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REMEDIATION SUMMARY &

RISK-BASED SITE CLOSURE REQUEST

BOPCO, LP

POKER LAKE UNIT #78 SWD TANK BATTERY Eddy County, New Mexico Unit Letter "A" (NE/NE), Section 25, Township 24 South, Range 30 East Latitude 32.194069° North, Longitude 103.827614° West NMOCD Reference #'s: 2RP-1190 & 2RP-1234

Prepared For:

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JAN 2 3 2014 NMOCD ARTESIA

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1.0 INTRODUCTION & BACKGROUND INFORMATION

Basin Environmental Service Technologies, LLC (Basin Environmental), on behalf of BOPCO, LP (BOPCO), has prepared this *Remediation Summary & Risk-Based Site Closure Request* for the release site known as Poker Lake Unit (PLU) #78 Salt Water Disposal (SWD) Tank Battery. The legal description of the release site is Unit Letter "A" (NE/NE), Section 25, Township 24 South, Range 30 East, in Eddy County, New Mexico. The geographic coordinates of the release site are 32.194069° North latitude and 103.827614° West longitude. The property affected by the release is owned by The United States Department of the Interior, Bureau of Land Management (BLM). A "Site Location Map" is provided as Figure 1.

On May 26, 2012, BOPCO discovered a release (Release #1) had occurred at the PLU #78 SWD Tank Battery. Lightning struck two (2) one thousand-barrel (1,000 bbl) fiberglass gun barrel tanks and caused immediate, catastrophic damage to the tanks and the adjacent storage tanks inside the containment area, including a five hundred-barrel (500 bbl) steel oil skim tank and a third one thousand-barrel (1,000 bbl) fiberglass tank. The lightning strike and subsequent fire also damaged piping and the catwalk system inside the containment area. Falling pipe damaged three (3) areas of the steel-walled containment, causing crude oil and produced water to breach the containment and overflow into the adjacent pastureland.

The release was immediately reported to the New Mexico Oil Conservation Division (NMOCD) Artesia District Office. The Release Notification and Corrective Action (Form C-141) indicated approximately four thousand barrels (4,000 bbls) of produced water and approximately twenty barrels (20 bbls) of crude oil were released. A vacuum truck was utilized to recover approximately one thousand, eight hundred and twenty barrels (1,820 bbls) of the free-standing fluid in the containment area. The release affected an area of pastureland measuring approximately twenty-one thousand, six hundred and eighty square feet (21,680 ft²).

On July 11, 2012, BOPCO discovered a second release (Release #2) had occurred at the PLU #78 SWD Tank Battery. The SWD was without power when the tanks overflowed, resulting in a release of crude oil and produced water. Electricians were on-site and vacuum trucks were on course to the facility when a section of the containment wall separated at a seam, causing crude oil and produced water to breach the containment and overflow into the adjacent pastureland, where it pooled in the floor of an ongoing excavation and commingled with rain water from a recent storm.

The release was immediately reported to the NMOCD Artesia District Office. The Form C-141 indicated approximately six hundred barrels (600 bbls) of produced water and approximately ten barrels (10 bbls) of crude oil were released. A vacuum truck was utilized to recover a total of approximately one thousand and fifty barrels (1,050 bbls) of free-standing liquid (including rain water, crude oil, and produced water) from the containment area and the floor of the excavation.

The two (2) releases were remediated concurrently. The Forms C-141 are provided in Appendix A. General photographs of the release sites are provided in Appendix B.

2.0 NMOCD SITE CLASSIFICATION

A search of the New Mexico Water Rights Reporting System (NMWRRS) database maintained by the New Mexico Office of the State Engineer (NMOSE) indicated information was unavailable for Section 25, Township 24 South, Range 30 East. A depth-to-groundwater reference map utilized by the NMOCD indicates groundwater should be encountered at approximately three hundred and sixty feet (360') to three hundred and sixty-five feet (365') below ground surface (bgs). Based on the NMOCD ranking system, zero (0) points will be assigned to the site as a result of this criterion.

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

There are no surface water bodies within one thousand feet (1,000') of the release. Based on the NMOCD ranking system, zero (0) points will be assigned to the site as a result of this criterion.

NMOCD guidelines indicate the PLU #78 SWD Tank Battery release site has an initial ranking score of zero (0) points. The soil remediation levels for a site with a ranking score of zero (0) points are as follows:

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

The New Mexico Administrative Code (NMAC) does not currently specify a remediation level for chloride concentrations in soil. Chloride remediation levels are set by the NMOCD on a site-specific basis.

3.0 SUMMARY OF SOIL REMEDIATION ACTIVITIES

On May 31, 2012, following initial response activities, delineation of Release #1 commenced. A series of four (4) delineation trenches (Sample #1 through Sample #4) were advanced in the pastureland adjacent to the PLU #78 SWD Tank Battery to investigate the horizontal and vertical extent of impacted soil. Delineation trenches Sample #1, Sample #2, and Sample #4 were each advanced to a total depth of approximately five feet (5') bgs. Delineation trench Sample #3 was advanced to a total depth of approximately ten feet (10') bgs. Soil samples were collected at fourfoot (4') to five-foot (5') intervals and field-screened with a chloride test kit. A total of nine (9) confirmation soil samples (Sample #1 @ 1', Sample #1 @ 5', Sample #2 @ 1', Sample #2 @ 5', Sample #3 @ 1', Sample #3 @ 5', Sample #3 @ 10', Sample #4 @ 1', and Sample #4 @ 5') were submitted to Cardinal Laboratories in Hobbs, New Mexico, for analysis of TPH and chloride concentrations using Environmental Protection Agency (EPA) Methods SW-846 8015M and 4500 Cl-B, respectively. Sample #1 @ 5' and Sample #3 @ 10' were also analyzed for concentrations of BTEX using EPA Method SW-846 8021b. Table 1 summarizes the "Concentrations of Benzene, BTEX, TPH & Chloride in Soil". Soil sample locations are depicted in Figure 3 through Figure 5. Laboratory analytical reports are provided as Appendix D.

Laboratory analytical results indicated TPH concentrations ranged from less than the laboratory method detection limit (MDL) in Sample #1 @ 5', Sample #3 @ 5', Sample #3 @ 10', and Sample #4 @ 5' to 14,770 mg/kg in Sample #1 @ 1'. Chloride concentrations ranged from 160 mg/kg in Sample #2 @ 5' to 30,000 mg/kg in Sample #4 @ 1'. BTEX constituent concentrations in Sample #1 @ 5' and Sample #3 @ 10' were less than the appropriate laboratory MDL.

On June 4, 2012, five (5) additional delineation trenches were advanced at the site to investigate the horizontal and vertical extent of impacted soil in pooling areas in the pastureland adjacent to the PLU #78 SWD Tank Battery. Soil samples collected from the delineation trenches were field-screened with a chloride test kit. Field-test results indicated further delineation would be required along the flow path of the release.

To facilitate remediation activities, the release site was divided into two (2) sections: Pasture Excavation and Pad Excavation. The Pasture Excavation was located in the pastureland adjacent to the PLU #78 SWD Tank Battery, and the Pad Excavation was located on the tank battery pad. Due to time, budget, and operational concerns, it was determined that the Pasture Excavation would be completed first, and the Pad Excavation would be completed at a later date.

On June 5, 2012, remediation of Release #1 commenced at the site. A chloride test kit was used to field-screen the horizontal and vertical extent of impacted soil and to guide the excavation (Pasture Excavation). Excavated soil was stockpiled on-site, pending final disposition.

On July 11, 2012, following initial response activities, remediation of Release #2 commenced in conjunction with the ongoing remediation activities associated with Release #1.

On July 26, 2012, thirty-six (36) soil samples (Sample #1 through Sample #11, Sample #13 through Sample #26, and Sample #29 through Sample #39) were collected from the floor and sidewalls of the Pasture Excavation and submitted to the laboratory for analysis of TPH and chloride concentrations. Laboratory analytical results indicated TPH concentrations ranged from less than the laboratory MDL in Sample #2 through Sample #11, Sample #13 through Sample #20, Sample #22, Sample #23, Sample #25, Sample #26, and Sample #32 through Sample #39 to 110 mg/kg in Sample #24. Chloride concentrations ranged from less than the laboratory MDL in Sample #24 to 58,400 mg/kg in Sample #38.

One (1) soil sample (East Pooling Area) was collected from the floor of the Pasture Excavation in a pooling area associated with Release #2. The soil sample was submitted to the laboratory for analysis of TPH and chloride concentrations. Laboratory analytical results indicated the TPH concentration was 7,765 mg/kg, and the chloride concentration was 48.0 mg/kg.

Review of laboratory analytical results indicated further vertical delineation would be required in the area represented by soil sample East Pooling Area. Further excavation in the areas represented by Sample #26, Sample #30, Sample #32, Sample #37, and Sample #38 was deemed impracticable due to the presence of the active PLU #78 SWD Tank Battery adjacent to the Pasture Excavation.

On July 31, 2012, two (2) soil samples (Manifold Floor 6' and Manifold Floor 8') were collected from the floor of the Pasture Excavation and submitted to the laboratory for analysis of TPH and chloride concentrations. Laboratory analytical results indicated TPH concentrations ranged from

20,570 mg/kg in soil sample Manifold Floor 6' to 48,040 mg/kg in soil sample Manifold Floor 8'. The chloride concentration was 176 mg/kg in both Manifold Floor 6' and Manifold Floor 8'.

Review of laboratory analytical results indicated further excavation would be required in the area represented by soil samples Manifold Floor 6' and Manifold Floor 8'.

On August 1, 2012, five (5) soil borings (SB-1 through SB-5) were advanced at the site to further investigate the vertical extent of impacted soil. Soil samples were collected at five-foot (5') drilling intervals and field-screened using a Photo-Ionization Detector (PID) and/or chloride test kit. Selected soil samples were submitted to the laboratory for analysis of BTEX, TPH, and/or chloride concentrations. The locations of the soil borings are depicted in Figure 2, "Sample Location Map (Overview)". Soil boring logs are provided as Appendix C.

Soil boring SB-1 was advanced in the northwest floor of the Pasture Excavation, at approximately five feet (5') bgs, near the terminus of the flow path of the release. The soil boring was advanced to a total depth of approximately twenty-five feet (25') bgs. Soil samples collected at drilling depths of five feet (5'), ten feet (10'), fifteen feet (15'), and twenty feet (20') were submitted to the laboratory for analysis of BTEX, TPH, and/or chloride concentrations. Laboratory analytical results indicted BTEX constituent concentrations were less than the appropriate laboratory MDL in all submitted soil samples. TPH concentrations ranged from less than the laboratory MDL in the soil samples collected at 10' bgs (SB-1 @ 5') and 25' bgs (SB-1 @ 20') to 10.5 mg/kg in the soil sample collected at 15' bgs (SB-1 @ 10'). Chloride concentrations ranged from 32.0 mg/kg in the soil sample collected at 25' bgs (SB-1 @ 20') to 1,300 mg/kg in the soil sample collected at 15' bgs (SB-1 @ 10').

Soil boring SB-2 was advanced in the floor of the Pasture Excavation, at approximately five feet (5') bgs, in the area represented by soil sample East Pooling Area. The soil boring was advanced to a total depth of approximately twenty-five feet (25') bgs. Soil samples collected at drilling depths of five feet (5'), ten feet (10'), fifteen feet (15'), and twenty feet (20') were submitted to the laboratory for analysis of BTEX, TPH, and/or chloride concentrations. Laboratory analytical results indicted TPH and BTEX constituent concentrations were less than the appropriate laboratory MDL in all submitted soil samples. Chloride concentrations ranged from 864 mg/kg in the soil sample collected at 10' bgs (SB-2 @ 5') to 3,560 mg/kg in the soil sample collected at 20' bgs (SB-2 @ 15').

Soil boring SB-3 was advanced in the west floor of the Pasture Excavation, at approximately five feet (5') bgs. The soil boring was advanced to a total depth of approximately thirty feet (30') bgs. Soil samples collected at drilling depths of five feet (5'), ten feet (10'), fifteen feet (15'), twenty feet (20'), and twenty-five feet (25') were submitted to the laboratory for analysis of BTEX, TPH, and/or chloride concentrations. Laboratory analytical results indicated BTEX constituent concentrations were less than the appropriate laboratory MDL in all submitted soil samples. TPH concentrations ranged from less than the laboratory MDL in the soil samples collected at 10' bgs (SB-3 @ 5') and 15' bgs (SB-3 @ 10') to 596 mg/kg in the soil sample collected at 30' bgs (SB-3 @ 25'). Chloride concentrations ranged from 128 mg/kg in the soil sample collected at 30' bgs (SB-3 @ 25') to 1,470 mg/kg in the soil sample collected at 15' bgs (SB-3 @ 10').

Soil boring SB-4 was advanced in the floor of the Pasture Excavation, at approximately five feet (5') bgs, and approximately fifty feet (50') to the west of the PLU #78 SWD Tank Battery. The

soil boring was advanced to a total depth of approximately thirty feet (30') bgs. Soil samples collected at drilling depths of five feet (5'), ten feet (10'), fifteen feet (15'), twenty feet (20'), and twenty-five feet (25') were submitted to the laboratory for analysis of BTEX, TPH, and/or chloride concentrations. Laboratory analytical results indicated BTEX constituent concentrations were less than the appropriate laboratory MDL in all submitted soil samples. TPH concentrations ranged from 10.3 mg/kg in the soil sample collected at 30' bgs (SB-4 @ 25') to 119 mg/kg in the soil sample collected at 10' bgs (SB-4 @ 25') to 1,360 mg/kg in the soil sample collected at 10' bgs (SB-4 @ 25').

Soil boring SB-5 was located on the caliche pad adjacent to the PLU #78 SWD Tank Battery and was advanced to a total depth of approximately twenty-five feet (25') bgs. Soil samples collected at drilling depths of five feet (5'), ten feet (10'), fifteen feet (15'), twenty feet (20'), and twenty-five feet (25') were submitted to the laboratory for analysis of BTEX, TPH, and/or chloride concentrations. Laboratory analytical results indicated BTEX constituent concentrations were less than the appropriate laboratory MDL in all submitted soil samples. TPH concentrations ranged from less than the laboratory MDL in soil samples SB-5 @ 10' and SB-5 @ 25' to 37.5 mg/kg in soil sample SB-5 @ 5'. Chloride concentrations ranged from 176 mg/kg in soil sample SB-5 @ 10'.

Due to the presence of a layer of pad sand in the floor of the Pasture Excavation on the day of drilling, soil samples could not be collected from the drilling surface (i.e., the floor of the excavation) of soil borings SB-1 through SB-4. On August 3, 2012, heavy equipment was utilized to remove the layer of pad sand in order to collect four (4) samples (SB #1 Surface, SB #2 Surface/East Pooling Area 8', SB #3 Surface, and SB #4 Surface) of native, in-situ soil from the floor of the excavation. Twelve (12) additional soil samples (Sample #12, Sample #40 through Sample #44, Manifold Floor 12', Power Pole North, Power Pole South, Power Pole East, Power Pole West, and Lines) were collected from the floor and sidewalls of the Pasture Excavation. The soil samples were submitted to the laboratory for analysis of TPH and chloride concentrations. Laboratory analytical results indicated TPH concentrations ranged from less than the laboratory MDL in soil samples Sample #12, Sample #40 through Sample #44, and Power Pole West to 18,880 mg/kg in soil sample Lines. Chloride concentrations ranged from 96.0 mg/kg in soil sample Manifold Floor 12' to 61,600 mg/kg in soil sample SB #3 Surface.

Due to safety considerations and to preserve the structural integrity of the utility pole supplying electricity to the PLU #78 SWD Tank Battery, soil represented by soil samples Power Pole North, Power Pole South, Power Pole East, and Power Pole West was left in-situ. Further excavation in the area represented by soil sample Lines was deemed impracticable due to the presence of active pipelines adjacent to the Pasture Excavation.

On August 8, 2012, representatives of Basin Environmental and BOPCO met with a representative of the NMOCD Artesia District Office to request permission to leave soil represented by soil samples Power Pole North, Power Pole South, Power Pole East, Power Pole West, Lines, Sample #30, Sample #32, Sample #37, and Sample #38 in-situ. Due to the depth to water at the site and the lack of surface water or supply wells in the area, a modified chloride closure level of 3,000 to 5,000 mg/kg was requested for the site. In order to achieve vertical delineation for the entire Pasture Excavation based on the new closure standard, it was proposed that the floor of the excavation would be divided into a series of grids. Delineation trenches

would be advanced inside the grids, and soil samples would be collected until field-test results indicated chloride concentrations were below the revised closure standard. The requests were approved by the NMOCD representative.

Based on laboratory analytical results, the Pasture Excavation was advanced in the areas represented by Sample #12 and Sample #44. Two (2) confirmation samples (Sample #12A and Sample #44A) and four (4) additional soil samples (Sample #27, Sample #28, Sample #45, and Sample #46) were collected from the sidewalls of the excavation and submitted to the laboratory for analysis of TPH and chloride concentrations. Sample #27 was also analyzed for concentrations of BTEX. Laboratory analytical results indicated TPH concentrations ranged from less than the laboratory MDL in Sample #12A and Sample #44A to 1,216 mg/kg in Sample #27. Chloride concentrations ranged from 32.0 mg/kg in Sample #12A to 22,000 mg/kg in Sample #28. BTEX constituent concentrations in Sample #27 were below the appropriate laboratory MDL.

Review of laboratory analytical results indicated further excavation would be required in the area represented by Sample #27. Further excavation in the area represented by Sample #28 was deemed impracticable due to the presence of the active PLU #78 SWD Tank Battery adjacent to the Pasture Excavation.

From August 13 through August 14, 2012, the floor of the Pasture Excavation was divided from north-to-south at fifty-foot (50') intervals into eight (8) grids (Grid 1 through Grid 8). A series of delineation trenches were advanced east-to-west in the gridded areas to evaluate the horizontal and vertical extent of contaminated soil. Due to the variable width of the Pasture Excavation, the number of delineation trenches and their orientation (i.e., north-to-south, east-to-west, or diagonal) varied from grid to grid. The delineation trenches were evenly distributed horizontally within each grid to ensure adequate coverage of the excavation floor. Soil samples were collected at two-foot (2') to five-foot (5') intervals and field-screened with a chloride test kit, and selected confirmation soil samples were submitted the laboratory for analysis of chloride concentrations. The locations of the grids and delineation trenches are depicted in Figures 2 through 6. Laboratory analytical results are summarized in Table 1. Field-test results are summarized in Table 2.

Grid 1 was located in the northern portion of the Pasture Excavation, near the area defined by soil boring SB-1. A series of three (3) delineation trenches (S #1, S #2, and S #3) were advanced in Grid 1, with total depths ranging from approximately five feet (5') in trench S #1 to approximately seven feet (7') in trenches S #2 and S #3. Soil samples were collected at two-foot (2') to three-foot (3') intervals and field-screened with a chloride test kit. A total of three (3) confirmation soil samples (G #1 S #2 2', G #1 S #2 7', and G #1 S #2 10') were submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from 256 mg/kg in soil sample G #1 S #2 10' to 19,000 mg/kg in soil sample G #1 S #2 2'.

Grid 2 was located approximately fifty feet (50') south of Grid 1, near the area defined by soil boring SB-1. A series of three (3) delineation trenches (S #1, S #2, and S #3) were advanced in Grid 2, each with a total depth of approximately ten feet (10'). Soil samples were collected at two-foot (2') to three-foot (3') intervals and field-screened with a chloride test kit. A total of three (3) confirmation soil samples (G #2 S #2 5', G #2 S #2 7', and G #2 S #2 10') were submitted to

the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from 400 mg/kg in soil sample G #2 S #2 10' to 14,600 mg/kg in soil sample G #2 S #2 5'.

Grid 3 was located approximately fifty feet (50') south of Grid 2. A series of four (4) delineation trenches (S #1, S #2, S #3, and S#4) were advanced in Grid 3, with total depths ranging from approximately five feet (5') in trench S #3 to seven feet (7') in trenches S #1, S #2, and S #4. Soil samples were collected at two-foot (2') to three-foot (3') intervals and field-screened with a chloride test kit. A total of three (3) confirmation soil samples (G #3 S #2 2', G #3 S #2 5', and G #3 S #2 7') were submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from 1,620 mg/kg in soil sample G #3 S #2 2'.

Grid 4 was located approximately fifty feet (50') south of Grid 3, in the approximate center of the Pasture Excavation. A series of three (3) delineation trenches (S #1, S #2, and S #3) were advanced in Grid 4, with total depths ranging from approximately five feet (5') in trench S #3 to ten feet (10') in trench S #1. Soil samples were collected at two-foot (2') to three-foot (3') intervals and field-screened with a chloride test kit. A total of three (3) confirmation soil samples (G #4 S #2 2', G #4 S #2 5', and G #4 S #2 7') were submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from 4,000 mg/kg in soil sample G #4 S #2 7' to 42,800 mg/kg in soil sample G #4 S #2 2'.

Grid 5 was located approximately fifty feet (50') south of Grid 4, in the area represented by soil boring SB-3, and adjacent to a soil "island" (represented by soil samples Power Pole North, Power Pole South, Power Pole East, and Power Pole West) left in-situ inside the excavation to support the utility pole supplying electricity to the PLU #78 SWD Tank Battery. Two (2) delineation trenches (S #1 and S #3) were advanced in Grid 5, each with a total depth of approximately ten feet (10'). Soil samples were collected at two-foot (2') to three-foot (3') intervals and field-screened with a chloride test kit. Two (2) confirmation soil samples (G #5 S #3 5' and G #5 S #3 10') were submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from 1,170 mg/kg in soil sample G #5 S #3 10' to 14,600 mg/kg in soil sample G #5 S #3 5'.

Grid 6 was located approximately fifty feet (50') south of Grid 5, adjacent to, and to the south of the soil "island" represented by soil samples Power Pole North, Power Pole South, Power Pole East, and Power Pole West. A series of three (3) delineation trenches (S #1, S #2, and S #3) were advanced in Grid 6, with total depths ranging from approximately five feet (5') in trench S #1 to twenty feet (20') in trench S #3. Soil samples were collected at two-foot (2') to five-foot (5') intervals and field-screened with a chloride test kit. A total of three (3) confirmation soil samples (G #6 S #3 5', G #6 S #3 10', and G #6 S #3 15') were submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from 4,400 mg/kg in soil sample G #6 S #3 15' to 17,400 mg/kg in soil sample G #6 S #3 5'.

Grid 7 was located approximately fifty feet (50') south of Grid 6, near the area represented by soil boring SB-4 and to the west of the PLU #78 SWD Tank Battery. Two (2) delineation trenches (S #1 and S #2) were advanced in Grid 7, each with a total depth of approximately five feet (5'). Soil samples were collected at two-foot (2') to three-foot (3') intervals and field-screened with a chloride test kit. Two (2) confirmation soil samples (G #7 S #2 2' and G #7 S #2

5') were submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from 4,480 mg/kg in soil sample G #7 S #2 5' to 6,640 mg/kg in soil sample G #7 S #2 2'.

Grid 8 was located in the southern portion of the excavation, approximately fifty feet (50') south of Grid 7 and to the west of the PLU #78 SWD Tank Battery. A series of three (3) delineation trenches (S #1, S #2, and S #3) were advanced in Grid 8, with total depths ranging from approximately five feet (5') in trench S #1 to fifteen feet (15') in trench S #3. Soil samples were collected at two-foot (2') to five-foot (5') intervals and field-screened with a chloride test kit. A total of three (3) confirmation soil samples (G #8 S #2 2', G #8 S #2 7', and G #8 S #2 10') were submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from 688 mg/kg in soil sample G #8 S #2 10' to 26,000 mg/kg in soil sample G #8 S #2 2'.

On August 30, 2012, representatives of Basin Environmental and BOPCO met with a representative of the NMOCD Artesia District Office to discuss the findings of the delineation event and to request permission to install an impermeable polyurethane liner in the floor of the Pasture Excavation. The request was denied by the NMOCD representative. Basin Environmental and BOPCO were instructed to advance the floor of the excavation until field screens indicated chloride concentrations were within the 3,000 to 5,000 mg/kg closure standard agreed to on August 8, 2012.

On September 12, 2012, the Pasture Excavation was advanced in the areas represented by Sample #26 and Sample #27. Two (2) confirmation soil samples (Sample #26A and Sample #27A) and two (2) additional soil samples (Sample #47 and Sample #48) 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 TPH and BTEX constituent concentrations were less than the appropriate laboratory MDL in all submitted soil samples. Chloride concentrations ranged from 576 mg/kg in Sample #27A to 1,090 mg/kg in Sample #47.

From June 6 through September 27, 2012, approximately twenty-six thousand, three hundred cubic yards (26,300 yd³) of impacted soil was transported to Lea Land, Inc. (NMOCD Permit # WM-01-035), for disposal.

On October 8, 2012, after excavation of the Pasture Excavation had been completed, nine (9) soil samples (Grid 1 Floor, Grid 2 Floor, Grid 3 Floor, Grid 4 Floor, Grid 5 Floor, Grid 6 Floor, Grid 7 Floor, Grid 8 Floor, and Header Floor) were collected from the final excavation floor and submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from 2,200 mg/kg in soil sample Grid 2 Floor to 5,040 mg/kg in soil sample Grid 4 Floor.

Based on laboratory analytical results, from September 28 to November 8, 2012, the Pasture Excavation was backfilled with non-impacted material, compacted, and contoured to fit the surrounding topography. Final dimensions of the excavation were approximately four hundred and eighty feet (480') in length, ranging in width from approximately twenty-five feet (25') to approximately three hundred and sixty feet (360'), and ranging in depth from approximately five feet (5') to approximately eighteen feet (18').

On December 3, 2012, delineation of the Pad Excavation commenced. Twelve (12) soil samples (Pad 1-S, Pad 1-B, Pad 2-S, Pad 2-B, Pad 3-S, Pad 3-B, Pad 4-S, Pad 4-B, Pad 5-S, Pad 5-B, Pad 6-S, and Pad 6-B) were collected from the floor and sidewalls of a trench that had been advanced at the tank battery for the installation of electrical conduit to power an on-site security system. The soil samples were submitted to the laboratory for analysis of TPH and chloride concentrations. Soil sample Pad 6-B was also analyzed for concentrations of BTEX. Soil sample locations are depicted in Figure 7, "Sample Location Map (Pad Excavation)".

Laboratory analytical results indicated TPH concentrations were less than the laboratory MDL in all submitted soil samples. Chloride concentrations ranged from 96.0 mg/kg in soil sample Pad 6-S to 2,240 mg/kg in soil sample Pad 1-B. BTEX constituent concentrations in soil sample Pad 6-S were less than the appropriate laboratory MDL.

On October 23, 2013, remediation of the PLU #78 SWD Tank Battery pad (i.e., Pad Excavation) commenced. A chloride test kit was used to field-screen the horizontal extent of impacted soil and to guide the excavation. In order to prevent excavation activities from hindering trucking operations at the tank battery, the excavation was limited to a total depth of approximately six inches (6") to one foot (1') bgs. Excavated soil was stockpiled on-site, pending final disposition.

From October 28 through October 31, 2013, approximately four hundred and twenty cubic yards (420 yd³) of impacted soil was transported to Lea Land, Inc., for disposal.

On October 30, 2013, four (4) soil samples (Floor A, Floor B, Floor C, and Floor D) were collected from the floor of the Pad Excavation and submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from 992 mg/kg in soil sample Floor D to 4,040 mg/kg in soil sample Floor B.

Based on field tests and laboratory analytical results, from October 31 through November 4, 2013, the excavation was backfilled, compacted, and contoured to fit the surrounding grade. Prior to backfilling, the final dimensions of the Pad Excavation were approximately two hundred and fifteen feet (215') in length, varying in width from approximately sixty feet (60') to approximately one hundred and twenty eight feet (128'), and approximately six inches (6") to one foot (1') in depth.

On November 5, 2013, the backfilled Pasture Excavation was covered with a layer of hay to inhibit surface erosion. The site will be seeded with a BLM-approved seed mixture during the 2014 calendar year.

4.0 QA/QC PROCEDURES

4.1 Soil Sampling

Soil samples were delivered to Cardinal Laboratories, Inc., of Hobbs, New Mexico, for BTEX, TPH, and/or chloride analyses using the methods described below:

- BTEX concentrations in accordance with EPA Method SW-846 8021b
- TPH concentrations in accordance with modified EPA Method SW-846 8015M

• Chloride concentrations in accordance with EPA Method SM 4500 Cl-B

4.2 Decontamination of Equipment

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

4.3 Laboratory Protocol

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

5.0 SITE CLOSURE REQUEST

Contaminated soil at the PLU #78 SWD Tank Battery release site was excavated to the extent practicable. Soil samples collected from the floors and sidewalls of the PLU #78 SWD Tank Battery Pasture and Pad Excavations were analyzed by an NMOCD-approved laboratory, and TPH and BTEX constituent concentrations were less than the regulatory remediation action levels (RRAL's) established for the site by the NMOCD (with the exception of soil sample Lines, which exhibited a TPH concentration of 18,800 mg/kg). In-situ soil exhibiting TPH and/or chloride contamination above RRAL's will be remediated upon decommissioning and/or abandonment of the currently active SWD and tank battery.

Basin Environmental recommends BOPCO provide the NMOCD Artesia District Office and the BLM a copy of this *Remediation Summary & Risk-Based Site Closure Request* and request the NMOCD grant site closure to the PLU #78 SWD Tank Battery release site.

6.0 LIMITATIONS

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

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

7.0 DISTRIBUTION:

Copy 1:	Mike Bratcher New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division (District 2) 1301 E. Grand Avenue Artesia, New Mexico 88210
Copy 2:	James Amos Bureau of Land Management 602 E. Greene Street Carlsbad, New Mexico 88220
Copy 3:	Tony Savoie BOPCO, LP 522 W. Mermod, Ste. 704 Carlsbad, New Mexico 88220
Copy 4:	Basin Environmental Service Technologies, LLC P.O. Box 301 Lovington, New Mexico 88260

Figures

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Tables

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TABLE 1 CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL

BOPCO, LP POKER LAKE UNIT #78 SWD TANK BATTERY EDDY COUNTY, NEW MEXICO NMOCD REFERENCE NO: 2RP-1190 & 2RP-1234

	SAMPLE	SAMPLE			METHOD: EPA SW 846-8021B, 5030					METHOD: 8015M			TOTAL	E 300
SAMPLE LOCATION	DEPTH (BELOW EXCAVATION FLOOR)	DEPTH (BELOW GROUND SURFACE)	SAMPLE DATE	SOIL STATUS	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL- BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C ₆ -C ₁₂ (mg/Kg)	DRO C ₁₂ -C ₂₈ (mg/Kg)	ORO C ₂₈ -C ₃₅ (mg/Kg)	TPH C ₆ -C ₃₅ (mg/Kg)	CHLORIDE (mg/Kg)
Sample #1 @ 1'	-	1'	5/31/2012	Excavated	-	-	-	-	-	2,800	10,600	1,370	14,770	11,600
Sample #1 @ 5'	-	5'	5/31/2012	Excavated	< 0.050	< 0.050	< 0.050	<0.150	< 0.150	<10.0	<10.0	<10.0	<10.0	336
Sample #2 @ 1'	-	1'	5/31/2012	Excavated	-	-	-	-	-	<10.0	29.3	14.1	43.4	2,720
Sample #2 @ 5'	-	5'	5/31/2012	Excavated	-	-	-	-	-	<10.0	13.5	26.4	39.9	160
Sample #3 @ 1'	-	1'	5/31/2012	Excavated	-	•	-		-	<10.0	73.8	22.6	96.4	11,900
Sample #3 @ 5'	-	5'	5/31/2012	Excavated	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	5,600
Sample #3 @ 10'		10'	5/31/2012	Excavated	<0.050	< 0.050	<0.050	<0.150	<0.150	<10.0	<10.0	<10.0	<10.0	2,480
Sample #4 @ 1'	-	1'	5/31/2012	Excavated	-	-	-	-	-	<10.0	327	85.7	413	30,000
Sample #4 @ 5'	-	5'	5/31/2012	Excavated	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	320
Sample #1	-	4'	7/26/2012	In-Situ	-	-	-	-	-	<10.0	13.0	18.7	31.7	400
Sample #2	-	4'	7/26/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	192
Sample #3	-	4'	7/26/2012	In-Situ	-	-	-		-	<10.0	<10.0	<10.0	<10.0	256
Sample #4	-	4'	7/26/2012	In-Situ	-	-	-		-	<10.0	<10.0	<10.0	<10.0	144
Sample #5		4'	7/26/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	656
Sample #6	-	4'	7/26/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	544
Sample #7	-	4'	7/26/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	384
Sample #8	-	4'	7/26/2012	In-Situ	-	-	-		-	<10.0	<10.0	<10.0	<10.0	144
Sample #9		4'	7/26/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	608
Sample #10	-	4'	7/26/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	416
Sample #11	-	4'	7/26/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	288
Sample #13	-	4'	7/26/2012	In-Situ	-	_	-	-	-	<10.0	<10.0	<10.0	<10.0	432
Sample #14	-	4'	7/26/2012	In-Situ	-		-	-	-	<10.0	<10.0	<10.0	<10.0	304
Sample #15	-	4'	7/26/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	656
Sample #16	-	4'	7/26/2012	In-Situ	-	-	-		-	<10.0	<10.0	<10.0	<10.0	528
Sample #17	-	4'	7/26/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	48.0
Sample #18	-	4'	7/26/2012	In-Situ	-				-	<10.0	<10.0	<10.0	<10.0	176
Sample #19		4'	7/26/2012	In-Situ	_	-	-	-	-	<10.0	<10.0	<10.0	<10.0	160
Sample #20	-	4'	7/26/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	<16.0
Sample #21	-	4'	7/26/2012	In-Situ	_	-	-	-	-	<10.0	16.5	<10.0	16.5	128
Sample #22	-	4	7/26/2012	In-Situ	_	-	-		-	<10.0	<10.0	<10.0	<10.0	<16.0
Sample #23	-	4'	7/26/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	<16.0
Sample #24	-	4'	7/26/2012	In-Situ	-	-	-	-	-	28.3	82.1	<10.0	110	<16.0
Sample #25	-	4'	7/26/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	592
Sample #26	-	4'	7/26/2012	Excavated	_	-	-	-	-	<10.0	<10.0	<10.0	<10.0	8.660
Sample #29	•	4'	7/26/2012	In-Situ	-		-	-	-	<10.0	21.1	<10.0	21.1	256
Sample #30		4	7/26/2012	In-Situ	_				-	<10.0	22.5	<10.0	22.5	1.680
Sample #31		4	7/26/2012	In-Situ	-				-	<10.0	11.9	<10.0	11.9	160
Sample #32		4	7/26/2012	In-Situ	_		-		-	<10.0	<10.0	<10.0	<10.0	9.330
Sample #33	-	4	7/26/2012	In-Situ	_	•			-	<10.0	<10.0	<10.0	<10.0	96.0
Sample #34	-	4	7/26/2012	In-Situ	-			-		<10.0	<10.0	<10.0	<10.0	80.0
Sample #35	-	4	7/26/2012	In-Situ	-	-	-	-		<10.0	<10.0	<10.0	<10.0	128
Sample #36	-	4	7/26/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	80.0
Sample #37	-	4'	7/26/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	50,400
Sample #38	-	4'	7/26/2012	In-Situ			-	-	-	<10.0	<10.0	<10.0	<10.0	58,400
Sample #39	-	4'	7/26/2012	In-Situ		-	-	-		<10.0	<10.0	<10.0	<10.0	448
East Pooling Area	-	4	7/26/2012	Excavated		-		-	-	1 220	5.740	805	7,765	48.0
				Linguitatou						.,	<u> </u>		1,	

TABLE 1 CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL

BOPCO, LP POKER LAKE UNIT #78 SWD TANK BATTERY EDDY COUNTY, NEW MEXICO NMOCD REFERENCE NO: 2RP-1190 & 2RP-1234

	SAMPLE	SAMPLE				METHOD: E	PA SW 846-80	21B, 5030		ME	METHOD: 8015M		ΤΟΤΑΙ	E 300
SAMPLE LOCATION	DEPTH (BELOW EXCAVATION FLOOR)	DEPTH (BELOW GROUND SURFACE)	SAMPLE DATE	SOIL STATUS	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL- BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C ₆ -C ₁₂ (mg/Kg)	DRO C ₁₂ -C ₂₈ (mg/Kg)	ORO C ₂₈ -C ₃₅ (mg/Kg)	TOTAL TPH C ₆ -C ₃₅ (mg/Kg)	CHLORIDE (mg/Kg)
Manifold Floor 6'	-	6'	7/31/2012	Excavated	-	-	-	-	-	4,720	13,800	2,050	20,570	176
Manifold Floor 8'	-	8'	7/31/2012	Excavated	-	-		-	-	15,500	28,100	4,440	48,040	176
SB-1 @ 5' *	5'	10'	8/1/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	256
<u>SB-1 @ 10'</u> *	10'	15'	8/1/2012	In-Situ	<0.050	< 0.050	< 0.050	<0.150	<0.150	<10.0	10.5	<10.0	10.5	1,300
SB-1 @ 15' *	15'	20'	8/1/2012	In-Situ	-	-	-	-	-	-	-	-	-	48.0
SB-1@20' *	20'	25'	8/1/2012	In-Situ	<0.050	< 0.050	< 0.050	<0.150	<0.150	<10.0	<10.0	<10.0	<10.0	32.0
SB-2@5' *	5'	10'	8/1/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	864
SB-2@10' *	10'	15'	8/1/2012	In-Situ	<0.050	< 0.050	<0.050	<0.150	<0.150	<10.0	<10.0	<10.0	<10.0	2.200
SB-2@15' *	15'	20'	8/1/2012	In-Situ	-	-	-	-	-	-	-	-	-	3,560
SB-2 @ 20' *	20'	25'	8/1/2012	In-Situ	<0.050	< 0.050	< 0.050	<0.150	<0.150	<10.0	<10.0	<10.0	<10.0	1,040
SB-3@5' *	5'	10'	8/1/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	1,060
SB-3@10' *	10'	15'	8/1/2012	In-Situ	<0.050	< 0.050	< 0.050	<0.150	<0.150	<10.0	<10.0	<10.0	<10.0	1,470
SB-3@15' *	15'	20'	8/1/2012	In-Situ	-	-	-	-	-	-	-	-	-	1,250
SB-3 @ 20' *	20'	25'	8/1/2012	In-Situ	-	-	-	-	-	-	-	-	-	576
SB-3 @ 25' *	25'	30'	8/1/2012	In-Situ	<0.050	< 0.050	<0.050	<0.150	<0.150	<10.0	189	407	596	128
SB-4@5'*	5'	10'	8/1/2012	In-Situ	-	-	-	-	-	<10.0	32.8	86.3	119	1,360
SB-4@10'*	10'	15'	8/1/2012	In-Situ	< 0.050	< 0.050	< 0.050	<0.150	<0.150	<10.0	11.1	23.9	35.0	384
SB-4@15' *	15'	20'	8/1/2012	In-Situ	-	-	-	-	-	-	-	-	-	240
SB-4@20'*	20'	25'	8/1/2012	In-Situ	-	-	-	-	-	-	-	-	-	240
SB-4@25'*	25'	30'	8/1/2012	In-Situ	<0.050	< 0.050	< 0.050	<0.150	<0.150	<10.0	<10.0	10.3	10.3	112
· · · · · · · · · · · · · · · · · · ·			- <u> </u>					l						
SB-5@5'	· .	5'	8/1/2012	In-Situ	-	-	-	-	-	<10.0	19.4	18.1	37.5	1,340
SB-5@10'	-	10'	8/1/2012	In-Situ	<0.050	< 0.050	<0.050	<0.150	<0.150	<10.0	<10.0	<10.0	<10.0	2,520
SB-5@15	-	15'	8/1/2012	In-Situ	•	-	-	-	-	-	-		-	1,630
SB-5@20'	-	20'	8/1/2012	In-Situ		-	-	-	-	-	-	-		208
SB-5@25'	-	25'	8/1/2012	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.150	<10.0	<10.0	<10.0	<10.0	176
Sample #12		4'	8/3/2012	Excavated	-	-	-	-		<10.0	<10.0	<10.0	<10.0	7,280
Sample #40	· ·	4'	8/3/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	480
Sample #41		4'	8/3/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	688
Sample #42	-	4'	8/3/2012	In-Situ	-	-	•	-	-	<10.0	<10.0	<10.0	<10.0	1.220
Sample #43	-	4'	8/3/2012	In-Situ	•	-	-	-	-	<10.0	<10.0	<10.0	<10.0	944
Sample #44	-	4'	8/3/2012	Excavated	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	25,200
Manifold Floor 12'	-	12'	8/3/2012	In-Situ	•	-	-	-	-	<10.0	429	98.5	528	96.0
SB #1 Surface **	-	5'	8/3/2012	Excavated	-	-	-	-	-	<10.0	703	176	879	36,000
SB #2 Surface/East Pooling Area 8' **	-	8'	8/3/2012	Excavated	-	-	-	-	-	<10.0	337	126	463	1,560
SB #3 Surface **	-	5'	8/3/2012	Excavated	-	-	-	-	-	<10.0	153	82.7	236	61,600
SB #4 Surface **	-	5'	8/3/2012	Excavated	-	-	-	-	-	<10.0	1,310	320	1,630	20,000
Power Pole North	-	4'	8/3/2012	In-Situ	-	-	•	-	-	<10.0	15.2	42.7	57.9	40,000
Power Pole South	-	4'	8/3/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	18.2	18.2	37,600
Power Pole East	-	4'	8/3/2012	In-Situ	-	-	-		-	<10.0	<10.0	10.0	10.0	48,000
Power Pole West	-	4'	8/3/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	43,200
Lines		0.5	8/3/2012	In-Situ	-	-	-	-	-	52.4	14,900	3,980	18,880	10,100
					, <u>10</u>									l.

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TABLE 1 CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL

BOPCO, LP POKER LAKE UNIT #78 SWD TANK BATTERY EDDY COUNTY, NEW MEXICO NMOCD REFERENCE NO: 2RP-1190 & 2RP-1234

	SAMPLE	SAMPLE		T	METHOD: EPA SW 846-8021B, 5030 METHOD: 8015M		5M	TOTAL	E 300					
SAMPLE LOCATION	DEPTH (BELOW EXCAVATION FLOOR)	DEPTH (BELOW GROUND SURFACE)	SAMPLE DATE	SOIL STATUS	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL- BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C ₆ -C ₁₂ (mg/Kg)	DRO C ₁₂ -C ₂₈ (mg/Kg)	ORO C ₂₈ -C ₃₅ (mg/Kg)	TOTAL TPH C ₆ -C ₃₅ (mg/Kg)	CHLORIDE (mg/Kg)
Sample #12A	-	4'	8/8/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	32.0
Sample #27	-	4'	8/8/2012	Excavated	<0.050	< 0.050	< 0.050	<0.150	<0.150	<10.0	1,010	206	1,216	8,130
Sample #28	-	4'	8/8/2012	In-Situ	-	-	-	-	-	<10.0	493	143	636	22,000
Sample #44A	-	4'	8/8/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	288
Sample #45		4'	8/8/2012	In-Situ	-	-	-	•	-	<10.0	13.1	26.6	39.7	48.0
Sample #46		4'	8/8/2012	In-Situ	-	-	-			<10.0	43.1	12.6	55.7	320
G #1 S #2 2' ***	2'	7'	8/13/2012	Excavated					<u> </u>		-			19.000
G #1 S #2 7' ***		12'	8/13/2012	Excavated	_		-							12,000
G #1 S #2 10' ***	10'	15'	8/13/2012	Excavated					-					256
			0/10/2012	LACAVAICO					-	<u> </u>				230
G #2 S #2 5' ***	5'	10'	8/13/2012	Excavated	-	-	-	-	-	-	-	-	-	14,600
G #2 S #2 7' ***	7'	12'	8/13/2012	Excavated	-	-	-	-	-	-	-	-	-	10,400
G #2 S #2 10' ***	10'	15'	8/13/2012	In-Situ	-	-	-	-	•	-	-	-	-	400
0 //0 0 //0 01 ***		71	0/10/0010						<u> </u>			<u> </u>		
	2	10	8/13/2012	Excavated		•			-		-			20,600
	5	10	8/13/2012	Excavated		-					-		-	14,000
G #3 S #2 /	/`	12	8/13/2012	In-Situ	-		-				-	<u> </u>		1,620
G #4 S #2 2 ['] ***	2'	7'	8/14/2012	Excavated		· ·	-			-	-		-	42,800
G #4 S #2 5' ***	5'	10'	8/14/2012	Excavated	-		-		-		-	<u> </u>	-	12,400
G #4 S #2 7 <u>****</u>	7'	12'	8/14/2012	In-Situ	-	-	-	-	-	-	-	-	-	4,000
				<u> </u>										
<u>G #5 S #3 5 ***</u>	5'	10'	8/14/2012	Excavated	-			.		-	-	<u> </u>	-	14,600
G #5 S #3 10' ***	10'	<u>15'</u>	8/14/2012	In- <u>Situ</u>	-	-	-				-	<u> </u>	-	1,170
G #6 S #3 5' ***	5'	10'	8/14/2012	Excavated		-						<u> </u>		17 400
G #6 S #3 10' ***	10'	15'	8/14/2012	Excavated		-					-		-	6 500
G #6 S #3 15' ***	15'	20'	8/14/2012	In-Situ										4 400
		<u> </u>	0/14/2012							 				4,400
G #7 S #2 2' ***	2'	7'	8/14/2012	Excavated	-		-	-	-	•	-	-	-	6,640
G #7 S #2 5'_ ***	5'	10'	8/14/2012	In-Situ	-	-	-	-	-	-	-	-	-	4,480
C #0 C #0 C' ***		71	9/14/2012	Evenueted		<u> </u>								26.000
G #9 S #2 Z		12'	8/14/2012	Excavaled	-	-			-				_	20,000
G #8 S #2 10' ***	10'	15'	8/14/2012			-			-				-	688
		10	0/11/2012					_				+		000
Sample #26A	-	4'	9/12/2012	In-Situ	<0.050	<0.050	<0.050	<0.0150	<0.0150	<10.0	<10.0	<10.0	<10.0	800
Sample #27A	-	4'	9/12/2012	In-Situ	< 0.050	< 0.050	< 0.050	<0.0150	< 0.0150	<10.0	<10.0	<10.0	<10.0	576
Sample #47	-	4'	9/12/2012	In-Situ	< 0.050	< 0.050	< 0.050	< 0.0150	<0.0150	<10.0	<10.0	<10.0	<10.0	1,090
Sample #48	-	4'	9/12/2012	In-Situ	<0.050	<0.050	<0.050	<0.0150	<0.0150	<10.0	<10.0	<10.0	<10.0	608
					· · ·			L	ļ			 	ļ	
Grid 1 Floor	- <u> </u>	18'	10/8/2012	In-Situ	-	-		-	-		•	<u>⊢</u>	-	3,920
Grid 2 Floor		10'	10/8/2012	In-Situ	-	-	<u> </u>	-			•			2,200
Grid 3 Floor		10'	10/8/2012	In-Situ	-	-	<u> </u>				-			3,000
Grid 4 Hoor		10'	10/8/2012	In-Situ	-		•			<u> </u>	-		-	5,040
		12	10/8/2012		-		-		-	<u> </u>				3,640
		15	10/8/2012		-	····-	-		-	<u> </u>	<u> </u>		· ·	4,200
GRU / FIOOF			10/8/2012	IN-SITU	-	-		-		1		· ·	· · ·	3,000

TABLE 1 CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL

BOPCO, LP POKER LAKE UNIT #78 SWD TANK BATTERY EDDY COUNTY, NEW MEXICO NMOCD REFERENCE NO: 2RP-1190 & 2RP-1234

	SAMPLE	SAMPLE	E SAMPLE D DATE	SOIL STATUS		METHOD: E	PA SW 846-80	21B, 5030		METHOD: 8015M			TOTAL	E 300
SAMPLE LOCATION	DEPTH (BELOW EXCAVATION FLOOR)	DEPTH (BELOW GROUND SURFACE)			BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL- BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C ₆ -C ₁₂ (mg/Kg)	DRO C ₁₂ -C ₂₈ (mg/Kg)	ORO C ₂₈ -C ₃₅ (mg/Kg)	TPH C ₆ -C ₃₅ CH (mg/Kg) (r	CHLORIDE (mg/Kg)
Grid 8 Floor		12'	10/8/2012	In-Situ	-	-	-	-	•	-	-	-	-	3,600
Header Floor		10'	10/8/2012	In-Situ	-	-	-	-	-	-	-	-	-	2,600
Pad 1-S	-	2'	12/3/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	1,300
Pad 1-B	-	3'	12/3/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	2,240
Pad 2-S	-	2'	12/3/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<u><10</u> .0	512
Pad 2-B	-	3'	12/3/2012	In-Situ	-	-	-	•	-	<10.0	<10.0	<10.0	<10.0	640
Pad 3-S	-	2'	12/3/2012	In-Situ	-	-	-	•	-	<10.0	<10.0	<10.0	<10.0	128
Pad 3-B	-	4'	12/3/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	272
Pad 4-S	-	2'	12/3/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	288
Pad 4-B	-	4'	12/3/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	480
Pad 5-S	-	2'	12/3/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	272
Pad 5-B	-	3'	12/3/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	368
Pad 6-S	-	2'	12/3/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	96.0
Pad 6-B		3,	12/3/2012	In-Situ	<0.050	<0.050	<0.050	<0.150	< 0.300	<10.0	<10.0	<10.0	<10.0	128
Floor A		1'	10/30/2013	In-Situ	-		:		-	-	-	-	-	3,720
Floor B	-	1'	10/30/2013	In-Situ	-	-	-	-	-	-	-	-	-	4,040
Floor C	-	2'	10/30/2013	In-Situ	-	-	-	-	-	-	-	-	-	1,070
Floor D		2'	10/30/2013	In-Situ	-	-	-	-	-	-	-	-	-	992
NMOCD Regulatory Standard					10			<u> </u>	50				5,000	3,000 - 5,000

Notes:

- Not applicable.

* Indicates drilling depth. Soil borings were advanced in the floor of the excavation, approximately five feet (5') below ground surface (bgs).

** Due to the presence of a layer of pad sand in the floor of the excavation on the drilling date (August 1, 2012), soil samples could not be collected from the drilling surface (i.e., the floor of the

excavation). On August 3, 2012, heavy equipment was utilized to remove the layer of pad sand in order to collect a sample of native, in-situ soil from the floor of the excavation.

*** Indicates trenching depth. Delineation trenches were advanced in the floor of the excavation, approximately five feet (5') below ground surface (bgs).

Table 2 FIELD TEST RESULTS

BOPCO, LP POKER LAKE UNIT #78 SWD TANK BATTERY EDDY COUNTY, NEW MEXICO NMOCD REFERENCE NO: 2RP-1190 & 2RP-1234

	SAMPLE	SAMPLE		Field Test
	DEPTH**	DEPTH**		
SAMPLE LOCATION	(Below	(Below	SAMPLE DATE	CHI OBIDE
	Excavation	Ground		(ma/Ka)
	Floor)	Surface)		(
Grid 1 - S #1	2'	7'	8/13/2012	8 540
"	5'	10'	8/13/2012	1 976
Grid 1 S #2			9/12/2012	19.060*
unu 1+0 #2	5'	10'	9/12/2012	14,720
		10	0/10/2012	10,152*
	10'	12	0/13/2012	10,152
	10	10	0/13/2012	240
unu i - 5 #3	2	/	8/13/2012	11,096
	5	10	8/13/2012	6,656
	7	12	8/13/2012	1,372
Grid 2 - S #1	2'	7'	8/13/2012	16.272
"	5'	10'	8/13/2012	11.096
0	7'	12'	8/13/2012	8 540
	10'	15'	8/13/2012	352
Grid 2 S #2	10 2'	15	0/13/2012	14 720
unu z - 3 #z	2 E'	10'	0/13/2012	14,720
	ס יד	10	8/13/2012	14,720
	/	12	8/13/2012	9,304
	10	15	8/13/2012	472
Grid 2 - 5 #3	2	10	8/13/2012	13,360
	5	10'	8/13/2012	12,160
	1	12'	8/13/2012	3,780
	10'	15'	8/13/2012	188
Grid 3 - S #1	2'	7'	8/13/2012	>25.444
"	5'	10'	8/13/2012	8 540
11	7'	12'	8/13/2012	112
Grid 3 - S #2	2'	7'	8/13/2012	22 568*
"	5'	, 10'	8/13/2012	14 720*
	7'	12'	8/13/2012	1 532*
Grid 3 - S #3	2'	7'	8/13/2012	4 100
"	5'	, 10'	8/13/2012	3 204
Grid 3 - S #4	2'	7'	8/13/2012	13 360
"	5'	, 10'	8/13/2012	6 656
"	7'	12'	8/13/2012	1 532
	· · · · ·		0/10/2012	1,002
Grid 4 - S #1	2'	7'	8/14/2012	20,136
n	5'	10'	8/14/2012	8,540
"	7'	12'	8/14/2012	6,656
"	10'	15'	8/14/2012	188
Grid 4 - S #2	2'	7'	8/14/2012	>25,444*
II	5'	10'	8/14/2012	11,096*
"	7'	12'	8/14/2012	3,484*
Grid 4 - S #3	2'	7'	8/14/2012	3,780
"	5'	10'	8/14/2012	1.044
				.,
			L	

Table 2 FIELD TEST RESULTS

BOPCO, LP POKER LAKE UNIT #78 SWD TANK BATTERY EDDY COUNTY, NEW MEXICO NMOCD REFERENCE NO: 2RP-1190 & 2RP-1234

	SAMPLE	SAMPLE		Field Test
	DEPTH**	DEPTH**		
SAMPLE LOCATION	(Below	(Below	SAMPLE DATE	
	Excavation	Ground		(mg/Kg)
	Floor)	Surface)		
Grid 5 - S #1	2'	7'	8/14/2012	>25,444
R	5'	10'	8/14/2012	10,152
R	7'	12'	8/14/2012	8,948
н	10'	15'	8/14/2012	3,484
Grid 5 - S #2ª	N/A	N/A	N/A	N/A
Grid 5 - S #3	2'	7'	8/14/2012	>25,444
19	5'	10'	8/14/2012	14,720*
11	7'	12'	8/14/2012	93.04
11	10'	15'	8/14/2012	1,220*
Grid 6 - S #1	2'	7'	8/14/2012	11,096
n	5'	10'	8/14/2012	4,816
Grid 6 - S #2	2'	7'	8/14/2012	18,060
H	5'	10'	8/14/2012	8,948
н	7'	12'	8/14/2012	5,220
N	10'	15'	8/14/2012	2,948
Grid 6 - S #3	2'	7'	8/14/2012	>25,444
*	5'	10'	8/14/2012	14,428*
11	7'	12'	8/14/2012	6,656
11	10'	15'	8/14/2012	5,220*
IF	15'	20'	8/14/2012	3,780*
11	20'	25'	8/14/2012	3,484
Grid 7 - S #1	2'	7'	8/14/2012	6,656
	5'	10'	8/14/2012	4,816
Grid 7 - S #2	2'	7'	8/14/2012	5,220*
19	5'	10'	8/14/2012	3,484*
Grid 7 - S #3⁵	N/A	N/A	N/A	N/A
Grid 8 - S #1	2'	7'	8/14/2012	2,476
	5'	10'	8/14/2012	1,220
Grid 8 - S #2	2'	7'	8/14/2012	20,136*
	5'	10'	8/14/2012	7,852
17	7'	12'	8/14/2012	7,852*
17	10'	15'	8/14/2012	612*
Grid 8 - S #3	2'	7'	8/14/2012	11,096
	5'	10'	8/14/2012	7,852
"	7'	12'	8/14/2012	6,656
	10'	15'	8/14/2012	5,220
	15'	20'	8/14/2012	776

Notes:

* Submitted for laboratory analysis of chloride concentrations.

** Delineation trenches were advanced in the floor of the excavation, approximately five feet (5') below ground surface (bgs).

a Soil boring SB-3 is representative of soil in this area. Trench was not excavated.

^b Soil boring SB-4 is representative of soil in this area. Trench was not excavated.

Appendices

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

District 1 1625 N French District II 1301 W. Grand . District III 1000 Rio Brazos District IV 1220 S St. Fran	Dr., Hobbs, M Avenue, Arte Road, Aztec cis Dr , Santa		Re Submit 2 C District (wi	Form C-141 vised October 10, 2003 Copies to appropriate Office in accordance ith Rule 116 on back side of form							
			Rele	ease Notific	cation	and Co	orrective A	ction_		_	
nmcs/2	179 380	SZ DRCO L R		21022	27	OPERA'	FOR Ny Savoie	🛛 Init	al Report	Final Report	
Address 522	2 W. Mern	nod, Suite 70	4 Carlsb	ad, N.M. 88220		Telephone I	No. 432-556-87.	30			
Facility Nar	ne Poker I	.ake Unit #7	8 SWD 1	Tank Battery		Facility Typ	e E&P	· · · · · · · · · · · · · · · ·			
Surface Ow	ner Federa	1		Mineral (Owner I	Federal		Lease	No.		
LOCATION OF RELEASE 30-015-27536											
Unit Letter A	Section 25	Township 24S	Range 30E	Feet from the	North	South Line	Feet from the	East/West Linc	County Eddy	1	
L		L	 ل	atitude N 32.	194069	Longitu	ide W 103.8276	514	•		
				- NA1	TURE	OF REL	FASE				
Type of Rele	ase: Crude	oil and produc	ced water			Volume of produced	f Release: 4000 E water and 20 bbls	Bols of Volume of damaged	Recovered: l containmen	1820 bbls. From the t. None from the he containment.	
Source of Re	lease: SWE	Tank Battery	/			Date and I	Hour of Occurrence	Hour of Dis	Hour of Discovery		
Was Immedi	ate Notice (Given?				1f YES, To	o Whom?	8/20/11	8:00 a.m.		
			Yes [] No 📋 Not R	lequired	NMOCD	emergency #104,	Jim Amos BLM			
By Whom? Was a Water	<u>Fony Savoie</u> course Rea	ched?]Yes 🛛] No	<u>. </u>	Date and I If YES, V	Iour 5/26/11 9:22 olume Impacting	p.m. to the BLM the Watercourse.	and 9:24 p.n	1. to the NMOCD	
If a Waterco	urse was Im	pacted, Descr	ibe Fully.	*	· · ·	1					
Describe Cause of Problem and Remedial Action Taken.* Lighting struck the facility gun barrel tanks causing immediate damage to both tanks and the adjacent tanks inside the containment. All of the production was immediately shut down and incoming streams were diverted to other facilities. Fire crews from Malaga and Loving responded to and had the fire put out by 11:00 p.m. Vacuum trucks.started removing water from the damaged containment. Describe Area Affected and Cleanup Action Taken.*The salt water disposal tanks were located inside a poly lined metal containment. Two of the 1000 bbl fiberglass gun barrel tanks were nearly completely destroyed due to the lightning hit and fire. The 500 bbl steel oil skim tank was also severely damaged along with one of the 1000 bbl fiberglass water storage tanks. There were a total of 4-1000 bbl fiberglass storage tanks, (2) 1000 bbl gun barrels, and (1) 500 bbl. Oil skim tank inside the containment area. The containment was damaged by falling piping and fire; however it was holding most some of the water being released by the damaged tanks. There were 3 areas where the containment was breached allowing crude oil and produced water to travel off-site into the pasture. The affected area in the pasture measured approximately 21,680 sq. ft. A sampling event was started on 5/31/12 to determine the vertical and horizontal extent of the spill. On 6/4/12 we began removing the heavily impacted soil and hauling it to an approved disposal facility. The Site remediation for the produced water and erude oil spill will follow the NMOCD and BLM guidelines for leaks and spills. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not reli											
Tederul, state	, or roour in						OIL CON	SERVATION	N DIVISI	ON	
Signature:) Ory	Dam	s Ø			Approved by	District Supervi Signed By	sor: 1.	and so		
	JUN 2.7 2012										
ritte: waste	ivigmt.& R	emediation Sp	becianst			Approval Da	ue:	Expiration	Date:		
E-mail Addr	ess: TASav	oie@BassPet.	.com			Conditions of	of Approval: tion per OCD F	Rules &	Attache	d 🔲	
Date: 6/22/1	2	-to ICN		Phone:432-556-8	87 <u>3(</u> G	kemedia uidelines. S		DIATION			
Auacii Add	nional She	CIS II INCCESS	sai y		-			A NI+			

Suidelines.	SOBIAILI KEINEE
PROPOSAL	NOT LATER THA
7/	127/12

2RP-1/20

District 1
1625 N. French Dr., Hobbs, NM 88240
District II
811 S First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S St Francis Dr , Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr.

Santa Fe, NM 87505

RECEIVED

Form C-141 Revised August 8, 2011

JUL 17 2012 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC. NMOCD ARTESIA

Release Notification and Corrective Action nJMW1221430661 **OPERATOR** Final Report Initial Report 260737 Name of Company: BOPCO, L.P. Contact: Tony Savoie Address: 522 W. Mermod, Suite 704 Telephone No. 432-556-8730 Carlsbad, N.M. 88220 Facility Name: Poker Lake Unit 78 SWD Facility Type: Salt Water Disposal Tank Battery Mineral Owner: Federal Surface Owner: Federal API No. 30-015-27536 LOCATION OF RELEASE Township Feet from the North/South Line Feet from the East/West Line Unit Letter Section Range County 24S 30E 25 Eddy А Latitude:N 32.194069 __ Longitude: W 103.827614 NATURE OF RELEASE Type of Release Produced Water and crude oil Volume of Release 600 bbls Volume Recovered 500 bbls total fluid produced water and 10 bbls crude oil Source of Release Tank overflow and containment failure Date and Hour of Occurrence: Date and Hour of Discovery: 7/11/12 7/11/12 Approximately 5:00 p.m. Approximately 5:00 p.m. If YES, To Whom? Was Immediate Notice Given? Yes 🗌 No 🗌 Not Required NMOCD Emergency #104 and BLM By Whom? Tony Savoie Date and Hour: 7/11/12 NMOCD at 7:10 p.m. BLM e-mail 7:39 p.m. Was a Watercourse Reached? If YES, Volume Impacting the Watercourse. Yes No If a Watercourse was Impacted, Describe Fully.* Describe Cause of Problem and Remedial Action Taken.* The SWD was without power when the tanks started overflowing, electricians were on-site and vacuum trucks were on the way to the facility when the new 0 perm containment wall separated at a seam. Screws were used to secure the wall and keep it from totally collapsing. Describe Area Affected and Cleanup Action Taken.* The area affected was undergoing a remediation to clean up a previous produced water spill, most of the water along with a large amount of rain water ponded up in one of the excavations in the pasture. A total of 1050 bbls of water and oil was recovered; the water tested at about 25,000 mg/kg chlorides, which is about 1/2 the normal chloride concentration for the produced water. Remediation efforts are continuing following the NMOCD and BLM guidelines for spill remediation. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. OIL CONSERVATION DIVISION Signature: Au Signed By W ALMO Charasler Approved by Environmental Specialist: Printed Name: Tony Savoie Title: Waste Mgmt. and Remediation Specialist Approval Dates 0 1 2012 Expiration Date: E-mail Address: tasavoie@basspet.com Conditions of Approval: Attached Date: 7/16/12 Phone: 432-556-8730 * Attach Additional Sheets If Necessary Remediation per OCD Rules & Guidelines. SUBMIT REMEDIATION

PROPOSAL NOT LATER THAN:

'		JEDT			
District I 1625 N. French Dr., Hobbs, NM 88240 District II	of New Mexico	Form C-141			
1301 W. Grand Avenue, Artesia, NM 88210					
District III 1000 Rio Brazos Road, Aztec, NM 87410	ervation Division	AFTESDistrict Office in accordance			
District-IV 1220 Sol	ith St. Francis Dr.	RECE With Rule 116 on back			
Santa Santa	Fe, NM 8/505				
Release Notificati	on and Corrective Action	JAN 23 2014			
INMOCD ARTESIA OP	ERATOR	Limital Report			
Name of Company BOPCO, LP 260737	Contact Tony Savoie	1 <u>-</u> 1,-1,			
Address 522 W. Mermod, Suite 704, Carlsbad, NM 88220 Facility Name, Poker Lake Unit #78 SWD Tank Battery	Facility Type F&P				
Surface Owner Federal Mineral Owner	r Federal	Lease No. AP1 #30-015-27536			
LOCATI	ON OF RELEASE				
Unit LetterSectionTownshipRangeFeet from theNoA2524S30E	th/South Line Feet from the East/	West Line County Eddy			
Latitude 32.194069° Nor	th Longitude 103.8276	514° West			
NATUR	E OF RELEASE				
Type of Release Crude oil and produced water	Volume of Release 4,000 bbls of produced water and 20 bbls of crude oil	Volume Recovered 1,820 bbls from the damaged containment. None from the surface area outside the containment.			
Source of Release SWD Tank Battery	Date and Hour of Occurrence 5/26/12, 9:00 p.m.	Date and Hour of Discovery 5/26/12 9:00 p.m.			
Was Immediate Notice Given? X Yes No Not Required	If YES, To Whom? NMOCD Emergency #104, Jim Ar	nos BLM			
By Whom? Tony Savoie	Date and Hour 5/26/12, 9:22 to the	BLM & 9:24 to the NMOCD			
Was a Watercourse Reached?	If YES, Volume Impacting the Wa	tercourse.			
If a Watercourse was Impacted, Describe Fully.*					
Describe Cause of Problem and Remedial Action Taken:* Lightning adjacent tanks inside the containment. All of the production was immer from Malaga and Loving responded to and had the fire put out by 11:0	struck the facility gun barrel tanks, causi diately shut down, and incoming streams 0 p.m. Vacuum trucks started removing	ng immediate damage to both tanks and the s were diverted to other facilities. Fire crews water from the damaged containment.			
Describe Area Affected and Cleanup Action Taken.* The salt water d	isposal tanks were located inside a poly-	lined metal containment. Two of the 1,000-			
damaged along with one of the 1.000 bbl fiberglass water storage tank	s. There were a total of four (4) 1.000-bl	b) fiberglass storage tanks, two (2) 1.000-bbl			
gun barrels, and one (1) 500-bbl oil skim tank inside the containme	nt area. The containment was damaged	by falling piping and fire; however, it was			
holding most of the water being released by the damaged tanks. There	were 3 areas where the containment was	s breached, allowing crude oil and produced			
was remediated as per NMOCD recommended guidelines. Please re	erence the attached <i>Remediation Summ</i>	ary & Risk-Based Site Closure Request for			
remediation details.					
regulations all operators are required to report and/or file certain rel	e to the best of my knowledge and und	e actions for releases, which may endanger			
public health or the environment. The acceptance of a C-141 report	by the NMOCD marked as "Final Repo	ort" does not relieve the operator of liability			
should their operations have failed to adequately investigate and reme or the environment. In addition NMOCD acceptance of a C-141 r	diate contamination that pose a threat to	ground water, surface water, human health			
federal, state, or local laws and/or regulations.	port does not reneve the operator of R	sponsionity for compliance with any other			
	OIL CONSERV	VATION DIVISION			
Signature: i Our Signature					
Printed Name: Tony Savoie	Approved by District Supervisor:				
Title: Waste Mgmt. & Remediation Specialist	Approval Date:	Expiration Date:			
E-mail Address: TASavoie@BassPet.com	Conditions of Approval:				
Date: 1/22/14 Phone: 432-556-8730					
	2RP- 1190				

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State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised October 10, 2003

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 RECE Submit 2007 is a propriate District Office in accordance with Rule 116 on back JAN 23 2014 side of form

Release Notification and Corrective ActionMOCD ARTESIA

OPERATOR		Initial Report	X Final Report
Name of Company BOPCO, LP 200737	Contact Tony Savoie		
Address 522 W. Mermod, Suite 704, Carlsbad, NM 88220	Telephone No. (432)556-8730		
Facility Name Poker Lake Unit #78 SWD	Facility Type E&P		
		1	

Surface Owner Federal

Mineral Owner Federal

Lease No. API #30-015-27536

LOCATION OF RELEASE

Unit Letter A	Section 25	Township 24S	Range 30E	Feet from the	North/South Line	Feet from the	East/West Line	County Eddy

Latitude 32.194069° North Long

Longitude 103.827614° West

NATURE OF RELEASE

Type of Release Produced water and crude oil	Volume of Release 600 bbls of produced water and 10 bbls of crude oil	Volume Recovered 500 bbls total fluid			
Source of Release Tank overflow and containment failure	Date and Hour of Occurrence 7/11/12, 5:00 p.m.	Date and Hour of Discovery 7/11/12 Approximately 5:00 p.m.			
Was Immediate Notice Given? X Yes No Not Required	If YES, To Whom? NMOCD Emergency #104 and BLM	1			
By Whom? Tony Savoie	Date and Hour 7/11/12 NMOCD at 7:10 p.m. BLM e-mail 7:39 p.m.				
Was a Watercourse Reached?	If YES, Volume Impacting the Watercourse.				
🗌 Yes X No					
If a Watercourse was Impacted Describe Fully *					
Describe Cause of Problem and Remedial Action Taken:* The SWD was without power when the tanks started overflowing. Electricians were on-site and					
vacuum trucks were on the way to the facility when the new 0-perm containment wall separated at a seam. Screws were used to secure the wall and keep it					
from totally collapsing.					
Describe Area Affected and Cleanup Action Taken.* The area affected was undergoing a remediation to clean up a previous produced water spill. Most of					
the water, along with a large amount of rain water ponded up in one of the excavations in the pasture. A total of 1,050 bbls of water and oil was recovered.					
Following initial response activities, the release was remediated as per NMOCD recommended guidelines. Please reference the attached <i>Remediation</i>					
Summary & Risk-based Sile Closure Request for remediation details.					
regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases, which may endanger					
public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability					
should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health					
or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other					
federal, state, or local laws and/or regulations.					
	OIL CONSERV	ATION DIVISION			
Signature: 1 Ong Danie					

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

2RP-1234

Appendix B Photographs



Poker Lake Unit #78 SWD Tank Battery - 5/26/2012 Release



Poker Lake Unit #78 SWD Tank Battery - 5/26/2012 Release


Poker Lake Unit #78 SWD Tank Battery - 5/26/2012 Release



Poker Lake Unit #78 SWD Tank Battery - 5/26/2012 Release



Poker Lake Unit #78 SWD Tank Battery - 5/26/2012 Release



Poker Lake Unit #78 SWD Tank Battery - 5/26/2012 Release



Poker Lake Unit #78 SWD Tank Battery - 5/26/2012 Release



Poker Lake Unit #78 SWD Tank Battery - 5/26/2012 Release



Poker Lake Unit #78 SWD Tank Battery - 5/26/2012 Release Site (Following Removal of Heavily Impacted Soil on Battery Pad)



Poker Lake Unit #78 SWD Tank Battery - 5/26/2012 Release Site (Following Removal of Heavily Impacted Soil on Battery Pad)



Poker Lake Unit #78 SWD Tank Battery - 7/11/2012 Release



Poker Lake Unit #78 SWD Tank Battery - 7/11/2012 Release



Poker Lake Unit #78 SWD Tank Battery - Pasture Excavation (Looking North)



Poker Lake Unit #78 SWD Tank Battery - Pasture Excavation (Looking Northwest)



Poker Lake Unit #78 SWD Tank Battery - Pasture Excavation (Looking Northeast)



Poker Lake Unit #78 SWD Tank Battery - Pasture Excavation (Looking East-Northeast)



Poker Lake Unit #78 SWD Tank Battery - Pasture Excavation (Looking East)



Poker Lake Unit #78 SWD Tank Battery - Pasture Excavation (Soil "Island")



Poker Lake Unit #78 SWD Tank Battery - Pasture Excavation (Manifold Floor)



Poker Lake Unit #78 SWD Tank Battery - Pasture Excavation (Looking Northeast)



Poker Lake Unit #78 SWD Tank Battery - Advancement of Soil Boring SB-1 (Looking Southwest)



Poker Lake Unit #78 SWD Tank Battery - Advancement of Soil Boring SB-2 (Looking East)



Poker Lake Unit #78 SWD Tank Battery - Advancement of Soil Boring SB-5 (Looking North)



Poker Lake Unit #78 SWD Tank Battery - Pasture Excavation (Following Backfill; Looking North)



Poker Lake Unit #78 SWD Tank Battery - Pasture Excavation (Following Backfill)



Poker Lake Unit #78 SWD Tank Battery - Pad Excavation



Poker Lake Unit #78 SWD Tank Battery - Pad Excavation



Poker Lake Unit #78 SWD Tank Battery - Pad Excavation

Appendix C Soil Boring Logs

Below Ground	Soil	Chloride Field	PID	Petroleum F	Petroleum	Soil Description		
Surface	Column	lest	Reading	Odor	Stain	Son Description		Boring SB-1
			05	None	None	0' - 1' - Red fine sand 1' - 3' - Gypsum; tan fine sand	Date [Thickr Depth Depth	August 1, 2012 ness of Bentonite Seal 20 Ft of Exploratory Boring 20 Ft bgs to Groundwater
		004		None	None	3' - 16' - Tan fine sand; sandstone	Groun	d Water Elevation
		(<112	1.3	None	None		L L	Indicates the PSH level measured on Indicates the groundwater level measured on
20		<112		None	None	16' - 20' - Tan fine sand	PID	Laboratory Analysis. Head-space reading in ppm obtained with a photo-ionization detector.

Completion Notes

 The soil boring 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.

on the profile log represent approximate boundaries. Actual transitions may be gradual. Basin Environmental Service Technologies, LLC 3100 Plains Hwy. Lovington, NM 88260

Checked By: BRB

Soil Boring SB-1

Depth

BOPCO, LP Poker Lake Unit #78 SWD Tank Battery Eddy County, New Mexico NMOCD Reference #: 2RP-1190



Prep By: BJA

September 5, 2012

Depth Below Ground Surface	Soil <u>Column</u>	Chloride Field <u>Test</u>	PID Reading	Petroleum F	Petroleum <u>Stain</u>	Soil Description		Boring SB-2
			157	None	None	0' - 1' - Red fine sand 1' - 3' - Gypsum; tan fine sand	Date Thick Deptr Deptr Grou	Drilled <u>August 1, 2012</u> ness of Bentonite Seal <u>20 Ft</u> of Exploratory Boring <u>20 Ft bgs</u> to Groundwater <u>duration</u>
-				None	None	3' - 16' - Tan fine sand; sandstone		
- 10 			9.6	None	None		¥ ▼	Indicates the PSH level measured on
			10.9	None	None	16' - 16' - Tan fine sand	PID	Laboratory Analysis. Head-space reading in ppm obtained with a photo-ionization detector.

Completion Notes

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

Checked By: BRB

Soil Boring SB-2

BOPCO, LP Poker Lake Unit #78 SWD Tank Battery Eddy County, New Mexico NMOCD Reference #: 2RP-1190



Basin Environmental Service Technologies, LLC 3100 Plains Hwy. Lovington, NM 88260 Prep By: BJA

September 5, 2012

Depth Below		Chloride						
Ground	Soil	Field	PID	Petroleum P	etroleum	Call Description		
Surface	<u>Column</u>	Test	Reading	Odor	<u>Stain</u>	Soll Description		Boring SB-3
- 0 - 5			0.0	None	None	0' - 1' - Red fine sand	Date I Thickr Depth Depth	August 1, 2012 ness of Bentonite Seal 25 FL of Exploratory Boring 25 Ft bgs to Groundwater
- - - 10			0.4	None	None	1' - 11' - Tan fine sand; sandstone	Groun	nd Water Elevation
- 15		(1,200)	0.8	None	None		⊥ ⊥ ○	Indicates the groundwater level measured on Indicates samples selected for
20		472	0.4	None	None	11' - 25' - Tan fine sand	PID	Laboratory Analysis. Head-space reading in ppm obtained with a photo-ionization detector.
		136	0.0	None	None			

Completion Notes

 The soil boring was advanced on date using air rotary drilling techniques.
 The lines between material types shown on the profile grepresent approximate boundarities. Actual transitions may be gradual. Basin Environmental Service Technologies, LLC 3100 Plains Hwy. Lovington, NM 88260 Checked By: BRB

Prep By: BJA

September 5, 2012

Soil Boring SB-3

BOPCO, LP Poker Lake Unit #78 SWD Tank Battery Eddy County, New Mexico NMOCD Reference #: 2RP-1190

Basin Environment Price Technolouies

Depth Below		Chloride					
Ground	Soil	Field	PID	Petroleum F	Petroleum		
<u>Surface</u>	<u>Column</u>	Test	Reading	<u>Odor</u>	<u>Stain</u>	Soil Description	Boring SB-4
				None	None	0' - 2' - Gypsum, tan fine sand	Date Drilled August 1, 2012 Thickness of Bentonite Seat 25 Ft Depth of Exploratory Boring 25 Ft bgs
- 5 - - - - - -			0.9	None	None	2' - 13' - Tan fine sand; sandstone	Depth to Groundwater Ground Water Elevation
			(2.0)	None	None		 Indicates the PSH level measured on Indicates the groundwater level measured on Indicates samples selected for
- - - - 20		248	3.6	None	None	13' - 25' - Tan fine sand	Laboratory Analysis. PID Head-space reading in ppm obtained with a photo-ionization detector.
_ 		136		None	None		

Completion Notes

The soil boring 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-4

BOPCO, LP Poker Lake Unit #78 SWD Tank Battery Eddy County, New Mexico NMOCD Reference #: 2RP-1190



Checked By: BRB

Depth Below		Chloride						
Ground	Soil	Field	PID	Petroleum F	Petroleum			
Surface	<u>Column</u>	<u>Test</u>	Reading	<u>Odor</u>	<u>Stain</u>	Soil Description		Boring SB-5
۳	-					0' - 0.5' - Tan fine sand	Date I	DrilledAugust 1, 2012
-				None	None	0.5' - 6' - Red fine sand	Thick	ness of Bentonite Seal 30 Ft
-5			0.9				Depth	to Groundwater
-				None	None	6' 12' Tap fine cond gypour:	Grour	nd Water Elevation
- 10			0.6			sandstone	T	Indicates the PSH level measured
Ę	1010			None	None		T	on
- 15		(1,480)) (0.5)				0	measured on Indicates samples selected for
Ē			\smile	None	None		PID	Laboratory Analysis. Head-space reading in ppm obtained
20		280	(0.0)	-				with a photo-tonization detector.
Ē		\smile	\smile	None	None	13' - 30' - Tan fine sand; sandstone		
- 25		(108)(1.2)					
Ē		\smile	\sim	None	None			
E 30		(112) (0.6)	1.5110				
		\sim						

Completion Notes

The soil boring 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.

Checked By: BRB

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

Prep By: BJA

September 5, 2012

Soil Boring SB-5

BOPCO, LP Poker Lake Unit #78 SWD Tank Battery Eddy County, New Mexico NMOCD Reference #: 2RP-1190



Appendix D

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Laboratory Analytical Reports

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June 01, 2012

BEN J. ARGUIJO Basin Environmental Service P.O. Box 301 Lovington, NM 88260

RE: PLU 78 SWD PAD

Enclosed are the results of analyses for samples received by the laboratory on 05/31/12 16:32.

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

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

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celez D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	05/31/2012	Sampling Date:	05/31/2012
Reported:	06/01/2012	Sampling Type:	Soil
Project Name:	PLU 78 SWD PAD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SAMPLE #3 @ 1' (H201227-03)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	11900	16.0	06/01/2012	ND	400	100	400	3.92	
ТРН 8015М	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/01/2012	ND	192	95.8	200	4.75	
DRO >C10-C28	73.8	10.0	06/01/2012	ND	198	99.0	200	10.5	
EXT DRO >C28-C35	22.6	10.0	06/01/2012	ND					
Surrogate: 1-Chlorooctane	106	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	120	% 63.6-15	4						

Sample ID: SAMPLE #4 @ 1' (H201227-04)

Chloride, SM4500CI-B	mg/	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	30000	16.0	06/01/2012	ND	400	100	400	3.92	
ТРН 8015М	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/01/2012	ND	192	95.8	200	4.75	
DRO >C10-C28	327	10.0	06/01/2012	ND	198	99.0	200	10.5	
EXT DRO >C28-C35	85.7	10.0	06/01/2012	ND					
Surrogate: 1-Chlorooctane	109	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	132	% 63.6-15	4						

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*=Accredited Analyte

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	05/31/2012	Sampling Date:	05/31/2012
Reported:	06/01/2012	Sampling Type:	Soil
Project Name:	PLU 78 SWD PAD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SAMPLE #2 @ 5' (H201227-06)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	06/01/2012	ND	400	100	400	3.92	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/01/2012	ND	192	95.8	200	4.75	
DRO >C10-C28	13.5	10.0	06/01/2012	ND	198	99.0	200	10.5	
EXT DRO >C28-C35	26.4	10.0	06/01/2012	ND					
Surrogate: 1-Chlorooctane	99.4	% 65.2-14	0	, <u>, , , , , , , , , , , , , , , , , , </u>					
Surrogate: 1-Chlorooctadecane	115	% 63.6-15	4						

Sample ID: SAMPLE #3 @ 5' (H201227-07)

Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5600	16.0	06/01/2012	ND	400	100	400	3.92	
ТРН 8015М	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/01/2012	ND	192	95.8	200	4.75	
DRO >C10-C28	<10.0	10.0	06/01/2012	ND	198	99.0	200	10.5	
EXT DRO >C28-C35	<10.0	10.0	06/01/2012	ND					
Surrogate: 1-Chlorooctane	108	% 65.2-14	10						
Surrogate: 1-Chlorooctadecane	117 :	63.6-15	54						

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*=Accredited Analyte

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Celeg D. Kune

Celey D. Keene, Lab Director/Quality Manager



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

Received:	05/31/2012	Sampling Date:	05/31/2012
Reported:	06/01/2012	Sampling Type:	Soil
Project Name:	PLU 78 SWD PAD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SAMPLE #3 @ 10' (H201227-09)

BTEX 8021B	mg/	kg	Analyze	d By: ZZZ			· · ·		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/01/2012	ND	2.08	104	2.00	5.71	
Toluene*	<0.050	0.050	06/01/2012	ND	1.90	94.9	2.00	4.96	
Ethylbenzene*	<0.050	0.050	06/01/2012	ND	1.80	89.9	2.00	5.46	
Total Xylenes*	<0.150	0.150	06/01/2012	ND	5.47	91.2	6.00	5.00	
Surrogate: 4-Bromofluorobenzene (PIL	99.1 % 89.4-12		6						
Chloride, SM4500Cl-B	mg/	'kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2480	16.0	06/01/2012	ND	400	100	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/01/2012	ND	192	95.8	200	4.75	
DRO >C10-C28	<10.0	10.0	06/01/2012	ND	198	99.0	200	10.5	
EXT DRO >C28-C35	<10.0	10.0	06/01/2012	ND					
Surrogate: 1-Chlorooctane	105 5	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	117 9	63.6-15	4						

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*=Accredited Analyte

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Celecy D. Kune

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240

(575) 393-2326 FAX (575) 393-2476

Company Name: Basin Environmental Service Technologies, LLC	BILLTO	ANALYSIS REQUEST
Project Manager: Ben J. Arguijo	P.O. #:	
Address: P.O. Box 301	Company: BOPCO, LP	
City: Lovington Staté: NM Zip: 88260	Atth: Tony Savole	
Phone #: (575)396-2378 Fax #:(575)396-1429	Address: 522 w. Mermod	
Project #: Project Owner: BOPCO, LP	Çity: Carlsbad	
Project Name: PLU 78 SWD PAD	State: NM Zip: 88220	
Project Location: EDDY N.M.	Phone #: (432) 556-8730	
Sampler Name: Joby Walters	Fax #:	
FOR LAB USE CALY	PRESERV SAMPLING	
Tap [.D. Sample I.D. CONTAINERS Solu NUMATER PL 2012221	SLUDGE OTHER: ACIDIBASE: OTHER: OTHER:	BONS M Chlorides BTEY
1 SAmple #1 O Ø / GI X	X 531-12 10:00	
2 Sample# 2 @ # 1' GIIV	X 5-31-12 10:10	X X
3 Sample # 3 @ 1 G.1 X	X 5-31-12 10:20	
4 Sample # 4 C 1' G 1 1X	X 531.12 10:30	
5 Sample HI @ 51 GI	X 531-12 11:00	XXXXLUSH
6 5 cmp le # 2 @ 5' G 1	X 5.31-12 /1.3C	
Jample # 3 Q51 G1 1	X 5-31-12 12:00	
5 Sample # 4 C5' [51]	XI 5-31-12 12:30	
9 Samplet 30 101 511 1	YI 531-12 1.30	
PLEASE HOTE: Habely and Damages-Content's futurely and client's evaluative remove for any dram arrang whether based in to analysis. At claims including those to neglopone and any other saure whatsoever shale be demended valued unless match in we service, in no overt shall Cartmal be hable for incidental or consequential damages, including without highling, business internal athlates or aucressers arising out of a related to the performance of services becauted by Cartenal, registers of whether such Reling (Gished By: Barter By Cartenal By Cartenal Service) Bate/ Cartenal Service By Cartenal Service By Cartenal Services and Services (Service) Services (Service) Cartenal Services (Service) Services (Service) S	tropi ar top, shift be limited to the amount pale by the short g and receives by Cartinal within 30 days star completion o ons, itors of use, or loss of profes incurred by cleant, its sub- lant is bin-red upon any of the above stated maxing or other Phone R	Ine spellsable basifes, wað Lesult: 🗌 Yes 💷 No 🛛 Add'I Phone #:
	Fax Res REMAR	ult: 🔲 Yes 🔲 No 🛛 Add'I Fax #:

- How has	19:33 COAL SLE ON	REMARKS:
Refinquished By: Deflivered By: (Circle One)	Date: Received By: Time: Sample Condition (CHECKED)BY: Cool Intact (Initials)	Please email results to pm@basineny.com & TAsavoie@BassPet.com
Sampler - UPS - Bus - Other: † Cardinal cannot accept verbal	Changes. Please fax written changes to 505-393-2476	Pa

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August 01, 2012

JOEL LOWRY Basin Environmental Service P.O. Box 301 Lovington, NM 88260

RE: POKER LAKE UNIT #78 SWD

Enclosed are the results of analyses for samples received by the laboratory on 07/28/12 9:59.

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

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

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	07/28/2012	Sampling Date:	07/26/2012
Reported:	08/01/2012	Sampling Type:	Soil
Project Name:	POKER LAKE UNIT #78 SWD	Sampling Condition:	** (See Notes)
Project Number:	BOPCO	Sample Received By:	Celey D. Keene
Project Location:	EDDY CO., NM		

Sample ID: SAMPLE #3 (H201758-03)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	07/31/2012	ND	432	108	400	0.00	
TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/30/2012	ND	193	96.4	200	0.923	
DRO >C10-C28	<10.0	10.0	07/30/2012	ND	218	. 109	200	3.18	
EXT DRO >C28-C35	<10.0	10.0	07/30/2012	ND					
Surrogate: 1-Chlorooctane	93.9	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	105	% 63.6-15	4						

Sample ID: SAMPLE #4 (H201758-04)

Chloride, SM4500CI-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	07/31/2012	ND	432	108	400	0.00	
TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/30/2012	ND	193	96.4	200	0.923	
DRO >C10-C28	<10.0	10.0	07/30/2012	ND	218	109	200	3.18	
EXT DRO >C28-C35	<10.0	10.0	07/30/2012	ND					
Surrogate: 1-Chlorooctane	88.0	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	97.2	% 63.6-15	4						

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



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Received:	07/28/2012	Sampling Date:	07/26/2012
Reported:	08/01/2012	Sampling Type:	Soil
Project Name:	POKER LAKE UNIT #78 SWD	Sampling Condition:	** (See Notes)
Project Number:	BOPCO	Sample Received By:	Celey D. Keene
Project Location:	EDDY CO., NM		

Sample ID: SAMPLE #7 (H201758-07)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	384	16.0	07/31/2012	ND	432	108	400	0.00	
ТРН 8015М	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/30/2012	ND	193	96.4	200	0.923	
DRO >C10-C28	<10.0	10.0	07/30/2012	ND	218	109	200	3.18	
EXT DRO >C28-C35	<10.0	10.0	07/30/2012	ND					
Surrogate: 1-Chlorooctane	91.8	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	104	% 63.6-15	4						

Sample ID: SAMPLE #8 (H201758-08)

Chloride, SM4500CI-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	07/31/2012	ND	432	108	400	0.00	
TPH 8015M	mg/kg		Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/30/2012	ND	193	96.4	200	0.923	
DRO >C10-C28	<10.0	10.0	07/30/2012	ND	218	109	200	3.18	
EXT DRO >C28-C35	<10.0	10.0	07/30/2012	ND					
Surrogate: 1-Chlorooctane	98.0	% 65.2-14	10						
Surrogate: 1-Chlorooctadecane	108	% 63.6-15	14						

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Celey D. Keene, Lab Director/Quality Manager



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Received:	07/28/2012	Sampling Date:	07/26/2012
Reported:	08/01/2012	Sampling Type:	Soil
Project Name:	POKER LAKE UNIT #78 SWD	Sampling Condition:	** (See Notes)
Project Number:	BOPCO	Sample Received By:	Celey D. Keene
Project Location:	EDDY CO., NM		

Sample ID: SAMPLE #11 (H201758-11)

Chloride, SM4500CI-B	mg/kg		Analyze	Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	07/31/2012	ND	432	108	400	0.00	
TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/31/2012	ND	193	96.4	200	0.923	
DRO >C10-C28	<10.0	10.0	07/31/2012	ND	218	109	200	3.18	
EXT DRO >C28-C35	<10.0	10.0	07/31/2012	ND					
Surrogate: 1-Chlorooctane	82.7	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	94.5	% 63.6-15	4						

Sample ID: SAMPLE #13 (H201758-12)

Chloride, SM4500CI-B	mg/kg		Analyze	Analyzed By: AP					_
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	432	16.0	07/31/2012	ND	432	108	400	0.00	
TPH 8015M	mg/kg Ana		Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/31/2012	ND	193	96.4	200	0.923	
DRO >C10-C28	<10.0	10.0	07/31/2012	ND	218	109	200	3.18	
EXT DRO >C28-C35	<10.0	10.0	07/31/2012	ND					
Surrogate: 1-Chlorooctane	84.2	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	92.5	% 63.6-15	4						

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Celey D. Keene, Lab Director/Quality Manager



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Received:	07/28/2012	Sampling Date:	07/26/2012
Reported:	08/01/2012	Sampling Type:	Soil
Project Name:	POKER LAKE UNIT #78 SWD	Sampling Condition:	** (See Notes)
Project Number:	BOPCO	Sample Received By:	Celey D. Keene
Project Location:	EDDY CO., NM		

Sample ID: SAMPLE #16 (H201758-15)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	528	16.0	07/31/2012	ND	432	108	400	0.00	
TPH 8015M	mg/kg		Analyze	Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/31/2012	ND	193	96.4	200	0.923	
DRO >C10-C28	<10.0	10.0	07/31/2012	ND	218	109	200	3.18	
EXT DRO >C28-C35	<10.0	10.0	07/31/2012	ND					
Surrogate: 1-Chlorooctane	90.4	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	98.5	% 63.6-15	4						

Sample ID: SAMPLE #17 (H201758-16)

Chloride, SM4500Cl-B	mg/kg		Analyze	Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/31/2012	ND	432	108	400	0.00	
трн 8015м	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/31/2012	ND	193	96.4	200	0.923	
DRO >C10-C28	<10.0	10.0	07/31/2012	ND	218	109	200	3.18	
EXT DRO >C28-C35	<10.0	10.0	07/31/2012	ND					
Surrogate: 1-Chlorooctane	91.3	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	<i>99.</i> 7	% 63.6-15	4						

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



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Received:	07/28/2012	Sampling Date:	07/26/2012
Reported:	08/01/2012	Sampling Type:	Soil
Project Name:	POKER LAKE UNIT #78 SWD	Sampling Condition:	** (See Notes)
Project Number:	BOPCO	Sample Received By:	Celey D. Keene
Project Location:	EDDY CO., NM		

Sample ID: SAMPLE #20 (H201758-19)

Chloride, SM4500Cl-B	mg/kg		Analyze	Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/31/2012	ND	400	100	400	3.92	
TPH 8015M	mg,	/kg	g Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/31/2012	ND	193	96.4	200	0.923	
DRO >C10-C28	<10.0	10.0	07/31/2012	ND	218	109	200	3.18	
EXT DRO >C28-C35	<10.0	10.0	07/31/2012	ND					
Surrogate: 1-Chlorooctane	91.6	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	100	% 63.6-15	4						

Sample ID: SAMPLE #21 (H201758-20)

Chloride, SM4500CI-B	mg/kg		Analyze	Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	07/31/2012	ND	400	100	400	3.92	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/31/2012	ND	193	96.4	200	0.923	
DRO >C10-C28	16.5	10.0	07/31/2012	ND	218	109	200	3.18	
EXT DRO >C28-C35	<10.0	10.0	07/31/2012	ND					
Surrogate: 1-Chlorooctane	84.5	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	87.9	% 63.6-15	4						

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Celey D. Keene, Lab Director/Quality Manager



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Received:	07/28/2012	Sampling Date:	07/26/2012
Reported:	08/01/2012	Sampling Type:	Soil
Project Name:	POKER LAKE UNIT #78 SWD	Sampling Condition:	** (See Notes)
Project Number:	BOPCO	Sample Received By:	Celey D. Keene
Project Location:	EDDY CO., NM		

Sample ID: SAMPLE #24 (H201758-23)

Chloride, SM4500Cl-B	mg/kg		Analyze	Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/31/2012	ND	400	100	400	3.92	
TPH 8015M	mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	28.3	10.0	07/31/2012	ND	193	96.6	200	0.500	
DRO >C10-C28	82.1	10.0	07/31/2012	ND	203	101	200	3.37	
EXT DRO >C28-C35	<10.0	10.0	07/31/2012	ND					
Surrogate: 1-Chlorooctane	82.9	% 65.2-14	10			<u></u>			
Surrogate: 1-Chlorooctadecane	57.6	% 63.6-15	4						

Sample ID: SAMPLE #25 (H201758-24)

Chloride, SM4500Cl-B	mg/kg		Analyze	Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	592	16.0	07/31/2012	ND	400	100	400	3.92	
ТРН 8015М	mg,	/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/31/2012	ND	193	96.6	200	0.500	
DRO >C10-C28	<10.0	10.0	07/31/2012	ND	203	101	200	3.37	
EXT DRO >C28-C35	<10.0	10.0	07/31/2012	ND					
Surrogate: 1-Chlorooctane	94.0	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	96.0	% 63.6-15	4						

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



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Received:	07/28/2012	Sampling Date:	07/26/2012
Reported:	08/01/2012	Sampling Type:	Soil
Project Name:	POKER LAKE UNIT #78 SWD	Sampling Condition:	** (See Notes)
Project Number:	BOPCO	Sample Received By:	Celey D. Keene
Project Location:	EDDY CO., NM		

Sample ID: SAMPLE #30 (H201758-27)

Chloride, SM4500CI-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1680	16.0	07/31/2012	ND	400	100	400	3.92	
TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/31/2012	ND	193	96.6	200	0.500	
DRO >C10-C28	22.5	10.0	07/31/2012	ND	203	101	200	3.37	
EXT DRO >C28-C35	<10.0	10.0	07/31/2012	ND					
Surrogate: 1-Chlorooctane	86.4	% 65.2-14	10						
Surrogate: 1-Chlorooctadecane	87.3	% 63.6-15	4						

Sample ID: SAMPLE #31 (H201758-28)

Chloride, SM4500CI-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	07/31/2012	ND	400	100	400	3.92	
TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/31/2012	ND	193	96.6	200	0.500	
DRO >C10-C28	11.9	10.0	07/31/2012	ND	203	101	200	3.37	
EXT DRO >C28-C35	<10.0	10.0	07/31/2012	ND					
Surrogate: 1-Chlorooctane	92.8	% 65.2-14	0					-	
Surrogate: 1-Chlorooctadecane	96.0	% 63.6-15	4						

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Celey D. Keene, Lab Director/Quality Manager



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Received:	07/28/2012	Sampling Date:	07/26/2012
Reported:	08/01/2012	Sampling Type:	Soil
Project Name:	POKER LAKE UNIT #78 SWD	Sampling Condition:	** (See Notes)
Project Number:	BOPCO	Sample Received By:	Celey D. Keene
Project Location:	EDDY CO., NM		

Sample ID: SAMPLE #34 (H201758-31)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	07/31/2012	ND	400	100	400	3.92	
TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/31/2012	ND	193	96.6	200	0.500	
DRO >C10-C28	<10.0	10.0	07/31/2012	ND	203	101	200	3.37	
EXT DRO >C28-C35	<10.0	10.0	07/31/2012	ND					
Surrogate: 1-Chlorooctane	107 9	65.2-14	0						
Surrogate: 1-Chlorooctadecane	112 9	63.6-15	4						

Sample ID: SAMPLE #35 (H201758-32)

Chloride, SM4500CI-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	07/31/2012	ND	400	100	400	3.92	
TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/31/2012	ND	193	96.6	200	0.500	
DRO >C10-C28	<10.0	10.0	07/31/2012	ND	203	101	200	3.37	
EXT DRO >C28-C35	<10.0	10.0	07/31/2012	ND					
Surrogate: 1-Chlorooctane	86.1	% 65.2-14	10						
Surrogate: 1-Chlorooctadecane	84.8	% 63.6-15	54						

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Celeg D. Keene

Celey D. Keene, Lab Director/Quality Manager



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Received:	07/28/2012	Sampling Date:	07/26/2012
Reported:	08/01/2012	Sampling Type:	Soil
Project Name:	POKER LAKE UNIT #78 SWD	Sampling Condition:	** (See Notes)
Project Number:	BOPCO	Sample Received By:	Celey D. Keene
Project Location:	EDDY CO., NM		

Sample ID: SAMPLE #38 (H201758-35)

Chloride, SM4500CI-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	58400	16.0	07/31/2012	ND	400	100	400	3.92	
TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/31/2012	ND	193	96.6	200	0.500	
DRO >C10-C28	<10.0	10.0	07/31/2012	ND	203	101	200	3.37	
EXT DRO >C28-C35	<10.0	10.0	07/31/2012	ND					
Surrogate: 1-Chlorooctane	95.5	% 65.2-14	0						-
Surrogate: 1-Chlorooctadecane	99.6	% 63.6-15	4						

Sample ID: SAMPLE #39 (H201758-36)

Chloride, SM4500CI-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	448	16.0	07/31/2012	ND	400	100	400	3.92	
ТРН 8015М	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/31/2012	ND	193	96.6	200	0.500	
DRO >C10-C28	<10.0	10.0	07/31/2012	ND	203	101	200	3.37	
EXT DRO >C28-C35	<10.0	10.0	07/31/2012	ND					
Surrogate: 1-Chlorooctane	94.6	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	100	% 63.6-15	4						

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

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

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Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager

Page 21 of 25
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	Company Name	Basin Environmental Ser	rvice Te	echnol	ogies, LLC		- 11											P	rojec	n#:	80	PC	<u>0 L</u>	. <u>P.</u>							
	Company Address:	P. O. Box 301																Proj	ect l	.oc:	Edo	ly C	0./ N	IM							
	City/State/Zip:	Lovington, NM 88260																	P	0#:											
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CARDINAL LABORATORIES

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	City/State/Zip:	Lovington, NM 88260												_					PO)#:_											
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August 01, 2012

BEN J. ARGUIJO Basin Environmental Service P.O. Box 301 Lovington, NM 88260

RE: PLU 78 SWD PAD

Enclosed are the results of analyses for samples received by the laboratory on 07/31/12 15:45.

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

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

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



Notes and Definitions

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

Cardinal Laboratories

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Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager

Page 3 of 4



August 07, 2012

BEN J. ARGUIJO Basin Environmental Service P.O. Box 301 Lovington, NM 88260

RE: POKER LAKE UNIT #78 SWD

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

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

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

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	08/02/2012	Sampling Date:	08/01/2012
Reported:	08/07/2012	Sampling Type:	Soil
Project Name:	POKER LAKE UNIT #78 SWD	Sampling Condition:	Cool & Intact
Project Number:	BOPCO	Sample Received By:	Jodi Henson
Project Location:	EDDY CO., NM		

Sample ID: SB - 1 @ 10' (H201805-02)

BTEX 8021B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/07/2012	ND	1.70	85.2	2.00	7.84	
Toluene*	<0.050	0.050	08/07/2012	ND	1.83	91.3	2.00	6.14	
Ethylbenzene*	<0.050	0.050	08/07/2012	ND	1.87	93.5	2.00	6.07	
Total Xylenes*	<0.150	0.150	08/07/2012	ND	5.64	94.0	6.00	5.24	
Surrogate: 4-Bromofluorobenzene (PIE	100 %	6 89.4-12	6						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1300	16.0	08/06/2012	ND	416	104	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/03/2012	ND	185	92.3	200	0.279	
DR0 >C10-C28	10.5	10.0	08/03/2012	ND	195	97.6	200	5.50	
EXT DRO >C28-C35	<10.0	10.0	08/03/2012	ND					
Surrogate: 1-Chlorooctane	92.8 9	65.2-14	0						
Surrogate: 1-Chlorooctadecane	90.0 9	63.6-15	4						

Sample ID: SB - 1 @ 15' (H201805-03)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/06/2012	ND	416	104	400	3.92	

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	08/02/2012	Sampling Date:	08/01/2012
Reported:	08/07/2012	Sampling Type:	Soil
Project Name:	POKER LAKE UNIT #78 SWD	Sampling Condition:	Cool & Intact
Project Number:	BOPCO	Sample Received By:	Jodi Henson
Project Location:	EDDY CO., NM		

Sample ID: SB - 2 @ 5' (H201805-05)

Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	864	16.0	08/06/2012	ND	416	104	400	3.92		
ТРН 8015М	mg/	kg	Analyze	d By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	08/03/2012	ND	185	92.3	200	0.279		
DRO >C10-C28	<10.0	10.0	08/03/2012	ND	195	97.6	200	5.50		
EXT DRO >C28-C35	<10.0	10.0	08/03/2012	ND						
Surrogate: 1-Chlorooctane	90.1 9	65.2-14	0							
Surrogate: 1-Chlorooctadecane	93.6 9	63.6-15	54							

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Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager



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

Received:	08/02/2012	Sampling Date:	08/01/2012
Reported:	08/07/2012	Sampling Type:	Soil
Project Name:	POKER LAKE UNIT #78 SWD	Sampling Condition:	Cool & Intact
Project Number:	BOPCO	Sample Received By:	Jodi Henson
Project Location:	EDDY CO., NM		

Sample ID: SB - 2 @ 20' (H201805-08)

BTEX 8021B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/07/2012	ND	1.70	85.2	2.00	7.84	
Toluene*	<0.050	0.050	08/07/2012	ND	1.83	91.3	2.00	6.14	
Ethylbenzene*	<0.050	0.050	08/07/2012	ND	1.87	93.5	2,00	6.07	
Total Xylenes*	<0.150	0.150	08/07/2012	ND	5.64	94.0	6.00	5.24	
Surrogate: 4-Bromofluorobenzene (PIE	100 9	% 89.4-12	6						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1040	16.0	08/06/2012	ND	416	104	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/03/2012	ND	185	92.3	200	0.279	
DRO >C10-C28	<10.0	10.0	08/03/2012	ND	195	97.6	200	5.50	
EXT DRO >C28-C35	<10.0	10.0	08/03/2012	ND					
Surrogate: 1-Chlorooctane	85.2	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	85.5	% 63.6-15	4						

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Cellery D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	08/02/2012	Sampling Date:	08/01/2012
Reported:	08/07/2012	Sampling Type:	Soil
Project Name:	POKER LAKE UNIT #78 SWD	Sampling Condition:	Cool & Intact
Project Number:	BOPCO	Sample Received By:	Jodi Henson
Project Location:	EDDY CO., NM		

Sample ID: SB - 3 @ 10' (H201805-10)

BTEX 8021B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/07/2012	ND	1.70	85.2	2.00	7.84	
Toluene*	<0.050	0.050	08/07/2012	ND	1.83	91.3	2.00	6.14	
Ethylbenzene*	<0.050	0.050	08/07/2012	ND	1.87	93.5	2.00	6.07	
Total Xylenes*	<0.150	0.150	08/07/2012	ND	5.64	94.0	6.00	5.24	
Surrogate: 4-Bromofluorobenzene (PIL	98.4 %	5 89.4-126							
Chloride, SM4500Cl-B	mg/k	g	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1470	16.0	08/06/2012	ND	416	104	400	3.92	
TPH 8015M	mg/k	g	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/03/2012	ND	185	92.3	200	0.279	
DRO >C10-C28	<10.0	10.0	08/03/2012	ND	195	97.6	200	5.50	
EXT DRO >C28-C35	<10.0	10.0	08/03/2012	ND					
Surrogate: 1-Chlorooctane	85.0 %	65.2-140	1						
Surrogate: 1-Chlorooctadecane	87.2 %	63.6-154							

Sample ID: SB - 3 @ 15' (H201805-11)

Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1250	16.0	08/06/2012	ND	416	104	400	3.92	

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Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager



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

Received:	08/02/2012	Sampling Date:	08/01/2012
Reported:	08/07/2012	Sampling Type:	Soil
Project Name:	POKER LAKE UNIT #78 SWD	Sampling Condition:	Cool & Intact
Project Number:	BOPCO	Sample Received By:	Jodi Henson
Project Location:	EDDY CO., NM		

Sample ID: SB - 4 @ 5' (H201805-14)

Chloride, SM4500CI-B	mg/kg		Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1360	16.0	08/06/2012	ND	416	104	400	3.92	
TPH 8015M	mg/kg		Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/04/2012	ND	185	92.3	200	0.279	
DRO >C10-C28	32.8	10.0	08/04/2012	ND	195	97.6	200	5.50	
EXT DRO >C28-C35	86.3	10.0	08/04/2012	ND					
Surrogate: 1-Chlorooctane	89.0 9	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	93.9 9	63.6-15	4						

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Celey D. Keene, Lab Director/Quality Manager



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

Received:	08/02/2012	Sampling Date:	08/01/2012
Reported:	08/07/2012	Sampling Type:	Soil
Project Name:	POKER LAKE UNIT #78 SWD	Sampling Condition:	Cool & Intact
Project Number:	BOPCO	Sample Received By:	Jodi Henson
Project Location:	EDDY CO., NM		

Sample ID: SB - 4 @ 20' (H201805-17)

Chloride, SM4500Cl-B	mg	/kg	Analyze	Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	08/06/2012	ND	416	104	400	3.92	

Sample ID: SB - 4 @ 25' (H201805-18)

BTEX 8021B	mg/kg		Analyze	Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/07/2012	ND	1.70	85.2	2.00	7.84	
Toluene*	<0.050	0.050	08/07/2012	ND	1.83	91.3	2.00	6.14	
Ethylbenzene*	<0.050	0.050	08/07/2012	ND	1.87	93.5	2.00	6.07	
Total Xylenes*	<0.150	0.150	08/07/2012	ND	5.64	94.0	6.00	5.24	
Surrogate: 4-Bromofluorobenzene (PIL	101 9	6 89.4-12	6						
Chloride, SM4500Cl-B	mg/	kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPÐ	Qualifier
Chloride	112	16.0	08/06/2012	ND	416	104	400	3.92	
TPH 8015M	mg/	kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/04/2012	ND	185	92.3	200	0.279	
DRO >C10-C28	<10.0	10.0	08/04/2012	ND	195	97.6	200	5.50	
EXT DRO >C28-C35	10.3	10.0	08/04/2012	ND					
Surrogate: 1-Chlorooctane	88.0 5	65.2-14	0						
Surrogate: 1-Chlorooctadecane	89.2	63.6-15	4						

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



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Received:	08/02/2012	Sampling Date:	08/01/2012
Reported:	08/07/2012	Sampling Type:	Soil
Project Name:	POKER LAKE UNIT #78 SWD	Sampling Condition:	Cool & Intact
Project Number:	BOPCO	Sample Received By:	Jodi Henson
Project Location:	EDDY CO., NM		

Sample ID: SB - 5 @ 10' (H201805-20)

BTEX 8021B	mg/kg		Analyze	Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/07/2012	ND	1.70	85.2	2.00	7.84	
Toluene*	<0.050	0.050	08/07/2012	ND	1.83	91.3	2.00	6.14	
Ethylbenzene*	<0.050	0.050	08/07/2012	ND	1.87	93.5	2.00	6.07	
Total Xylenes*	<0.150	0.150	08/07/2012	ND	5.64	94.0	6.00	5.24	
Surrogate: 4-Bromofluorobenzene (Pl	IC 101	% 89.4-12							

Chloride, SM4500Cl-B	mg/kg		Analyze	Analyzed By: HM					
Analyte	' Result	Reporting Limit	Analyzed	Method Blank	BS % Recovery	True Value QC	RPD	Qualifier	
Chloride	2520	16.0	08/06/2012	ND	416	104	400	3.92	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/04/2012	ND	185	92.3	200	0.279	
DRO >C10-C28	<10.0	10.0	08/04/2012	ND	195	97.6	200	5.50	
EXT DRO >C28-C35	<10.0	10.0	08/04/2012	ND					
Surrogate: 1-Chlorooctane	90.3	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	87.8	% 63.6-15	4						

Sample ID: SB - 5 @ 15' (H201805-21)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1630	16.0	08/06/2012	ND	416	104	400	3.92	

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

 ND
 Analyte NOT DETECTED at or above the reporting limit

 RPD
 Relative Percent Difference

 **
 Samples not received at proper temperature of 6°C or below.

 Insufficient time to reach temperature.

 Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

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Page 17 of 20

Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Basin Environmental Service Technologies, LLC					BILL TO						Д	NAL	YSIS	RE	QUE	ST_				
Project Manager	Ben J. Arquijo				. P.	O, #:													Ī	
Address: P.O.	Bóx .301.				Ċ	Company: EOPCO, 5P												l		
City: Lovingto	City: Lovington State: NM Zipi 88260					ltn: Tony	Savoio											ļ		
Phone #:				A	ddress: 52	2 W. Merny	od													
Project #: Project Owner: BOPCO, LP					ci	ity: Carls	bad													
Project Name: Poker Làke Unit #78.SWD					st	tate: MM	Zip: 88220													
Project Location	Eddy Co., NM				. Pt	none #: (43	31556-873	о												
Sampler Name:					Fa	ax #:											. 1			
FOR LAS USE ONLY			-	MATRIX	-	PRESERV	SAMPLIN	G												
Lab I.D. H201505	Sample I.D.	(G)RAB OR (C)OM	& CONTRINERS GROUNDWATER	WASTEWATER SOIL	SLUDGE OTHER:	ACID/BASE: ICE / COOL OTHER :	DATE	ŢĮME	Chloride.	801511	BTEN									
୍ର୍	513-30 5'	G	1	X		X	8/1/12	1100	X	X								,		
1D	3B \$3 P.10'							i105		X_	x									<u>.</u>
11	38-3015'					1		1110	· .					·						· ·
12	<u>5B-3 P.20'</u>		<u>.</u>		iiiiii			1115					<u>`</u>							
13	<u>5B·3.C.25'</u>							1120		<u>x</u>	X									
14	58-4 6 51	╎╷╷╻	<u> </u>					1140		<u> X </u>										-
15	5B-4 @ 10'							1145	· · · ·	<u>X</u> ,	X		·							<u> </u>
.16	3B-4 C 15'	<u> </u>					<u> </u>	1150												
17	513-4 0 20'					_		1155				<u> </u>								
15	3B-9 A 25'	K/A	И_					1200	$ \psi $	X	X.			<u>. </u>						

analyzes. All claims induding those for negSgenze and any other cause whatsoever shall be deemed varied unless mace in varied and received by Cardinal within 30 days after complexity of the applicable service. In no event shall Calidinat be liable for incidental or consequental damages, including worcul limitation, bosiness internotions, loss of use, or loss of profils incurred by clent, its subsidiaries,

atiliates or successors alising out of or related to the performan	ice of services hereunder by Carunal/regardless of whether such Statch is based upon any Stitle above stated i	reasons or stiterwise.
Relinguished By:	Date: A / Received By: /	Phone Result: D Yes D No Add'l Phone #:
	Time: 1545 DOdi MUNDON	Fax Result:
Relinguistied By:	Date: Received By: Time:	Please email results to probasingly com
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Sample Condition CHECKED BY: Cool Intact (Initials) Types Yes Yes	& TAsavoie@BassPeticom
† Cardinal cannot accept verba	Il changes. Please fax written changes to 505-393-2476	,



August 06, 2012

BEN J. ARGUIJO Basin Environmental Service P.O. Box 301 Lovington, NM 88260

RE: POKER LAKE UNIT #78 SWD

Enclosed are the results of analyses for samples received by the laboratory on 08/03/12 15:05.

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

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

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	08/03/2012	Sampling Date:	08/03/2012
Reported:	08/06/2012	Sampling Type:	Soil
Project Name:	POKER LAKE UNIT #78 SWD	Sampling Condition:	Cool & Intact
Project Number:	BOPCO	Sample Received By:	Jodi Henson
Project Location:	EDDY CO., NM		

Sample ID: SAMPLE #41 (H201814-03)

Chloride, SM4500Cl-B	mg/kg		Analyze	Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	688	16.0	08/06/2012	ND	416	104	400	3.92	
ТРН 8015М	mg,	/kg	Analyze	d By: MS		. <u>.</u>			·
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/06/2012	ND	167	83.6	200	3.32	
DRO >C10-C28	<10.0	10.0	08/06/2012	ND	153	76.5	200	8.37	
EXT DRO >C28-C35	<10.0	10.0	08/06/2012	ND					
Surrogate: 1-Chlorooctane	87.2	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	89.4	% 63.6-15	4						

Sample ID: SAMPLE #42 (H201814-04)

Chloride, SM4500CI-B	mg/kg		Analyze	Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1220	16.0	08/06/2012	ND	416	104	400	3.92	
TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/06/2012	ND	167	83.6	200	3.32	
DRO >C10-C28	<10.0	10.0	08/06/2012	ND	153	76.5	200	8.37	
EXT DRO >C28-C35	<10.0	10.0	08/06/2012	ND					
Surrogate: 1-Chlorooctane	87.2	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	88.4	% 63.6-15	54						

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Celey D. Keene, Lab Director/Quality Manager



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

Received:	08/03/2012	Sampling Date:	08/03/2012
Reported:	08/06/2012	Sampling Type:	Soil
Project Name:	POKER LAKE UNIT #78 SWD	Sampling Condition:	Cool & Intact
Project Number:	BOPCO	Sample Received By:	Jodi Henson
Project Location:	EDDY CO., NM		

Sample ID: MANIFOLD FLOOR 12' (H201814-07)

Chloride, SM4500CI-B	mg/kg		Analyze	Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	08/06/2012	ND	416	104	400	3.92	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/06/2012	ND	167	83.6	200	3.32	
DRO >C10-C28	429	10.0	08/06/2012	ND	153	76.5	200	8.37	
EXT DRO >C28-C35	98.5	10.0	08/06/2012	ND .					
Surrogate: 1-Chlorooctane	96.0	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	97.6	% 63.6-15	4						

Sample ID: SB #2 SUR/ EP. A 8' (H201814-08)

Chloride, SM4500Cl-B	mg/kg		Analyze	Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1560	16.0	08/06/2012	ND	416	104	400	3.92	
TPH 8015M	mg	/kg	Analyze	d By: MS		<u> </u>			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/06/2012	ND	167	83.6	200	3.32	
DRO >C10-C28	337	10.0	08/06/2012	ND	153	76.5	200	8.37	
EXT DRO >C28-C35	126	10.0	08/06/2012	ND					
Surrogate: 1-Chlorooctane	97.8	% 65.2-14	10						
Surrogate: 1-Chlorooctadecane	104	% 63.6-15	54						

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Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager



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

Received:	08/03/2012	Sampling Date:	08/03/2012
Reported:	08/06/2012	Sampling Type:	Soil
Project Name:	POKER LAKE UNIT #78 SWD	Sampling Condition:	Cool & Intact
Project Number:	BOPCO	Sample Received By:	Jodi Henson
Project Location:	EDDY CO., NM		

Sample ID: SB #4 SUR (H201814-11)

Chloride, SM4500Cl-B	mg/kg		Analyze	Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	20000	16.0	08/06/2012	ND	416	104	400	3.92	
TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/06/2012	ND	167	83.6	200	3.32	
DRO >C10-C28	1310	10.0	08/06/2012	ND	153	76.5	200	8.37	
EXT DRO >C28-C35	320	10.0	08/06/2012	ND					
Surrogate: 1-Chlorooctane	99.0	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	123	% 63.6-15	4						

Sample ID: POWER POLE NORTH (H201814-12)

Chloride, SM4500CI-B	mg/kg		Analyze	Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	40000	16.0	08/06/2012	ND	416	104	400	3.92	
ТРН 8015М	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/06/2012	ND	167	83.6	200	3.32	
DRO >C10-C28	15.2	10.0	08/06/2012	ND	153	76.5	200	8.37	
EXT DRO >C28-C35	42.7	10.0	08/06/2012	ND					
Surrogate: 1-Chlorooctane	88.2	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	90.3	% 63.6-15	4						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	08/03/2012	Sampling Date:	08/03/2012
Reported:	08/06/2012	Sampling Type:	Soil
Project Name:	POKER LAKE UNIT #78 SWD	Sampling Condition:	Cool & Intact
Project Number:	BOPCO	Sample Received By:	Jodi Henson
Project Location:	EDDY CO., NM		

Sample ID: POWER POLE WEST (H201814-15)

Chloride, SM4500CI-B	mg/	'kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	43200	16.0	08/06/2012	ND	416	104	400	3.92	
TPH 8015M	mg/	mg/kg		d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/06/2012	ND	167	83.6	200	3.32	
DRO >C10-C28	<10.0	10.0	08/06/2012	ND	153	76.5	200	8.37	
EXT DRO >C28-C35	<10.0	10.0	08/06/2012	ND					
Surrogate: 1-Chlorooctane	92.8	% 65.2-14	(0						
Surrogate: 1-Chlorooctadecane	96.8	% 63.6-15	4						

Sample ID: LINES (H201814-16)

Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: HM	-				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10100	16.0	08/06/2012	ND	416	104	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: MS					5-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	52.4	50.0	08/06/2012	ND	167	83.6	200	3.32	
DRO >C10-C28	14900	50.0	08/06/2012	ND	153	76.5	200	8.37	
EXT DRO >C28-C35	3980	50.0	08/06/2012	ND					
Surrogate: 1-Chlorooctane	101 9	65.2-14	0						
Surrogate: 1-Chlorooctadecane	287 % 63.6-154		54						

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 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 incurved by client, its subsidiaries, affliates or successors arising out of or related to the performance of the services. Hereunder by Cardinal, regardless of whether such claims based upon any of the above stated reasons or otherwise. Results relate only to the sample along the above. This report shall not persported except in full with written approval of Cardinal Laboratories.

Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Basin Environmental Service Technologies, LLC				BI	LL TO	a de la calendaria de la c	***********		*********		ANAL	YSIS	RE	QUE	ST	7. X.M. F. L. H.				
Project Manager:	Ben J. Arguijo				Ρ.	0 #:			Ī					ann caca thuint					A CONTRACTOR OF A CONTRACT	
Address: P.O.	Box 301		Company: BOPCO, LP]														
City: Lovingtor	n State: NM	Zip	88	260	Atth: Tony Savoié			1												
Phone #: (575)3	396~2378 Fax #: (575) 35	6-1	429		Ad	ldress: 52	2 w. Mer	mod.	l											
Project #:	Project Owner	: BO	PCO	, LP	Ci	ty: Carls	ad													
Project Name: ?	oker lake Unit 78 SWD	•			St	ate: NM	Zip: 8822	20												
Project Location:	EDDY NM				Ph	ione #: (43	2)556-8	730	1		د									
Sampler Name:	Jody Walters				Fa	x #:			1		S									
FOR LABUSE ONLY	ilen senisten ander ander der mennen ander en senisten einen der mennen im seine senisten an		Π	MATRIX		PRESERV	SAMPL	ING	1		5									Į
Lab I.D. H2D181년	Sample I.D.	(G)RAB OR (C)OMF	# CONTAINERS	GROUNDWATER WASTEWATER SOIL OIL	OTHER:	ACID/BASE: ICE / COOL OTHER:	DATE	TIME	Cholorides.	BOISM	Hold For									
- 1 -	Sample Hiz	6	1	Y.1		X	83.12	9:00	X	X	an maren					nullite Automobile		an canada		
2	Sample #40	6	1	· Y	, .	XI	8.3.12	9:05	X	K	-					. 4				
3	Sample #41	6	Ĺ	X		X	83.12	9:10	X	X										
4	Sample# 42	G	1	X	<u> </u>	X	8.3-12	9:15	1	.K.							-			
	Sample # 43	G	1		<u> </u>	X	8.3.12	9:20	<u>.</u> <u> </u>	X										
	Sample #44	<u>G</u>	1		_	<u></u> χ	8-3-12	9:25	X	X										
7	Manifold Floor 12	6					8.3.12	19:30	X	X	×									
- <u>-</u> 3 S	08#2 sup / E.J. A 8'	6					8-3-12	7:35	$\frac{x}{\sqrt{2}}$		<u>×</u>									
<u> </u>	SOF SUR	6	$\left \cdot \right $			X 8-3-12 9:40			$\frac{y}{x}$			·'	i		· · · · ·					

PLEASE HOTE: Liabdry and Damoges. Caldinal's habely and each's exclusive remeaby for any clash anticy valegoer based in contract or ten, shall be lengted to the amount paid by the client for the analyses. All clashy-including those for register and any other cause values over shall be deented walked unless made in veiling and received by Caminal within 30 days after completion of the applicable

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attities or successors arong out or or related to the performance of services percunder by Cardenal, regordless of whether such claum + based woon any of the above stated reasons or otherwise.

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

Page 11 of 12



August 23, 2012

BEN J. ARGUIJO Basin Environmental Service P.O. Box 301 Lovington, NM 88260

RE: POKER LAKE UNIT #78 SWD

Enclosed are the results of analyses for samples received by the laboratory on 08/09/12 15:30.

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

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

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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

Celez D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	08/09/2012	Sampling Date:	08/08/2012
Reported:	08/23/2012	Sampling Type:	Soil
Project Name:	POKER LAKE UNIT #78 SWD	Sampling Condition:	Cool & Intact
Project Number:	BOPCO	Sample Received By:	Jodi Henson
Project Location:	EDDY CO., NM		

Sample ID: SAMPLE 27 (H201850-02)

BTEX 8021B	mg/	kg	Analyze	d By: AP					I-02		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
Benzene*	<0.050	0.050	08/23/2012	ND	1.92	96.0	2.00	0.190			
Toluene*	<0.050	0.050	08/23/2012	ND	1.96	98.2	2.00	1.16			
Ethylbenzene*	<0.050	0.050	08/23/2012	ND	1.99	99.4	2.00	1.76			
Total Xylenes*	<0.150	0.150	08/23/2012	ND	6.45	107	6.00	2.18			
Surrogate: 4-Bromofluorobenzene (PIL	100 %	6 89.4-12	6								
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP			-				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
Chloride	8130	16.0	08/13/2012	ND	400	100	400	0.00			
TPH 8015M	mg/	kg	Analyze	d By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
GRO C6-C10	<10.0	10.0	08/11/2012	ND	174	86.8	200	1.44			
DRO >C10-C28	1010	10.0	08/11/2012	ND	176	88.2	200	0.126			
EXT DRO >C28-C35	206	10.0	08/11/2012	ND							
Surrogate: 1-Chlorooctane	117 9	65.2-14	0								
Surrogate: 1-Chlorooctadecane	134 9	63.6-15	4								

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager



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

Received:	08/09/2012	Sampling Date:	08/08/2012
Reported:	08/23/2012	Sampling Type:	Soil
Project Name:	POKER LAKE UNIT #78 SWD	Sampling Condition:	Cool & Intact
Project Number:	BOPCO	Sample Received By:	Jodi Henson
Project Location:	EDDY CO., NM		

Sample ID: SAMPLE 45 (H201850-05)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	48.0 16.0		ND	400	100	400	0.00	
ТРН 8015М	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/13/2012	ND	188	94.1	200	0.729	
DRO >C10-C28	13.1	10.0	08/13/2012	ND	190	95.1	200	0.877	
EXT DRO >C28-C35	26.6	10.0	08/13/2012	ND					
Surrogate: 1-Chlorooctane	106	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	107 % 63.6-154		4						

Sample ID: SAMPLE 46 (H201850-06)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	loride 320 16.0		08/13/2012	ND	400	100	400	0.00	
TPH 8015M	TPH 8015M mg/kg			d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/13/2012	ND	188	94.1	200	0.729	
DRO >C10-C28	43.1	10.0	08/13/2012	ND	190	95.1	200	0.877	
EXT DRO >C28-C35	12.6	10.0	08/13/2012	ND					
Surrogate: 1-Chlorooctane	115	% 65.2-14	10						
Surrogate: 1-Chlorooctadecane	119 % 63.6-154		54						

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Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240

(575) 393-2326 FAX (575) 393-2476

Company Name	ompany Name: Basin Environmental Service Technologies, LLC			ogies, LLC	LLC BILL TO ANALYSIS REQUEST													
Project Manage	": Ben J. Arguijo				P.C), #:			Γ									
Address: P.O	. Box 301				Coi	mpany: E	OPCO, LP											-
City: Loving	on State: NM	Zip	: .88	3260	Att	n: Tony	Savoie		1									
Phone #: (575) 396-2378 Fax #:(575) 3	96-1	429)	Áda	dress: 52:	2 w. Mern	bot										
Project #:	Project Owne	: вс	PCO), LP	City	y: Carlsb	ad											
Project Name:	Poker Lake Unit 785	ST	>		Sta	te: MM	Zip: 88220)		1								
Project Location	1: EDDY NM				Pho	one #: (43	2)556-87	30										
Sampler Name:	Jody Walters				Fax	(#:			<u>ب</u> ا		10							
FOR LAB USE CALLY		T.	m	MATRIX		PRESERV.	SAMPLI	NG	<u>,</u>	ہ ا	3							
Lab I.D. H201850	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER WASTEWATER SOIL OIL SLUDGE	OTHER .	ACID/BASE: ICE / COOL OTHER ·	DATE	TIME	Chlos:	BONSTA	Hold Park							
1	SAMPLE 12A	G	i			X	8.8.12	1.00	Y	4								
_ 2	SAmple 27	G	j	<u>, у</u>		$\boldsymbol{\mathbf{x}}$	8.8.12	1:18	1	+								
3	Striple 28	G	1			X	8.8.12	1.15	7	+								
<u> </u>	SAmple 44	<u>C</u>	1.			<u> </u>	8.8.12	1:20	4	1_					 l	 		
5	Sample 45	<u>G</u>	1	X		XI	8.8.12	1:25	1	1					 	 	i	
10	SAmple 46	G	1	<u> </u>		<u></u>	8.812	1:30	.t_	1					 	 		
	Strapte Floor #5	G	1	<u> </u>			8.8.12	1= 49 1	57	-+	4-	-754	<u> </u>		ļ!	 ļ	 	
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PLEASE HOTE: Lincolry and Domoges. Contrait's kabity and client's exclusive remeay for any dawn anking whether based in contrast or rort, shall be limited to the amount pind by the client for the analyses. All claims including these for negligence and any other source whatsoever shall be limited to the should be determined with the applicable service. In movement and clientiaties that is consequent campage, blocking without provide the shared in writing and received by Cardinal writin 30 days abor completion of the applicable service. In one even shall calificable limited for consequent campage, blocking without provided that its representations of the state of the service of the service of the service of the service of the consequences of the service of the

arbitates or or Awares answe out of or related to the performance of severes Berounder by Cardinal relativity of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	28/9/12	Received By:	Phone Result:
100 watt	Tyg: 30	Gode Menson	REMARKS:
Relinquisted By:	Date:	Received By:	
	Time:		Please email results to pm@basinenv.com
Delivered By: (Circle One)		Sample Condition CHECKED/BY: Cool Intact ((pitials)	& TAsavoie@BassPet.com
Sampler - UPS - Bus - Other:		3 Pres Pres CTA	

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-24/6

Ì.



August 21, 2012

BEN J. ARGUIJO Basin Environmental Service P.O. Box 301 Lovington, NM 88260

RE: POKER LAKE UNIT #78 SWD

Enclosed are the results of analyses for samples received by the laboratory on 08/15/12 15:40.

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

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

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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

Celez D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	08/15/2012	Sampling Date:	08/13/2012
Reported:	08/21/2012	Sampling Type:	Soil
Project Name:	POKER LAKE UNIT #78 SWD	Sampling Condition:	Cool & Intact
Project Number:	BOPCO	Sample Received By:	Jodi Henson
Project Location:	EDDY CO., NM		

Sample ID: G #2, S #2, 7' (H201909-05)

Chloride, SM4500CI-B mg/kg		Analyzed By: HM							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10400	16.0	08/16/2012	ND	416	104	400	0.00	

Sample ID: G #2, S #2, 10' (H201909-06)

Chloride, SM4500CI-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	400	16.0	08/16/2012	ND	416	104	400	0.00	

Sample ID: G #3, S #2, 2' (H201909-07)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	20600	16.0	08/16/2012	ND	416	104	400	0.00	

Sample ID: G #3, S #2, 5' (H201909-08)

Chloride, SM4500Cl-B mg/kg		Analyzed By: HM							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	14000	16.0	08/16/2012	ND	416	104	400	0.00	

Sample ID: G #3, S #2, 7' (H201909-09)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1620	16.0	08/16/2012	ND	416	104	400	0.00	

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Celey D.Kune

Celey D. Keene, Lab Director/Quality Manager



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

Received:	08/15/2012	Sampling Date:	08/14/2012
Reported:	08/21/2012	Sampling Type:	Soil
Project Name:	POKÉR LAKE UNIT #78 SWD	Sampling Condition:	Cool & Intact
Project Number:	BOPCO	Sample Received By:	Jodi Henson
Project Location:	EDDY CO., NM		

Sample ID: G #6, S #3, 5' (H201909-15)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	17400	16.0	08/16/2012	ND	416	104	400	0.00	

Sample ID: G #6, S #3, 10' (H201909-16)

Chloride, SM4500CI-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6500	16.0	08/17/2012	ND	416	104	400	0.00	

Sample ID: G #6, S #3, 15' (H201909-17)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4400	16.0	08/17/2012	ND	416	104	400	0.00	

Sample ID: G #7, S #2, 2' (H201909-18)

Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6640	16.0	08/17/2012	ND	416	104	400	0.00	

Sample ID: G #7, S #2, 5' (H201909-19)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4480	16.0	08/17/2012	ND	416	104	400	0.00	

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Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

- ND
 Analyte NOT DETECTED at or above the reporting limit

 RPD
 Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500CI-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 7 of 10



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name	" Basin Environmental Service '	Technologies, LLC	BILL TO	ANALYSIS REQUEST	
Project Manage	¹¹ Ben J. Arguijo		P.O. #:		A REAL PROPERTY AND A REAL
Áddress: P.O	. Bôx 301		Company: BOPCO, LP		
City: Lovingt	on State: MM	Zip: 88260	Alln: Tony Savole		
Phone #: (575)396-2378 Fax #: (575) 3	96-1429	Address: 522 w. Mermod		
Project #:	Project Owner	BOPCO, LP	City: Carlsbad		
Project Name:	Poker Lake Unit 78 SWD		State: NM Zip: 88220		
Project Location	EDDY NM.	······	Phone #: (432) 556-8730		
Sampler Name:	Jooy walters		Fax#:		
FOR LAB USE CHEY	nar e na manar e cantende fan - zonen de gener gener de gener fan de gener fan de gener de gener de gener de g I	MATRIX	PRESERV SAMPLING		
Lab I.D. H2D19D9	Sample I.D.	(G)RAB OR (C)OMF # COMTAINERS GROUNDWATER WASTEWATER SOIL OIL OIL	OTHER: ACID/BASE: OTHER: OTHER: DATHER ACID/BASE: OTHER: ACID/BASE: OTHER:	Chlor. 200	
11	G4, 5#2, 5	GIIIX	Xi 8-14-12 9:00	X	
12	G#4, S#2 , 7	GIZX	X 8.14.12 9.20		
13	645,543,5	ĠJ X	X 8-14-12 9:40		
14	G#5, S#3, 10'	GI X	X 8.14-12 10:00	X · · · ·	
15	GH6, SH3, 5'	<u>CIX</u>	X 8:14-12 10:20		
16	6#6,5#3,10	GIX	Y 9:14-12 10:50		
11	G#b, SH3, 15'	GIX	X 81912 11.20		
15	G#7, 5#2, 2'	GIXI	\$ 8.14.12 11.50		
19	6#7,5#2,5	GIIXI	X 8-14-12 12:10		
20	GH8, 5#2, 2	GII YI	8-14-12 12:30		
PLEASE HOTE: WIDNY a	id Damages. Cardinal's hability and client's exclusive remedy for a	later ausing whether based in contract	or test, shall be trailed to the amount paid by the client for	for the	

analyses. All claims including those for neglegoing and any other cause vibilitories whether backed univer unal sectored by Cacinal within 30 cays after completion of the applicable service. In no event shap cardinal be liable for the dependence of the applicable service. In no event shap cardinal be liable for the dependence of the applicable service.

athliates of auccessors ansing out of or related to line periodinance of services hereinder by Cantholi reperdies's of whether such claim in bated upon any of the apove claim reserves or ofference.

Relinquished By: Relinquished By:	Date: Received By:	, Henson	Phone Result: Fax Result: REMARKS:	O Yes C Yes		Add'l Phone #: Add'l Fax #:	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Time: Sam So So So So So So So So So So	ple Condition CHECKEDBY L Intact (Initialis) Yes B Yes No I No I	Plea : & TA	se emai savoie®	l resul BassPet	ts to pm⊗basinenv.com ≠com	
† Cardinal cannot accept verbal c	hanges. Please fax written ch	anges to 505-393-2476					Page



September 20, 2012

BEN J. ARGUIJO Basin Environmental Service P.O. Box 301 Lovington, NM 88260

RE: PLU 78 SWD PAD

Enclosed are the results of analyses for samples received by the laboratory on 09/12/12 16:20.

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

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

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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

Celez D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	09/12/2012	Sampling Date:	09/12/2012
Reported:	09/20/2012	Sampling Type:	Soil
Project Name:	PLU 78 SWD PAD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SAMPLE #27 (H202207-02)

BTEX 8021B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/20/2012	ND	2.25	113	2.00	9.99	
Toluene*	<0.050	0.050	09/20/2012	ND	2.46	123	2.00	10.6	
Ethylbenzene*	<0.050	0.050	09/20/2012	ND	2.44	122	2.00	11.2	
Total Xylenes*	<0.150	0.150	09/20/2012	ND	7.41	124	6.00	10.8	
Surrogate: 4-Bromofluorobenzene (PIL	99.9	% 89.4-12	6						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	576	16.0	09/17/2012	ND	416	104	400	3.92	
ТРН 8015М	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/17/2012	ND	190	94.9	200	2.67	
DRO >C10-C28	<10.0	10.0	09/17/2012	ND	186	92.9	200	5.65	
EXT DRO >C28-C35	<10.0	10.0	09/17/2012	ND					
Surrogate: 1-Chlorooctane	89.9	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	91.2	% 63.6-15	4						

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 any other cause whatscever 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 subsidianes, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims based and boxe stated reasons or otherwise. Results relate only to the sample identified above. This report shall not be reproduced except in full with written approval of Cardinal Librations.

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 3 of 7



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

Received:	09/12/2012	Sampling Date:	09/12/2012
Reported:	09/20/2012	Sampling Type:	Soil
Project Name:	PLU 78 SWD PAD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: SAMPLE #48 (H202207-04)

BTEX 8021B	mg/	'kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/20/2012	ND	2.25	113	2.00	9.99	
Toluene*	<0.050	0.050	09/20/2012	ND	2.46	123	2.00	10.6	
Ethylbenzene*	<0.050	0.050	09/20/2012	ND	2.44	122	2.00	11.2	
Total Xylenes*	<0.150	0.150	09/20/2012	ND	7.41	124	6.00	10.8	
Surrogate: 4-Bromofluorobenzene (PIL	97.8	% 89.4-12	26						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	608	16.0	09/17/2012	ND	416	104	400	3.92	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/17/2012	ND	190	94.9	200	2.67	

ND

ND

186

92.9

200

5.65

09/17/2012

09/17/2012

Cardinal Laboratories

DRO >C10-C28

EXT DRO >C28-C35

Surrogate: 1-Chlorooctane

Surrogate: 1-Chlorooctadecane

*=Accredited Analyte

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Celeg D. Keine

<10.0

<10.0

93.2%

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65.2-140 63.6-154

Celey D. Keene, Lab Director/Quality Manager

Page 5 of 7



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

AMALVSIS DEOLIEST

101 East Marland, Hobbs, NM 88240

(575) 393-2326 FAX (575) 393-2476 Company Name: BASTN ENVIRON mental Service Technologies LLC BILL TO BE BILL TO BE BILL TO BE DE LE
Undit environ menter Dervice Technologies CLC		
Project Manager: Ben J Arguije	P.O. #:	
Address: P.O. BOY 301	Company: Borco, LP	
City: Louington State: NM Zip: BB260	Attn: Tony Souide	
Phone #: (575) 396 - 2378 Fax #: (575) 396 - 1429	Address: 522 w mermod	
Project #: Project Owner: Bofco LP	City: Carlsbad	
Project Name: PLU 78 500D	State: Nm Zip: 88260	
Project Location: EDDY, N.M.	Phone #: (432) 5568730	
Sampler Name: Jody Walters	Fax #:	
FOR LABUSE OULY	PRESERV SAMPLING	
H205202 (G)RAB OR (C)OM # CONTAINERS GROUNDWATER SOIL OIL	OTHER. ACID/BASE: ICE / COOL OTHER: OTHER:	Chlorid BRIST
1 Sample #26 G1 X	X 942-12 1.00	X X X
2 Sample HZ7 GIX	X 9-12-12 1.10	\times \times \times
3 Sumple #47 61 1	X 9-12-12 1.20	
4 Sumple #48 G 1 1	1 9-12-12 1.30	×××
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PLEASE NOTE: Lincidity and Damagers. Candred's leaderly and dearly and dearly and dearly and dam arising whether based in contract or tort, study be limited to the amount paid by the chemical based and any other study and the applicable and any other study with a state method by the chemical or the applicable and any other study and by the chemical or the applicable and any other study a

employees. All columns encluding trace for perigreme and any other cancel washing with the encluding with the second of the encluding trace for perigreme and any other cancel washing the second of the encluding without framework and the encluding without framework interruptions. Use a second to be added to be encluded or concequence to cancel and encluding without frameworks, business interruptions, tax is and the second or the encluded or th

effairs or processors arising out of an related to the performance of services herearder by Cardinal, repartiess of whither such claim is based upon any of the above stabed reasons of otherwise.

Phone Result: O Yes O No |Add'l Phone # Relinquished By: Repeived By: Date Fax Result: I Yes I No Add'l Fax #: REMARKS Time Please email results to Pmebasivenusion + Relinquished By: Date: Received By: TASAVOICEBOSSPOt. com * bJFX added 9/18/12-Time: CHECKED BY: Sample Condition Delivered By: (Circle One) Cool Intact О Sampler - UPS - Bus - Other: NO NO † Cardinal cannot accept verbal changes, Please fax written changes/tb (575) 393-2326 LID



October 17, 2012

BEN J. ARGUIJO Basin Environmental Service P.O. Box 301 Lovington, NM 88260

RE: POKER LAKE UNIT #78 SWD

Enclosed are the results of analyses for samples received by the laboratory on 10/15/12 11:45.

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

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

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	10/15/2012	Sampling Date:	10/08/2012
Reported:	10/17/2012	Sampling Type:	Soil
Project Name:	POKER LAKE UNIT #78 SWD	Sampling Condition:	Cool & Intact
Project Number:	BOPCO	Sample Received By:	Jodi Henson
Project Location:	EDDY CO., NM		

Sample ID: GRID 5 FLOOR 12' (H202502-05)

Chloride, SM4500CI-B	Analyzed	i By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3640	16.0	10/17/2012	ND	400	100	400	0.00	

Sample ID: GRID 6 FLOOR 15' (H202502-06)

Chloride, SM4500Cl-B	/kg	Analyze	d By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4200	16.0	10/17/2012	ND	400	100	400	0.00	

Sample ID: GRID 7 FLOOR 7' (H202502-07)

Chloride, SM4500CI-B	Analyzed	By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3000	16.0	10/17/2012	ND	400	100	400	0.00	

Sample ID: GRID 8 FLOOR 12' (H202502-08)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP			<u> </u>		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3600	16.0	10/17/2012	ND	400	100	400	0.00	

Sample ID: HEADER FLOOR 10' (H202502-09)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2600	16.0	10/17/2012	ND	400	100	400	0.00	

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*=Accredited Analyte

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Basin Environmental Service Technologies, LLC				T	BILL TO				ANALYSIS REQUEST															
Project Manage	^{r:} Ben J. Arguijo							P.O.	#:				I		1									
Address: P.O	Address: P.O. Box 301						Com	pàn	ÿ:≞	OPCO, LE	,										{			
City: Lovingt	on State: NM	Zip	: 88	260				Attn	: т	'oniy	Savoie								[
Phone #: (575) 396-2378 Fax #: (575) 3	96-:	429					Add	ress	: 52	2 W. Mer	mod		1										
Project #:	Project Owner	r: BC	PCO	, LP				City	: Ca	rlsi	bad			ł										
Project Name:	Poker Lake Unit 78	Sil	DC					State	e: NM	i	Zip: 8822	0							1					
Project Locatio	n: EDDY NM	×						Pho	ne #:	(43	2) 556-87	30												
Sampler Name:	Toduck Hers							Fax	#:					ļ										
FOR LAB USE DULY		Ι.			MAT	RIX		P	RES	ERV.	SAMPLI	NG	1 ~											
Lab I.D. H2D2502	Sample I.D.	(G)RAB OR (C)OMF	# CONTAINERS	GROUNDWATER	SOIL	OIL	SLUDGE	OTHER :	ACIU/BASE: ICE / COOL	OTHER ;	DÀTE	TIME	Chloride			•								
1	Grid Floor 181	G	Ľ		X				X		10-8-12	7:00	X		<u> </u>			<u> </u>						
2	Grid Z Floor 10	G	1		X				<u> </u>		10.8.12	7.05							<u> </u>					
3	Grid 3 Floor 10'	G.	<u> </u>		<u> </u>		<u>.</u>		_ <u> X</u>	[10-8-12	7.10	7											
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PLEASE NOTE: Lized ty and Damages, Carcinal's liability and chen's orches we remedy to any daim prising whether based in contract or (ort, shall be limited to the amount paid by the stert for the analyses. All claims inclusing those for negligence and any other cause whatsoever shall be immed worked unless made in writing and received by Cardinal within 30 days after consistent of the applicable service. In no overticable Cardinal be (upple for incidental or consequential damages, inclusing whether but cardinal be upple start as a prior and analy other consequence damages, inclusing whether but cardinal be upple start and and the applicable service. In no overticable Cardinal be (upple for incidental or consequencial damages, inclusing whether but cardinal bears as discussions) and over the start consequence of the applicable and analysis of use or loss of prior barries of the start of the above the cardinal related as of whether such claim is based upper and of the above start dressing or date and analysis.

Relinguished By:	Date: Received By: //	Phone Result: 🛛 Yes 🖾 No (Add'l Phone #:
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I work How	DUNI MILLAN SAUCHONS	Please email results to pm@basinenv.com
Delivered By: (Circle One)	Sample Condition CHECKED BY:	& TAsavoie@BassPet.com
Sampler - UPS - Bus - Other:	Ves Yes	

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


November 01, 2013

BEN J. ARGUIJO Basin Environmental Service P.O. Box 301 Lovington, NM 88260

RE: POKER LAKE UNIT #78 SWD

Enclosed are the results of analyses for samples received by the laboratory on 10/31/13 15:45.

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

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Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celez D. Keine

Celey D. Keene Lab Director/Quality Manager



Notes and Definitions

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

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*=Accredited Analyte

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Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager

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