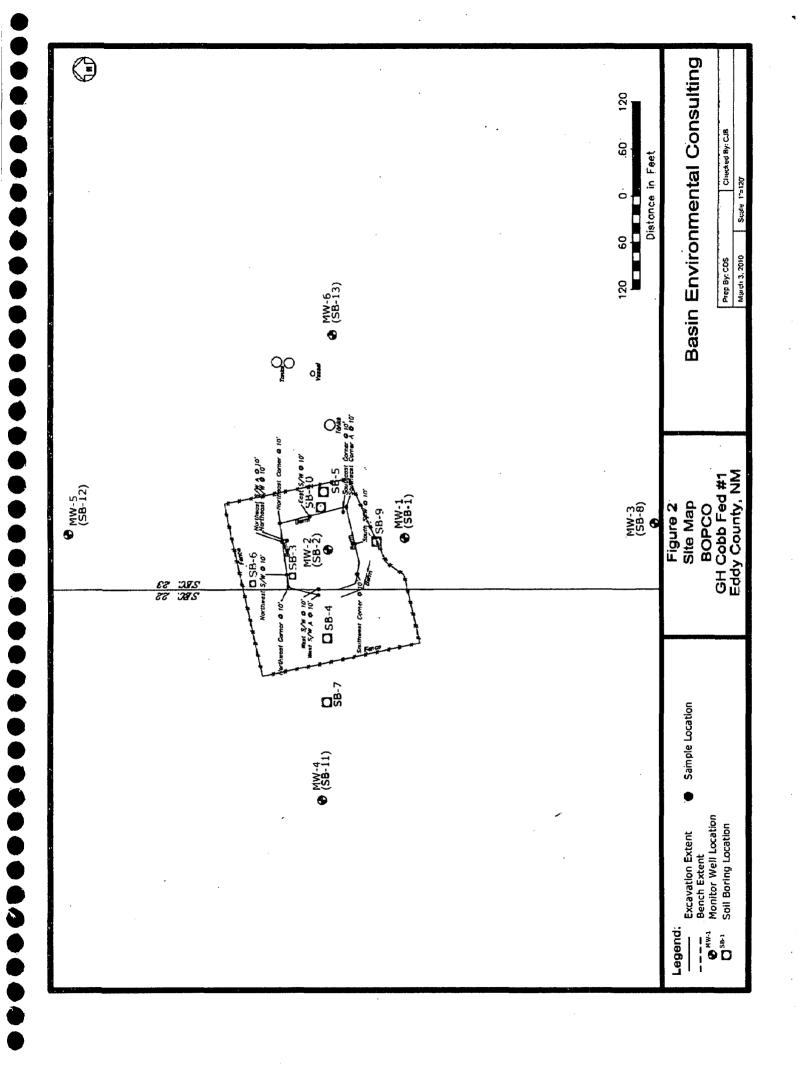
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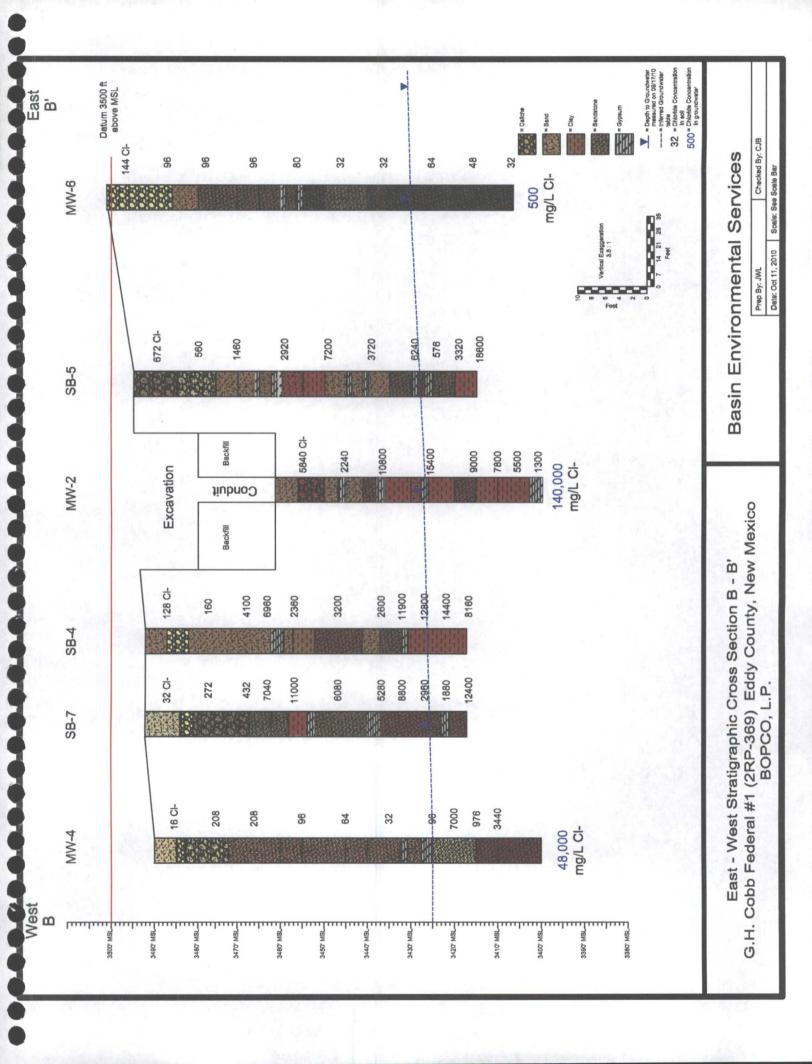
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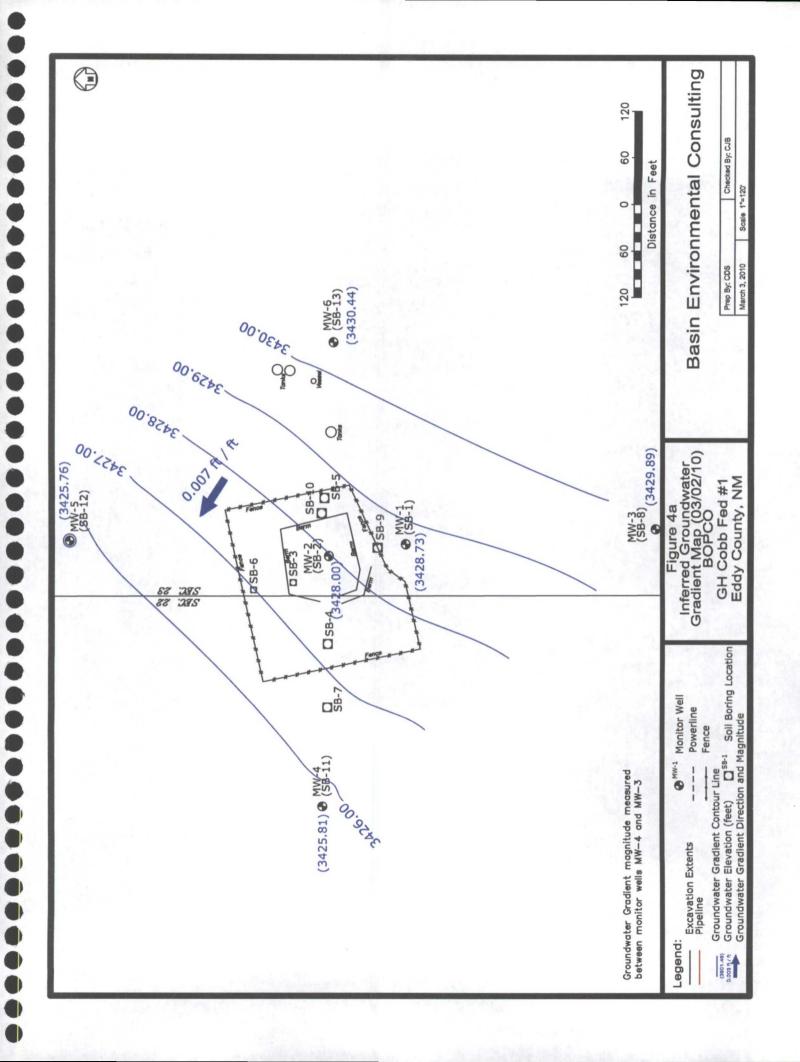
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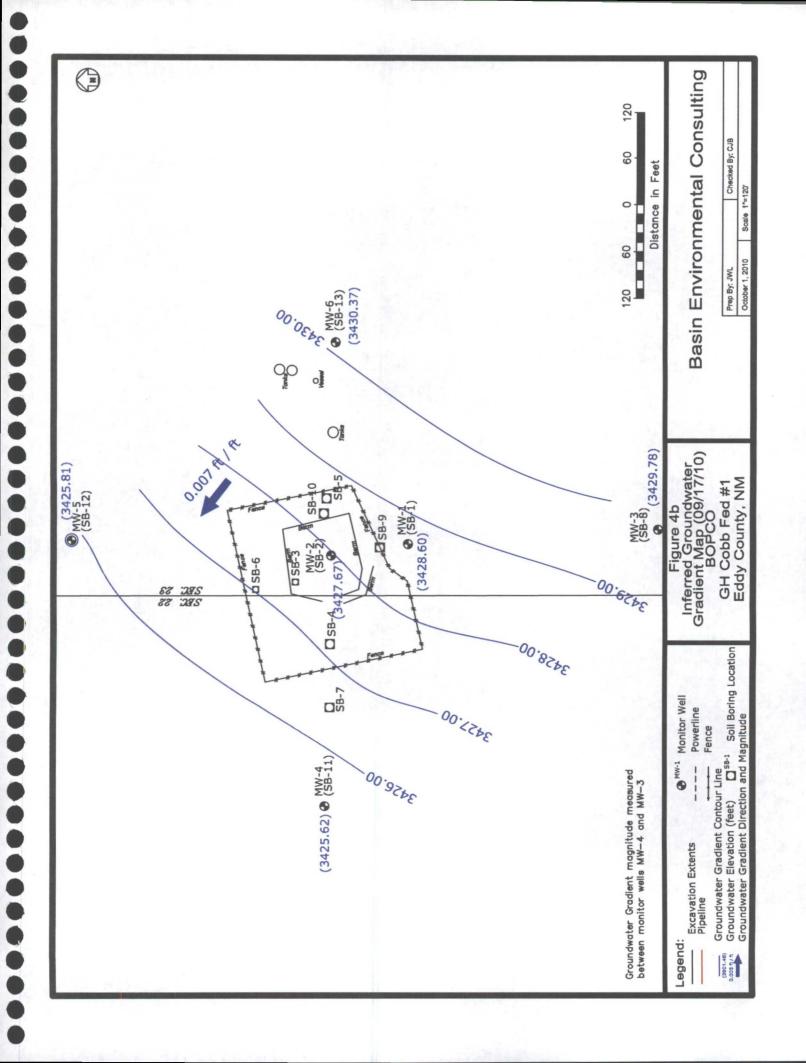
Figures

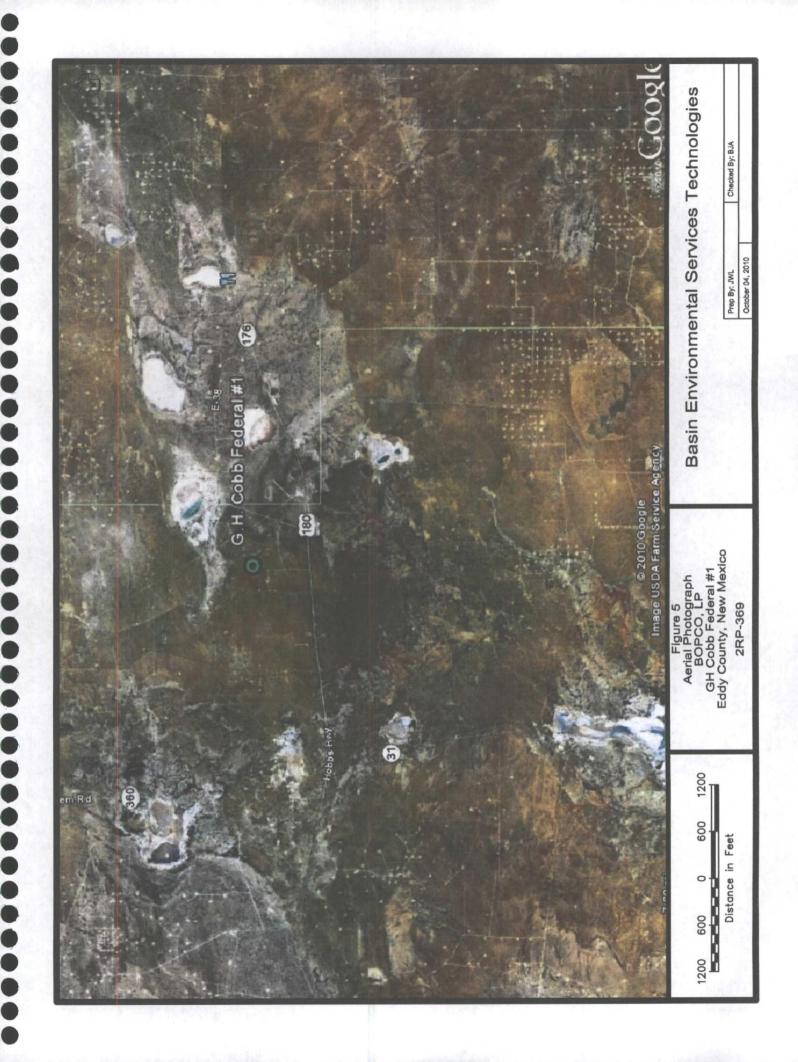












Tables

TABLE 1

CONCENTRATIONS OF TPH, BTEX AND CHLORIDES IN SOIL

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

	1			I	METHOD:	EPA SW 846	-8021B, 5030	,	r	4500			
SAMPLE LOCATION	SAMPLE DEPTH (Below Grade Surface)	SAMPL E DATE	SOIL STATUS	BENZENE (mg/Kg)	TOLUEN E (mg/Kg)	ETHYL- BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	BTEX (mg/Kg)	GRO C₀.C₁₀ (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)	CHLORID E (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	tn-Situ	<u> </u>					<10.0	<10.0	<10.0	<10.0	64
SB-1 @ 60'	60 Feet	12/30/09	In-Situ	<u> </u>		<u> </u>	-	-	<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	<10.0 <10.0	<10.0 <10.0	8,200 4,480
SB-1 @ 70'	70 Feet 75 Feet	12/30/09	In-Situ In-Situ				- :		<10.0	<10.0	<10.0	<10.0	1,230
SB-1 @ 75' 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	<u> </u>					<10.0	<10.0	<10.0	<10.0	144
35 / W 30		72,00,00	1000 A	Sale Sample	W 5 2 W	* 4	50 S 18 18 18	1 34 547	5 877 475 A	18 3 P	\$ 18 ° 2 ° 4	3/2/2/2	
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
			20	3 . 4				5 5 667		193	C	***	
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_	<u> </u>				<u> </u>		-	-	-	384
SB-3 @ 25'	40 Feet	01/04/10	In-Situ			<u> </u>		<u>-</u>	-	-	<u> </u>	•	4,800
SB-3 @ 35'	50 Feet	01/04/10	In-Situ	<u></u>		ļ <u>-</u>		ļ <u>:</u>	<u> </u>	<u> </u>	-	-	6,800 12,000
S8-3 @ 40'	55 Feet 60 Feet	01/04/10	In-Situ In-Situ	<u> </u>					-	-	-		9,500
SB-3 @ 45' SB-3 @ 55'	70 Feet	01/04/10	In-Situ	-	-	-	- :	-		-	 		6,300
SB-3 @ 60'	75 Feet	01/04/10	In-Situ	-						-	<u> </u>		5,200
550@ 66	/	01/04/10	W. C.					5.2.	or and the	13.5		· · · · · · · · · · · · · · · · · · ·	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	-	•	-	-			<u> </u>	-	-	11,900
SB-4 @ 65'	65 Feet	01/05/10	In-Situ	-	<u> </u>	-	-		-	-	•	•	12,800
SB-4 @ 70°	70 Feet	01/05/10	In-Situ		-		-	•		<u> </u>	-	-	14,400
SB-4 @ 75'	75 Feet	01/05/10	In-Situ	- 590, 14,6391,	-	-	-	-	- -	- meterature: 1		- - 1, 44 *	8,160
CB 6 @ 6'	5 Foot	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 @ 5' SB-5 @ 15'	5 Feet 15 Feet	01/05/10	In-Situ	<0.050	~0.050	~0.050	~0.300	~0.300	<10.0	1/.2	~10.0	- 17.2	560
SB-5 @ 15	25 Feet	01/05/10	In-Situ				<u> </u>	 			 	<u> </u>	1,460
SB-5 @ 35'	35 Feet	01/06/10	In-Situ	-			-	<u> </u>		 -			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
			~: y :							_منبدا	4 5 4		
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	· ·	<u> </u>	· ·	-	-	-	<u> </u>		-	304
SB-6 @ 25'	25 Feet	01/06/10	In-Situ	<u> </u>	<u> </u>	-	-	-	-	<u> </u>	-	-	704
SB-6 @ 35'	35 Feet	01/06/10	In-Situ	<u> </u>	· •	<u> </u>	•	-	-	 	 :	-	7,520
SB-6 @ 45'	45 Feet	01/06/10	In-Situ		-				 	-	- -		4,320 5,760
SB-6 @ 55'	55 Feet 60 Feet	01/06/10	In-Situ In-Situ						<u> </u>	-	 - -		8,560
SB-6 @ 60' SB-6 @ 65'	65 Feet	01/06/10	In-Situ					 -	 -	 	 -		13,400
SB-6 @ 70'	70 Feet	01/06/10	In-Situ			 	 -		-	-	 	-	12,400
00.0 (@ 10	70166	3 5 3 5 3 5 5	in-Situ	1.50 2.00		2.5	1. 1. 1.	8 Tal 4 8	14 gre - 1	9.5			
	1471	1 . *) *	Page 1	<u> </u>	<u> </u>				15 0 2 5 1			<u> </u>	

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 Company Company		r			,	METHOD	EDA SW 846	2021E 5030			SW RA	8_8045M		4500
SS-7 @ 15	SAMPLE LOCATION	DEPTH (Below Grade				TOLUEN E	ETHYL- BENZENE	TOTAL XYLENES	втех	C6.C10	DRO C ₁₀ -C ₂₈	DRO Ext. C ₂₈ -C ₃₅ (mg/Kg	TPH C ₆ -C ₃₅	CHLORID E (mg/Kg)
SS-7 @ 15	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
SAT Q W 35 Feet 0111170 In-Stu					-	-	-	-	-	-				272
SST Q SST Q SST		25 Feet	01/11/10	In-Situ	-	-			-			-		432
SAT 0 45 56 56 57 57 57 57 58 58 58 58					•	•		-	-	-	-	-	-	7,040
SS-7_Q SS												-		11,000
SS-7 @ SS GS Feet D17170 In-Stu									ļ					6,080 5,280
Set 7														8,800
SP-7 27									-					2,960
Set 8 g F S Feet 017270 In-Stu <0.000			01/11/10		-	-	-	-	-	-	-		•	1,880
\$8-8 @ S		75 Feet				•	-	-	•					12,400
\$8-8 @ 15			. %											700
\$8-8 @ 25"						<0.050		<0.300		<10.0				560 240
\$8-8 @ 35								•						288
\$8-8 @ 45'														80
SSR-8														48
S8-8 @ 85						-	-	-		-	-			32
\$8-8 @ 89' 89 Feet 011/2710 In-Situ	SB-8 @ 65'	65 Feet	01/12/10	In-Şitu			-	-		-		-		32
\$8-8 @ 55					•	-		-	-	-	-	·		32
Se9-@ S						•		•	-	-				48
\$3-9 @ 15	SB-4 @ 85	85 Feet		In-Situ			ļ	-						48
\$89-9@ 207	SB-9 @ 5	5 Feet	7.1	In-Situ	<0.050	<0.050	<0.050	<0.300		1 4 111		<10 n		1,140
\$8-10 @ 5		+									-			144
Sel-10 @ 5										-				192
S8-10 @ 20		D 705	. 31		X 2				6.12	1 1 Ju	. J. Sa.			
S8-10 @ 20" 20 Feet 01/12/10 in-Situ 40.050 <0.050 <0.050 <0.000 <0.000 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0					<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	42.7	<10.0	42.7	1,360
\$8-11 @ 5'							-			-	-	-	•	416
SB-11 @ S			01/12/10		-	-	-	-			-			224
SB-11 @ 15 15 Feet 011/31/0 In-Situ			01/13/10		<0.050	<0.050	<0.050	<0.300	c0 300	2 - 2.0	<10.0	e10.0	<10.0	16
\$\frac{8}{11} \(\text{if} \) \(25 \) \(\text{Feel} \) \(\text{if} \) \(\t								-0.500			-			208
SB-11 (2) 35 SFeet 011/31/0 In-Situ							1	•				_		208
SB-11 @ 55						-				-				96
SB-11 @ SP		45 Feet	01/13/10	In-Situ	•		·				-	-	,	64
\$B-11 @ 70'					-	-	-	•	-	•	•	-	-	32
SB-11 Gro Forest Olf Street Olf														96
SB-11														7,000
\$\frac{8}{8} - 12 \(\text{ is } \) \\ \\ \\ \ \ \ \ \ \ \ \ \ \ \ \ \														976 3,440
SB-12 @ 15							2.0		_	75 50 C 75 E		7 .		3,440
SB-12 @ 15'					<0.050	12	<0.050				79 AM	<10.0	<10.0	48
SB-12 @ 45		15 Feet	01/15/10	In-Situ	-	-	•	-		-	-	-	-	208
SB-12 @ 45	SB-12 @ 25'	25 Feet	01/15/10	In-Situ	•	-	-	-	-			,	-	240
SB-12 @ 55' 55 Feet 01/15/10 In-Situ														48
SB-12 @ 65					-		-	-						128 144
SB-12 @ 57					-		-							4,000
SB-12 @ 80' 80 Feet 01/15/10 In-Situ														2,640
SB-12 @ 85							 	-			-	-	-	5,680
SB-13 @ 5'			$\overline{}$		-	-	-	-	-	-	-		-	2,680
SB-13 @ 15'	SB-12 @ 90'	90 Feet						•						992
SB-13 @ 15'	CD 40 6 C	1	2.7			-0.050	10000	-0.000				412.2	-400	
SB-13 @ 25'					<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	<10.0	~10.0	×10.0	144 96
SB-13 @ 35'			91710710	iii oita							ا ۔		-	96
SB-13 @ 45'														96
SB-13 @ 55'										-				80
SB-13 @ 75'	SB-13 @ 55'	55 Feet	01/15/10	In-Situ	-	-	.	-	-	•				32
SB-13 @ 85' 85 Feet 01/15/10 In-Situ														32
SB-13 @ 95'														64
Northwest S/W @ 10' 10 Feet 01/08/10					 		 	 						48 32
Northwest SW @ 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 <10.0 Northwest SW @ 10' 10 Feet 01/08/10 Excavated <0.050 <0.050 <0.050 <0.050 <0.300 <0.300 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10					7		12.0			. 30° 3' .		7,7,0	-	- Je
Northeast SW @ 10' 10 Feet 01/08/10 Excavated <0.050 <0.050 <0.050 <0.0300 <0.300 <10.0 <10.0 <10.0 <10.0 <10.0 10.0 <10.0 10.0					<0.050	0.065	<u> </u>					<10.0	<10.0	256
East SW @ 10'	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
South SW @ 10'	West S/W @ 10'													4,600
Northwest Comer @ 10'														9,900
Northeast Corner @ 10'														8,500
Southwest Comer @ 10'														192
Southeast Comer @ 10'														3,680 896
Northeast SW A @ 10' 10 Feet 02/11/10 In-Situ 1 Southeast Camer A @ 10' 10 Feet 02/11/10 In-Situ														6,900
Northeast SW A @ 10'					~U.UUU									0,900
Southeast Comer A @ 10' 10 Feet 02/11/10 In-Situ					l ''		 							1,060
West S/W A @ 10' 10 Feet 02/11/10 In-Situ							-							768
	West S/W A @ 10'	10 Feet	02/11/10	In-Situ	1	-	4							672
NMOCD Regulatory Standard 10 50 1	W	Carrier Co					100			to the	7.11. 3.4			77
the state of the s	NMOCD Regulatory Stand	ard	l		10	L	L	L	50		<u> </u>	L	L	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
WAR	34 17 C 34 F	A STATE OF THE		
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	02/03/10	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			3,425.62
1VI VV -4	09/1//10	3,495.59	69.97	3,423.02
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 MW-5	06/03/10	3,494.38	68.31	3,426.07
IVI W-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	01/20/10	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
18 B. J.	1. 1. 1 also very 2	History William	11410/25-16	

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

			П				П	П	П	П	/	П	П				П				П						٠.)		45	
EPA160.1	TDS	(mg/L)	63,200	-	1	The Company	215,000	-	-	-		773	-	-	2	72,500	1	1	200 (2)	118,000	ı	1		1,440		t	1. 18	1	1. 4. 14. 1. 1. 1.	10,000
E 4500	CHLORIDES	(mg/L)	41,000	46,000	43,000	11 2 2 7 7 7	134,000		134,000	140,000	S 15 . 326	124	200	220	2.	51,000	49,500	48,000		000'88	70,000	78,000		424	456	009	2 2 1 1 1 2	_	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	250
TCPL SW 7470A	MERCURY	(mg/L)		-	1	The state of the s	_	<0.0001		1	The second second	1		ì		-		-	200					1			1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	<0.0001	Water Commence Commence	0.04
	BARIUM	(mg/L)	1	t	1	*e *		1.43	ı	1	14 74 4 25	1	-	1	M. 1 (36, 7	ı		-	J. 18. 18. 18			1	* * * *	1		-	, 1 1 th e	2.06		20
	SILVER	(mg/L)	1	ł	1	188 1 300	-	<0.444	1	ŀ	44 11 5	1	-	ı	1997	-		_	1 5 2 3	_		1		ŀ	-	ı	· ·	<0.444	1500	1.00
	SELENIUM	(mg/L)	-	ı	ı			<2.22	-	-	*3" SA	-	-	-		1			1.00	_		-		_		-	1.5	<2.22	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	1.00
TCLP SW846 6010B	ARSENIC CADMIUM CHROMIUM SELENIUM	(mg/L)	1	ı	1		-	<0.556	1	-	37	-	-	-		1	-			-	-	-	6.5	-		1	1.00	<0.556	5.73	1.00
TCL	MDIMON	(mg/L)	-	ı	ı			<0.111	1	-		-	-	1		1	-	1		-	-	1		-		-		<0.111		0.2
	ARSENIC C	(mg/L)	-	ı	-			<2.22	ı	-		t	ı	1		1	,			ı	ı	1				1		<2.22		1.00
	LEAD /		1				-	<2.22	-	1		1	ı	,	 5	1	ı	1		ı		1		;	:	-		<2.22		1.00
	TOTAL	BTEX		ı	ı		-	0.064	1	t		1	ı	ı	,	ı	ŀ	ı		ı		ı		ı	ŀ	ı		0.1826		
	O-XYLENES	(mg/L)		1	1		-	<0.200	1	:		t	ı	1		1	1	_		1		. 1		ı	ı	ı		<0.0200		XYLENES 0.62
EPA 8021B		XYLENES		,	,		:	0.0432	:	ı	2. 2.	1	ı	1			1	1		-	-	ı	,	1	1	1		<0.0400		TOTAL XYL
EP/	ЕТНУС-	BENZENE (ma/L)		1	ı		-	<0.0200	1	1		1	1	. 1			ı	-		-	1	-		-	-	-		0.1028		0.75
			•	-	,		1	<0.0400	1	ı	,	1	-	,	2	1	1	1	.,	1		1	1.	1	1	t		<0.0400	A 4 4 4	0.75
	BENZENE TOLUENE	(mg/L)	ŀ	1	1		1	0.0208	1	-	.7,	1	1	1			1			1	1.			1	ı	t		0.0798		0.01
		DATE	01/26/10	06/03/10	09/17/10		01/26/10	03/24/10	06/03/10	09/17/10		01/26/10	06/03/10	09/17/10		01/26/10	06/03/10	09/17/10		01/26/10	06/03/10	09/17/10	3	01/26/10	06/03/10	09/17/40	٤,	03/24/10	5.	
	SAMPLE LOCATION		MW-1	MW-1	MW-1	一天一十二十二十五日	MW-2	MW-2	MW-2	MW-2	一年一十四日 人名丁斯人姓氏	MW-3	MW-3	MW-3	C. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	MW-4	MW-4	MW-4	し ガーキー こまがなる	MW-5	MW-5	MW-5	さい 一人 一大 一大 一大 大 大 大 大 大 大 大 大 大 大 大 大 大 大	MW-6	MW-6	WW-6		Produced Water Tank	一日、一十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二	REGULATORY STANDARD

TABLE 4

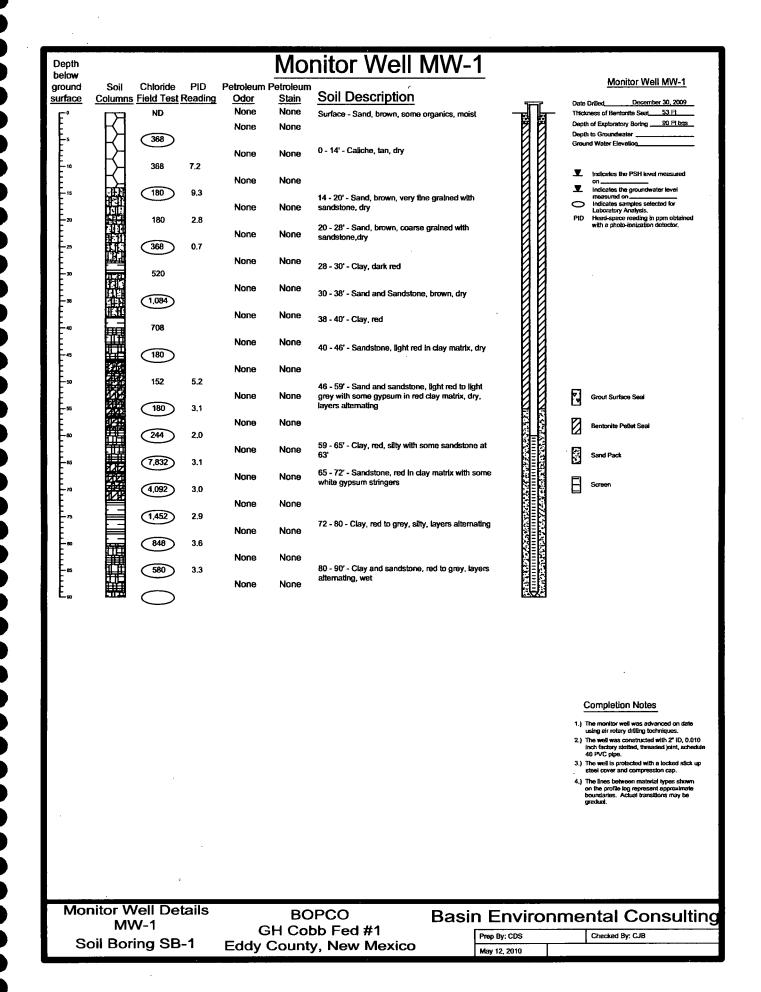
CONCENTRATIONS OF POTASSIUM, ARSENIC AND MAGNESIUM IN SOIL

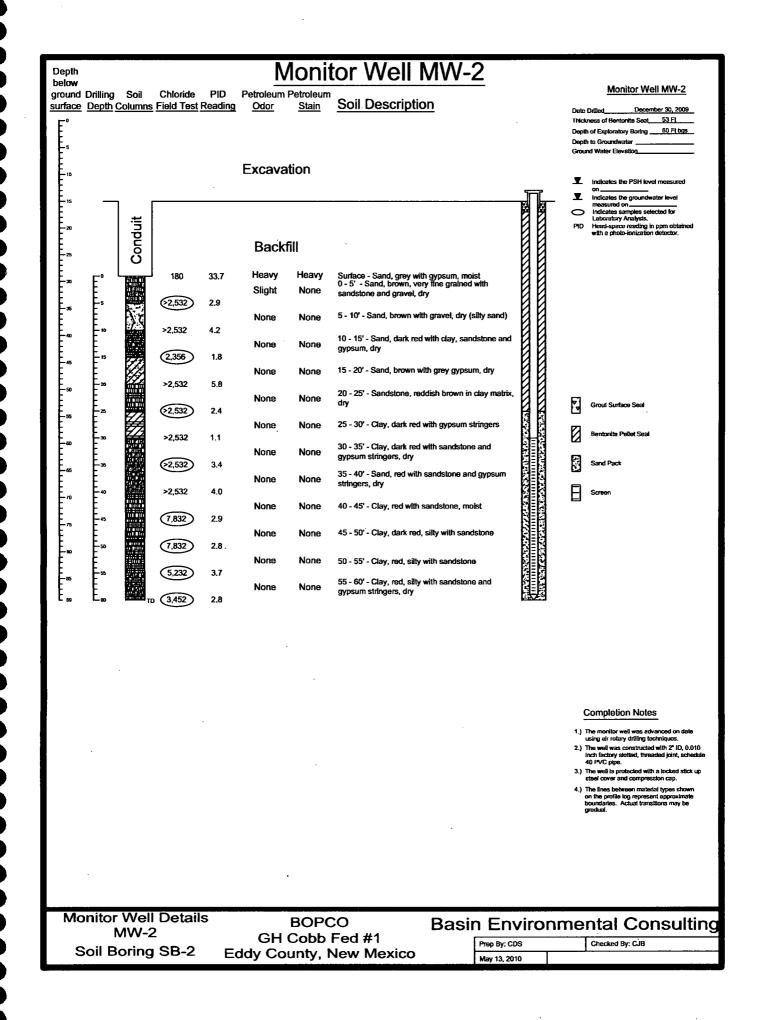
BOPCO, LP G.H. COBB FEDERAL #1 EDDY COUNTY, NEW MEXICO

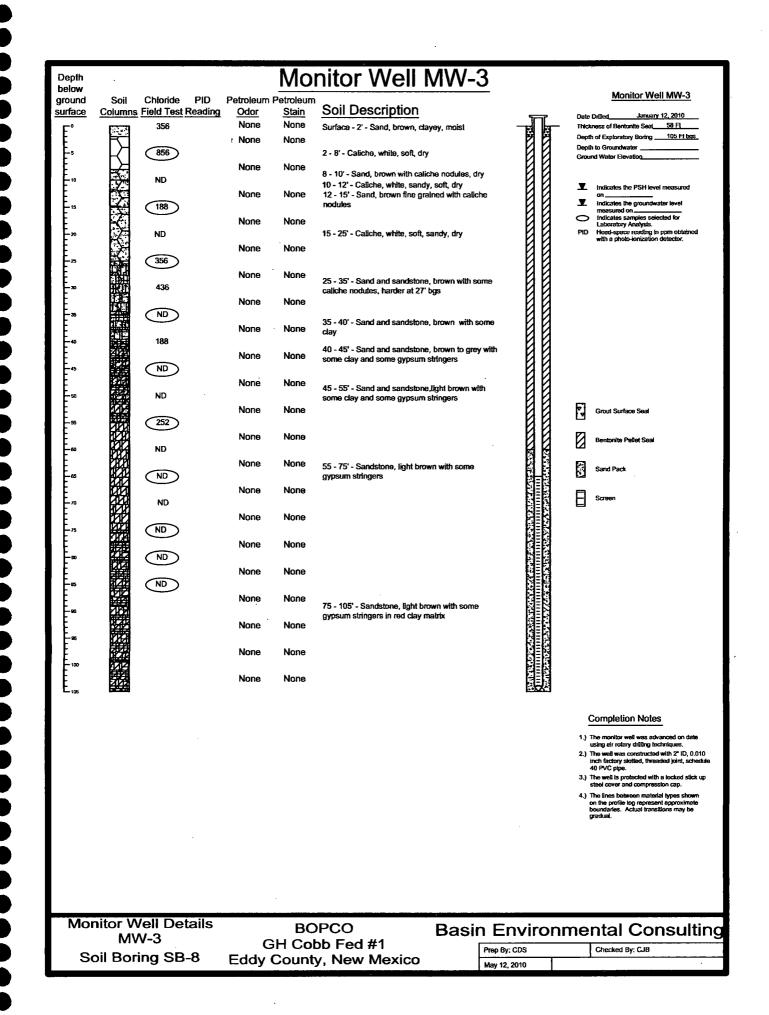
				METHOD:	EPA 600/4-9	1/010, 3050
SAMPLE LOCATION	SAMPLE DEPTH (Below Grade Surface)	SAMPLE DATE	SOIL STATUS	TOTAL POTASSIUM (mg/Kg)	TOTAL ARSENIC (mg/Kg)	TOTAL MAGNESIUM (mg/Kg)
SB-1 @ 60'	60 Feet	12/30/09	In-Situ	459	< 5	3,340
SB-1 @ 65'	65 Feet	12/30/09	In-Situ	494	<5	4,600
SB-1 @ 70'	70 Feet	12/30/09	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		In-Situ	701	10.8	3,170
SB-2 @ 5'	44 Feet		In-Situ	730	<10.0	8,900
SB-2 @ 35'		01/04/10	In-Situ	1,060	<10.0	7,110
SB-2 @ 40'	69 Feet		In-Situ	1,330	16	18,800
SB-2 @ 45'	74 Feet		In-Situ	684	<10	6,740
SB-2 @ 50'	79 Feet		In-Situ	884	11.2	12,300
SB-3 @ Surface	15 Feet		In-Situ	1,030	<10	7,290
SB-3 @ 5'	20 Feet		In-Situ	455	<10	4,150
SB-3 @ 50'	65 Feet		In-Situ	1,610	<10	9,930
SB-3 @ 55'	70 Feet		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		In-Situ	1,350	10	13,000
SB-4 @ 75'	75 Feet		In-Situ	1,010	14.3	15,800
SB-5 @ 25'	25 Feet		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		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
· Chenny State Comment	16 7 18 18 18 18 18				1	
NMOCD Regulatory Standard				-	100	-

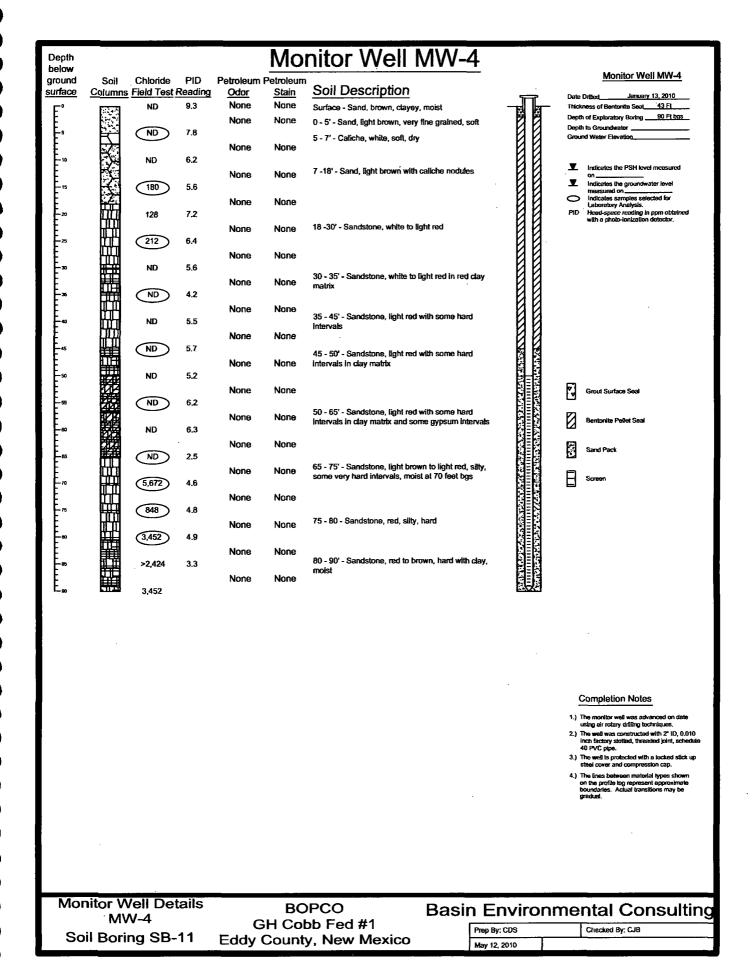
Appendices

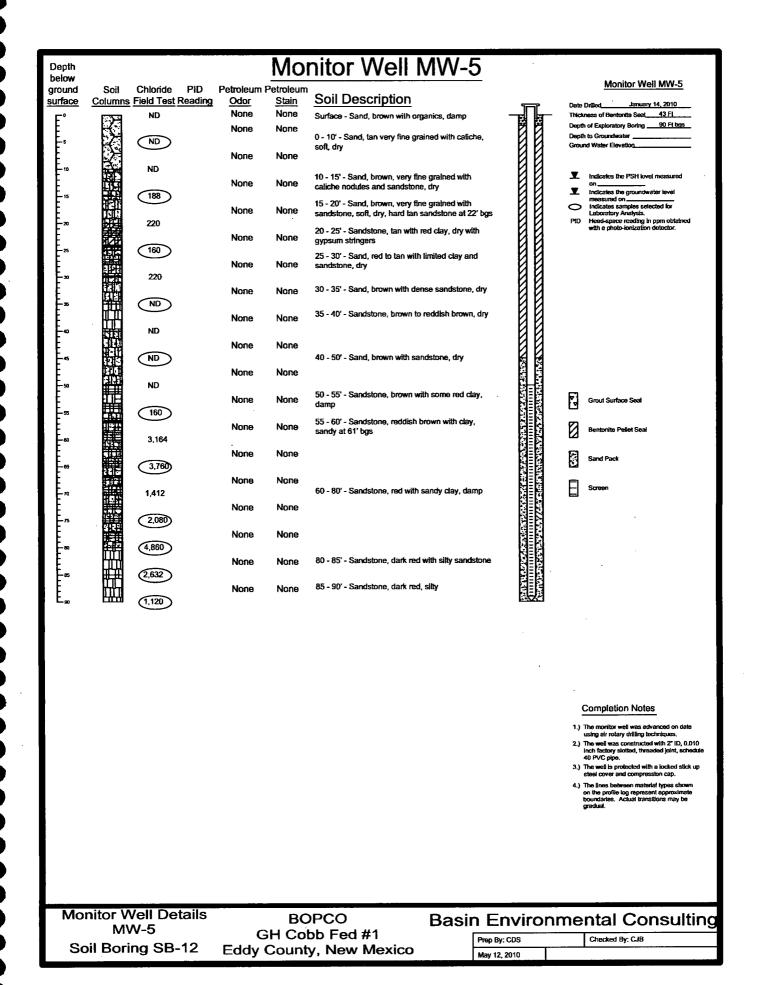
Appendix A Soil Boring & Monitor Well Logs

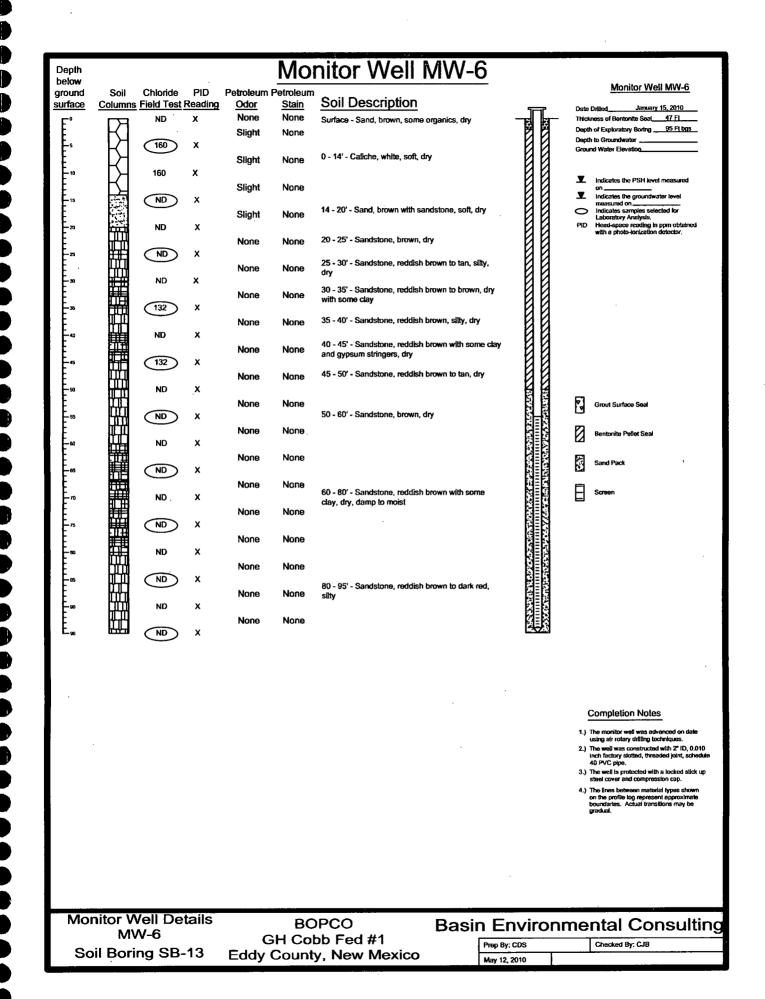












Soil Boring SB-3 Depth below Soil Boring SB-3 Drilling ground Chloride PID Petroleum Petroleum Soil Stain Soil Description surface Depth Columns Field Test Reading <u>Odor</u> January 5, 2010 Thickness of Bentonite Seat 60 Ft Depth of Exploratory Boring _ 60 Ft bas Depth to Groundwater Ground Water Elevation Excavation ▼. Indicates the PSH level measured on _____ Indicates the groundwater level measured on _____ ▼ None None Surface - Catiche, tan, sandy, dry 0 - 5' - Sand, brown, very fine grained with 708 4.5 Indicates samples selected for Laboratory Analysis. 0 None None sandstone, dry 416 3.0 Head-space reading in ppm obtained with a photo-ionization detector. 5 -10' - Sandstone, brown, silty, dry None None 416 2.7 10 - 15' - Sand, brown with sandstone, dry None None 416 4.8 None None 15 - 25' - Sand, brown, very fine grained with 7,224 3.9 sandstone, dry None None 3,452 3.8 None None 3,452 2.3 25 - 35' - Clay, red, silty with sandstone, dry None None 6,664 6.8 35 - 40' - Clay, red with sandstone and some None None gypsum, some moisture 9,232) 6.4 40 - 45' - Clay, dark red, silty with sandstone and None None avosum stringers 6,664 45 - 50' - Clay, dark red, silly with sandstone, moist None None 2.892 2.9 50 - 55' - Clay, dark red, damp None None 3,452 2.7 55 - 60' - Clay, dark red with gypsum stringers, None None damp (3,452) 2.5

Completion Notes

- The monitor well was advanced on data using air rotary drilling techniques.
- 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

Depth					So	il Boring SB-4		
below	.	.				ii Borning OB 1		Boring SB-4
ground	Soil	Chloride	PID	Petroleum F		Sail Description		Donning OD
<u>surface</u>	Columns	Field Test		<u>Odor</u>	<u>Stain</u>	Soil Description	Date I	Drilled January 5, 2010
F°	इस	ND	1.7	None	None			ness of Bentonite Seat75 Ft
F	8.5		1.8	None	None	Surface - 5' - Sand, brown, very fine grained	•	of Exploratory Boring 75 Ft bgs
<u>-</u> ,	ner'						•	nto Groundwater
E	13-5	_	1.5	None	None	5 - 10' - Catiche, tan, sandy, dry		
L 10	15 E	128						
F	C.A.		1.8	None	None	10 - 15' - Sand, brown, very fine grained, with	▼	Indicates the PSH level measured
F 15	X	(180)	1.0	None	NUINE	caliche, dry	▼.	Indicates the groundwater level
E"	770						_	measured on Indicates samples selected for
ŧ			2.5	None	None	15 - 20' - Sand, brown, with sandstone, dry	0	Laboratory Analysis.
-zo		212				20 - 25' - Sand, brown, very fine grained with	PID	Head-space reading in ppm obtained with a photo-ionization detector.
F	1101		3.8	None	None	sandstone, dry		
E-25		3,452				•		
E			4.1	None	None	25 - 30' - Sand, brown, very fine grained with some		
-30		6,148				day and sandstone,dry		
F	11 11		2,2	None	None	30 - 35' - Sand and sandstone, brown with gypsum		
E,		(1,960)	2,2	140716	HONG	stringers, dry		
E‴		1,900	• •			35 - 40' - Clay, reddish brown, sandy with		
ŧ	F		2.3	None -	None	sandstone, dry		
	用	5,232				40 - 45' - Sandstone, reddish brown, dense, hard		
E	Щ		3.7	None	None	with clay		
F-45	##	(2,636)				•		
ŧ			5.9	None	None	45 - 50' - Sandstone, red in clay matrix, dry		
⊢ ₅o		6,148						
F	翻	•	4.3	None	None	50 - 55' - Sand, brown with sandstone and some		
E₌		(2,396)	4.5	140116	HONG	cłay, dry		
E"	 	2,330				55 - 60' - Sandstone, reddish brown, coarse		
‡	HH	(2.20)	3.6	None	None	grained with clay matrix		
⊢ ∞		13,028				60 - 65' - Clay, red, silty with sandstone and grey		
E			2.0	None	None	gypsum, damp	,	
-65	开	(11,920)						
į.			4.0	None	None	65 - 70' - Clay, dark red with sandstone, damp		
<u> </u>		(11,920)						
Ē			2.4	None	None	70 - 75' - Clay, dark red, silty with sandstone, wet		
E,		(5,672)	€7	110116	. 10116			
		3,012						

Completion Notes

- The moritor well was advanced on date using air rotary drilling bothniques.
 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**

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

Depth below				<u> </u>	So	il Boring SB-5
ground	Soil	Chloride	PID	Petroleum F		_
surface	<u>Co</u> lumns	Field Test	Reading	Odor	Stain	Soil Description
г°	(CZ)	ND	1.2	None	None	Surface - Sand, brown with organics, dry
E	52		1.8	None	None	
<u>_</u> 5	25	(676)				0 - 10' - Sand, tan with caliche nodules, dry
E	193		1.7	None	None	
10 11 10 10 10 10 10	3 ∑∺	676		•		
E	63		1.2	None	None	
L 15		(572)				10 - 20' - Sand, tan, very fine grained, with caliche,
E			1.9	None	None	dry
20		396	***			
E			1.9	None	None	20 - 25' - Sand, brown with sandstone, dry
L ₂s		(1,340)				•
E			0.7	None	None	25 - 30' - Sand, brown, very fine grained with
-30		436	•		,,,,,,	sandstone,dry
Ē			1.5	None	None	30 - 35' - Sand, reddish brown with clay, sandstone
-36		(1,244)	1.0	110110	110110	and gypsum stringers, layering, dry
Ė	E (a)		2.2	None	None	35 - 40' - Sand, red with limited clay and
E.40	<u>III</u>	1.340		110110	1101.0	sandstone, dry
Ė		.,	1.9	None	None	40 - 45' - Clay, red with gypsum, dry
E ₄₅		(5,232)	1.0	110110	140710	
F	淵	<u>(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	2.1	None	Nane	45 - 50' - Sand, reddish brown with clay and
E _{so}	5.1.5	4.092	2.1	140116	140110	sandstone, dry
F	23	1,002	2.3	None	None	50 - 55' - Sand, brown, very fine grained with grey
E _{ss}	Z_{-}	(3,164)	2.0	NOTE	None	gypsum, layering, dry
ţ.	1,14 E	(0,10,	1.7	None	None	55 - 60' - Sand, brown, very fine grained with
E		4.444	1.1	INUING	MOIIE	sandstone and some clay, dry
<u> </u>		7,777	1.9	None	None	60 - 65' - Sandstone, reddish brown in clay matrix,
E.,	Ш	(6,664)	1.3	None	HOHE	dry
<u> </u>	1124	0,004	2.0	None	None	65 - 70' - Sandstone, dark red with clay and grey
E,,		(856)	2.0	IADIIG	NOHE	gypsum, layered, dry
F			1.5	None	None	70 - 75' - Sandstone, reddish brown in silly clay,
E,		(3,164)	1.0	NOTE	NUILE	dry
‡ ~		3,104	1.1	None.	None	75 - 80' - Clay, dark red, moist
E.		(13,028)	1.1	None	None	
	םד	13,029				

Boring SB-5

Date	Drilled	anuary 5, 2010
Thick	ness of Bentonite Sea	BD F1
Depth	of Exploratory Boring	80 Ftbos
Depti	to Groundwater	
Groun	nd Water Elevation	
ፗ	Indicates the PSH is	evel measured
_	on	.
•	Indiana, the sec.	
•	Indicates the ground measured on	

Completion Notes

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

Soil Boring SB-5

BOPCO GH Cobb Fed #1 **Eddy County, New Mexico** **Basin Environmental Consulting**

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

Depth					So	il Boring SB-6
below						ii Bornig OB o
ground	Soil	Chloride	PID	Petroleum I		Cail Description
surface	Columns	Field Test		<u>Odor</u>	<u>Stain</u>	Soil Description
E,	14.57	ND	1.2	None	None	Surface - Sand, reddish brown, with caliche nodules
þ			2.9	None	None	
- 5		529				0 - 10' - Sand, tan with soft caliche, dry
E	1881		2.5	None	None	
⊢ ‰		436				
F	TE TH		3.7	None	None	10 - 15' - Sand, brown with sandstone, dry
E.		(356)	J.1	None	140116	
F."	111	<u> </u>	4.5	None	None	15 - 20' - Sand, tan to brown, very fine grained with
F		188	4.5	None	None	sandstone, dry
E™	114 1	100				•
þ	300		5.2	None	None	•
F™		(792)				20 - 40' - Sand, brown, very fine grained with
E	胡柏		3.6	None	None	sandstone, dry
[−∞		5,232				
ļ.	11.11	_	2.8	None	None	
<u>-</u> 20		6,664				
. E			7.9	None	None	•
` Է ⊷		3,452				
E	猫	•	2.3	None	None	40 - 45' - Sandstone, dark red in clay mattix, dry
E ₄₅		(4,824)	_,0	140110	110110	40 - 45 - Sandstone, dark red in day matux, dry
ļ [*]		(4,024)	3.1	None	None	45 - 50' - Sandstone, layered brown to grey, with
Ė.s		3,452	3.1	MOHE	None	gypsum, dry
E"		3,402				EO EE Condition however woulden ambend day
-	₩₩		3.1	None	None	50 - 55' - Sandstone, brown, very fine grained, dry
		(5,232)				55 - 60' - Clay, reddish brown, silty with sandstone,
E		_	5.2	None	None	dry
-60		(7,832)				
ŧ			4.4	None	None	60 - 65' - Clay, dark red, sandy with sandstone, dry
E-65	開	13,028				
E			1.9	None	None	65 - 70' - Clay, dark red, sandstone layering, moist
Lೄ	••••	(10,040)				
	10					

Soil Boring SB-6

January 6, 2010

Thick	ness of Bentonite Seat 70 F1
Depti	of Exploratory Boring70 Ft bgs
Depth	to Groundwater
Groun	nd Water Elevation
ፗ	Indicates the PSH level measured on
▼	
_	on Indicates the groundwater level

Completion Notes

- The monitor well was advanced on date using air rotary drilling techniques.
- 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 Chloride PID Petroleum Petroleum ground Soil Soil Description surface Columns Field Test Reading <u>Stain</u> Odor January 11, 2010 None None 0 - 5' - Sand, tan to grey, very fine grained, moist (snow melt), dry at 6-inches 2.9 None None (ND) 5 - 8' - Sand, tan to grey, very fine grained with some caliche nodules, dry 2.5 None None 8 - 11' - Caliche, white, dry, sandy ND 3.7 None None 11 - 15' - Sand, brown with some caliche layers T. (180) 4.5 None None 15 - 22' - Sand, brown with some caliche and red day 180 5.2 None None 22 - 25' - Sand, brown with some caliche (324) 3.6 25 - 30' - Sandstone, brown, moderately hard None None 6,664 30 - 34' - Sandstone, brown, moderately hard with 2.8 None None some gypsum and clay (9,232) 34 - 40' - Clay, red and sandstone, red, very hard 7.9 None None with some gypsum 3,760 2.3 None None 40 - 52' - Sandstone, brown to red in red clay (5,232) mattrix, moderate to very hard, thin layering with some gypsum 3.1 None None 3,760 52 - 55' - Gypsum, white to grey 3.1 None None (4,444) 5.2 None None 55 - 65' - Sandstone, red, moderately hard with red (8,500) clay mattrix 44 None None (2,636) 65 - 70' - Sandstone, red, moderately hard with red 1.9 None None clay mattrix and some gypsum stringers (2,172) 70 - 75' - Sandstone, red, hard, moist 1.9 (10,040)

Soil Boring SB-7

Thick	ness of Bentonite Seat	75 FI
Depti	of Exploratory Boring _	75 Ft bgs
Depti	to Groundwater	
Grou	nd Water Elevation	
_		
•	Indicates the PSH level	measured

Completion Notes

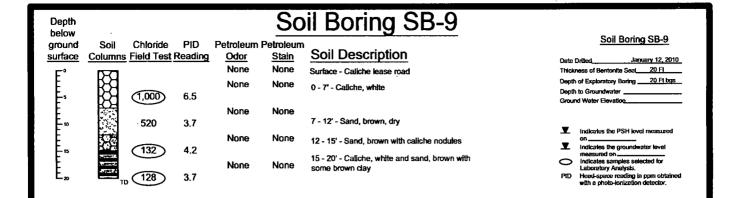
- The monitor well was advanced on date using air rotary drilling techniques.
- The lines between material types sho on the profile log represent approximate boundaries. Actual transitions may be approximated by the profile log represent approximate transitions may be approximated.

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



Completion Notes

- The monitor well was advanced on date using air rotary drilling techniques.
- The lines between matter if 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: CJ8

May 14, 2010

Soil Boring SB-10 Depth below Soil Boring SB-10 ground Chloride PID Petroleum Petroleum Soil Soil Description
Surface - Sand, light brown, very fine grained with surface Columns Field Test Reading <u>Stain</u> Odor January 12, 2010 Date Drilled None None Thickness of Bentonite Seat 20 FI Depth of Exploratory Boring 20 F1 bgs None None Deoth to Groundwater None None 0 - 20' - Sand, white to light brown to brown with ▼ Indicates the PSH level measured None None ▼. 0 None None

Completion Notes

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

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



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 Method SW-846 8260 Benzene, Toluene, Ethyl Benzene, and Total Xylenes 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/Reene

Laboratory Director



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

GRO DRO DRO ext. (C6-C10) (>C10-C28) (>C28-C35)

	(06 010)	(* O10 O28)	(* GZB G35)
_LAB NUMBER SAMPLE ID	(mg/kg)	(mg/kg)	(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

H18968 TPHEXT BASIN



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

		Cl
LAB NO.	SAMPLE ID	(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 Cont	rol	500
True Value (JC .	500
% Recovery		100
Relative Per	cent Difference	< 0.1

METHOD: Standard Methods 4500-CIB

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

ist /

H18968 Basin Environmental



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 Cor	ntrol	10.6	5.04	4.91
True Value	QC .	10.0	5.00	5.00
% Recover	У	106	101	98.2
Relative St	andard 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.

H18968M BASIN

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		1778	# 2451	Company: $\mathcal{R}\mathcal{O}$	Town	Address:		te: Zip:	Phone #:	夺:	PRESERV. SAM	700	ACIDIA CELTE DATE	X 12/30				- Na-40-1 and	***************************************				contract or tort, shall be il	ardinal within 30 days after con 112 of profils incurred by clien	ony of the above stated reason	ļ		\	CHECKED BY:	**************************************	76.
		JVV.	P.O.		ZLE Attn:	1429 Add	. O	State:	Pho	Fax#:	MATRIX	::	OTHER SUL OIL SOIL	×	ngga jagan dadi a							>	calm arishg varether based in co	in witing and received by Ca nemptions, loss of uso, or to	of whether such claim is based upon any of the above titled resears or differents red By:)! ~-	J. M. Colons	Sample Condition	O Yes O Yes	jes to 575-393-24
ω	40 -2476	7	1-		n' ap: BBZL	75-316-	BOP	万百				OR (C)OMP.	евоп) # сои	_ - වී								 -	remedy for any claim an	deemed withed urbss made y without limitation, business i	Receiv	7	Received By:	Hat.	Tomp. S.	4.0C	fax written chang
ORATORIE	101 East Marland, Hobbs, NM 88240 (575) 393,2326 Fax (575) 393,2476	20. Co.	Les Beul	さいとすっ	State: M	4	Project Owner:	T COULL	MNG		0	Ö		, S	-0	, (٥,	5,	N.	0,	2,		Ity and offent's exclusive	ar cause whatevever shell be a resequental damages, including	Date:	12 v 15 v	Date Ci	C2.版			rchanges. Please
* ARDINAL LABORATORIES	101 East Marland (575) 393-235	DAS NO	CAMIL	ÚŢ	DUNGTON	Cl27 200	115	COBB	EDDY C	ころに		Sample.ID		5B-1@S	58-1@1S	58-1 c 25	SB-1@35'	53-1045	502-1@551	58-1060)	3	O IS 1 @ SO O COMPANY (ISDIN)	se for negitgence and any oth If be table for incidental or con	o act of or related to the performence of Shed;	4	/	1	Sircle One)	us - Other:	† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476
S ARI		Company Name:	Project Manager:	Address: 2800	Clty: LOUIN	Phone #: 075	Project#: 24	Project Name:	Project Location:	Sampler Name:	FOR LAB USE ONLY	Lao ID		H18963-1		-3	j		2,-	12-		<u>-</u>	PLEASE NOTE: Liability and Damages, Cardinal's liability and client's exclusive remedy for any	amipas. Al deins including those for negigence and any other cause wheteverur strall be deemed waived untess made in witing and received within 30 days after compation of the applicable service. In no evers shall Gardinal be bable for inclination and conceptuental damages, including waived intenses intemptions, loss of uso, or bus or profits incurred by clear, its expessionina.	Sampler Relinguish	イギニ	Relinquished By:	一九二	Delivered By: (Circle One)	Sampler - UPS - Bus - Other:	† Cardinal car

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741,	72 \		~	₩))	Si	<i>(</i> ط	•	ر []	2Ų 0	<u>14</u>	TIME	700 X	大 大 大	1825 X				amount pold o	applicable 15,	Phone Result:	REMARKS:					
·		01 7718	115かで #101	COUDDIN: SCPC	Attn: 16-VISA/DIE	Address:	City:	State: Zip:	Phone #:	Fax #:	PRESERV. SAMPLING	4		отнея: Асір/вье Отнея: А	X 2 30 1	71 05/21 X					d in contract or tort, shall be limited to the	d by Cardinsi wathh 30 days after complation of the re, or loss of profits incurred by clear, its subsidiari supon any of the above stated reasons or otherwise	Pho	REN		und	on CHECKED BY: (Initials)	+	0170
TORIES	s, NM 88240 (575),893-2476	J. CONSTITUTE	E BRUBIT	1 22	State: NM Zip: 188260	Fax#, 575-396-1429	Project Owner: ROPCO	-C (25/24C # 1	DON	K	MATRIX	<u>ਬ</u>	SABMI STAW	(G)RAB OOIL SOUL OOIL		X	X				Cardinals libbility and client's exclusive remedy for any cialm arising whether based in contract or ton, shall be limited to tho amount cold by the client for the	othe case wintsome stud to deemed waked unders made in wing and received by Centical within 50 days after compation of the applicable consequented demegos, including winded thistian business instanctions has so uses, or loss of profits incursed by clear it, as babildiseles, maces of services beautids by Centical respections of whiteir such clean is based once not of the doors attack research or otherwise.	Date: Received By:	70.	Pol. # Receive	S.) The SM	Temp./ Sample Condition	4.C BYGS TYGS ON THE	
ARDINAL LABORATORIES	101 East Marland, Hobbs, NM 88240 ——(575) 393-2326 Fax (575) 893-2476	Company Name: 505 NJ	וני	Ž		0127	1	Project Name: CDSB: HC	Project Location: \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc	Sampler Name:	FOR LAB USE OMY		Lab I.D. Sample I.D.	and Winds	41,968-11 SB-10 Bd	-1258-1@GE	23.1		AAN PRINCIPALITA (1915) (1914) (1914) (1914) (1914) (1914) (1914) (1914) (1914) (1914) (1914) (1914) (1914) (19		PLEASE NOTE: Lability and Damages, Cardinal's liability and cit	analyses. All ctains including those for negligence and any other cause wherevice. In no event shall Cardins be lable for inclidents or consequentle difference on service for excessions arising our difference of services.		・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・	Relinquished By:		Delivered By: (Circle One)	Sampler - UPS - Bus - Other:	



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(Kèene Laboratory Director



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		2,150	7.20	12,200
Quality Co	ntrol	10.6	5.04	4.91
True Value	QC	10.0	5.00	5.00
% Recover	У	106	101	98.2
Relative St	andard 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.

H18958M BASIN

5 AMALYSIS REQUEST 00St 04S 手が 1230 305 9 370 500 130 1100 140 TIME SAMPLING Company: ROC 01 7718 DATE いっての 17 Zipi Attn: TONU : ABHTO PRESERV. CE I COOF Address: Phone #: P.O. #: ACID/BASE: State: City: : язнто SLUDGE 605 7210 Fax: 575-396-1429 MATRIX State: NM zip: 882L6 ROIF Project Owner: MOPC **MASTEWATER BEROUNDWATER** Bellow 1 575) 393-2326 Fax (575) 393-2476 子ごとれにい EDUNAL のようという。 もとここの Sample I.D. 5B-1@531 58-10 2S 58-1@35 SB-1060 SR-1045 58-1@15 58-10 LS 58-16-701 E S 088 200 58-1 DUISATO 2800 Phone #5075 Project Manager: Project Location: Company Name: H18963-1 Sampler Name: Project Name: FOR LAB USE ONLY Lab I.D. Address: Project #: City:

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ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240

to damages, including without limitation businese interruptions, loss of uso, or loss of profile incursed by them, As tubsidiaries, service. In no event enal Cerdinal be liable for incollental or

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

VAIZ (2 Page 2 of 2	🧳 🐧 AMALYSIS REQUEST	7	₩ ₩ ₩		3	l		<u>ح</u>	IC	7	3)(14	ル ・フ		X	>			unt gald by the client for the	No D	ult: No Add1 Fax #: S:					
# ARDINAL LABORATORIES	10 East Mariana, nouss, nim oozav 	かるいし、Coresucting	MILLE JAMANT PO# 2451	3	State: NM Zip: ESZLO Attn: ICAN SALDIE	7210 Fax #: 575-396-1429 Address:	1	DSB TC (2012AL# 1 State: Zip:	Du (12) Will Phone #:	Fax #:	MATRIX PRESERV SAMPLING	S S	NATER SE: OL	(G)RAB (G)RAB (G)RAB (G)RAB (G)	X	SHL108121 X X Y PSG ®	2581 05 1 X X 12 30 1825			s libblity and clients exclusive remedy for any clair ery other cases whitboever shat be deemed walved unless et or consequental demages, including wiltout limbation, busis	of services hereunder by Cardinal, regardless of whether exchicksin is based upon any of the above solled reasons or Date:	3187	Silar Received By:	TOPESO Spe IM CON	Temp/	う; デ	
ARDINAL	101 East (575) :	Company Name: 500	Project Manager: (AM	Address: 2800	CIN: LEVILLESTON	Phone #: 575-(65	Project#: ZitSi	Project Name:	Project Location:	Sampler Name:	FOR LAB USE ONLY		Lab I.D.		4,1963-11 58-16	1-82-1	T			LEASE NOYE: Liability and Damages, Cardinal raiyess. All claims incheding those for nogigence and sovice. Inno event shall Cordinal be liablo for incident	filiatos or successors crising out of or related to the performance Saminier Relicional Aborts	DOX.	Relinquished By:	22	Delivered By: (Circle One)	Sampler - UPS - Bus - Other:	

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



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 Method SW-846 8260 Benzene, Toluene, Ethyl Benzene, and Total Xylenes

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



ANALYTICAL RESULTS FOR BASIN ENVIRONMENTAL CONSULTING, LLC

ATTN: CAMILLE BRYANT

LOVINGTON, NM 88260 FAX TO: (575) 396-1429

P.O. BOX 381

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

•		Cl
LAB NO.	SAMPLE ID	(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 Cont	rol	500
True Value (QC .	500
% Recovery		100
Relative Per	cent Difference	2.0

METHOD: Standard Methods 4500-CIB

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

Not accredited for Chloride.

Chemist

Date



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 H19001-14 SB-3 @ 45' H19001-15 SB-3 @ 55' H19001-16 SB-3 @ 60' H19001-17 SB-4 @ 5' H19001-18 SB-4 @ 15' H19001-20 SB-4 @ 30' H19001-21 SB-4 @ 35' H19001-22 SB-4 @ 45' H19001-23 SB-4 @ 55' H19001-24 SB-4 @ 60' H19001-25 SB-4 @ 60' H19001-26 SB-4 @ 70' H19001-27 SB-4 @ 75' Quality Control True Value QC	CI
H19001-15 SB-3 @ 55' H19001-16 SB-3 @ 60' H19001-17 SB-4 @ 5' H19001-18 SB-4 @ 15' H19001-19 SB-4 @ 25' H19001-20 SB-4 @ 30' H19001-21 SB-4 @ 35' H19001-22 SB-4 @ 45' H19001-23 SB-4 @ 55' H19001-24 SB-4 @ 60' H19001-25 SB-4 @ 60' H19001-25 SB-4 @ 65' H19001-27 SB-4 @ 70' H19001-27 SB-4 @ 75' Quality Control True Value QC	(mg/kg)
H19001-16 SB-3 @ 60' H19001-17 SB-4 @ 5' H19001-18 SB-4 @ 15' H19001-20 SB-4 @ 30' H19001-21 SB-4 @ 35' H19001-22 SB-4 @ 45' H19001-23 SB-4 @ 55' H19001-24 SB-4 @ 60' H19001-25 SB-4 @ 65' H19001-27 SB-4 @ 70' H19001-27 SB-4 @ 75' Quality Control True Value QC	9,500
H19001-17 SB-4 @ 5' H19001-18 SB-4 @ 15' H19001-19 SB-4 @ 25' H19001-20 SB-4 @ 30' H19001-21 SB-4 @ 35' H19001-22 SB-4 @ 45' H19001-23 SB-4 @ 55' H19001-24 SB-4 @ 60' H19001-25 SB-4 @ 65' H19001-25 SB-4 @ 70' H19001-27 SB-4 @ 75' Quality Control True Value QC	6,300
H19001-18 SB-4 @ 15' H19001-19 SB-4 @ 25' H19001-20 SB-4 @ 30' H19001-21 SB-4 @ 35' H19001-22 SB-4 @ 45' H19001-23 SB-4 @ 55' H19001-24 SB-4 @ 60' H19001-25 SB-4 @ 65' H19001-26 SB-4 @ 70' H19001-27 SB-4 @ 75' Quality Control True Value QC	5,200
H19001-19 SB-4 @ 25' H19001-20 SB-4 @ 30' H19001-21 SB-4 @ 35' H19001-22 SB-4 @ 45' H19001-23 SB-4 @ 55' H19001-24 SB-4 @ 60' H19001-25 SB-4 @ 65' H19001-26 SB-4 @ 70' H19001-27 SB-4 @ 75' Quality Control True Value QC	128
H19001-20 SB-4 @ 30' H19001-21 SB-4 @ 35' H19001-22 SB-4 @ 45' H19001-23 SB-4 @ 55' H19001-24 SB-4 @ 60' H19001-25 SB-4 @ 65' H19001-26 SB-4 @ 70' H19001-27 SB-4 @ 75' Quality Control True Value QC	160
H19001-21 SB-4 @ 35' H19001-22 SB-4 @ 45' H19001-23 SB-4 @ 55' H19001-24 SB-4 @ 60' H19001-25 SB-4 @ 65' H19001-26 SB-4 @ 70' H19001-27 SB-4 @ 75' Quality Control True Value QC	4,100
H19001-22 SB-4 @ 45' H19001-23 SB-4 @ 55' H19001-24 SB-4 @ 60' H19001-25 SB-4 @ 65' H19001-26 SB-4 @ 70' H19001-27 SB-4 @ 75' Quality Control True Value QC	6,960
H19001-23 SB-4 @ 55' H19001-24 SB-4 @ 60' H19001-25 SB-4 @ 65' H19001-26 SB-4 @ 70' H19001-27 SB-4 @ 75' Quality Control True Value QC	2,360
H19001-24 SB-4 @ 60' H19001-25 SB-4 @ 65' H19001-26 SB-4 @ 70' H19001-27 SB-4 @ 75' Quality Control True Value QC	3,200
H19001-25 SB-4 @ 65' H19001-26 SB-4 @ 70' H19001-27 SB-4 @ 75' Quality Control True Value QC	2,600
H19001-26 SB-4 @ 70' H19001-27 SB-4 @ 75' Quality Control True Value QC	11,900
H19001-27 SB-4 @ 75' Quality Control True Value QC	12,800
Quality Control True Value QC	14,400
True Value QC	8,160
	510
A. 5	500
% Recovery	102
Relative Percent Difference	2.0

METHOD: Standard Methods 4500-CIB

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

Not accredited for Chloride.

Chemist /

Date

H19001 Basin Environmental



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 DRO DRO ext. ETHYL TOTAL (C_6-C_{10}) ($>C_{10}-C_{28}$) ($>C_{28}-C_{35}$) BENZENE TOLUENE BENZENE XYLENES (mg/kg) (mg/kg) (mg/kg) (mg/kg) (mg/kg) (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
							watercook - Commence -
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

Date

H19001 TPHextBTEX BASIN

ARDINAL LABORATORIES

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

M ö

Page ANALYSIS REQUEST (2000) (2 1350 1025 しかり雨 1130 SE2 202 Company: RCPCO SAMPLING BILL TO 也 2451 DATE Zip: Attn: TONGY : A3HTO ICE / COOF Phone #: Address P.O.#: ACID/BASE State: Fax #: CİŢ ЯЗНТО State: NIM Zip: BRZ60 1210Fax#: 575-394-1429 Project Owner: 130PCO でいる。これの TIOS **MASTEWATER RETAWGNUORS** # CONTAINERS .4MO(2) RO BAR(8) というでんど BULLY いってく ことというできた 58-20 SS 58-2@ 2S 58-2@ 3S SB-20 45 5B-2e 50 Sample I.D. 00 SB-2@ IS 38-2 es CBB 300 53-20 6-3@ くらいない。 288 Project Manager: Company Name: Project Location H19001-1 Sampler Name FOR LAB USE DITLY Project Namo: Lab I.D. Project #: Address: Phone #: City:

unhas nude in waling and received by Cardalel within 30 days after completion of the explicable sevice. In no event shall Cantoou be abole tor incoprate on consoquental dumagne, including valued fantabon business interuptions, bas of use, or hars of profits troumed by clear, its exhabition as analyses. At claims including those LEASE NOTE: LIZE

| Sampler Relinquished Relinquished By: (Circle One) Time: Sampler-UPS - Bus - Other: |
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† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

101 East Marland, Hobbs, NM 88240 ARDINAL LABORATORIES

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

Page 7.0 5.00

Company Name:	しいるのうでもの	1000111100	30	BILL TO			ANALYSIS REQUEST	7
Project Manager:	CAN LUCE (- 15	P.O.#: 2	11811				
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PLEASE NOTE: LIADIN	PLEASE NOTE: LIBUIRTY and Damages. Cardinal's liability and citient's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the cilent for the	y cipimi arising whether base	ed in contract or tort, or	iall be limited to the amount	gaid by the c	lent for the		

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Add'I Phono #: Add'I Fax #:

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Relinquished By:

 \dagger Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476. eq 2.6

Sampler - UPS - Bus - Other:

ARDINAL LABORATORIES

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

Company Name:	のよう。これでは、これで	5.1.7.1.2S	81.1.70	ANALYSIS	REQUEST
Project Manager:		してよ	P.O.#. 24511		
Address:	4	つつ	Company: REPCO		
	J. 67	0928G	ATT TONY SAVOIE		
Phone #: 57	5-(205-7210Fax#: 575	394-1429 Address:	Address:	3	
Project #:	Project Owner:	Bopco	City:	112	
Project Name:	COBB. FEDERA	#	State: Zip:	か な な ち う	
Project Locatlop:	C POON	₹ 2	Phone #:	17 17	
Sampler Name	SID ST アプロド	· BRUANT	Fax#:))	
FOR LAB USE ONLY	100	MATRIX	PRESERV. SAMPLING	- つ ろ	
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PLEASE NOTE: LIZBIITY and Comages. Cardinars lizbility and clients exclusive remedy for any claim arising whether based in contract of tort, shall be limited to the amount baid by the client for the ansyses. At claims inchafing itops for regigerro and any other cause untakeoner stall be deemed valved unless made in wing and received by Central within 30 days after connected or the modification.

service. In no event aftel Condinat to stable for incidental or consequental demagnes, including without finitation business internation. Sets of profils from the Option, its substitutions.

No Add1 Phone #: 00 Phone Result: Fax Result: REMARKS: Sampler - UPS - Bus - Other: Delivered By: (Circle One) Relinquished By:

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



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



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

	CI				
SAMPLE ID	(mg/kg)				
SB-5 @ 5'	672				
SB-5 @ 15'	. 560				
SB-5 @ 25'	1,460				
SB-5 @ 35'	2,920				
SB-5 @ 45'	7,200				
SB-5 @ 55'	3,720				
SB-5 @ 65'	6,240				
SB-5 @ 70'	576				
SB-5 @ 75'	3,320				
SB-5 @ 80'	18,600				
Quality Control					
QC .	500				
	102				
cent Difference	2.0				
	SB-5 @ 5' SB-5 @ 15' SB-5 @ 25' SB-5 @ 35' SB-5 @ 45' SB-5 @ 55' SB-5 @ 65' SB-5 @ 70' SB-5 @ 75' SB-5 @ 80'				

METHOD: Standard Methods 4500-CIB

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

Not accrédited for Chloride.

Chemist

Date

H19000 Basin Environmental



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

		CI
LAB NO.	SAMPLE ID	(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 Con		510
True Value	2C	500
% Recovery		102
Relative Per	cent Difference	2.0

METHOD: Standard Methods	4500-Cl'B

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

Not accredited for Chloride.

Chemis

Date

H19000 Basin Environmental



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 DRO DRO ext. ETHYL TOTAL (C_6-C_{10}) (> $C_{10}-C_{28}$) (> $C_{28}-C_{35}$) BENZENE TOLUENE BENZENE XYLENES (mg/kg) (mg/kg) (mg/kg) (mg/kg) (mg/kg) (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
angung tinggan ayang anguna angunan sarang sarang sanang sanang sanang sanang sanang sanang sanang sanang sanan							
AND				**************************************			
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 ext.

Lab Director

Date

H19000 TPHextBTEX BASIN

ARDINAL LABORATORIES

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

S)

Company Name: DHS// CC/SIC +CMS	5	ANALISIS REGUESI
Project Manager: (P. M.) E. Bryca F	P.O.# 34 じニ	0
Address: 2800 Plains Hair	Company: BORC LP	
city: Lovina for state: Minister: 882100	Attn: Thing Sigvine	יופני
+C)#xex 012t - S	Address:	
Post	City:	1 x
Project Name: (ODD I Peclerial #1	State: Zip:	73
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TYes GYes Received By ぶら Sampler - UPS - Bus - Other: Delivered By: (Circle One) invalle to Relinquished By:

 \dagger Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476. \pm \mathcal{D}

101 East Mariand, Hobbs, NM 88240 ARDINAL LABORATORIES

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

Page 2 of 2 REQUEST ANALYSIS 1008 QQS/7 <u> صنداد</u> Attn: TONG SAYDIE Company: BOPCO, LY SAMPLING 01 7718 ΖĎ PRESERV. Address: Phone #: P.O. #; State: Fax#: City: MATRIX SOPCO. LP 396 1429 1M ZIP: SBALD いいとに上れ Project Owner: 1005 - Talo Fax#: 575 ないなが State: 7 ellingl Address: 2500 Apins amille Design ξ "OBB CIN: LOVIACION Project Manager: Project Location: Company Name: Phone #: 575 Project Name: Sampler Name: FOR LAB USE ONLY Project #:

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for any caim arking whether based in contract or tort, shall be limited to the amount paid by the client for the within 30 days ofter completion of the applicable LEASE NOTE: Lizbility and Damages. Cardina's liability and client's exclusive

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



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



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 Con	trol	5.05	4.95	10.5
True Value	QC	5.00	5.00	10.0
% Recovery		101	99	105
	indard 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.

Chamist

Date

H19002M BASIN

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 client for 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 thirty (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 herounder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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	K
		(mg/kg)	(mg/kg)	(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 Cor		9.80	9.52	25.1
True Value	QC	10.0	10.0	25.0
% Recover	y	98.0	95.2	100
Relative St	andard Deviation	0.1	0.2	<0.1
METHODS	· EPA 600/4-91/010	6010	6010	6010

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

Date

01/12/10

] i ANALYSIS REQUEST Add'i Phone # 2 2 00 otherwise.
Phone Result:
Fax Result:
REMARKS: 1025 080 loos 1350 Oseo 27/0 1130 240 255 1700 Company: ROPCO SAMPLING BILL TO 7451 DATE Zip: Arm: COLVY : ABHTO ICE I COOF Phone #: Address P.O. #: State: Fax#: ACID/BASE CIty: язнто Cool Intact BOONTS 205-721cFax#: 575-396-1420 OIF いていているか いからり **A**BTAWBTSAW H GROUNDWATER State: N'M Zip: (G)RAB OR (C)OMP. SUPERIE S (575) 393-2326 Fax (575) 393-2476 Project Owner: 33-3@ Surrace しつるよみが , 500 いついせ JANI PAGE Sample I.D. B-20 40 12月 25 58-305 58-20 DASIN Sampler - UPS - Bus - Other: Delivered By: (Circle One) 2860 300 1 Project Manager: Project Locations Company Name: ellnquished By Sampler Name Project Name: FOR LAB USE ONLY HFW22-Lab I.D. Project#: Address: LEASE MOTE: Phone #:

ARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240

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

101 East Marland, Hobbs, NM 88240 ARDINAL LABORATORIES

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

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† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476. $\pm 72b$

ARDINAL LABORATORIES

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

S in Bara

REQUEST ANALYSIS 520 SSO 1200 1320 1450 Attn: TONY SILVOIE 800 TIME Company: ROPCO BILL TO 7481 DATE Zip: язнто Phone #: Address P.O. #: State: Fax#: ACID/BASE CIQ **SEHTO** STADGE State: N/M Zip: BRZ60 205-7210Fax#: \$75-3916:-1+20 RUPE 2012 JUNE Project Owner: BOPCO TIOS MASTEWATER # **ВЕТАМОИ ОО РЕ** # CONTAINERS TUDEKK! (G)RAB OR (C)OMP. というこ いってし いというにいれない Sample I.D. SB-60 BS 58-60 35 33-6@ ZS 58-60 to SB-60 70' CBB DO S SULLOS TON Project Manager: Project Location: Company Name: Sampler Name Project Name: FOR LAB USE CHILY Lab I.D. Phone #: 🥕 Address: Project #: City:

within 30 days ofter completion of the oppinicable In no oversi shall Cardinal be liable for incidental or Add1 Phone / 22 Phone Result: Fax Result: REMARKS: JW (201) Received By: Sampler - UPS - Bus - Other: Delivered By: (Circle One) edished By

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



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



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

4500-CIB

01/13/10

Sample Received By: JH

Analyzed By: HM

		Ci
LAB NO.	SAMPLE ID	(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 Cor	otrol	510
True Value	QC	500
% Recover	У	102
Relative Pe	ercent Difference	2.0

METHOD: Standard Methods

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

Chemist

Date



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
111001	********** ***************************	†···						0.000

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
mades controls consumated and an additional controls and additional controls a							
AND							
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 Directon

H19019 TPHextBTEX BASIN

Date

PLEASE NOTE: Liability and Damages. Cardinal's flability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for 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 thirty (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. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

ARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240

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(575) 393-2326 Fax (5 <u>7</u> 5)	JUS LISTO	(Pamille	So Alemas	(A)	5-721	511	Jose Chal	Sall Lale	(10mm 10 g			Sample I.D		The Huust	1 atheast S	11 22 st 5/W	5 rst 5/W	Saith S/W	1/athust	reast (をとればる		
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PLEASE NOTE. Valatility and Damages. Cardinary liability and clienty exclusive remedy for any cleim ariship whether based in contract or cort, small be limited to the amount paid by the client for the ampless and engagence and any other case whethere is the defendence in regigners and any other case whethere is the defendence is the client shall be appeared to the appearance of the property of the client and the client a

Add'l Phone #: Add'l Fax #: 윤 CHECKED BY: Cook Intact Received By: Sampler · UPS · Bus · Other: Delivered By: (Circle One)

 \dagger Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476 $\mathcal L$

サククサ



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



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

			ETHYL	TOTAL
•	BENZENE	TOLUENE	BENZENE	XYLENES
LAB NUMBE SAMPLE ID	(mg/kg)	(mg/kg)	(mg/kg)	(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.

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tork, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed walved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In he would be liable for incidental or consequential damages, including, without limitation, business interruptions, toss of use, or loss of profits incurred by client, its subsidiarles, 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. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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 @ 40C

Sample Received By: JH

Analyzed By: AB

 $\begin{tabular}{ll} GRO & DRO & DRO & ext. \\ (C_6-C_{10}) & (>C_{10}-C_{28}) & (>C_{28}-C_{35}) \\ LAB NUMBER & SAMPLE ID & (mg/kg) & (mg/kg) & (mg/kg) \\ \end{tabular}$

ANALYSIS D	ATE	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 Contr	ol	491	426	
True Value Q	C	500	500	_
% Recovery		98.2	85.2	
Relative Perc	ent 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

Date

H19090 TPHEXT BASIN



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

01

Sample Received By: JH

Analyzed By: HM

		CI
LAB NO.	SAMPLE ID	(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 Cont	rol	500
True Value (JC .	500
% Recovery		100
Relative Per	cent Difference	<0.1

METHOD: Standard Methods 4500-Cl'B

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

Not acofedited for Chloride.

Chemist

Date

01/22/10



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

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

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

METHOD: Standard Methods 4500-CIB

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

Not accredited for Chloride.

hemist/\

Date



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	(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-CIB

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

Not accredited for Chloride.



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

 CI^{-}

Analyzed By: HM

		Cl
LAB NO.	SAMPLE ID	(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 Conf	irol	500
True Value (QC	500
% Recovery		100
Relative Per	cent Difference	< 0.1

METHOD: Standard Methods 4500-CI'B

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

Not accredited for Chloride.

Chemist

Date



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

CI

•		CI CI
LAB NO.	SAMPLE ID	(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 Cont	rol	500
True Value	QC	500
% Recovery		100
Relative Per	cent Difference	< 0.1

METHOD: Standard Methods 4500-CI'B

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

Not accredited for Chloride.

Chemist

Date

101 East Marland, Hobbs, NM 88240 ARDINAL LABORATORIES

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ANALYSIS REQUEST 1545 345 1420 OBS 010 120 000 B 130% TIME DI TIIB DATE Attn: (02 язнто Company: Address: Phone #: P.O.#: State: ACID/BASE: Fax #: City: згирсе Этнго 210Fax#575-376-142 07280 B.M Project Owner: ASPCO ZOIF ということ **MASTEWATER** яатьмаииояа ξ 2 サンスのといっ (G)RAB OR (C)OMP. (575) 393-2326 Fax (575) 393-2476 RS/2/GIV 58-7@35 Sample I.D. JB-7@ 55 5*B-1@ (*20 33-7e 45 3/-Ye Project Manager: Project Location: Company Name: Sampler Name: Project Name: HGCGG-FOR UAD USE OULY Lab I.D. Phone #: 🀔 Project#: Address:) City:

JAN AR

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

Sampler - UPS - Bus - Other:

101 East Marland, Hobbs, NM 88240 * ARDINAL LABORATORIES

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

Page 2 of 6

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Company Name:	Address: Z & Color City: L CALLOCT Phone #: S YS - L CALLOCT Project #: Z + L CALLOCATION: C Project Location: C Sampler Name: C	FOR UNB USE ONLY	11-06011	21-	11-	91-		2 6,	8,

Cool Intact Sampler - UPS - Bus - Other: nquished By:

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

101 East Marland, Hobbs, NM 88240 - ARDINAL LABORATORIES

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

Company Name:	TOASIDER CARLETIC	81.4.70	ANALYSIS REQUEST
Project Manager:	CACCION (SIGNA)	115th C:#:04	
Address: Z ROO	PLAINS H	Company: ROPCO	
	CU (VCTO) State:	Attn: Town Securol 5	(-
Phone #: 57	Phone #: 575-105-7210 Fax#: 575-39-1429	Address:	
Project#:	2451 Project Owner: BOPCO	City:	(3
Project Name:	COSB (FEDEROR #1	State: Zip:	
Project Location:	W	Phone #:	
Sampler Name:	し、大つ大い	Fax #:	72
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Phone Result:

Fax Result:

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No I Aes Delivered By: (Circle One) Sampler - UPS - Bus - Other: elinguished By:

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

101 East Marland, Hobbs, NM 88240 - ARDINAL LABORATORIES

	(575) 393-2326 Fax (575) 393-2476			Page 1 of
Company Name:	DASIDENT CORUC	יובד אוייר	B16 70	ANALYSIS REQUEST
Project Manager:	CAMILLE B) L. C. E.	P.O.#: 2451	
Address: 2800	TAIN #		Company: BOPCO	
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Phone #: 57	5-605-7210Fax#:575-	必でする	Address:	× (~
Project#: 2	Project Owner:	BOPAD	City:	3
Project Name:	COBB (TEDERAR)		State: Zip:	り が
Project Location:	(C)	W	Phone #:	
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15th ~	58-12@ 15'		26	
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No Add'l Phone #: Phone Result: Fax Result: Combe Sampler - UPS - Bus - Other: Relinquished By:

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

ARDINAL LABORATORIES

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

Page No Land

REQUEST ANALYSIS 1155 3/6 120 = 49 1230 S 1000 001 330 1020 0250 TIME がある。同 SAMPLING BILL TO DATE Attn: Col PRESERV. : ABHTO Company: CE I COOF Phone #: Address P.O. #: State: Fax#: CID/BASE: Ċ Ç : A3HTO สอดการ 710Fax#.575-394-142 State: 1 MM Zip: 88260 MATRIX TIC Project Owner: BOPCO NOS X **ABTAWBT2AW ЗЕТАМОИ ПОЯЗ** # NW GMO(3) RO BAR(3) て加いますと 53-12@ LOS 38-12@75 B-126 90' 5R-12@ 85 B-12@ 80 ASIN CIVI でな、こんの ての Q-126 LORB Phone #: 575-1,005-Address: 2800 Project Manager: Project Location: 12n-Company Name: In-Obabi H 5 ころ Sampler Name: י מב FOR LAB USE ONLY かっし 3 Project Name: Ċ Lab I.D Project#: City:

sayed uniass made in witing and received by Cardinal within 30 days after complation of the explicable entes. In no event also Cardinal bo table for incidental or consequental demages, including addood finitation business interruptions, loss of use, or loss of profits incursed by clearl, as substituties, Add'l Phone #: Add'l Fax #:

2 2

Phone Result: Fax Result: REMARKS: No Co JANN C rdess of whether such claim Received By Sampler - UPS - Bus - Other: nguished By

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

ARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240

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

Page 6 of 6

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Company Name:	Project Manager:	Address: 29		22	Project#: 2	.; g	Project Location:	Sampler Name:	POR LAB USE ONLY	Lab 1.0.	NG GG O	8	-522	汚し	くなく	156	~ 5M	1,28		***************************************

PLEASE NOTE: LIBBITY and Compace. Cardinal's lability and client's exclusive remedy for any claim arising whether based in contract or ton, that be limited to the amount paid by the client for the ranyes. As teims including those for registeres and any other cause whosteries that he desired unders made in wilting and received by Corderal with 30 days after completion of the supplicable services. In no evers shall Contral by label for indicated or consequented demayes, including without his results in the results of or has of profix fronted by clear, its autostitutes. Fax Result: REMARKS: CHECKED BY: Cool Intact
Yes D Yes Sampler - UPS - Bus - Other: Delivered By: (Circle One)

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

#120



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 Method SW-846 8260 Benzene, Toluene, Ethyl Benzene, and Total Xylenes 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



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

Chemist

TEXAS NELAP CERTIFICATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE,

AND TOTAL XYLENES. Reported on wet weight.

Date



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

LAB NUMBER SAMPLE ID

Sampling Date: 01/12/10 Sample Type: SOIL

Sample Condition: COOL & INTACT @ 40C

Sample Received By: JH

Analyzed By: AB

GRO DRO DRO ext. (C_6-C_{10}) (> $C_{10}-C_{28}$) (> $C_{28}-C_{35}$) (mg/kg) (mg/kg) (mg/kg)

ANALYSIS DATE	01/25/10	01/25/10	01/25/10
H19090-25 SB-10 @ 5'	<10.0	42.7	<10.0
			-
The state of the s			urteteriyaan tildi ee
The state of the s			**************************************
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 Directór

01/27/10 Date

H19090-25 TPHEXT BASIN



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.

Date

PLEASE NOTE: Liability and Damagos. Cardinal's liability and client's exclusive remedy for any cleim arising, whether based in contract or tort, shall be limited to the amount paid by client for 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 thirty (30) days after completion of the applicable service. If house, the properties of the properties 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. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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

LAB NUMBER SAMPLE ID

Sampling Date: 01/11/10 - 01/15/10

Sample Type: SOIL

Sample Condition: COOL & INTACT @ 40C

Sample Received By: JH

Analyzed By: AB

GRO DRO DRO ext. (C_6-C_{10}) $(>C_{10}-C_{28})$ $(>C_{28}-C_{35})$ (mg/kq) (mg/kq) (mg/kq)

ANALYSIS D	ATE	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 Contr	ol	491	426	-
True Value C	IC	500	500	
% Recovery	grandensin Electronic de management d'establement : - en appendient : - de pubblished : - de pubbli	98.2	85.2	
Relative Perc	cent 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

Date

H19090 TPHEXT BASIN



ATTN: CAMILLE BRYANT P.O. BOX 381

LOVINGTON, NM 88260 FAX TO: (575) 396-1429

Receiving Date: 01/19/10 Analysis Date: 01/20/10

Reporting Date: 01/21/10 Sampling Date: 01/11/10 & 01/12/10

Project Number: 24511 (BOPCO, LP) Sample Type: SOIL

Project Name: COBB FEDERAL #1 Sample Condition: COOL & INTACT @ 4°C

Project Location: EDDY COUNTY, NM Sample Received By: JH

Analyzed By: HM

		CI ⁻
LAB NO.	SAMPLE ID	(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 Cont	rol	500
True Value (QC	500
% Recovery		100
Relative Per	cent Difference	<0.1

METHOD: Standard Methods 4500-CI'B

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

Not acofedited for Chloride.

Chemist

Date

01/2/10



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

CI

LAB NO.	SAMPLE ID	(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							
H19090-23	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 Cont	rol .	500					
True Value (JC .	500					
% Recovery		100					
Relative Per	cent Difference	<0.1					

4500-CIB METHOD: Standard Methods

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

Not accredited for Chloride.

Date



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

05

Sample Received By: JH

Analyzed By: HM

		Cl
LAB NO.	SAMPLE ID	(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 Cont	rol	500
True Value (JC	500
% Recovery		100
Relative Per	cent Difference	< 0.1

METHOD: Standard Methods 4500-Cl B

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

Not accredited for Chloride.

Chemist "

Date

H19090 Basin Environmental

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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

		CI
LAB NO.	SAMPLE ID	(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 Cont	trol	500
True Value (2 C	500
% Recovery		100
Relative Per	cent Difference	· < 0.1

METHOD: Standard Methods 4500-CI'B

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

Not accredited for Chloride.

Chemist

Date



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

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

METHOD: Standard Methods 4500-CIB

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

Not accredited for Chloride.

Chemist

Date

ARDINAL LABORATORIES

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

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PLEASE NOTE: Liability and Compages, Condinant liability and clientry exclusive remedy for my claim artsing whether based in contract or that, shall be limited to the amount poid by the client for the existence of the comparison of the opposition

Phone Result:
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REMARKS: Cool Intact

No I No No Time Sampler - UPS - Bus - Other: Relinquished By:

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101 East Marland, Hobbs, NM 88240 ARDINAL LABORATORIES

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

Page 3 of 6

5 3 ANALYSIS REQUEST 2 Q ኢ 1,420 530 1520 1540 1555 1405 α sc 2101 SAMPLING BILL TO Zip: Attn: TOYL PRESERV. : яэнто Company: ICE / COOF Phone #: Address: P.O. #: State: ACID/BASE: Fax#: City. : язнто Bearing NO TIOS **MASTEWATER ВЕСОПИДМАТЕР** S Z 古のから、井 (G)RA8 OR (C)OMP. Project Owner: 72/OFax#: OK 58-10@15 58-10@20' e 5/ (A) Sample I.D. 18-10@S 58-9@ 0 Siy: (CO.//Cytro.k Address: ZOOO Phone #: 5151-Project Manager: Project Location: Company Name: Sampler Name: HP090-2 Project Name: FOR LAB USE ONLY Lab I.D. Project#:

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ARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240

(575) 393-2326 Fax (575) 393-2476 ろみちょう ほんし Consurring **BILL TO**

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PLEASE NOTE: LIBBILITY and DEMERGES, Cardinals liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount analyses, end say other cause whateone end be deemed whete made in white and received by Cardinal which all deep either completion of the amount service. In no event end Cardinal be labble for inclusive conceptual demenges, including without intension, based rises, or base of profits incured by claim, its subsidiaries,

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101 East Marland, Hobbs, NM 88240

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

Page 6 of C

ANALYSIS REQUEST 0/4/ 30t/ S 1535 1510 525 とう igo TIME SAMPLING DATE BILL TO Zip: Attn: Cy. PRESERV. язнто Company: ICE I COOF Phone #: Address: P.O. #: State: Fax#: ACID/BASE: <u>:</u> яэнто SLUDGE 371-218-State: 11/11 Zip: 8-8260 MATRE 1105 いとして一個な **MASTEWATER S** 2 (G)RA8 OR (C)OMP. Project Owner: 12/0Fax#5/15 とのならい アドノウの RS/DEVEL 100 N Sample I.D. IN CONFORTION Address: ZOOO Phone #: 575-Project Manager: roject Location: Company Name: H G DSD 20 Sampler Name: project Name: FOR LAB USE ORRY びて Lab I.D. Project#: į

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

#100



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 Method SW-846 8260 Benzene, Toluene, Ethyl Benzene, and Total Xylenes 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



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

CI

LAB NO.	SAMPLE ID	(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 Cor	ntrol	500					
True Value	QC	500					
% Recover	У	100					
Relative Pe	ercent Difference	< 0.1					

METHOD: Standard Methods 4500-CIB

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

Chemi

Date

H19257 Basin Environmental .

ANALYSIS REQUEST D TIME S SAMPLING 2010 DATE **9177** Zip: : A3HTO PRESERV. Company: ICE / COOF Phone #: Address: P.O. #: Attn: State: Fax #: ACID/BASE: City: : язнто STUDGE MATRIX 110 ROIF **MASTEWATER ВЕТАМОИ ОРР** State: MYNZip: 8 # CONTAINERS (G)RAB OR (C)OMP. Fax#1575 (575) 393-2326 Fax (575) 393-2476 e dora Project Owner: 0000000 101 East Marland, Hobbs, NM 88240 t) e(V) ARDINAL LABORATORIES or A de lo 0/0 Sample I.D. STONE OF Address: 28DD Project Manager: Company Name: Phone # C+C Project Location: Samplor Name: Project Name: FOR LAB USE ONLY. Lab I.D. Project #: City:

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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

Datoratory Director



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 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	*K	Cľ
		(ma/L)	(ma/L)	(ma/L)	(ma/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
The state of the s				
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

ge by with the contract of the		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Commence of the commence of th
METHODS: EPA 600/4-91/010	200.7	200.7	200.7 SM4500-CIB
	·		

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

Chemist

Date

H19089M BASIN

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101 East Mariand, Hobbs, NM 88240 ARDINAL LABORATORIES

ANALYSIS REQUEST Page COSH Signatura BOPeo 01 7718 ジャナレ Zip Atm: O.C. Company: Address Phone #: P.O. #: State: C T 7210 Fax#575-396-1429 DNSLTING 7 Zip: Ħ (575) 393-2326 Fax (575) 393,2476 Project Owner: CARTECORA State: ///// \$000 P 2800 A Company Name:

15.00 14.00 15.00 16.00 TIME SAMPLING DATE PRESERV. SENTO CE / COOF Fax#: ACID/BASE: : ABHTO SLUDGE 710 TIOS **MASTEWATER** ЯЗТАМОИООЯЭ G)RAB OR (C)OMP YRDD WATER Sample I.D Project Manager: Project Location: Sampler Name: HP0569-Project Name: FOR LAB USE ONEY Lab I.D Address: Project#: Phone #:

rained unless made in writing and received by Cordinal within 30 days after compliction of the applicable LEASE NOTE: Liability and Damages ndyses. All claims including those for

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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



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

		CI ⁻	TDS
LAB NO.	SAMPLE ID	(mg/L)	(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 Contr	ol	500	NR
True Value Q	C	500	NR
% Recovery		100	NR
Relative Perc	cent Difference	2.0	0.5

METHOD: Standard Methods, EPA 4500-Clb 160.1

/]

Date

H19163 Basin Environmental

ARDINAL LABORATORIES

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

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01 77/8	P.O.#: 24 5[1]	Company: Cotton	Attn: TONY SAYO	Address:	City:	State: Zip:	Phone #:	Sagat AcurolCS	PRESERV. SAMPLING	2010	OOF VZE:	отнея юе / со отнея фате	91 72 X	1/26 00	1/26 9	11 921 11	21 02/1	1/20 1.			
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Company Name:	Project Manager:	Address: 2800	CIN (NOV!)	Phone #: 575	Project #: 24	Project Name:	Project Location:	Sampler Name:	FOR LAB USE DRILY		Lab I.D.		一個に	Š	a	4	n	3			

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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

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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

Final Ver. 1.000



Certificate of Analysis Summary 367139 Basin Environmental Consulting, LLC, Lovington, NM

Project Name: GH Cobb Federal #1

Date Received in Lab: Mon Mar-29-10 08:50 am

Report Date: 07-APR-10

Project Id: 24511

Project Location: Eddy County, NM Contact: Camille Bryant

Project Location: Eddy County, NIM				Droiset Manager Brent Barron II	Brent Barron II	
				r roject ivianager.	Divil Dalloll, 11	
	Lab Id:	367139-001	367139-002			
Acontrol December	Field Id:	Produced Water Tank	MW-2			
Analysis nequesieu	Depth:					
•	Matrix:	WATER	WATER			1
	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			i
m,p-Xylenes		ND 0.0400	0.0432 0.0400			
o-Xylenc		ND 0.0200	ND 0.0200			
Total Xylenes		ND 0.0200	0.0432 0.0200			
Total BTEX	i	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				
Selenium		ND 2.22	. 1			
Silver		ND 0.444	ļ			
Barium		2.06 0.222	1.43 0.222			

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.

The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.

XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.

Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Odessa Laboratory Manager Brent Barron, II



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.

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5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
2505 North Falkenburg Rd, Tampa, FL 33619	(813) 620-2000	(813) 620-2033
5757 NW 158th St, Miami Lakes, FL 33014	(305) 823-8500	(305) 823-8555
12600 West I-20 East, Odessa, TX 79765	(432) 563-1800	(432) 563-1713
842 Cantwell Lanc, Corpus Christi, TX 78408	(361) 884-0371	(361) 884-9116



Form 2 - Surrogate Recoveries

Project Name: GH Cobb Federal #1

Work Orders: 367139,

Lab Batch #: 800413

Sample: 559446-1-BKS / BKS

Project ID: 24511

Batch:

Matrix: Water

Units: mg/L	Date Analyzed: 03/30/10 07:58	SU	RROGATE R	ECOVERY	STUDY	
ВТЕ	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
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	SU	RROGATE R	RECOVERY	STUDY	
ВТЕ	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
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: |

Matrix: Water

Units: mg/L	Date Analyzed: 03/30/10 09:21	SU	RROGATE R	ECOVERY	STUDY	
BTE	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
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	SU	RROGATE R	ECOVERY	STUDY	
ВТЕ	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]	1	
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	SU	RROGATE R	ECOVERY	STUDY	_
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes			[D]		
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

Surrogate Recovery [D] = 100 * A / B

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

^{**} Surrogates outside limits; data and surrogates confirmed by reanalysis

^{***} Poor recoveries due to dilution



Form 2 - Surrogate Recoveries

Project Name: GH Cobb Federal #1

Work Orders: 367139,

Lab Batch #: 800413

Sample: 366845-004 S / MS

Project ID: 24511

Matrix: Water SURROGATE RECOVERY STUDY **Date Analyzed:** 03/30/10 21:35 Units: mg/L

Onits. mg/D Date Analyzed. 05/50/10 21.55	J				
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes			[D]		
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

Matrix: Water Batch: 1

Units: mg/L Date Analyzed: 03/30/10 21:55	SU	RROGATE R	ECOVERY :	STUDY	
BTEX by EPA 8021B Analytes	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	0.0291	0.0300	75	80-120	*

Surrogate Recovery [D] = 100 * A / B

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

^{*} Surrogate outside of Laboratory QC limits

^{**} Surrogates outside limits; data and surrogates confirmed by reanalysis

^{***} Poor recoveries due to dilution



BS / BSD Recoveries



Project Name: GH Cobb Federal #1

Work Order #: 367139

Sample: 559446-1-BKS Lab Batch ID: 800413 Analyst: ASA

Date Prepared: 03/30/2010

Project ID: 24511 **Date Analyzed:** 03/30/2010

Matrix: Water

Batch #: 1

Units: mg/L		BLAN	BLANK/BLANKSPIKE/BLANKSPIKE DUPLICATE RECOVERY STUDY	PIKE / B	LANKS	PIKE DUPL	ICATE	RECOVE	KY STUD	Y	
BTEX by EPA 8021B	Blank Sample Result	Spike Added	Blank Spike	Blank Spike	Spike Added	Blank Spike	Bik. Spk Dup.	RPD	Control Limits	Control Limits	Flag
Analytes	[y]	[B]	Result [C]	%R [D]	[E]	Duplicate Result [F]	%R [G]	%	%R	%RPD	
Benzene	QN	0.1000	0.0824	82	0.1	0.0877	88	9	70-125	25	
Toluenc	ND	0.1000	0.0832	83	0.1	0.0889	68	7	70-125	25	
Ethylbenzene	QN	0.1000	0.0848	85	0.1	0.0905	16	7	71-129	25	
m,p-Xylenes	QN	0.2000	0.1744	87	0.2	0.1855	93	9	70-131	25	
o-Xylene	QN	0.1000	0.0866	87	0.1	0.0924	92	9	71-133	25	

Analyst: LATCOR

Lab Batch ID: 801218

Date Prepared: 04/06/2010 Batch #: 1

Sample: 559946-1-BKS

Matrix: Water

Date Analyzed: 04/06/2010

Units: mg/L		BLAN	K /BLANK S	PIKE / B	LANKS	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY	ICATE 1	RECOVE	RY STUD	Į,	
TCLP Mercury by SW 7470A	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	BIK. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes	•	[B]	[C]	[D]	[E]	Result [F]	[6]				
Mercury	ON	0.0010	0.0012	120	0.001	0.0011	011	6	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

Final Ver. 1.000



BS / BSD Recoveries



Project Name: GH Cobb Federal #1

Work Order #: 367139

Analyst: LATCOR

Lab Batch ID: 800960

Sample: 559493-1-BKS

Date Prepared: 03/30/2010 Batch #: 1

Project ID: 24511 Date Analyzed: 03/31/2010

Matrix: Water

		INIWIG	DEALTH DEALTH STIME DOLLING THE MECOVERY STOLE			T T T T T T T T T T T T T T T T T T T					
TCLP Metals by SW846 6010B Sample R	nk Result	Spike Added	Blank Spike Result	Blank Spike	Spike Added	Blank Spike Dunlicate	BIK. Spk Dup. %R	RPD	Control Limits	Control Limits	Flag
Analytes	 <u>[</u>	B	[2]	ē	<u>a</u>	Result [F]	<u>5</u>	•			
Arsenic	Ω	0.800	0.719	06	8.0	0.694	87	4	80-120	20	
Barium	Ð.	0.150	0.155	103	0.15	0.154	103	1	80-120	20	
Cadmium	<u>P</u>	0.200	0.168	84	0.2	0.167	84	-	80-120	20	
Chromium ND	9	0.200	0.161	18	0.2	0.160	08	-	80-120	20	
Lead	Q	1.10	0.951	98	1.1	0.948	98	0	80-120	20	
Sclenium ND	9	0.300	0.313	104	6.0	0.301	100	4	80-120	20	•
Silver	QN	0.080	0.074	86	80.0	0.069	98	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

Final Ver. 1.000



Form 3 - MS / MSD Recoveries



Project Name: GH Cobb Federal #1

Work Order #: 367139

Date Analyzed: 03/30/2010 Lab Batch ID: 800413

QC-Sample ID: 366845-004 S

Batch #:

Matrix: Water _

Project ID: 24511

Date Prepared: 03/30/2010

ASA Analyst:

Reporting Units: mg/L		W	ATRIX SPIKE	:/MAT	RIX SPII	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY	re reco	VERY S	STUDY		
BTEX by EPA 8021B	Parent Sample	Snike	Spiked Sample	Spiked Sample	Snike	Duplicate Sniked Sample	Spiked	nga	Control	Control I imits	5 6 E
Analytes	Result [A]	Added [B]	[2]	%R (D)	Added	Result [F]	% R [G]	%	%R	%RPD	ub
Benzene	ND	0.1000	8080'0	81	0.1000	0.0794	62	2	70-125	25	
Toluene	ND	0.1000	0.0810	81	0.1000	9080'0	18	0	70-125	25	
Ethylbenzenc	ND	0.1000	0.0833	83	0.1000	0.0827	83	1	71-129	25	
m,p-Xylenes	. QN	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	

Date Analyzed: 04/06/2010 Lab Batch ID: 801218

QC-Sample ID: 367223-001 S Date Prepared: 04/06/2010

1 Matrix: Soil LATCOR Analyst: Batch #:

Control Limits %RPD 20 Control Limits %R 75-125 MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY RPD Spiked Dup. %R [G] 120 Spiked Sample Result [F] Duplicate 0.0012 Spike Added 0.0010 Ξ Spiked Sample % <u>D</u> 130 Spiked Sample Result 0.0013 $\overline{\mathbf{c}}$ Spike Added 0.0010 <u>8</u> Parent Sample Result ₹ 2 TCLP Mercury by SW 7470A Analytes Reporting Units: mg/L Mercury

Flag

×

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

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





Project Name: GH Cobb Federal #1

Work Order #: 367139

Lab Batch ID: 800960

Date Analyzed: 03/31/2010

QC-Sample ID: 366845-001 S **Date Prepared:** 03/30/2010

Batch #: 1 Matrix: Water Analyst: LATCOR

Project ID: 24511

Reporting Units: mg/L		W	ATRIX SPIKI	3/MAT	RIX SPII	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY	TE REC	VERY S	TUDY		
TCLP Metals by SW846 6010B	Parent Sample	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
Analytes	Result [A]	Added [B]	ਹੁ	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	1
Barium	0.044	0.200	0.218	87	0.200	0.218	87	0	80-120	20	
Silver	QN	080'0	0.067	84	080'0	0.067	84	0	80-120	20	
Arsenic	ΩN	0.800	0.745	93	0.800	0.739	92	-	80-120	20	
Cadmium	QN	0.200	0.168	84	0.200	991.0	83	_	80-120	20	
Chromium	0.328	0.200	0.500	98	0.200	0.497	85	-	80-120	20	
Lead	QN	1.10	0.912	83	1.10	0.905	82	1	80-120	20	
Selenium	QN	0.400	0.324	81	0.400	0.305	9/	9	80-120	20	×

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

SAMPLE / SAMPLE DUPLICATE RECOVERY

Reporting Units: mg/L	SAMPLE	SAMPLE	DUPLIC	ALE REC	OVERY
TCLP Metals by SW846 6010B 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	
Lcad	ND	ND	NC	25	
Sclenium	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

TAT brishnst2 □ NPDES TAT (Pro-Schedule) 24, 48, 72 fire Phone: 432-563-1800 Fax: 432-563-1713 TRRP M.A.O.Y CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST Project Name: GH Cobb Federal #1 Temperature Upon Receipt: BTEX 8034615030 or BTEX 8260 X Project Loc: Eddy County, NM X Standard Semple Contains
VOCs Free of Her As Ag Bas Cd Cr P7b Hg Se Project #: 24511 YEVESPICEC Unions (CI, SO4, Alkalinity) ₩ ₩ (A ,eM ,eM ,eD) anous. Report Format: 3001 XT 2001 XT :Hd. 8850 193.4 8015B Specify Oth cibryant@basin-consulting.com **₹** ₹ 03-29-10 Other (Specify) Odessa, Texas 79765 12600 West L20 East COLSTEN HOEN *05*H ¥0/1 € (505) 396-1429 нсі CONH 714095 × × Fotal #. of Containers Fax No: 1050 33 Delqms2 smfT 2 Received by ELOT <u>م</u> م 3/24/2010 3/24/2010 Date Sampled PAGE ագեթը ըսլերը։ **Environmental Lab of Texas** 3.41 Basin Environmental Consulting, Beginning Depth 3/20/10 Lovington, NM 88260 Camille Bryant Produced Water Tank Company Address: P.O. Box 381 FIELD CODE Sampler Signature Project Manager: Company Name Telephone No: City/State/Zip: Special Instructions (lab use only) ORDER #: 002 103-(Vino esu dai) # 8A

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

lient: Basin Env.				
ate/ Time: 63-29-10 C 0850				
ab ID#: 36-7139				,
hitials: JMF				
muais.				
Sample Receipt C	Checklist		Client initia	ıls
#1 Temperature of container/ cooler?	(Yes)	No	1.6 °C	Ì
#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? / lave/	(Yes)	No	Not Present]
#5 Chain of Custody present?	(Yes)	No]
#6 Sample instructions complete of Chain of Custody?	(Yes)	No		7
#7 Chain of Custody signed when relinquished/ received?	(Fes	No]
#8 Chain of Custody agrees with sample label(s)?	A ES	No	ID written on Cont./ Lid]
#9 Container label(s) legible and intact?	Ves	No	Not Applicable	7
#10 Sample matrix/ properties agree with Chain of Custody?	(Yes-	No		7
#11 Containers supplied by ELOT?	(Yes)	No		7
#12 Samples in proper container/ bottle?	(FES)	No	See Below	7
#13 Samples properly preserved?	(Yes)	No	See Below	7
#14 Sample bottles intact?	(Yes)	No		7
#15 Preservations documented on Chain of Custody?	(Yes)	No		7
#16 Containers documented on Chain of Custody?	(Yes)	No		7
#17 Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	7
#18 All samples received within sufficient hold time?	Yes	No	See Below	7
#19 Subcontract of sample(s)?	Yes	(No)	Not Applicable	7
#20 VOC samples have zero headspace?	Yes	No	Not Applicable	7
Variance Docum	nentation			
Contacted by:			Date/ Time:	
Regarding:				
				
Corrective Action Taken:				
Check all that Apply: See attached e-mail/ fax Client understands and would Cooling process had begun s	-		. =	



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 Method SW-846 8260 Benzene, Toluene, Ethyl Benzene, and Total Xylenes 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



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

		CI
LAB NO.	SAMPLE ID	(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 Cor		500
True Value	QC	500
% Recover	<u> </u>	100
Relative Pe	ercent Difference	1.9

METHOD: Standard Methods 4500-Cl'B

Chemist

Date

H20054 Basin Environmental

Tanno Courrenand to (575) <u>393-2326</u> Fax (575) 393-2476 101 East Marland, Hobbs, NM 88240 * ARDINAL LABORATORIES ompany Name

6

Page

ANALYSIS REQUEST									-													
	P.O. #:	company: 6000	Attn: 1 Sn y Sayoje	Address:	City:	State: Zip:	Phone #:	Fax #:	PRESERV. SAMPLING	9	0 <u>0</u>	0F:	0.8AP.00 (186)	ICE VCII	大 6 3 15451大	1630	1615	1/0/5	1600	1530		
Company Name: 150-20 Environment and COVISINE		15 CHO S	ФЛ state; ЛМ Zip: 883.46	"Hane #: 575 655-7210 Fax #(575)396-1429	Jwneri, BOPCO	<u>_</u>	roject Location: ECICL, Co mm	ynolcls	POR LAB USE ONLY ALL SALES OF THE SALES OF T	かないことの記録がないというというは	RS RER	AWC	SAB (A)	OIF 20II ANV GEG GEG	1	2 min. 2	3 mm-3	4 mm 4 mm 4	5 mil. 5	9.00 M		

LEASE NOTE: LIBBILITY and Damabes. Cardinal's liability and client's exclusive remedy for any cialm arking whether based in contract or tort, shall be limited to the amount said by the client for the s made in writing and received by Cardinal within 30 days after completion of the applicable iters interruptions, losts of use, or bas of profits incurred by client, its aubstitiaties,

10 B-10 elinguished By:

Add'l Phone #:

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

Cool infact / Yes The No I No

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



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

Lab Director/Quality Manager

Celey & Keine



Analytical Results For:

BASIN ENVIRONMENTAL CONSULTING **CAMILLE BRYANT** P. O. BOX 381 LOVINGTON NM, 88260

Fax To:

(575) 396-1429

Received:

09/21/2010

Reported:

09/23/2010

Project Name:

G H COBB FEDERAL #1

Project Number:

NONE GIVEN

Project Location:

EDDY COUNTY, NM

Sampling Date:

09/17/2010

Sampling Type:

Water

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: MW - 1 (H020891-01)

Chloride, SM4500Cl-B	mg/	<u> </u>	Analyze	d 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, SM4500CI-B	mg/	<u> </u>	Analyze	d 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, SM4500CI-B	mg,	<u>/L</u>	Analyze	d 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, SM4500CI-B	mg,	<u>'L</u>	Analyze	d 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, SM4500CI-B	mg/	<u>'L</u>	Analyze	d 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

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 client for analyses. All claims, including those for negligence and arry other cause whatsoerer shall be deemed watered unless made in writing and received by Cardinal within thirty (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 profiles incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such

Celey D. Keine



Analytical Results For:

BASIN ENVIRONMENTAL CONSULTING CAMILLE BRYANT P. O. BOX 381 LOVINGTON NM, 88260

Fax To:

(575) 396-1429

Received:

09/21/2010

Reported:

09/23/2010

Project Name:

G H COBB FEDERAL #1 NONE GIVEN

Project Number: Project Location:

EDDY COUNTY, NM

Sampling Date:

09/17/2010

Sampling Type:

Water

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

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

PLESE NOTE: Liability and Demages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shell be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whistoners shall be deemed watered unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal Dardinal
Celey & Keine



Notes and Definitions

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

ND

*=Accredited Analyte Cardinal Laboratories

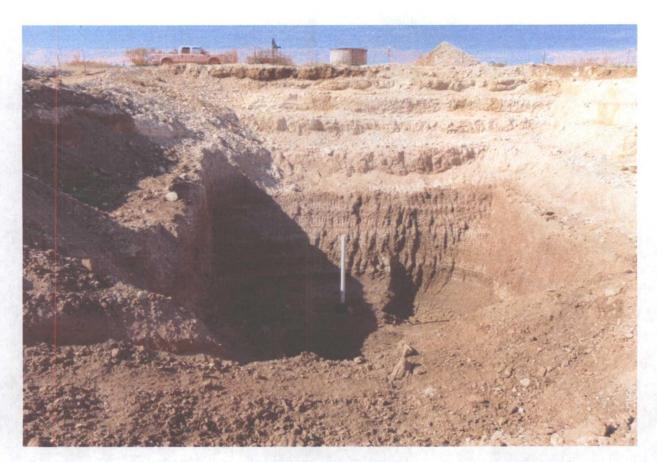
All claims, including those for negligence and PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. ony other cause whatsoever shall be deemed welved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable 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 the services hereunder by Cardinal, regardless of whether

Celey & Keine

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

Page Of	ANALYSIS REQUEST		7257 6	hivelflo	to the amount paid by the cilent for the	sult: D No Add'l Phone #:		
### ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240 (575) 393-2326 Fax (575) 393-2476	Company Name: Casin Filyind Dimented Company Name: Casin Filyind Dimented	13 July 18	Project #: Project Name: Graph Color of the Claral the State: Zip: Project Location: Ecclude The Sampler Name: Set Claral the Sample Sample Name: Set Claral the Sample Name: Set Claral the Sample Name: Set Claral the Sample Name: Set Claral the Sample Name: Set Claral the Sample Name: Set Claral the Sample Name: Set Claral the Sample Name: Set Claral the Sample Name: Set Claral the Sample Name: Set Claral the Sample Name: Set Claral the Sample Name: Set Claral the Sample Name: Set Claral the Sample Name: Set Claral the Sample Name: Set Claral the Sample Name: Set Claral the Sample Name: Set Claral the Sample Name: Set Claral the Set Claral t	CE / COOL COTORASE: COTORA	PLEASE KOTE. Liability and chairs liability and cliant's exclusive remecy for any cialm arising whether based in contract or ton; snail be limited to the amount	amed waved untoss motos in varing and received by Cardins' within 30 days after competition that in matern business is frequented, base of use, or loss of parties incurred by client, as and prime agraciless of inherest inferruptions, base of use, or loss of parties incurred by client, as and primes such claim is based upon any of the above super respect or as Received By:	Relinquished By:	Delivered By: (Circle One) Tetho. Sample Condition CHECKED BY: Cool Intact Ministrials Sampler - UPS - Bus - Other: Sampler - UPS - Bus - Other:

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 Rto Brazos Road, Aztec, NM 87410
District IV

State of New Mexico **Energy Minerals and Natural Resources**

Oil Conservation Division 1220 South St. Francis Dr.

RECEIVED	Form C-141 d October 10, 2003
DEC -7 ^{Submit 2} Cop	ies to appropriate ice in accordance
NMOCD ARTESIA	Rule 116 on back side of form

_					-	_	_	_	
3	0	-01	15	=	0	5	8.	2	7

					nta Fe, NM 87505 NMOCD ARTESIA s			side of form					
30-015-	0582	7	Rele	ease Notific	ation	and Co	rrective A	ction					
						OPERA			ıl Report	Final Report			
Name of Co				0737		Contact Tor							
_				ad, N.M. 88220			No. 432-556-873	30					
Facility Nan	ne: G.H. C	Cobb Federal	#1			Facility Typ	e E&P						
Surface Ow	ner Federa	ı l		Mineral O	wner F	ederal		Lease N	lo.30-015-05	829			
				LOCA	OIT	OF REI	LEASE						
Unit Letter M	Section 23	Township 20S	Range 31E	Feet from the		South Line	Feet from the	East/West Line	County Eddy				
	·		Latit	ude_N 32.33'11.	412	Longitud	e W 103.50'44.	304					
				NAT	URE	OF REL	EASE						
Type of Relea				sediment			of Release: Un-known Volume Recovered: 0						
Source of Re	Icase: Un-li	ned evaporati	on pit		Date and Hour of Occurrence Pre 2009 Date and Hour of Discovery 7/1/09								
Was Immedia	ate Notice (If YES, To	Whom?	1 /////					
			Yes 🔀	No ☐ Not Re									
By Whom?					Date and Hour								
Was a Water	course Read		Yes 🔯	1 No	If YES, Volume Impacting the Watercourse.								
						<u></u>				· <u></u>			
If a Watercou	irse was im	pacted, Descr	ibe Fully.	•		•							
				•									
Describe Cau	re of Probl	em and Reme	dial Actio	n Taken * Oneratio	on of th	e nit ceased r	prior to 7/1/09 an	proximately 4000 c	whic vards of	soil has been			
removed	isc of Froor	om and Reme	diai Actio	ii rakeii. Operati	on or ar	c più ccascu p	· ·	proximatery 4000 C	ubic yaids of :	on has occit			
							·						
				ken.*Pasture land i				t. lled, an air rotary ri	a will be used	to define the			
								submitted based on					
				NMOCD pit closu			·			·			
L haraby corti	futhat the	nformation o	van above	is true and compl	oto to tl	a bast of mu	lenovelodes and w	inderstand that purs	went to NIMO	2D rules and			
public health	or the envi	ronment. The	acceptane	ce of a C-141 repor	rtain release notifications and perform corrective actions for releases which may endanger 1 report by the NMOCD marked as "Final Report" does not relieve the operator of liability								
should their o	perations h	ave failed to a	idequately	investigate and re	restigate and remediate contamination that pose a threat to ground water, surface water, human health ce of a C-141 report does not relieve the operator of responsibility for compliance with any other								
federal, state,					Сропти		e ine operator or	responsionity for e	omphance with	tany onici			
		_	-				OIL CON	SERVATION	DIVISION	1			
Signature:	100	Day	P				B	1,					
Bigilatar v.			<u> </u>				District Supervisioned By						
Printed Name	e: Tony Sav	oie		- · · · · · · · · · · · · · · · · · · ·			ned by 7 - 117	7 20000					
Title: Waste l	Mgmt.& Ro	emediation Sp	ecialist			Approval Da	te: MAR 24	2010 Expiration	Date:				
					1								
E-mail Addre	ess: IASavo	newbassret.	com	·	<u> </u> _'	Conditions of		60 n la .	Attached []			
Date: 12/7/09)			Phone:432-556-87	30	REMEDIATION per OCD Rules and ,							

* Attach Additional Sheets If Necessary

PMLB 0934455618

Guidelines. SUBMIT REMEDIATION
PROPOSAL BY: Talestization is
Organia as of 3/24/10

2RP-369

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rond, 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

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

-,	Closure of a pit, closed-lo Modification to an existir	oop system, below-grade tan ng permit	, or proposed alternative method k, or proposed alternative method or non-permitted pit, closed-loop system,
below-grade tank,	or proposed alternative meth	nod	
Instructions: Please submit o	ne application (Form C-144) p	er individual pit, closed-loop sj	ostem, below-grade tank or alternative request
environment. Nor does approval relieve th	e operator of its responsibility to	of liability should operations resu comply with any other applicable	It in pollution of surface water, ground water or the governmental authority's rules, regulations or ordinances.
Operator: BOPCO, L.P.		OGRID	#:001801
Address: P.O. Box 2760, Midland, Te	xas 79702		
Facility or well name: G.H. Cobb Fede	eral#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 N	i32°33°11.412	Longitude W103°50'44.304	NAD: 🔲 1927 🔲 1983
Surface Owner: 🛭 Federal 🔲 State 🗀	Private Tribal Trust or Ind	ian Allotment	
2. ⊠ Pit: Subsection F or G of 19.15.1	7 11 3344.0		
Temporary: Drilling Workover			
☐ Permanent ☐ Emergency ☐ Cavin			
1	hicknessmil Ll	LDPE HDPE PVC	Other
String-Reinforced			
Liner Seams: Welded Factory	Other	Volume:	bbl Dimensions: Lx Wx D
3.			
Closed-loop System: Subsection			
Type of Operation: P&A Drillin intent)	ng a new well Workover or	Driffing (Applies to activities	which require prior approval of a permit or notice of
Drying Pad Above Ground Ste	el Tanks 🔲 Haul-off Bins 🗀	Other	_
☐ Lined ☐ Unlined Liner type: This	knessmil [LLDPE 🗌 HDPE 🔲 PVC	☐ Other
Liner Seams: Welded Factory	☐ Other		
Below-grade tank: Subsection I o	f 19.15.17.11 NMAC		
Volume:bbl	Type of fluid:		
Tank Construction material:		_	·
Secondary containment with leak de		liner, 6-inch lift and automatic	overflow shut-off
☐ Visible sidewalls and liner ☐ Vis			
Liner type: Thickness	•		and a specific delication and a supplication of the state
Differ type. Timekness		C Collor	
5. Alternative Method:			
Submittal of an exception request is requ	aired. Exceptions must be sub-	mitted to the Santa Fe Environ	mental Bureau office for consideration of approval.
Form C-144	Oil Co	onservation Division	Page 1 of 5

6. Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)	
Chain link, six fect 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. Signal Carlo 16 12 U.NA4 C	
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 accematerial are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appro-	opriate district
office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to dry	approval.
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	Yes No
lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.	Yes No
(Applies to temporary, emergency, or cavitation pits and below-grade tanks) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	∐ NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.	Yes No
(Applies to permanent pits) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	□ NA
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock	Yes No
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	
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	☐ Yes ☐ No
adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	
Within 500 feet of a wetland.	Yes No
- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	103 110
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.	☐ Yes ☐ No
 Engineering measures incorporated into the design; NM Burcau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map 	
Within a 100-year floodplain IFEMA map	☐ Yes ☐ No

Instructions: Each of the following it attached. Hydrogeologic Report (Below-g: Hydrogeologic Data (Temporary Siting Criteria Compliance Demi Design Plan - based upon the app Operating and Maintenance Plan Closure Plan (Please complete B and 19.15.17.13 NMAC	rade Tanks) - based upon the requirement and Emergency Pits) - based upon the ronstrations - based upon the appropriate propriate requirements of 19.15.17.11 Ni - based upon the appropriate requirements of the appropriate	n. Please indicate, by a charts of Paragraph (4) of Subsequirements of Paragraph requirements of 19.15.17. MAC Ints of 19.15.17.12 NMAC and upon the appropriate requirements of the control of the con	eck mark in the box, that the documents are section B of 19.15.17.9 NMAC (2) of Subsection B of 19.15.17.9 NMAC 10 NMAC
Instructions: Each of the following it attached. Geologic and Hydrogeologic Da Siting Criterla Compliance Dem Design Plan - based upon the ap Operating and Maintenance Plan	ata (only for on-site closure) - based upon constrations (only for on-site closure) - b propriate requirements of 19.15.17.11 N n - based upon the appropriate requireme	n. Please indicate, by a change in the requirements of Paragased upon the appropriate MAC ents of 19.15.17.12 NMAC	eck mark in the box, that the documents are graph (3) of Subsection B of 19.15.17.9 requirements of 19.15.17.10 NMAC
	soxes 14 through 18, if applicable) - base	ed upon the appropriate rec	quirements of Subsection C of 19.15.17.9 NMAC
and 19.15.17.13 NMAC			
Previously Approved Design (attac	b conv of decian) A Di Mumbou		
1			
Previously Approved Operating an	d Maintenance Plan API Number:		(Applies only to closed-loop system that use
shows around stool tanks or houl off hi	ns and propose to implement waste remo	and for alonged	
above ground steet tanks or natit-off of	ns ana propose to implement waste remo	oval for closure)	
Instructions: Each of the following it attached. Hydrogeologic Report - based uport in Siting Criteria Compliance Dem Climatological Factors Assessment Dike Protection and Structural Ir Dike Protection Design - based uport in Structural Ir Dike Protection Design - based uport in Structural Ir Dike Protection Design - based uport in Structural Ir Dike Protection Design - based uport in Structural Ir Dike Protection Design - based uport in Structural Ir Dike Protection Design - based uport in Structural Ir Dike Protection Design - based uport in Structural Ir Dike Protection Plan Dit Field Waste Stream Character Monitoring and Inspection Plan Dit Closure Plan - based upon the approximation of the Ir Discourage Ir Discoura	con the requirements of Paragraph (1) of constructions - based upon the appropriate cent cans - based upon the appropriate requirements of Design - based upon the appropriate requirements of 19. Ebility Assessment - based upon the approce Construction and Installation Plan - based upon the appropriate requirements of Plan - based upon the appro	F. Please Indicate, by a characteristic Subsection B of 19.15.17 requirements of 19.15.17. ments of 19.15.17.11 NM/riate requirements of 19.15.17.11 NMAC ropriate requirements of 19.15 and 19.15.17.12 NMAC requirements of 19.15.17.12 NMAC requirements of 19.15.17.19 nmace requirements of 19.15.17	10 NMAC AC .17.11 NMAC 9.15.17.11 NMAC .11 NMAC
Proposed Closure: 19.15.17.13 NMA	C		
Instructions: Please complete the appl		regards to the proposed cl	osure plan.
Type: Drilling Workover E	· · · · · · · · · · · · · · · · · · ·	·	<u> </u>
Proposed Closure Method: Waste I	Removal (Closed-loop systems only)		
On-site	Closure Method (Only for temporary pi	its and closed-loop systems	s)
	☐ In-place Burial ☐ On-site Trench	n Burial	
☐ Alterna	tive Closure Method (Exceptions must b	be submitted to the Santa F	e Environmental Bureau for consideration)
closure plan. Please Indicate, by a che Protocols and Procedures - based Confirmation Sampling Plan (if a Disposal Facility Name and Perm Soil Backfill and Cover Design S Re-vegetation Plan - based upon		are attached. 9.15.17.13 NMAC requirements of Subsection addrill cuttings) atterequirements of Subsection to 1 of 19.15.17.13 NMA	tion H of 19.15.17.13 NMAC C

Waste Removal Closure For Closed-loop Systems That Utilize Abov Instructions: Please indentify the facility or facilities for the disposal of facilities are required.	e Ground Steel Lanks or Haul-Oll Bins Only: (19.15.17.13.t of liquids, drilling fluids and drill cuttings. Use attachment if i	more than two
Disposal Facility Name:	Disposal Facility Permit Number:	
Disposal Facility Name:		
Will any of the proposed closed-loop system operations and associated a Yes (If yes, please provide the information below) No	ctivities occur on or in areas that will not be used for future ser-	vice and operations?
Required for impacted areas which will not be used for future service an Soil Backfill and Cover Design Specifications based upon the a Re-vegetation Plan - based upon the appropriate requirements of S Site Reclamation Plan - based upon the appropriate requirements	appropriate requirements of Subsection H of 19.15.17.13 NMA Subsection Lof 19.15.17.13 NMAC	c
17. Siting Criteria (regarding on-site closure methods only): 19.15.17.16 Instructions: Each siting criteria requires a demonstration of complia provided below. Requests regarding changes to certain siting criteria reconsidered an exception which must be submitted to the Santa Fe Envidemonstrations of equivalency are required. Please refer to 19.15.17.1	nce in the closure plan. Recommendations of acceptable sour may require administrative approval from the appropriate dist ironmental Bureau office for consideration of approval. Justi	rict office or may be
Ground water is less than 50 feet below the bottom of the buried waste. NM Office of the State Engineer - iWATERS database search; U	JSGS; Data obtained from nearby wells	Yes No
Ground water is between 50 and 100 feet below the bottom of the buried - NM Office of the State Engineer - iWATERS database scarch; U		Yes No
Ground water is more than 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; U		Yes No
Within 300 feet of a continuously flowing watercourse, or 200 feet of an lake (measured from the ordinary high-water mark). Topographic map; Visual inspection (certification) of the propos	· · · · · ·	Yes No
Within 300 feet from a permanent residence, school, hospital, institution. - Visual inspection (certification) of the proposed site; Aerial phot		☐ Yes ☐ No
Within 500 horizontal feet of a private, domestic fresh water well or spri watering purposes, or within 1000 horizontal feet of any other fresh water NM Office of the State Engineer - iWATERS database; Visual is	er well or spring, in existence at the time of initial application.	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written		Yes No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic to	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 EMNR	D-Mining and Mineral Division	Yes No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau Society; Topographic map	of Geology & Mineral Resources; USGS; NM Geological	☐ Yes ☐ No
Within a 100-year floodplain FEMA map		☐ Yes ☐ No
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: It by a check mark in the box, that the documents are attached. Siting Criteria Compliance Demonstrations - based upon the appropriate required Construction/Design Plan of Burial Trench (if applicable) based upon the Construction/Design Plan of Temporary Pit (for in-place burial of Protocols and Procedures - based upon the appropriate requirement Confirmation Sampling Plan (if applicable) - based upon the appropriate requirement Waste Material Sampling Plan - based upon the appropriate requirement Disposal Facility Name and Permit Number (for liquids, drilling filed)	priate requirements of 19.15.17.10 NMAC rements of Subsection F of 19.15.17.13 NMAC upon the appropriate requirements of 19.15.17.11 NMAC a drying pad) - based upon the appropriate requirements of 19. ts of 19.15.17.13 NMAC upriate requirements of Subsection F of 19.15.17.13 NMAC ements of Subsection F of 19.15.17.13 NMAC	15.17.11 NMAC
Soil Cover Design - based upon the appropriate requirements of St Re-vegetation Plan - based upon the appropriate requirements of S Site Reclamation Plan - based upon the appropriate requirements of	ubsection 1 of 19.15.17.13 NMAC	

	$\epsilon \Lambda = 0$, λ
Name (Print): Steve Johnson	Title: -5R. PRoduction
Signature:	Date: 7/1/69
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): Subsecti Instructions: Operators are required to obtain an approved closure plan pric The closure report is required to be submitted to the division within 60 days o section of the form until an approved closure plan has been obtained and the	or to implementing any closure activities and submitting the closure repoi of the completion of the closure activities. Please do not complete this
	Closure Completion Date:
Closure Method: Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alte If different from approved plan, please explain.	
23. Closure Report Regarding Waste Removal Closure For Closed-Joop Syste Instructions: Please indentify the facility or facilities for where the liquids, a two facilities were utilized.	Irilling fluids and drill cuttings were disposed. Use attachment if more th
Disposal Facility Name:	
Disposal Facility Name:	
Yes (If yes, please demonstrate compliance to the items below) No	or in areas that will not be used for future solvice and operations:
Required for impacted areas which will not be used for future service and oper Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique	ations:
Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique 34. Closure Report Attachment Checklist: Instructions: Each of the following	
Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique 34. Closure Report Attachment Checklist: Instructions: Each of the following 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	items must be attached to the closure report. Pleuse indicate, by a check
Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique 34. Closure Report Attachment Checklist: Instructions: Each of the following 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)	items must be attached to the closure report. Pleuse indicate, by a check
Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique 34. Closure Report Attachment Checklist: Instructions: Each of the following 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)	items must be attached to the closure report. Pleuse indicate, by a check
Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique Closure Report Attachment Checklist: Instructions: Each of the following 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 Lon	gitude NAD: 1927 1983
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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 divisionprescribed 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.