

Rice Environmental Consulting & Safety

P.O. Box 5630 Hobbs, NM 88241 Phone 575.393.4411 Fax 575.393.0293

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CERTIFIED MAIL RETURN RECEIPT NO. 7008 1140 0001 3070 5801

April 11th, 2012

Mr. Edward Hansen

New Mexico Energy, Minerals, & Natural Resources Oil Conservation Division, Environmental Bureau 1220 S. St. Francis Drive Santa Fe, New Mexico 87505

RE: ICP Report and Corrective Action Plan (CAP) Rice Operating Company – BD SWD System BD G-16 vent (1R426-29): UL/G sec. 16 T22S R37E

Mr. Hansen:

RICE Operating Company (ROC) has retained Rice Environmental Consulting and Safety (RECS) to address potential environmental concerns at the above-referenced site in the BD Salt Water Disposal (SWD) system. ROC is the service provider (agent) for the BD SWD System and has no ownership of any portion of the pipeline, well, or facility. The system is owned by a consortium of oil producers, System Parties, who provide all operating capital on a percentage ownership/usage basis.

Background and Previous Work

The site is located approximately 3 miles south of Eunice, New Mexico at UL/G sec. 16 T22S R37E as shown on the Site Location Map (Figure 1). Groundwater at this site is located approximately 96 +/- feet below ground surface (bgs).

In 2002, ROC initiated work on the former BD G-16 vent. The site was delineated using a backhoe and soil samples were screened at regular intervals for both hydrocarbons and chlorides. The excavation reached dimensions of $16 \times 16 \times 16$ feet bgs where composite samples were taken for laboratory verification. Laboratory tests of the site showed gasoline range organics (GRO) that were non-detect and diesel range organics (DRO) that were non-detect, with the exception of the remediated backfill which was 11.0 mg/kg. Laboratory chloride readings at the site were 3,240 mg/kg for the bottom composite, 3,640 mg/kg on the sidewall composite, and the remediated backfill had a reading of 144 mg/kg. At 16 feet bgs, a 1 ft clay layer was installed to inhibit further chloride migration. The soils were blended on site and the remediated backfill was returned to the excavation to bring it back to ground surface. The area was contoured to the surrounding landscape and an identification plate was placed on the surface of the site to mark its location for future environmental considerations. A junction box is no longer needed at the site. NMOCD was notified of potential groundwater impact on January 31^{st} , 2003, and a junction box

disclosure report was submitted to NMOCD with all the 2002 junction box closures and disclosures.

An Investigation and Characterization Plan (ICP) was submitted to the NMOCD on July 2nd, 2010 and approved on July 19th, 2010. The plan proposed additional investigation of the soils surrounding the former junction box, and the installation of monitoring well(s) to delineate groundwater quality if warranted.

ICP Investigative Results

Per the ICP, nine soil bores were advanced through the former junction box site on September 13th and 14th, 2010 (Figure 2). ROC personnel field tested the soil for chlorides and screened in the field with a photo-ionization detector (PID). Representative samples from the bore were taken to a commercial laboratory for confirmation of chloride and hydrocarbon field numbers (Appendix A). Laboratory readings in SB-3, SB-5, SB-6, SB-7, SB-8, and SB-9 exhibited chloride concentrations that decreased with depth. SB-3 decreased from 5,680 mg/kg at 20 ft to 2,720 mg/kg at 75 ft, SB-5 decreased from 3,800 mg/kg at 30 ft to 2,600 mg/kg at 75 ft, SB-6 decreased from 4,240 mg/kg at 20 ft to 1,090 mg/kg at 50 ft, SB-7 decreased from 3,160 mg/kg at 20 ft to 576 mg/kg at 75 ft, SB-8 decreased from 2,240 mg/kg at 55 ft to 1,760 mg/kg at 75 ft, and SB-9 decreased from 3,040 mg/kg at 30 ft to 1,380 mg/kg at 60 ft. SB-1 increased with depth from 2,320 mg/kg at 35 ft to 6,640 mg/kg at 75 ft, SB-2 increased with depth from 2,920 mg/kg at 45 ft to 3,680 mg/kg at 75 ft, and SB-4 increased with depth from 2,000 mg/kg at 65 ft to 3,840 mg/kg at 75 ft. Laboratory readings for GRO, DRO, and BTEX showed non-detect throughout all bores, except SB-7 where the GRO was 10.6 mg/kg at 20 ft and 12.5 mg/kg at 75 ft.

On January 13th, 2011, a monitor well was installed 26 ft southeast of the former junction box site (Figure 4). As the well was being installed, ROC personnel field tested the soil for chlorides and screened in the field with a photo-ionization detector (PID). Representative samples from the well were taken to a commercial laboratory for confirmation of chloride and hydrocarbon field numbers (Appendix A). Laboratory readings showed chloride numbers of 4,480 mg/kg at 10 ft bgs, 4,160 mg/kg at 75 ft bgs, and 1,390 mg/kg at 80 ft bgs. GRO and DRO readings were non-detect in all three samples.

On March 21st, 2011, an additional five soil bores (SB-10 through SB-15) were installed at the site (Figure 3). ROC personnel field tested the soil for chlorides and screened in the field with a photo-ionization detector (PID). Representative samples from SB-11, SB-13, SB-14, and SB-15 were taken to a commercial laboratory for confirmation of chloride and hydrocarbon field numbers (Appendix A). Laboratory chloride readings significantly decreased with depth. SB-11 decreased from 1,060 mg/kg at 10 ft to 208 mg/kg at 35 ft, SB-13 decreased from 2,400 mg/kg at 5 ft to 160 mg/kg at 40 ft, SB-14 decreased from 7,360 mg/kg at 5 ft to 160 mg/kg at 40 ft, and SB-15 decreased from 688 mg/kg at 15 ft to 128 mg/kg at 30 ft. GRO and DRO readings for all laboratory samples showed non-detect.

The monitor well has been sampled quarterly since its installation (Figure 4). The most recent (October 21, 2011) groundwater samples tested 64 mg/L in the near-source well (MW-1) (Appendix B). Five quarters of monitoring well sampling data have been collected, and each sampled constituent has remained below WQCC standards.

Recommendations

Based on the activities conducted during the Investigation and Characterization phase of delineation at the BD G-16 vent site, RECS submits the following as a Corrective Action Plan:

Five quarters of monitoring well sampling show no impact to groundwater above WQCC standards; as such ROC proposes to plug and abandon the near-source well (MW-1) with a 1-3% bentonite/concrete slurry with a 3 ft concrete cap.

The site has an existing clay liner measuring 16 ft x 16 ft at 16 ft bgs. ROC proposes to place a 20-mil, reinforced poly liner at 4-5 ft bgs that will measure 96 ft x 98 ft (Figure 5). The liner will cover all the soil bore points and extend past the farthest soil bores in each direction by five feet. The liner will provide a barrier that will inhibit the downward migration of chlorides to groundwater. The soils placed above the liner will have a laboratory chloride reading no greater than 500 mg/kg and a field PID measurement below 100 ppm. Excavated soil will be evaluated for use as backfill, and any soil requiring disposal will be properly disposed of at a NMOCD approved facility. The surface soils over and surrounding the site will be prepared with soil amendments as needed and then seeded with a native vegetative mix. Vegetation above the liner will also provide a natural infiltration barrier for the site since plants capture water through their roots thereby reducing the volume of water moving through the vadose zone to groundwater.

Upon completion of the CAP work elements, we anticipate ROC will submit a written report which will include a request for "remediation termination" and the closure of the regulatory file.

ROC appreciates the opportunity to work with you on this project. Please call Hack Conder at (575) 393-9174 or me if you have any questions or wish to discuss the site.

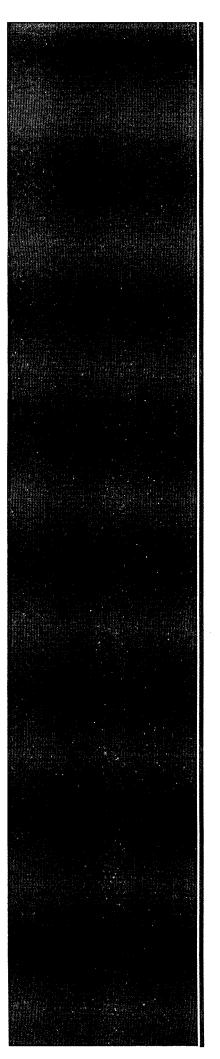
Sincerely,

ACWA

Lara Weinheimer Project Scientist RECS (575) 441-0431

Attachments:

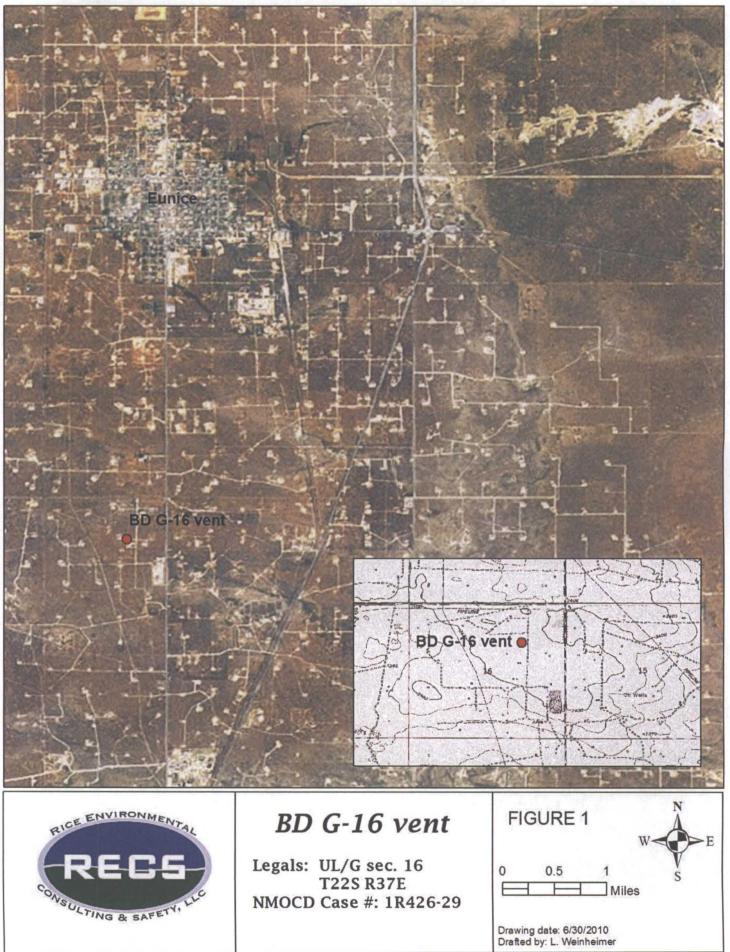
Figure 1 – Site Location map
Figure 2 – Soil Bore Installation (SB 1 – 9)
Figure 3 – Soil Bore Installation (SB 10 – 15)
Figure 4 – MW Installation and Sampling plat
Figure 5 – Proposed Liner
Appendix A – Soil Bore Logs and Laboratory Confirmation
Appendix B – Monitor Well Sampling Analysis



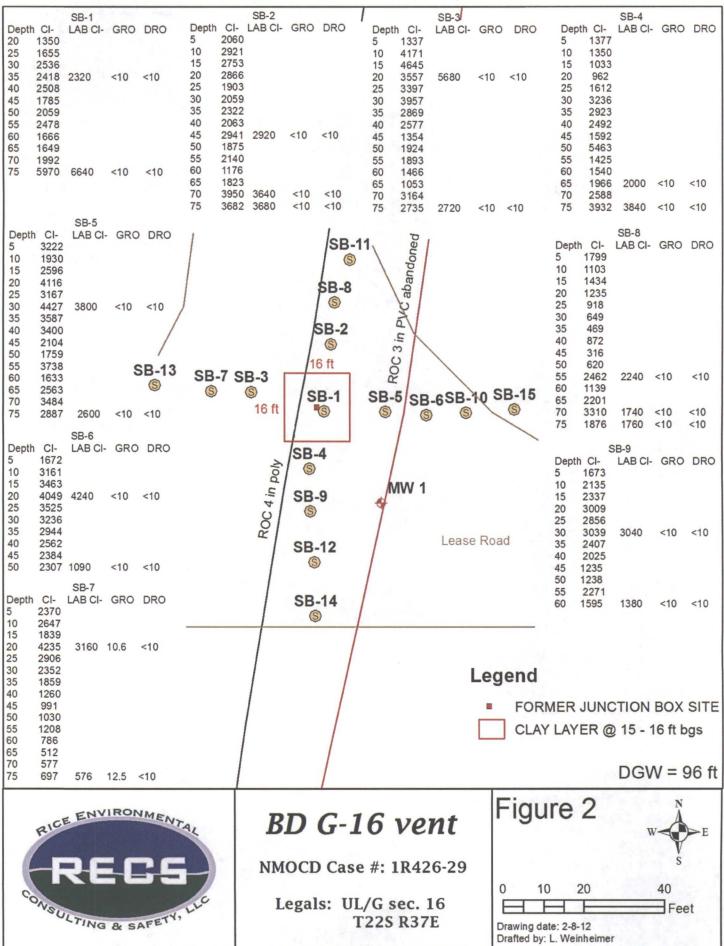
Figures

RICE Environmental Consulting and Safety (RECS) P.O. Box 5630 Hobbs, NM 88241 Phone 575.393.4411 Fax 575.393.0293

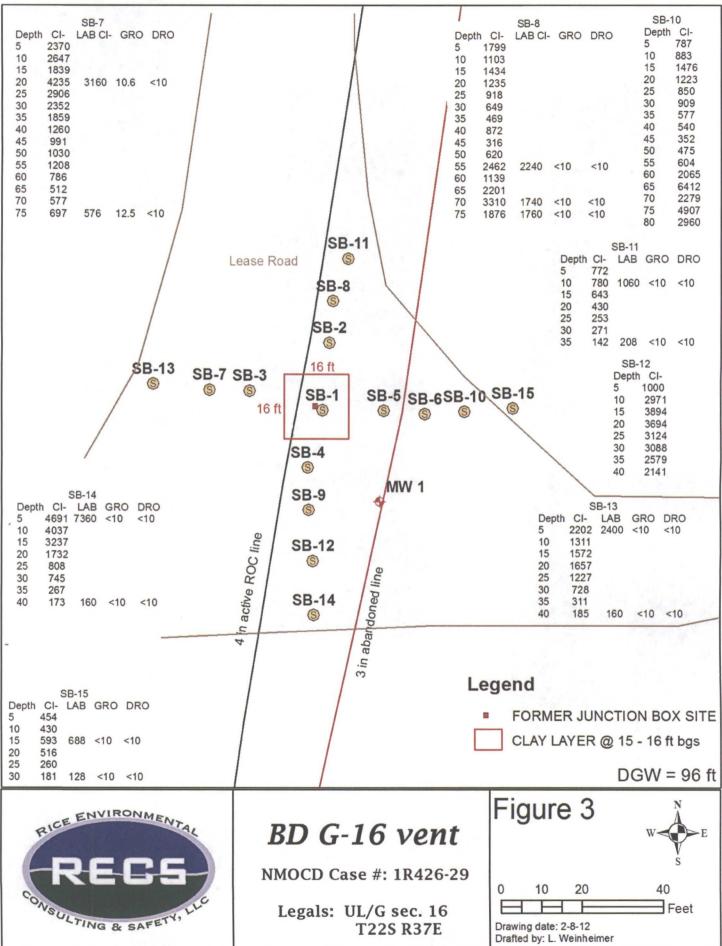
Site Location

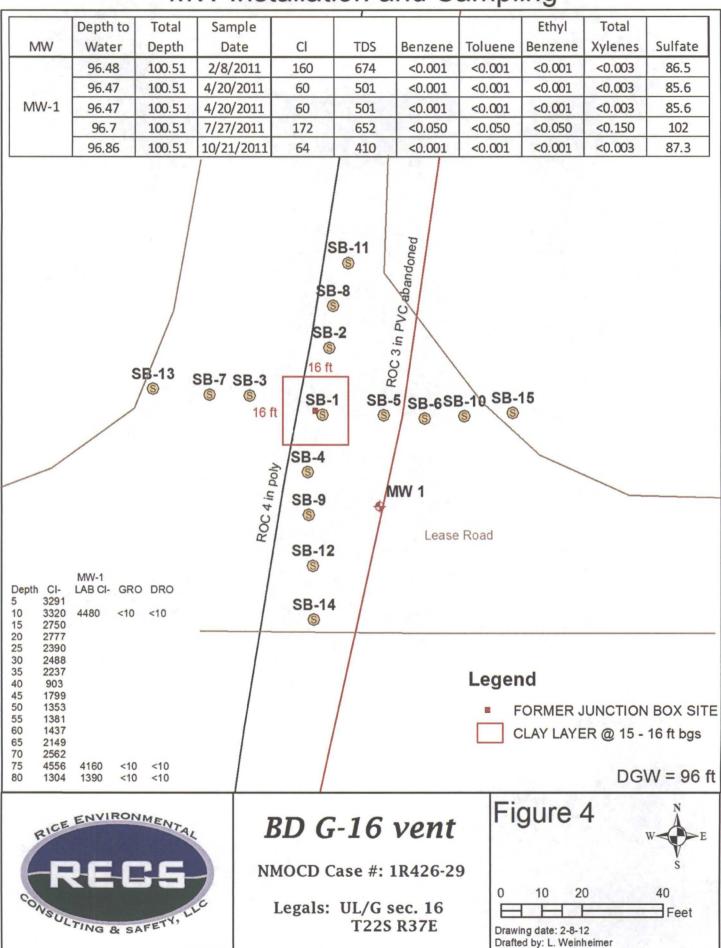


Soil Bore Installation



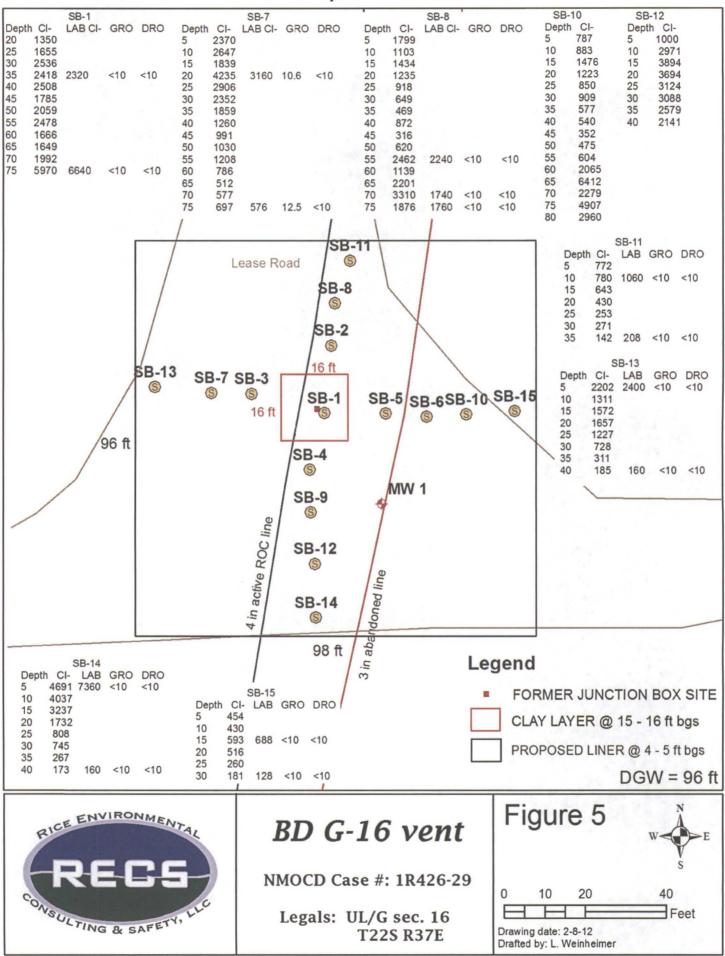
Soil Bore Information





MW Installation and Sampling

Proposed Liner



Appendix A Soil Bore Logs and Laboratory Confirmation

RICE Environmental Consulting and Safety (RECS) P.O. Box 5630 Hobbs, NM 88241 Phone 575.393.4411 Fax 575.393.0293

| | ger: ller: | Harri | a Weinho ison & C nc. Drillin | ooper | SB-7 SB-3 SB-1 SB-5 SB-6 | | R | LECS | e de |
|-----------------|--------------------------|-------|-------------------------------------|----------|---|-----|--|-----------------------|--------------------------|
| Start End | Method Date: Date: | 0.0 | Air Rota 9/13/201 9/13/201 | 10 10 | 58-4 58-9 | | Project Nan BD G-16 ve ject Consulta | ent SB-1 Int: RECS | |
| Comme | | = 75 | Drafte | | of the former junction box site. .ara Weinheimer GW = 82 ft | Lat | ation: UL/G s 32°23'36.578 g: 103°9'53.8 | "N | County: LE/ State: NM |
| Depth (feet) | chlori field te | 1000 | LAB | PID | Description | | Lithology | Well | Construction |
| | | | | | Light orangey brown very fine sand | | | | |
| 20 ft | 135 | 0 | | 0.2 | with caliche particles. Dry. No odor. | | | | |
| | | | | | Light orangey brown very fine sand. Dry. No odor. | | | | |
| 25 ft | 165 | 5 | | 0.2 | | | | | |
| | | | | | | | | | |
| 30 ft | 253 | 0 | | 1 | - | | | | |
| 35 ft | 241 | 8 | CI- 2320 | 0.7 | | | | | |
| | | | GRO <10 DRO <10 | | Orangey brown very fine sand. Slightly moist. No odor. | | | | |
| 40 ft | 250 | 8 | | 0.3 | | | | | |
| | | | | | | | | | |
| 45 ft | 178 | 5 | | 0.3 | | | | | bentonite |
| 50 ft | 205 | 9 | | 0.4 | | | | | seal |
| | | | | | Tan very fine sand. Slightly moist. No odor. | | | | |
| 55 ft | 247 | 8 | | 0.4 | | | | | |
| | | | | | | | | | |
| 60 ft | 166 | 6 | | 0.3 | | | | | 12.41 |

| Depth (feet) | chloride field tests | LAB | PID | Description | Lithology | Well Construction |
|-----------------|-------------------------|--------------------|-----|---|-----------|-------------------|
| | | | | Orangey brown very fine sand. Slightly moist. No odor. | | |
| 65 ft | 1649 | | 0.1 | | | |
| 70 ft | 1992 | | 0.1 | | | |
| 75 ft | 5970 | CI- 6640 GRO | 0.2 | | | |
| | | <10 DRO <10 | | | | |

| Dril Drilling Start End | | Harr I | Draft | ooper ng iry 10 10 orth of t | he former junction box site. GW = 82 ft | Lo | Project Nar BD G-16 ve bject Consulta | ent ant: REC sec. 16 Ta 9"N | ECS Well ID: t SB-2 t: RECS c. 16 T22S R37E V County: LEA | | |
|----------------------------------|-------------------|-----------|-------------|---|--|----|---|--------------------------------------|--|--|--|
| Depth (feet) | chlor field te | | LAB | PID | Description | | Lithology | Well | Construction | | |
| | | 20 | | | | | | | | | |
| 5 ft | 206 | 0 | | 1.2 | Light orangey brown very fine sand | | | | | | |
| 10 ft | 292 | 1 | | 0.1 | with caliche. Dry. No odor. | | | | | | |
| 15 ft | 275 | 3 | | 0.3 | | | | | | | |
| 20 ft | 286 | 6 | | 0.0 | | | | | | | |
| 25 ft | 190 | 3 | | 0 | Orangey brown very fine sand. Dry. No odor. | | | | | | |
| 30 ft | 205 | 9 | | 0.1 | | | | | | | |
| 35 ft | 232 | 2 | | 0.7 | Light orangey brown very fine sand | | | | | | |
| 40 ft | 206 | 3 | | 0 | with consolidated rock. Dry. No odor. | | | | bentonite seal | | |
| 45 ft | 294 | 1 | CI- 2920 | 0 | | | | | | | |

| Depth (feet) | chloride field tests | LAB | PID | Description | Lithology | Well Construction |
|-----------------|--|------------|-----|---|-----------|-------------------|
| | 1 | GRO | | | | |
| | 1 | <10 | | Orangey brown very fine sand with | | |
| 10-11 | 12. 2. 2. | DRO <10 | | consolidated rock. Slightly moist. | | |
| | | <10 | | No odor. | | |
| 50 ft | 1875 | | 0 | | | |
| | | | | Light brown very fine sand. Slightly moist. No odor. | | |
| 55 ft | 2140 | | 0.2 | | | |
| | 1.11 | | | Light orangey brown very fine sand. Slightly moist. No odor. | | |
| 60 ft | 1176 | | 0.2 | Clightly molat. No odor. | | |
| | | | | | | |
| 65 ft | 1823 | | 0.2 | | | |
| | | | | Orangey brown very fine sand. | | |
| | 7.5.7 8. 87 | CI- | | Slightly moist. No odor. | | |
| 70 ft | 3950 | 3640 | 0.2 | | | |
| | 1. | GRO | | | | |
| | | <10 DRO | | | | |
| | | <10 | | | | |
| | | CI- | | | | |
| 75 ft | 3682 | 3680 | 0.2 | | | |
| | | GRO | | | | |
| | | <10 | | | | |
| | | DRO | | | | |
| | | <10 | | | | |

| Drilling Start End Comme | Iler: Method Date: Date: Date: Ents: Locate TD = | Harrison Inc. D Air r 9/13/ 9/13/ ed 16 ft D 75 ft | otary 2010 2010 west of th | e former junction box site. GW = 82 ft | Loc Lat: | F | ent ant: RECS sec. 16 T22 6"N | |
|-----------------------------------|--|---|-------------------------------------|--|-------------|-----------|--|-------------|
| Depth (feet) | chlorid field tes | | B PID | Description | | Lithology | Well C | onstruction |
| 5 ft | 1,337 | | 0.9 | Light orangey brown very fine sand with caliche. Dry. No odor. | | | | |
| 10 ft | 4,171 | | 0.1 | | | | | |
| 15 ft | 4,645 | | 0.3 | Light orangey brown very fine sand. | | | | |
| 20 ft | 3,557 | CI 568 GR <1 DR | 0.2 0 | Dry. No odor. | | | | |
| 25 ft | 3,397 | <1 | 0.9 | | | | | |
| 30 ft | 3,957 | | 1.8 | | | | | |
| 35 ft | 2,869 | | 0.5 | • | | | | |
| | | | | Light orangey brown very fine sand with sanstone. Dry. No odor. | | | | bentonite |
| 40 ft | 2,577 | | 0.3 | Orangey brown very fine sand with | | | | > seal |
| 45 ft | 1,354 | | 0.4 | sandstone particles. Slightly moist. No odor. | | | | |

| Depth (feet) | chloride field tests | LAB | PID | Description | Lithology | Well Construction |
|-----------------|-------------------------|--------------------|-----|---|-----------|-------------------|
| | | | | | | |
| 50 ft | 1,924 | | 0.1 | | | |
| 6 | | | | | | |
| 55 ft | 1,893 | | 0 | | | |
| | | | | Orangey brown very fine sand. Slightly moist. No odor. | | |
| 60 ft | 1,466 | | 0.1 | | | |
| | | | | | | |
| 65 ft | 1,053 | | 0.4 | | | |
| | | | | | | |
| 70 ft | 3,164 | | 0.2 | | | |
| | | | | | | |
| 75 ft | 2,735 | CI- 2720 GRO | 0.1 | 이 이 성격을 많이 가 있는 | | |
| | | <10 DRO <10 | | | | |

| Dril Drilling Start End | Driller: Harrison Inc. D Drilling Method Air r Start Date: 9/13, End Date: 9/13, | | nc. Drillin Air rota 9/13/20 ⁻ 9/13/20 ⁻ | ooper ng ry 10 10 | SB-7 SB-3 SB-7 SB-3 SB-1 SB-5 SB-6 SB-4 SB-9 | Project Name: Well III BD G-16 vent SB-4 Project Consultant: RECS | | | | |
|----------------------------------|--|----------------|---|-------------------------------|---|---|-----------|------|--------------|--|
| Comme | | ated 1 = 75 | Drafte | | e former junction box site. ara Weinheimer GW = 82 ft | Location: UL/G sec. 16 Lat: 32°23'36.44"N Long: 103°9'53.858"W | | | County: LEA | |
| Depth (feet) | chlori field te | | LAB | PID | Description | | Lithology | Well | Construction | |
| | | | | | Brown sand and caliche (excavation) | 3 | | | | |
| 5 ft | 1377 | 7 | | 0 | | | | | | |
| 10 ft | 1350 |) | | 0 | | 1000 | | | | |
| | | | | | Dark Red Clay | | | | | |
| 15 ft | 1033 | 3 | | 0 | - | | | | | |
| 20 ft | 962 | | | 0.8 | | - | | | | |
| 25 ft | 1612 | 2 | | 0.8 | | | | | | |
| 30 ft | 3236 | 6 | | 0.9 | Very fine tan sand | | | | | |
| 35 ft | 2923 | 3 | | 0 | | | | | | |
| 40 ft | 2492 | 2 | | 0.1 | | | | | bentonite | |
| 45 ft | 1592 | 2 | | 0 | | | | | seal | |

| Depth (feet) | chloride field tests | LAB | PID | Description | Lithology | Well Construction |
|-----------------|-------------------------|-------------|-----|---|-------------------|-------------------|
| 1 | | | | | | |
| 3.0 | | | | Very fine tan sand with caliche rubble | | |
| 50 ft | 5463 | | 0 | | | |
| | | | | Very fine white sand | | |
| 55 ft | 1425 | | 0 | | | |
| | | | | | | |
| 60 ft | 1540 | | 0 | | | |
| | | CI- | | | | |
| 65 ft | 1966 | 2000 | 0 | | | |
| | | GRO <10 | | | | |
| | | DRO | | reddieb brown yery fine good | | |
| | | <10 | | reddish brown very fine sand | | |
| 70 ft | 2588 | | 0 | | | |
| | | | | | | |
| 75 ft | 3932 | CI- 3840 | 0 | | | |
| | | GRO <10 | | | | |
| | | DRO | | | The second second | |
| | | <10 | | | | |

| Dri | jger: Iler: Method | Harris Ir | dan Woo son & C nc. Drillin Air rotai | ooper ng | \$8-7 58-7 58-7 58-1 58-1 58-5 58-6 58-6 | | R | ECS | e: Well ID: | |
|-----------------|--------------------------|--------------|--|----------------|---|--|-----------|-----|---|--|
| End | | 9 | Drafte | 0 st of the | e former junction box site. ra Weinheimer GW = 82 ft | BD G-16 vent Project Consultant: R Location: UL/G sec. 16 Lat: 32°23'36.576"N Long: 103°9'53.639"W | | | SB-5 ECS T22S R37E County: LEA | |
| Depth (feet) | chlorid field te | de | LAB | PID | Description | | Lithology | | State: NM Construction | |
| | | | | | | | | | | |
| 5 ft | 3222 | 2 | 1 | 0 | | | | | | |
| 10 ft | 1930 |) | | 0 | Tan very fine sand | | | | | |
| 15 ft | 2596 | 5 | | 0 | | | | | | |
| 20 ft | 4116 | 6 | | 0 | Reddish brown very fine sand with caliche rubble | | | | | |
| 25 ft | 3167 | , | | 0 | | | | | | |
| 30 ft | 4427 | , | CI- 3800 GRO <10 | 0 | Tan very fine sand | | | | | |
| 35 ft | 3587 | 7 | DRO <10 | 0 | | | | | | |
| 40 ft | 3400 |) | | 0 | | | | | bentonite seal | |
| - | | | | | Brownish red very fine sand | | | | | |
| 45 ft | 2104 | | | 0 | | | | | | |

| Depth (feet) | chloride field tests | LAB | PID | Description | Lithology | Well Construction |
|-----------------|-------------------------|------------|-----|-----------------------------|-----------|-------------------|
| 100 | | | | | | |
| | 1 N 100 | | | | | |
| 50 ft | 1759 | | 0 | | | |
| | | | | Light tan very fine sand | | |
| 55 ft | 3738 | | 0 | Light tan voly into cana | | |
| | 1990 N.M. | | | | | |
| | | | | Tan very fine sand | | |
| 60 ft | 1633 | | 0 | and the second | | |
| | | - | | | | |
| 65 ft | 2563 | | 0 | | | |
| 00 11 | 2000 | 1. | | | | |
| | | | | Brownish red very fine sand | | |
| 70 ft | 3484 | | 0 | | | |
| | | | | | | |
| | | CI- | | | | |
| 75 ft | 2887 | 2600 | 0 | | | |
| | | GRO <10 | | | | |
| | | DRO | | | | |
| | | <10 | | | | |

| Drilling Start End Comme | Method Date: Date: ents: Locat | Draft 50 ft | Cooper ing ary 10 10 ast of th | e former junction box site. ara Weinheimer GW = 82 ft | Project Nan BD G-16 ve Project Consulta | ent SB-6 ent: RECS sec. 16 T22S R37E 66" County: LEA |
|-----------------------------------|---|----------------------------------|---|---|---|---|
| Depth (feet) | chlorid field tes | | PID | Description | Lithology | Well Construction |
| 5 ft | 1672 | | 0 | Tan very fine sand with caliche mix | | |
| 10 ft | 3161 | | 0 | Red very fine sand with caliche mix | | |
| 15 ft | 3463 | | 0 | | | |
| 20 ft | 4049 | Cl- 4240 GRO <10 DRO | 0 | | | |
| 25 ft | 3525 | <10 | 0 | Very fine tan sand | | bentonite |
| 30 ft | 3236 | | 0 | | | seal |
| 35 ft | 2944 | | 0 | | | |
| 40 ft | 2562 | | 0 | | | |
| 45 ft | 2384 | | 0 | Very fine tan sand with caliche rubble | | |

| Depth (feet) | chloride field tests | LAB | PID | Description | Lithology | Well Construction |
|-----------------|-------------------------|-------------|-----|------------------------------|-----------|-------------------|
| 50 ft | 2307 | CI- 1090 | 0 | Reddish brown very fine sand | | |
| 0011 | 2007 | GRO <10 | | | | |
| | | DRO <10 | | | | |

| Dri Drilling Start End Comme | Method Date: Date: ents: Locat | Harrison & Cooper Inc. Drilling Air rotary 9/13/2010 9/13/2010 Located 28 ft west of the former junction box site. Drafted by: Lara Weinheimer TD = 75 ft GW = 82 ft | | | | Project Name: Wa BD G-16 vent S Project Consultant: RECS Location: UL/G sec. 16 T22S R3 Lat: N32°23'36.631" Cou Long: W103°9'54.138" Stat | | |
|--|---|---|-----|---|--|--|------|-------------------|
| Depth (feet) | chloride field test | | PID | Description | | Lithology | Well | Construction |
| 5 ft | 2370 | | 0 | Very fine sand with tan caliche | | | | |
| 10 ft | 2647 | | 0 | Very fine red sand with caliche | | | | |
| 15 ft | 1839 | | 0 | Very fine white sand with caliche | | | | |
| 20 ft | 4235 | CI- 3160 GRO | 0 | | | | | |
| 25 ft | 2906 | 10.6 DRO <10 | 0 | Very fine tan sand with caliche rubble | | | | |
| 30 ft | 2352 | A 4 | 0 | | | | | |
| 35 ft | 1859 | | 0 | | | | | |
| 40 ft | 1260 | | 0 | Brown to tan very fine sand with caliche rubble | | | | bentonite seal |
| 45 ft | 991 | | 0 | | | | | |

| Depth (feet) | chloride field tests | LAB | PID | Description | Lithology | Well Construction |
|-----------------|-------------------------|------------------------|-----|---|-----------|-------------------|
| | | | | Brown to tan very fine sand with caliche rubble | | |
| 50 ft | 1030 | | 0 | | | |
| 55 ft | 1208 | | 0 | | | |
| | | | | Brown fine sand | | |
| 60 ft | 786 | | 0 | | | |
| 65 ft | 512 | | 0 | | | |
| 70 ft | 577 | | 0 | | | |
| 75 ft | 697 | Cl- 576 GRO 12.5 | 0 | | | |
| | | DRO <10 | | | | |

| Dril Drilling Start End | ger: Iler: Method Date: Date: ents: Loc | Harr I | ed 26 ft north of the former junction box site. | | the second se | | | Well ID: SB-8 SS | | |
|----------------------------------|--|-----------|---|----------|---|--|-----------|------------------------|--------------|--|
| Depth | | = 75 | Drafte ft | ed by: L | ara Weinheimer GW = 82 ft | Lat: 32°23'36.841"N Long: 103°9'53.781"W County State: | | | | |
| (feet) | field te | sts | LAB | PID | Description | 14 | Lithology | weil | Construction | |
| | | | | | Light orangey brown very fine sand with consolidated rock. Dry. No | | | | | |
| 5 ft | 1799 | 9 | | 0 | odor. | | | | i e | |
| | | | | | | | | | | |
| 10 ft | 1103 | 3 | - | 0 | | | | | | |
| IUI | 1100 | 5 | | 0 | and the second second | | | | | |
| | | | | | Light orangey brown very fine sand with caliche. Dry. No odor. | | | | | |
| 15 ft | 1434 | 4 | | 0 | | | | | | |
| | | - | | | | | | | | |
| 20 ft | 1235 | 5 | | 0 | | | | | | |
| | | - | | | Orangey brown very fine sand. Dry. | | | | | |
| 25 ft | 918 | | | 0 | No odor. | | | | | |
| 2011 | 010 | | | | | | | | | |
| | 14 | | | | | | | | | |
| 30 ft | 649 | | | 0 | | | | | | |
| | | | | | Orangey brown very fine sand with | | | | | |
| 35 ft | 469 | | | 0 | consolidated rock. Dry. No odor. | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | bentonite | |
| 40 ft | 872 | | | 0 | | | | | seal | |
| | | | | | | | | | | |

| chloride field tests | LAB | PID | Description | Lithology | Well Construction |
|---------------------------|---------------------------|--|---|---|--|
| | | | | and the second | |
| | | | | | |
| | | | . No odor. | | |
| 620 | | 0 | | | |
| | - | | Light orangey tan very fine sand | | |
| S. A. Maria | 01 | | Slightly moist. No odor. | | |
| 2462 | 2240 | 0 | | | |
| | GRO | | | Sec. Sec. Sec. | |
| 14.00 gr (| DRO | | Light orangey brown very fine sand. | | |
| Contraction of the second | <10 | | Slightly moist. No odor. | | |
| 1139 | | 0 | | | |
| State In | | | | | |
| | | | | | |
| 2201 | | 0 | | | |
| | | | and the second second | | |
| st. | | | | | |
| 0010 | CI- | | Slightly moist. No odor. | | |
| 3310 | | 0.2 | | | |
| | <10 | | | | |
| | | | | | |
| 1070 | CI- | - | 1 | | |
| 18/6 | | 0 | | | |
| | <10 | | | | |
| | DRO <10 | | | | |
| | field tests 620 2462 1139 | field tests LAB 620 - 620 - 620 - 620 - 620 - 620 - 620 - 620 - 620 - 620 - 620 - 620 - 620 - 620 - 620 - 620 - 620 - 620 - 680 - 1139 - 2201 - 2201 - 2201 - 3310 1740 6R0 -<10 | field tests LAB PID I I I 620 0 0 620 0 I 620 0 I 620 I 0 620 I 0 620 I I 2462 CI- 2240 0 GRO <10 | field testsLABPIDDescriptionIIIIIIIIII620006200IIIIIIIIII246222400GROIIIIIIIBROIII11390II <t< td=""><td>field testsLABPIDDescriptionLithologyII<</td></t<> | field testsLABPIDDescriptionLithologyII< |

| Dri | iger: Iler: Method | Harr I | a Weinh ison & C nc. Drillin Air rota | ooper ng | SB-7 SB-3 SB-7 SB-3 SB-1 SB-5 SB-6 SB-4 | | F | RECS | Well ID: | | |
|-----------------|--------------------------|-----------|--|-------------|--|--|-----------|------|--------------|--|--|
| Start End | Date: Date: | 0.00 | 9/14/20 ⁻ 9/14/20 ⁻ | 10 10 | the former junction box site. | BD G-16 vent Project Consultant: REC Location: UL/G sec. 16 T2 | | | SB-9 | | |
| | | | | | | | | | | | |
| Depth (feet) | chlori field te | | LAB | PID | Description | | Lithology | Well | Construction | | |
| | | | | | Light brown very fine sand with | | | | | | |
| 5 ft | 1673 | 3 | | 0 | . caliche. Dry. No odor. | | | | | | |
| | | | | | Light orangey brown very fine sand | | | | | | |
| 10 ft | 213 | 5 | | 0 | with caliche particles. Dry. No odor. | | | | | | |
| | 210 | <u> </u> | | | | | | | | | |
| 15 ft | 233 | 7 | | 0 | | | | | | | |
| 15 11 | 200 | / | | 0 | Light orangey brown very fine sand | | | | | | |
| | - | | | | with consolidated rock. Dry. No odor. | | | | | | |
| 20 ft | 300 | 9 | | 0 | | | | | | | |
| | 3.4 | 174 | · · | | | | | | | | |
| 25 ft | 285 | 6 | | 0.1 | | | | | 8 | | |
| 1.1 | | | | | Light orangey brown very fine sand. Dry. No odor. | | | | | | |
| 30 ft | 303 | 9 | CI- 3040 GRO | 0.1 | | | | | | | |
| | | | <10 DRO | | Orangey brown very fine sand. | | | | bentonite | | |
| 35 ft | 240 | 7 | <10 | 0.2 | Slightly moist. No odor. | | | | seal | | |
| | | | | | Light orangey brown very fine sand. | | | | | | |
| 40.4 | 000 | _ | | | Slightly moist. No odor. | | | | | | |
| 40 ft | 202 | 5 | | 0 | Light orangey brown very fine sand | | | | | | |
| | | | | | with consolidated rock. Slightly moist. No odor. | | | | | | |
| 45 ft | 123 | 5 | | 0.2 | | | | | | | |

| Depth (feet) | chloride field tests | LAB | PID | Description | Lithology | Well Construction |
|-----------------|-------------------------|-------------|-----|---|-----------|-------------------|
| | | | | Orangey brown very fine sand with | | |
| | | | | consolidated rock. Slightly moist. | | |
| 50 ft | 1238 | | 0.1 | No odor. | | |
| | | | | | | |
| 55 ft | 2271 | | 0 | | | |
| | | e | | | | |
| | | | | Light orangey brown very fine sand. Slightly moist. No odor. | | |
| 60 ft | 1595 | CI- 1380 | 0 | | | |
| | | GRO <10 | | | | |
| | | DRO <10 | | | | |

| lethod: e: nts: All sam former jund | 3/21/201 3/21/201 ples are f ction box s | y 1 1 rom cuttin site. No la | bs taken for this soil bore. Weinheimer | Project Name: Well ID: BD G-16 vent SB-10 Project Consultant: RECS SB-10 Location: UL/G sec. 16 T22S R37E Lat: 32°23'36.566"N County: LEA Long: 103°9'53.402"W State: NM | | | | |
|--|--|---|--|---|---|---|--|--|
| chloride | LAR | PID | Description | | | | onstruction | |
| 787 883 | | 1.9 | Tan silty fine caliche | | | | | |
| 1476 | | 1.9 | Tan fine silty sand | | | | | |
| 1223 | | 1.6 | r an into sity sand | _ | | | | |
| 850 | | 1.9 | | | | | | |
| 909 | | 1.7 | | | | | | |
| 577 | | 1.5 | Tan to red fine silty sand | | | | | |
| 540 | | 0.9 | | | | | bentonite | |
| | former jund TD = 8 chloride field tests 787 883 1476 1223 850 850 909 909 | a: 3/21/201 3/21/201 3/21/201 1/201 1/201 3/21/201 3/21/201 1/20 | 3/21/2011 Ints: All samples are from cutting former junction box site. No law DRAFTED BY: L. TD = 80 ft Chloride field tests LAB PID 787 1.9 787 1.9 787 1.9 883 1.7 1476 1.9 1223 1.6 850 1.9 909 1.7 909 1.7 577 1.5 577 1.5 | lethod:Air rotary 3/21/20113/21/20113/21/20113/21/20113/21/20113/21/20113/21/2011set. 3/23/21/2011set. 3/2Set. 4set. 3/2Set. 4former junction box site. No labs taken for this soil bore. DRAFTED BY: L. Weinheimer GW = 82 ftTD = 80 ftGW = 82 ftChloride field testsLABPIDDescription7871.97871.97871.97871.97871.97871.97871.97871.97871.97871.97871.97881.7114761.912231.68501.99091.79091.71.5Tan to red fine silty sand5771.5 | Air rotary 3/21/2011 ##4-4 ##5-10 Pro 3/21/2011 3/21/2011 ##4-4 ##5-10 Pro 3/21/2011 3/21/2011 ##5-10 Pro Pro 13/21/2011 10/2014 ##5-10 Pro Description Loc Inst: All samples are from cuttings. Located 35 ft east of the former junction box site. No labs taken for this soil bore. DRAFTED BY: L. Weinheimer Lat Loc Intervention Intervention <td>Air rotary Bathod: Air rotary 3/21/2011 3/21/2011 Bathod: 3/21/2011 3/21/2011 Bathod: article 3/21/2011 Bathod: article 3/21/2011 Bathod: article DRAFTED BY: L. Weinheimer Location: UL/G s DRAFTED BY: L. Weinheimer GW = 82 ft Location: UL/G s chloride LAB PID Description Litthology 787 1.9 Tan silty fine caliche Lithology 787 1.9 Tan silty fine caliche Image: Start Start</td> <td>Air rotary 3/21/2011 3/21</td> | Air rotary Bathod: Air rotary 3/21/2011 3/21/2011 Bathod: 3/21/2011 3/21/2011 Bathod: article 3/21/2011 Bathod: article 3/21/2011 Bathod: article DRAFTED BY: L. Weinheimer Location: UL/G s DRAFTED BY: L. Weinheimer GW = 82 ft Location: UL/G s chloride LAB PID Description Litthology 787 1.9 Tan silty fine caliche Lithology 787 1.9 Tan silty fine caliche Image: Start | Air rotary 3/21/2011 3/21 | |

| Depth (feet) | chloride field tests | LAB | PID | Description | Lithology | Well Construction |
|-----------------|-------------------------|-----|-----|--|-----------|-------------------|
| 45 ft | 352 | | 1.9 | | | |
| 50 ft | 475 | | 1.9 | | | |
| 55 ft | 604 | | 1.9 | Too to brown find allty could with array | | |
| 60 ft | 2065 | | 2.5 | Tan to brown fine silty sand with grey gravel | | |
| 65 ft | 6412 | | 1.7 | | | |
| 70 ft | 2279 | | 1.6 | Yellowish very fine sand | | |
| 75 ft | 4907 | | 0 | | | |
| | | | | Brownish red very fine sand (moist) | | |
| 80 ft | 2960 | | 0 | | | |

| Logger: Driller: | F | | dan Woo n & Coop | | \$B-11 \$B-8 \$B-2 \$B-13\$\$B-7\$\$B-3 \$B-13\$\$B-7\$\$B-6 \$B-15 \$B-4 \$B-10 | | F | RECS | in the |
|-------------------------|---------------------|--|--------------------------|-----|---|---|---------------------------|------|-------------------|
| Drilling M Start Dat | | | Air rotary 3/21/201 | | SB-9 SB-9 SB-12 SB-14 SB-14 | | bject Name: BD G-16 ve | ent | Well ID: SB-11 |
| End Date Comme | ents: All s | = 35 ft GW = 82 ft Long: 103°9'53.732"W S de sts LAB PID Description Lithology Well Cor | | | | | | | |
| Depth (feet) | chlorid field te | | LAB | PID | Description | | Lithology | Well | Construction |
| | | | | | Tan very fine caliche | | | | |
| 5 ft | 772 | | | 5.9 | | - | | | |
| 10 ft | 780 | _ | CI- 1060 | 6.1 | Tan very fine sand | | | | |
| | | | GRO <10 DRO | | Tan well consolidated caliche | | | | |
| 15 ft | 643 | | <10 | 4.1 | | | | | |
| 20 ft | 430 | | | 4.7 | | | | | bentonite |
| 25 ft | 253 | | | 6.9 | Brownish red very fine sand | | | | |
| 30 ft | 271 | | | 7.7 | | | | | |
| 35 ft | 142 | | Cl- 208 | 5.1 | Tan to red fine sand with some caliche | | | | |
| | | | GRO <10 DRO <10 | | | | | | |

| Logger: Driller: | н | | dan Woo n & Cooj | | SB-11 SB-2 SB-13SB-75B-3 SB-15SB-6 SB-4 SB-10 | | CON | REC | S STATUC | |
|-------------------------------------|---------------------|---|------------------------------------|---------|--|---|-----------|-------------------|-------------------|--|
| Drilling M Start Dat End Date | e: | | Air rotary 3/21/201 3/21/201 | 1 | SB-12 SB-14 | Project Name: BD G-16 vent Project Consultant: RE | | | Well ID: SB-12 | |
| | ne former | | tion bo | x site. | uttings. Located 37 ft south of No labs taken for this soil bore. /: L. Weinheimer GW = 82 ft | Location: UL/G sec. 16 T22S R37E Lat: 32°23'36.218"N County: L Long: 103°9'53.845"W State: NM | | | | |
| Depth (feet) | chlorid field te | | LAB | PID | Description | | Lithology | Well Construction | | |
| | | | | | Brown fine sand and caliche | | | | | |
| 5 ft | 1,000 | 0 | | 0.0 | | 100 | | | | |
| 10 ft | 2,971 | 1 | | 0.0 | Tan very fine silty sand with caliche | | | | | |
| 15 ft | 3,894 | 4 | | 0.0 | | Direction of the | | | | |
| 20 ft | 3,694 | 4 | | 0.0 | | | | | bentonite | |
| 25 ft | 3,124 | 4 | | 0.0 | | | | | seal | |
| 30 ft | 3,088 | 8 | | 0.0 | Light brown very fine silty sand | | | | | |
| 35 ft | 2,579 | 9 | | 0.0 | | | | | | |
| 40 ft | 2,141 | 1 | | 0.0 | | 10 m | | | | |
| | | | | | | | | | | |

| Logger: Driller: | | | rdan Woo on & Cooj | | SB-13 SB-75B-3 SB-13SB-75B-3 SB-15B-55B-6 SB-10 SB-10 | | F | RECS | and a state | |
|-------------------------------------|------------------|----------------|-----------------------------------|----------|--|---|---|------------------|-------------------|--|
| Drilling I Start Dat End Date | te: e: | | Air rotar 3/21/201 3/21/201 | 1 | 5B-9 5B-12 5B-14 5B-14 | Pro | bject Name: BD G-16 ve bject Consulta | ent ant: RECS | | |
| Comme | | samp) = 40 | the fo | rmer jur | ttings. Located 42 ft west of action box site. L. Weinheimer GW = 82 ft | Location: UL/G sec. 16 T22S R37E Lat: 32°23'36.647"N County: LE/ Long: 103°9'54.298"W State: NM | | | | |
| Depth (feet) | chlor field t | | LAB | PID | Description | | Lithology | Well | Construction | |
| | | 1 | | | | | | | | |
| 5 ft | 220 |)2 | CI- 2400 GRO <10 DRO | 0.3 | Tan silty caliche | | | | | |
| 10 ft | 131 | 1 | <10 | 0.6 | | | | | | |
| | | | | | Tan fine sand and caliche | | | | | |
| 15 ft | 157 | 72 | | 0.3 | | | | | | |
| 20 ft | 165 | 57 | | 0.2 | | | | | bentonite seal | |
| 25 ft | 122 | 27 | | 0.2 | Tan to red fine sand with some | | | | | |
| 30 ft | 72 | 8 | | 0.1 | caliche | | | | | |
| 35 ft | 31 | 1 | | 0.1 | | | | | | |
| 40 ft | 18 | 5 | CI- 160 GRO | 0.1 | | | | | | |
| | | | <10 DRO <10 | | | | | | | |

| Logger: Driller: | | | dan Woo n & Cooj | | SB-11 SB-8 SB-2 SB-13SB-75B-3 SB-15B-55B-6 SB-15 | | R | ECS | tree to the test of test o | | | |
|-------------------------------------|-------------------|------------------------|---------------------|----------|--|----|--|--|--|--|--|--|
| Drilling M Start Dat End Date | e: e: | 3/21/2011 3/21/2011 | | | 3/21/2011 3/21/2011 3/21/2011 | | | Project Name: Well ID: BD G-16 vent SB-14 Project Consultant: RECS | | | | |
| Comme | | sampl | the fo | rmer jui | uttings. Located 50 ft south of nction box site. : L. Weinheimer GW = 82 ft | La | Location: UL/G sec. 16 T22S R37E Lat: 32°23'36.085"N County: L8 Long: 103°9'53.847"W State: NM | | | | | |
| Depth (feet) | chlor field to | ide | LAB | PID | Description | | Lithology | | Construction | | | |
| | | - | | | Tan to red silty caliche | | | | | | | |
| 5 ft | 469 | 1 | CI- 7360 GRO | 0.3 | | | | | | | | |
| | | | <10 DRO <10 | | Red sand and caliche | | | | | | | |
| 10 ft | 403 | 7 | | 0.2 | | - | <i></i> | | | | | |
| | | | | | | | | | | | | |
| 15 ft | 323 | 7 | | 0.2 | | | | | | | | |
| | | | | | Tan to red fine sand with caliche | | | | | | | |
| 20 ft | 173 | 2 | | 0.2 | | | | | > bentonite | | | |
| 25 ft | 808 | 2 | | 0.6 | | | | | seal | | | |
| 2011 | | | | 0.0 | | | | | | | | |
| 30 ft | 74 | 5 | | 0.4 | | | | | | | | |
| | | | | | | 1 | | | | | | |
| 35 ft | 267 | 7 | | 0.5 | Reddish brown very fine sand | | | | | | | |
| 40 ft | 173 | 3 | CI- 160 | 0.5 | | | | | | | | |
| | | | GRO <10 DRO | | | | | | | | | |
| | | | <10 | | | | | | IJ | | | |

| Logger: Driller: | | Jordan Woodfin Harrison & Cooper, Inc. | | | SB-11 SB-8 SB-2 SB-13SB-7SB-3 SB-15B-5SB-6 SB-15 | RECS SONGULTING & SAFETYI LCC | | | | |
|---|-----------------|---|-------------------|-----|---|----------------------------------|--|---|--------------|--|
| Drilling I | Method: | | Air rotar | y | SB-4 SB-10 SB-9 mv 1 | Project Name: Well ID: | | | | |
| Start Date: | | 3/21/2011 | | | 8 SB-12 | | BD G-16 vent SB-15 | | | |
| End Date: 3/21/2011 | | | | | SB-14 | | Project Consultant: RECS | | | |
| Comments: All samples are from cuttings. Located 47 ft east of the former junction box site. DRAFTED BY: L. Weinheimer TD = 30 ft GW = 82 ft | | | | | | | Location: UL/G sec. 16 T22S R37E Lat: 32°23'36.579"N County: LEA Long: 103°9'53.27"W State: NM | | | |
| Depth (feet) | chlo field t | | LAB | PID | Description | 1 | Lithology | 1 | Construction | |
| 5 ft | 45 | 4 | | 0.6 | Tan fine caliche | | | | | |
| 0 11 | | - | | | Tan very fine sand | | | | | |
| 10 ft | 430 | | | 0.3 | | | | | | |
| | | | CI- | | Tan very fine sand with caliche | | | | | |
| 15 ft | 59 | 3 | 688 GRO <10 | 0.5 | | | | | | |
| | | | DRO <10 | | Tan very fine sand with caliche | | | | seal | |
| 20 ft | 51 | 6 | | 0.6 | | - | | | | |
| | | | | | | | | | | |
| 25 ft | 26 | 0 | | 0.5 | Light brown very fine sand | | | | | |
| 30 ft | 18 | 1 | CI- 128 | 0.6 | | | | | | |
| 30 11 | 18 | 1 | GRO <10 DRO | 0.0 | | | | | | |
| | | | <10 | | | | | | | |

| Logger: Driller: | | Jordan Woo arrison & Coo | per, Inc. | 58-7 SB-3 58-7 SB-3 58-7 SB-3 58-7 SB-4 58-6 58-6 | | - Sana | RECS | |
|--------------------------------------|------------------------|-----------------------------------|-----------|--|----|---|------------------|--------------------------|
| Drilling M Start Date End Date | e: | Air rotar 1/13/201 1/13/201 | 1 | SB-4 SB-9 © MW 1 | | oject Name: BD G-16 ve oject Consulta | ent ant: RECS | /ell ID: MW-1 |
| Comme | ents: Locat | DRAF | | of the former junction box site. L. Weinheimer GW = 82 ft | La | t: 32°23'36.358 | 8"N | County: LEA |
| Depth (feet) | chloride field test | | PID | Description | | Lithology | 1 | State: NM onstruction |
| | | | | | | | | |
| 5 ft | 3291 | | | | | | | |
| | | | | Tan very fine silty sand | | | | |
| 10 ft | 3320 | CI- 4480 GRO | | | | | | |
| | | <10 DRO <10 | | | | | | |
| 15 ft | 2750 | | | | | | | |
| | | | | | | | in. PVC | |
| 20 ft | 2777 | | | | | | 2 ir | |
| 25 ft | 2390 | | | | | | | |
| 25 11 | 2390 | | | | | | | |
| 30 ft | 2488 | | | Light brown very fine silty sand | | | | 5.4 |
| 35 ft | 2237 | | | | | | | bentonite |
| 40 ft | 903 | | | | | | | seal |
| | | | a second | | | | | |

| Depth (feet) | chloride field tests | LAB | PID | Description | Lithology | Well Construction |
|-----------------|-------------------------|---------------------------|-----|-------------------------------------|-----------|-------------------|
| 45 ft | 1799 | | | | | |
| 50 ft | 1353 | | | | | |
| | | | | | | |
| 55 ft | 1381 | 3 | | | | |
| 60 ft | 1437 | | | | | |
| 65 ft | 2149 | | | Tannish yellow very fine silty sand | | |
| | | | | | | |
| 70 ft | 2562 | | | | | |
| 75 ft | 4556 | CI- 4160 GRO | | Brown very fine moist sand | | |
| | | <10 DRO <10 CI- | | | | |
| 80 ft | 1304 | 1390 GRO <10 DRO | | | | |
| 85 ft | | <10 | | NO SAMPLES TAKEN | | sand |
| | | | | | | pack |
| 90 ft | | | | | | |
| 95 ft | | | | | | |
| 97 ft | | | | | | J |

September 20, 2010

Hack Conder Rice Operating Company 112 W. Taylor Hobbs, NM 88240

RE: BD G-16 VENT

Enclosed are the results of analyses for samples received by the laboratory on 09/14/10 9:16.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021Benzene, Toluene, Ethyl Benzene, and Total XylenesMethod SW-846 8260Benzene, Toluene, Ethyl Benzene, and Total XylenesMethod TX 1005Total Petroleum Hydorcarbons

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celux BKeine

Celey D. Keene Lab Director/Quality Manager

Analytical Results For:

Rice Operating Company Hack Conder 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

| Received: | 09/14/2010 | Sampling Date: | 09/13/2010 |
|-------------------|--------------|---------------------|----------------|
| Reported: | 09/20/2010 | Sampling Type: | Soil |
| Project Name: | BD G-16 VENT | Sampling Condition: | ** (See Notes) |
| Project Number: | NONE GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | BD G-16 VENT | | |

Sample ID: SB-1 @ 35' (H020841-01)

| Chloride, SM4500CI-B | mg/kg | | Analyzed By: HM | | | | | | |
|-------------------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 2320 | 16.0 | 09/14/2010 | ND | 448 | 112 | 400 | 3.51 | |
| TPH 8015M | mg/kg | | Analyzed By: AB | | | | | | A-01a |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 09/17/2010 | ND | 159 | 79.5 | 200 | 1.65 | |
| DRO >C10-C28 | <10.0 | 10.0 | 09/17/2010 | ND | 166 | 82.9 | 200 | 1.18 | |
| Surrogate: I-Chlorooctane | 89.3 | % 70-130 | 1 | | | | | | |
| Surrogate: 1-Chlorooctadecane | 134 | % 70-130 | | | | | | | |

Sample ID: SB-1 @ 75' (H020841-02)

| Chloride, SM4500CI-B | mg/kg | | Analyzed By: HM | | <u> </u> | | | | |
|-------------------------------|--------|-----------------|-----------------|--------------|----------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 6640 | 16.0 | 09/14/2010 | ND | 448 | 112 | 400 | 3.51 | |
| TPH 8015M | mg/kg | | Analyzed By: AB | | | | | | A-01a |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 09/17/2010 | ND | 159 | 79.5 | 200 | 1.65 | |
| DRO >C10-C28 | <10.0 | 10.0 | 09/17/2010 | ND | 166 | 82.9 | 200 | 1.18 | |
| Surrogate: 1-Chlorooctane | 96.5 | % 70-130 | | | | | | | |
| Surrogate: 1-Chlorooctadecane | 152 | % 70-130 | | | | | | | |

Cardinal Laboratories

*=Accredited Analyte

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line

Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

Rice Operating Company Hack Conder 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

| Received: Reported: | 09/14/2010 09/20/2010 | Sampling Date: Sampling Type: | 09/13/2010 Soil |
|------------------------|--------------------------|----------------------------------|--------------------|
| Project Name: | BD G-16 VENT | Sampling Condition: | ** (See Notes) |
| Project Number: | NONE GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | BD G-16 VENT | | |

Sample ID: SB-2 @45' (H020841-03)

| Chloride, SM4500CI-B | mg/kg | | Analyzed By: HM | | | | | | |
|-------------------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 2920 | 16.0 | 09/14/2010 | ND | 448 | 112 | 400 | 3.51 | |
| TPH 8015M | mg/kg | | Analyzed By: AB | | | | | | A-01a |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 09/17/2010 | ND | 159 | 79.5 | 200 | 1.65 | |
| DRO >C10-C28 | <10.0 | 10.0 | 09/17/2010 | ND | 166 | 82.9 | 200 | 1.18 | |
| Surrogate: 1-Chlorooctane | 92.2 | % 70-130 | | | | | | | |
| Surrogate: 1-Chlorooctadecane | 131 | % 70-130 | I | | | | | | |

Sample ID: SB-2 @ 70' (H020841-04)

| Chloride, SM4500CI-B | mg/kg | | Analyze | Analyzed By: HM | | | | | |
|-------------------------------|--------|-----------------|-----------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 3640 | 16.0 | 09/14/2010 | ND | 448 | 112 | 400 | 3.51 | |
| TPH 8015M | mg/kg | | Analyzed By: AB | | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 09/17/2010 | ND | 159 | 79.5 | 200 | 1.65 | |
| DRO >C10-C28 | <10.0 | 10.0 | 09/17/2010 | ND | 166 | 82.9 | 200 | 1.18 | |
| Surrogate: 1-Chlorooctane | 87.3 | % 70-130 | | | | | | | |
| Surrogate: I-Chlorooctadecane | 117 | % 70-130 | | | | | | | |

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

Rice Operating Company Hack Conder 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

| Received: | 09/14/2010 | Sampling Date: | 09/13/2010 |
|-------------------|--------------|---------------------|----------------|
| Reported: | 09/20/2010 | Sampling Type: | Soil |
| Project Name: | BD G-16 VENT | Sampling Condition: | ** (See Notes) |
| Project Number: | NONE GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | BD G-16 VENT | | |

Sample ID: SB- 2 @ 75' (H020841-05)

| Chloride, SM4500CI-B | mg, | /kg | Analyze | d By: HM | | | | | |
|-------------------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 3680 | 16.0 | 09/14/2010 | ND | 448 | 112 | 400 | 3.51 | |
| ТРН 8015М | mg/kg | | Analyzed By: AB | | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 09/17/2010 | ND | 159 | 79.5 | 200 | 1.65 | |
| DRO >C10-C28 | <10.0 | 10.0 | 09/17/2010 | ND | 166 | 82.9 | 200 | 1.18 | |
| Surrogate: 1-Chlorooctane | 97.4 | % 70-130 | 1 | | | | | - | |
| Surrogate: 1-Chlorooctadecane | 122 | % 70-130 | 1 | | | | | | |

Sample ID: SB-3 @ 15' (H020841-06)

| Chloride, SM4500CI-B | mg/kg | | Analyze | Analyzed By: HM | | | | | |
|-------------------------------|--------|-----------------|-----------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 5680 | 16.0 | 09/14/2010 | ND | 448 | 112 | 400 | 3.51 | |
| TPH 8015M | mg/kg | | Analyzed By: AB | | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 09/17/2010 | ND | 159 | 79.5 | 200 | 1.65 | |
| DRO >C10-C28 | <10.0 | 10.0 | 09/17/2010 | ND | 166 | 82.9 | 200 | 1.18 | |
| Surrogate: 1-Chlorooctane | 87.0 | % 70-130 | | | | | | | |
| Surrogate: 1-Chlorooctadecane | 99.1 | % 70-130 | | | | | | | |

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Page 4 of 12

Analytical Results For:

Rice Operating Company Hack Conder 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

| Received: | 09/14/2010 | Sampling Date: | 09/13/2010 |
|-------------------|--------------|---------------------|----------------|
| Reported: | 09/20/2010 | Sampling Type: | Soil |
| Project Name: | BD G-16 VENT | Sampling Condition: | ** (See Notes) |
| Project Number: | NONE GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | BD G-16 VENT | | |

Sample ID: SB-3 @ 75' (H020841-07)

| Chloride, SM4500Cl-B | mg/ | /kg | Analyze | d By: HM | | | | | |
|-------------------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 2720 | 16.0 | 09/14/2010 | ND | 448 | 112 | 400 | 3.51 | |
| TPH 8015M | mg/ | 'kg | Analyze | d By: AB | | | | | A-01 |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 09/17/2010 | ND | 159 | 79.5 | 200 | 1.65 | |
| DRO >C10-C28 | <10.0 | 10.0 | 09/17/2010 | ND | 166 | 82.9 | 200 | 1.18 | |
| Surrogate: 1-Chlorooctane | 88.1 | % 70-130 | | | | | | | |
| Surrogate: 1-Chlorooctadecane | 137 9 | % 70-130 | | | | | | | |

Sample ID: SB #4 @ 65' (H020841-08)

| Chloride, SM4500Cl-B | mg, | /kg | Analyze | d By: HM | | | | | |
|-------------------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 2000 | 16.0 | 09/14/2010 | ND | 448 | 112 | 400 | 3.51 | |
| ТРН 8015М | mg, | /kg | Analyze | d By: AB | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 09/17/2010 | ND | 159 | 79.5 | 200 | 1.65 | |
| DRO >C10-C28 | <10.0 | 10.0 | 09/17/2010 | ND | 166 | 82.9 | 200 | 1.18 | |
| Surrogate: 1-Chlorooctane | 86.2 | % 70-130 | | | | | | | |
| Surrogate: 1-Chlorooctadecane | 130 | % 70-130 | | | | | | | |

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

Rice Operating Company Hack Conder 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

| | Sampling Date: | 09/13/2010 |
|-----|----------------------------|---|
| | Sampling Type: | Soil |
| - · | Sampling Condition: | ** (See Notes) |
| | Sample Received By: | Jodi Henson |
| - | | |
| I | іт [.] і іт | IT Sampling Condition: Sample Received By: |

Sample ID: SB #4 @ 75' (H020841-09)

| Chloride, SM4500CI-B | mg/ | /kg | Analyze | d By: HM | | | | | |
|-------------------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 3840 | 16.0 | 09/14/2010 | ND | 448 | 112 | 400 | 3,51 | |
| TPH 8015M | mg/ | ′kg | Analyze | d By: AB | | | | | A-01a |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 09/17/2010 | ND | 159 | 79.5 | 200 | 1.65 | |
| DRO >C10-C28 | <10.0 | 10.0 | 09/17/2010 | ND | 166 | 82.9 | 200 | 1.18 | |
| Surrogate: I-Chlorooctane | 86.1 | % 70-130 | • | | | | | | |
| Surrogate: 1-Chlorooctadecane | 133 | % 70-130 | 1 | | | | | | |

Sample ID: SB #5 30' (H020841-10)

| Chloride, SM4500CI-B | mg/ | /kg | Analyze | d By: HM | | | | | |
|-------------------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 3800 | 16.0 | 09/14/2010 | ND | 448 | 112 | 400 | 3.51 | |
| TPH 8015M | mg/ | /kg | Analyze | d By: AB | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 09/17/2010 | ND | 159 | 79.5 | 200 | 1.65 | |
| DRO >C10-C28 | <10.0 | 10.0 | 09/17/2010 | ND | 166 | 82.9 | 200 | 1.18 | |
| Surrogate: 1-Chlorooctane | 86.7 | % 70-130 | | | | | | | |
| Surrogate: 1-Chlorooctadecane | 126 9 | % 70-130 | | | | | | | |

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Celey D. Keene, Lab Director/Quality Manager

Page 6 of 12

Analytical Results For:

Rice Operating Company Hack Conder 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

| Received: | 09/14/2010 | Sampling Date: | 09/13/2010 |
|-------------------|--------------|---------------------|----------------|
| Reported: | 09/20/2010 | Sampling Type: | Soil |
| Project Name: | BD G-16 VENT | Sampling Condition: | ** (See Notes) |
| Project Number: | NONE GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | BD G-16 VENT | | |

Sample ID: SB #5 75' (H020841-11)

| Chloride, SM4500CI-B | mg/ | ′kg | Analyze | d By: HM | | | | | |
|-------------------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 2600 | 16.0 | 09/14/2010 | ND | 448 | 112 | 400 | 3.51 | |
| TPH 8015M | mg/ | /kg | Analyze | d By: AB | | | | | A-01a |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 09/17/2010 | ND | 159 | 79.5 | 200 | 1.65 | |
| DRO >C10-C28 | <10.0 | 10.0 | 09/17/2010 | ND | 166 | 82.9 | 200 | 1.18 | |
| Surrogate: 1-Chlorooctane | 85.3 | % 70-130 | | | | | | | |
| Surrogate: 1-Chlorooctadecane | 145 9 | % 70-130 | | | | | | | |

Sample ID: SB #6 20' (H020841-12)

| Chloride, SM4500Cl-B | mg | /kg | Analyze | d By: HM | | | | | |
|-------------------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 4240 | 16.0 | 09/14/2010 | ND | 416 | 104 | 400 | 3.77 | |
| TPH 8015M | mg | /kg | Analyze | d By: AB | | | | | A-01a |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 09/17/2010 | ND | 159 | 79.5 | 200 | 1.65 | |
| DRO >C10-C28 | <10.0 | 10.0 | 09/17/2010 | ND | 166 | 82.9 | 200 | 1.18 | |
| Surrogate: 1-Chlorooctane | 87.5 | % 70-130 | | | | | | | |
| Surrogate: 1-Chlorooctadecane | 137 | % 70-130 | | | | | | | |

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

Rice Operating Company Hack Conder 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

| Received: | 09/14/2010 | Sampling Date: | 09/13/2010 |
|-------------------|--------------|---------------------|----------------|
| Reported: | 09/20/2010 | Sampling Type: | Soil |
| Project Name: | BD G-16 VENT | Sampling Condition: | ** (See Notes) |
| Project Number: | NONE GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | BD G-16 VENT | | |

Sample ID: SB #6 50' (H020841-13)

| Chloride, SM4500Cl-B | mg, | /kg | Analyze | d By: HM | | | | | |
|-------------------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 1090 | 16.0 | 09/14/2010 | ND | 416 | 104 | 400 | 3.77 | |
| TPH 8015M | mg, | /kg | Analyze | d By: AB | | | | | A-01a |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 09/17/2010 | ND | 159 | 79.5 | 200 | 1.65 | |
| DRO >C10-C28 | <10.0 | 10.0 | 09/17/2010 | ND | 166 | 82.9 | 200 | 1.18 | |
| Surrogate: 1-Chlorooctane | 87.5 | % 70-130 | 1 | | | | | | |
| Surrogate: 1-Chlorooctadecane | 134 | % 70-130 | ł | | | | | | |

Sample ID: SB #7 20' (H020841-14)

| Chloride, SM4500CI-B | mg, | /kg | Analyze | d By: HM | | | | | |
|-------------------------------|--------------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 3160 | 16.0 | 09/14/2010 | ND | 416 | 104 | 400 | 3.77 | |
| TPH 8015M | mg, | /kg | Analyze | d By: AB | | | | | A-01a |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | 10.6 | 10.0 | 09/17/2010 | ND | 159 | 79.5 | 200 | 1.65 | |
| DRO >C10-C28 | <10.0 | 10.0 | 09/17/2010 | ND | 166 | 82.9 | 200 | 1.18 | |
| Surrogate: 1-Chlorooctane | 88. <i>9</i> | % 70-130 | | | | | | | |
| Surrogate: 1-Chlorooctadecane | 134 | % 70-130 | | | | | | | |

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

Rice Operating Company Hack Conder 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

Received:09/14/2010Reported:09/20/2010Project Name:BD G-16 VENTProject Number:NONE GIVENProject Location:BD G-16 VENT

Sampling Date:09/13/2010Sampling Type:SoilSampling Condition:** (See Notes)Sample Received By:Jodi Henson

Sample ID: SB #7 75' (H020841-15)

| Chloride, SM4500CI-B | mg/ | /kg | Analyze | d By: HM | | | | | |
|-------------------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 576 | 16.0 | 09/14/2010 | ND | 416 | 104 | 400 | 3.77 | |
| TPH 8015M | mg/ | /kg | Analyze | d By: AB | | | | | A-01a |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | 12.5 | 10.0 | 09/17/2010 | ND | 159 | 79.5 | 200 | 1.65 | |
| DRO >C10-C28 | <10.0 | 10.0 | 09/17/2010 | ND | 166 | 82.9 | 200 | 1.18 | |
| Surrogate: 1-Chlorooctane | 88.0 | % 70-130 | | | | | | | |
| Surrogate: 1-Chlorooctadecane | 153 9 | % 70-130 | | | | | | | |

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

Notes and Definitions

| A-01a | Surrogate outside historical limits. |
|-------|---|
| A-01 | Surrogate outside historical limits |
| 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 |

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Celey D. Keene, Lab Director/Quality Manager

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ARDINAL LABORATORIES

| Company Name | (505) 393-2326 FAX (505) 393-24 | | (32 | <u> 3).07.3-1</u> | 001 | | - 132 | 5,6 | RII | .L. TO | | ÷÷÷ | | | | | VSIS | S. RE | OUE | ST | | | |
|------------------|--|-----------------|--------------|-----------------------------------|-----------|-----------|-----------------------|------------|----------|--|-----------------|----------|-------------|------|----------------|----------|------|-------|-----|----------|----------|------|-----|
| Project Manager | Hack Conder | | ÷ | | | | .0. # | | | | | · · · · | | | Í | | | | | | | Ī | |
| Address: 122 | | | | | | | omp | any | | <u> </u> | <u></u> | | | - | | ő | | | | ·. | | | i I |
| City: Hobbs | State: NM | Zip | 88 | 240 | | | Attri: | | | | | | | | Cations/Anions | | | | | | · | | |
| 1.112 | 174 Fax #: 397-14 | | | | | | Address: | | | | | | | | Ē | | | | | | | | |
| Project#: | ProjectiOwner | | | | - | Ĉity: | | | | | Σ | , ; | - | SIP | | | | | | | - | | |
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| | i. Ab. le lle verde | t | | 14.41 - | - 1 - | . F | Phone #: | | | Chlorides | 8015 | BTEX | xas TPH | atic | | | 1 | : | | | | | |
| Sampler Name: | Lara Weinheimer. | | | | | F | àx# | | | | | | | m l | ю Х | Ö | | Ľ | | | | P | |
| FOR LAB USE ONLY | | | \Box | MA | TRI | () 1 1 | PR | ESE | RV. | SAMPLI | NG | Ω. | L L | | Te. | fe | 2 | | | Ĺ | | | |
| Lab Î.D. | Sample I.D. | (G)RABIOR (C)OM | # CONTAINERS | GROUNDWATER WASTEWATER SOID | OIL | SLUDGE | OTHERS: ACID/BASE: | ICE / COOL | OŢĤĔŔĨ | <u>DATE</u> | TIME | | · · | | | Complete | | | | | | | |
| H20641-1 | Alt 1 & 25 | 6. | ť | | | | | •4.5 | , | 1. · · · / · · · · · · · · · · · · · · · | 6:10 | | 51 | | | | | | - | | | | |
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101 East Marland, Hobbs, NM 88240, 2111 Beechwood, Abilene, TX 79603

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NEED SAMPLES BACK, PLEASE

ARDINAL LABORATORIES

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

| 101 East Marland, Hobbs, NM 88240 | 2111 Beechwood, Abilene, TX, 79603. |
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| (505) 393-2326 FAX (505) 393-2476 | (325) 673-7001 FAX (325)673-7020 |

| Company Name | Rice Operating Company | | | | | | | | | | LL TO | illitijsninstipi) | j: | | · • • • • • • • • • • • • • • • • • • • | <u> </u> | | Vei | <u></u> | | | | | , |
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| Project Name: | BD 67-16 Ver | 5 | | ستنبسن | | City: | | | | SS. | | | T | U.S. | | | i. | | | | | | | |
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T. Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

#26

Page 12 of 12

September 20, 2010

Hack Conder Rice Operating Company 112 W. Taylor Hobbs, NM 88240

RE: BD G-16 VENT

Enclosed are the results of analyses for samples received by the laboratory on 09/14/10 16:10.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021Benzene, Toluene, Ethyl Benzene, and Total XylenesMethod SW-846 8260Benzene, Toluene, Ethyl Benzene, and Total XylenesMethod TX 1005Total Petroleum Hydorcarbons

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celux D. Keine

Celey D. Keene Lab Director/Quality Manager

Analytical Results For:

Rice Operating Company Hack Conder 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

| Received: | 09/14/2010 | Sampling Date: | 09/14/2010 |
|-------------------|--------------|---------------------|---------------|
| Reported: | 09/20/2010 | Sampling Type: | Soil |
| Project Name: | BD G-16 VENT | Sampling Condition: | Cool & Intact |
| Project Number: | NONE GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | BD G-16 VENT | | |

Sample ID: SB - 8 @ 55' (H020851-01)

| Chloride, SM4500CI-B | mg, | /kg | Analyze | d By: HM | | | · | | |
|-------------------------------|--------|-----------------|------------|--------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 2240 | 16.0 | 09/16/2010 | ND | 416 | 104 | 400 | 3.77 | |
| TPH 8015M | mg, | /kg | Analyze | d By: AB | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 09/18/2010 | ND | 165 | 82.5 | 200 | 2.83 | |
| DRO >C10-C28 | <10.0 | 10.0 | 09/18/2010 | ND | 164 | 82.1 | 200 | 0.607 | |
| Surrogate: 1-Chlorooctane | 90.4 | % 70-130 | | | | | | | |
| Surrogate: 1-Chlorooctadecane | 124 | % 70-130 | | | | | | | |
| | | 2.1 | | | | | | | |

Sample ID: SB - 8 @ 70' (H020851-02)

| Chloride, SM4500CI-B | mg | /kg | Analyze | d By: HM | | | | | |
|-------------------------------|--------|-----------------|------------|--------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 1740 | 16.0 | 09/16/2010 | ND | 416 | 104 | 400 | 3.77 | |
| TPH 8015M | mg, | /kg | Analyze | d By: AB | | <u>.</u> | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 09/18/2010 | ND | 165 | 82.5 | 200 | 2.83 | |
| DRO >C10-C28 | <10.0 | 10.0 | 09/18/2010 | ND | 164 | 82.1 | 200 | 0.607 | |
| Surrogate: 1-Chlorooctane | 91.8 | % 70-130 | | | | | | | |
| Surrogate: 1-Chlorooctadecane | 125 | % 70-130 | | | | | | | |

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Celey D. Keene, Lab Director/Quality Manager

Page 2 of 6

Analytical Results For:

Rice Operating Company Hack Conder 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

| Received: | 09/14/2010 | Sampling Date: | 09/14/2010 |
|-------------------|--------------|---------------------|---------------|
| Reported: | 09/20/2010 | Sampling Type: | Soil |
| Project Name: | BD G-16 VENT | Sampling Condition: | Cool & Intact |
| Project Number: | NONE GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | BD G-16 VENT | | |

Sample ID: SB - 8 @ 75' (H020851-03)

| Chloride, SM4500Cl-B | mg/ | /kg | Analyze | d By: HM | | | | | |
|-------------------------------|--------|-----------------|------------|--------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | 8S | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 1760 | 16.0 | 09/16/2010 | ND | 416 | 104 | 400 | 3.77 | |
| TPH 8015M | mg/ | 'kg | Analyze | d By: AB | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 09/18/2010 | ND | 165 | 82.5 | 200 | 2.83 | |
| DRO >C10-C28 | <10.0 | 10.0 | 09/18/2010 | ND | 164 | 82.1 | 200 | 0.607 | |
| Surrogate: 1-Chlorooctane | 92.2 | % 70-130 | | | | | | | |
| Surrogate: 1-Chlorooctadecane | 114 9 | % 70-130 | | | | | | | |

Sample ID: SB - 9 @ 30' (H020851-04)

| Chloride, SM4500CI-B | mg | /kg | Analyze | d By: HM | | | | | |
|-------------------------------|--------|-----------------|-----------------|--------------|-----|------------|-----------------------------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 3040 | 16.0 | 09/16/2010 | ND | 416 | 104 | 400 | 3.77 | |
| TPH 8015M | mg/kg | | Analyzed By: AB | | | | | | S-04 |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 09/18/2010 | ND | 165 | 82.5 | 200 | 2.83 | |
| DRO >C10-C28 | <10.0 | 10.0 | 09/18/2010 | ND | 164 | 82.1 | 200 | 0.607 | |
| Surrogate: 1-Chlorooctane | 91.9 | % 70-130 | | | | | , , , , , , , , , , , , , , , , , | | |
| Surrogate: I-Chlorooctadecane | 134 | % 70-130 | | | | | | | |

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Page 3 of 6

Analytical Results For:

Rice Operating Company Hack Conder 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

| Received: | 09/14/2010 | Sampling Date: | 09/14/2010 |
|-------------------|--------------|---------------------|---------------|
| Reported: | 09/20/2010 | Sampling Type: | Soil |
| Project Name: | BD G-16 VENT | Sampling Condition: | Cool & Intact |
| Project Number: | NONE GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | BD G-16 VENT | | |

Sample ID: SB - 9 @ 60' (H020851-05)

| Chloride, SM4500CI-B | mg, | /kg | Analyze | d By: HM | | | | | |
|-------------------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 1380 | 16.0 | 09/16/2010 | ND | 464 | 116 | 400 | 3.51 | |
| TPH 8015M | mg/kg | | Analyzed By: AB | | | | | | S-04 |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 09/18/2010 | ND | 165 | 82.5 | 200 | 2.83 | |
| DRO >C10-C28 | <10.0 | 10.0 | 09/18/2010 | ND | 164 | 82.1 | 200 | 0.607 | |
| Surrogate: 1-Chlorooctane | 94.1 | % 70-130 | | | | | | | |
| Surrogate: I-Chlorooctadecane | 143 | % 70-130 | 1 | | | | | | |

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Celey D. Keene, Lab Director/Quality Manager

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

Notes and Definitions

| 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 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 |
| | |

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Celey D. Keene, Lab Director/Quality Manager

Page 5 of 6

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603

(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020 Company Name: Rice Operating Company. BILL TO ANALYSIS REQUEST Project Manager: Hack Conder P.O. #: Address: 122 West Taylor Čòmpany: Complete Cations/Anions City: Hobbs State: NM Zip: 88240 Attn: Fax #: 397-1471 Phone #: 393-9174 Address: Project Owner: \geq Project #: City: HdT Chlorides TPH 8015 C=18 8.0 Ne St. Project Name: State: Zip: BTEX Project Location: Ser. Texas Phone #: Fax #: Sampler Name: Lara Weinheimer. FOR LAB USE ONLY MATRIX PRESERV SAMPLING C (G)RAE OR (C)OMP CONTAINERS GROUNDWATE NÀSTEWATER Sample I.D. SLUDGE: OTHER: ACID/BASE: Lab I.D. ICE//COOF OTHER: SOIL ē DATE TIME H20651 10-9° 5.5 Ż 10. 12: 35 Print the go 1 Ż . تركي 1 2 1819.8 10 ż 10 19.99 3 123 Tr. ľ. Ĵ, À 1 53.6 行的官臣 تمر Υ. 1 \mathcal{I} 36-9 30 1:22 P. le ÅT Ň ÷ 4 \$ 1 5 85 -S. Cast 17 1:57 * تحقی 4

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| Sampler - UPS Bus Other: | | | |
| and a second | 11 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 | No. No. No. Mo. M. | |

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



March 28, 2011

Hack Conder Rice Operating Company 112 W. Taylor Hobbs, NM 88240

RE: BD G-16 VENT (SOIL)

Enclosed are the results of analyses for samples received by the laboratory on 03/22/11 8:00.

Cardinal Laboratories is accredited through Texas NELAP for:

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

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



Rice Operating Company Hack Conder 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

| Received: | 03/22/2011 | Sampling Date: | 03/21/2011 |
|-------------------|---------------------|---------------------|---------------|
| Reported: | 03/28/2011 | Sampling Type: | Soil |
| Project Name: | BD G-16 VENT (SOIL) | Sampling Condition: | Cool & Intact |
| Project Number: | NOT GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | NOT GIVEN | | |

Sample ID: SB 11 @ 10 FT. (H100544-01)

Chloride, SM4500CI-B mg/kg Analyzed By: HM Analyte Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD Qualifier Chloride 1060 16.0 03/23/2011 ND 432 108 400 3.77 TPH 8015M Analyzed By: AB mg/kg Analyte Result Reporting Limit Analyzed True Value QC RPD Qualifier Method Blank BS % Recovery GRO C6-C10 <10.0 10.0 03/25/2011 ND 214 107 200 2.22 DRO >C10-C28 <10.0 10.0 03/25/2011 ND 216 108 200 3.48 Surrogate: 1-Chlorooctane 105 % 70-130 Surrogate: 1-Chlorooctadecane 101 % 70-130

Sample ID: SB 11 @ 35 FT. (H100544-02)

| Chloride, SM4500CI-B | mg | /kg | Analyze | d By: HM | | | | | |
|-------------------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 208 | 16.0 | 03/23/2011 | ND | 432 | 108 | 400 | 3.77 | |
| TPH 8015M | mg. | /kg · | Analyze | d By: AB | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 03/25/2011 | ND | 214 | 107 | 200 | 2.22 | |
| DRO >C10-C28 | <10.0 | 10.0 | 03/25/2011 | ND | 216 | 108 | 200 | 3.48 | |
| Surrogate: 1-Chlorooctane | 107 | % 70-130 | | | | | | | |
| Surrogate: 1-Chlorooctadecane | 101 | % 70-130 | | | | | | | |

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*=Accredited Analyte

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Celeg D. Kune

Celey D. Keene, Lab Director/Quality Manager



Rice Operating Company Hack Conder 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

| Received: | 03/22/2011 | Sampling Date: | 03/21/2011 |
|-------------------|---------------------|---------------------|---------------|
| Reported: | 03/28/2011 | Sampling Type: | Soil |
| Project Name: | BD G-16 VENT (SOIL) | Sampling Condition: | Cool & Intact |
| Project Number: | NOT GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | NOT GIVEN | | |

Sample ID: SB 13 @ 5FT (H100544-03)

| Chloride, SM4500CI-B | mg | /kg | Analyze | d By: HM | | | | | |
|-------------------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 2400 | 16.0 | 03/23/2011 | ND | 432 | 108 | 400 | 3.77 | |
| ТРН 8015М | mg/kg | | Analyzed By: AB | | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 03/26/2011 | ND | 214 | 107 | 200 | 2.22 | |
| DRO >C10-C28 | <10.0 | 10.0 | 03/26/2011 | ND | 216 | 108 | 200 | 3.48 | |
| Surrogate: 1-Chlorooctane | 103 | % 70-130 |) | | | | | | |
| Surrogate: 1-Chlorooctadecane | 97.5 | % 70-130 |) | | | | | | |

Sample ID: SB 13 @ 40 FT (H100544-04)

| Chloride, SM4500Cl-B | mg, | /kg | Analyze | d By: HM | - | | | | |
|-------------------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 160 | 16.0 | 03/23/2011 | ND | 432 | 108 | 400 | 3.77 | |
| TPH 8015M | mg, | /kg | Analyzed By: AB | | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 03/26/2011 | ND | 214 | 107 | 200 | 2.22 | |
| DRO >C10-C28 | <10.0 | 10.0 | 03/26/2011 | ND | 216 | 108 | 200 | 3.48 | |
| Surrogate: 1-Chlorooctane | 103 | % 70-130 | | | | | | | |
| Surrogate: 1-Chlorooctadecane | 98.2 | % 70-130 | | | | | | | |

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Celuz D. Kune

Celey D. Keene, Lab Director/Quality Manager



Rice Operating Company Hack Conder 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

| Received: | 03/22/2011 | Sampling Date: | 03/21/2011 |
|-------------------|---------------------|---------------------|---------------|
| Reported: | 03/28/2011 | Sampling Type: | Soil |
| Project Name: | BD G-16 VENT (SOIL) | Sampling Condition: | Cool & Intact |
| Project Number: | NOT GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | NOT GIVEN | | |

Sample ID: SB 14 @ 5 FT (H100544-05)

| Chloride, SM4500Ci-B | mg, | /kg | Analyze | d By: HM | | | | | |
|-------------------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 7360 | 16.0 | 03/23/2011 | ND | 432 | 108 | 400 | 3.77 | |
| TPH 8015M | mg, | /kg | Analyzed By: AB | | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 03/26/2011 | ND | 214 | 107 | 200 | 2.22 | |
| DRO >C10-C28 | <10.0 | 10.0 | 03/26/2011 | ND | 216 | 108 | 200 | 3.48 | |
| Surrogate: 1-Chlorooctane | 104 | % 70-130 | | | | | | | |
| Surrogate: 1-Chlorooctadecane | 100 | % 70-130 | | | | | | | |

Sample ID: SB 14 @ 40 FT (H100544-06)

| Chloride, SM4500CI-B | mg, | /kg | Analyze | d By: HM | | | | | |
|-------------------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 160 | 16.0 | 03/23/2011 | ND | 432 | 108 | 400 | 3.77 | |
| TPH 8015M | mg/kg | | Analyzed By: AB | | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 03/26/2011 | ND | 214 | 107 | 200 | 2.22 | |
| DRO >C10-C28 | <10.0 | 10.0 | 03/26/2011 | ND | 216 | 108 | 200 | 3.48 | |
| Surrogate: 1-Chlorooctane | 105 | % 70-130 |) | | | | | | |
| Surrogate: 1-Chlorooctadecane | 103 | % 70-130 | 1 | | | | | | |

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Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager



Rice Operating Company Hack Conder 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

| Received: | 03/22/2011 | Sampling Date: | 03/21/2011 |
|-------------------|---------------------|---------------------|---------------|
| Reported: | 03/28/2011 | Sampling Type: | Soil |
| Project Name: | BD G-16 VENT (SOIL) | Sampling Condition: | Cool & Intact |
| Project Number: | NOT GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | NOT GIVEN | | |

Sample ID: SB 15 @ 15 FT (H100544-07)

| Chloride, SM4500CI-B | mg, | /kg | Analyze | d By: HM | | | | | | |
|-------------------------------|-----------------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 688 | 16.0 | 03/23/2011 | ND | 432 | 108 | 400 | 3.77 | | |
| TPH 8015M | IPH 8015M mg/kg | | Analyzed By: AB | | | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| GRO C6-C10 | <10.0 | 10.0 | 03/26/2011 | ND | 214 | 107 | 200 | 2.22 | | |
| DRO >C10-C28 | <10.0 | 10.0 | 03/26/2011 | ND | 216 | 108 | 200 | 3.48 | | |
| Surrogate: 1-Chlorooctane | 106 | % 70-130 | | | | | | | | |
| Surrogate: 1-Chlorooctadecane | 102 | % 70-130 | I | | | | | | | |

Sample ID: SB 15 @ 30 FT (H100544-08)

| Chloride, SM4500CI-B | mg, | /kg | Analyze | d By: HM | | | | | |
|-------------------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 128 | 16.0 | 03/23/2011 | ND | 432 | 108 | 400 | 3.77 | |
| TPH 8015M | mg, | /kg | Analyzed By: AB | | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 03/26/2011 | ND | 214 | 107 | 200 | 2.22 | |
| DRO >C10-C28 | <10.0 | 10.0 | 03/26/2011 | ND | 216 | 108 | 200 | 3.48 | |
| Surrogate: 1-Chlorooctane | 106 | % 70-130 | | | | | | | |
| Surrogate: 1-Chlorooctadecane | 102 | % 70-130 | | | | | | | |

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Celing 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 |

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Celuy D. Kune

Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ARDINAL LABORATORIES

| Company Name | Rice Operating Company | | | | đ | | L TO | 增4. • ; | <u> </u> | | - | ļ | NAL | YSIS | RE | QUES | ST_ | | |
|------------------|------------------------------|------------------|--------------|---|---|----------------------------|--|---------|----------|----------|----------|----------|-------------------------|----------|----|------|-----|-------------|--------------|
| Project Manage | Hack Conder | | | | Ρ.(|), # . ⁹ | | | · | · | | | | 40 | | | | | |
| Address: 122 | s: 122 West Taylor Company:, | | | | | | | S | Ŭ, | | | | | | | | | | |
| City: Hobbs | State: NM | Zip: | 88 | 1.44 | | in: | | | | | | | Ъ. | 5 | | , | | | |
| Phone #: 575-3 | | | | | | dress: | | | | | | | Į. | Ē | | | | | |
| Project #: | Project Owner | 11 | | | Cit | iy D | | | 10 | Σ | | | s/F | Ŋ | | | | | |
| Project Name: | BD G-16 Vent | | | | Sta | ate: | Zip: | | e e | Ω Ω | × | HdT | Ë | ğ | | | | | |
| Project Location | i:BD'G-16 Vent | | | | Phone #: | | | | ric. | 801 | ΞÛ | | ați, | ē | | | | | |
| Sampler Name: | Jordan Woodfin | - | | | City: State: Zip: Phone #: Fax # ATRIX PRESERV SAMPLING PRESERV SAMPLING | | | | | | | | | | | | | | |
| FOR LAB USE ONLY | 1 | 1 1 | | MATRIX. | | PRESERV. | SAMPLI | NG | Ū. | ΗЧ | | e G | e E | Σ | | | | | |
| Lab I.D. | Sample I.D. | (G)RAB OR (C)OMP | # CONTAINERS | GROUNDWATER WASTEWATER Soll Oll Silubge | OTHER | ACID/BASE: ICE / COOL | DATE | TIME | • | T | | | Complete Cations/Anions | TPH 8015 | | | | | |
| 14100544-1 | SB.11 @ 10ft | 6 | 1 | V- 1 | t. | 1 | 3/21/11 | 09:30 | 1 | 1 | | | | | | | | | |
| 2 | SB 11 @ 35ft | 6 | 1 | | | 1 | | 09:55 | ./ | × | | | | | | | | | |
| 3 | SB 13 @ 5 ft | 67 | ĵ. | | | 1 | | 10:45 | 1 | <u>ي</u> | | | | | | | | | |
| <u> </u> | SB 13 @ 40ft | 2 | 1 | | ļ | | | 11:15 | <u> </u> | 1 | | | | | | | | | -upin samiya |
| 5 | SB 14 @ 5ft | 67 | 1 | V. | | | •. • | 01:15 | <i>.</i> | V | <u>.</u> | - | | | | | | | |
| 0 | SB 14 @ 40ft | 6 | 1 | V | <u> </u> | | | 01:40 | 1 | <u>N</u> | • | | | | | | | | |
| <u>11</u> | SB 15 @/15it | 4 | 1 | | ╞╧ | · . • • | د نېښتىسىسىنىغىسىس | 02.00 | <u></u> | | | | | | | | | | |
| - E | SB 15 @ 30ft | Q. | 1 | | | | | 02:30 | <i>.</i> | <u> </u> | | | | | | | | | |
| | | | | | | | •••••••••••••••••••••••••••••••••••••• | | | | | | | ·· | · | | | | |

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603: (505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020

PLEASE NOTE: Labelay and Dunages. Conducte labelay and cleant acceluative remody for any dama along whatper based in compact of toys, shall be leaded to the amount peld by the cleant for the onalyzes? All claims: Indexing that is to notificance and any other cause whatperson shall be deemed within a diverse index made in willing and received by Cardnal within 30 days after completion of the dependent service, is no event shall Cardnal be Lable to incidental or conservent and canages, including within a transmission shall be acceled by Cardnal within 30 days after completion of the dependent service, is no event shall Cardnal be Lable to incidental or conservent and canages, including within a labelay and received by Cardnal within 30 days after completion of the dependents. All habe for successions within solid or in foldental or conserventiate being within a labelay and within 30 days after completion of the dependents. All habe for successions within solid or in foldental or conserventiate being within a labelay and within a labelay and and the based upon any of the above stated related to remain a labelay. Received By: Received By: Phone Result: Date: Da

| Relinquished By: | Phone Resu Fax Result: |
|--|---------------------------|
| Jordan Woodfin | REMARKS: |
| Relinquished By: Date: Received By | email re |
| a como to an demadric | Hconde |
| Delivered By 2 (Circle One) G Sample Condition CHECKED | |
| Sampler - UPS' - Bus - Other: | Lweinh |

émail results Hoonder@riceswd.com; jwoodfin@rice-ecs.com; Lweinheimer@rice-ecs.com kjones@riceswd.com

' Yes

ZI No

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

NEED SAMPLES BACK, PLEASE

Add'I Fax #:

Page 7 of 7

January 25, 2011

Hack Conder Rice Operating Company 112 W. Taylor

RE: BD G-16 VENT

Hobbs, NM 88240

Enclosed are the results of analyses for samples received by the laboratory on 01/14/11 8:07.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021Benzene, Toluene, Ethyl Benzene, and Total XylenesMethod SW-846 8260Benzene, Toluene, Ethyl Benzene, and Total XylenesMethod TX 1005Total Petroleum Hydorcarbons

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celuy D. Kune

Celey D. Keene Lab Director/Quality Manager

Analytical Results For:

Rice Operating Company Hack Conder 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

| Received: | 01/14/2011 | Sampling Date: | 01/13/2011 |
|-------------------|--------------|---------------------|---------------|
| Reported: | 01/25/2011 | Sampling Type: | - Soil |
| Project Name: | BD G-16 VENT | Sampling Condition: | Cool & Intact |
| Project Number: | NONE GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | BD G-16 VENT | | |

Sample ID: MW 1 @ 10 FT. (H100097-01)

| Chloride, SM4500Cl-B | mg, | /kg | Analyze | d By: LR | | | | | |
|-------------------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 4480 | 16.0 | 01/14/2011 | ND | 432 | 108 | 400 | 7.69 | |
| ТРН 8015М | mg/kg | | Analyzed By: AB | | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 01/15/2011 | ND | 224 | 112 | 200 | 0.319 | |
| DRO >C10-C28 | <10.0 | 10.0 | 01/15/2011 | ND | 160 | 80.1 | 200 | 3.86 | |
| Surrogate: 1-Chlorooctane | 82.1 | % 70-130 |) | | | | | | |
| Surrogate: 1-Chlorooctadecane | 83.4 | % 70-130 |) | | | | | | |
| | | | | | | | | | |

Sample ID: MW 1 @ 75 FT. (H100097-02)

| Chloride, SM4500CI-B | mg, | /kg | Analyze | d By: LR | | | | | |
|-------------------------------|--------|-------------------|------------|--------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 4160 | 16.0 | 01/14/2011 | ND | 432 | 108 | 400 | 3.77 | |
| TPH 8015M | /kg | g Analyzed By: AB | | | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 01/15/2011 | ND | 224 | 112 | 200 | 0.319 | |
| DRO >C10-C28 | <10.0 | 10.0 | 01/15/2011 | ND | 160 | 80.1 | 200 | 3.86 | |
| Surrogate: 1-Chlorooctane | 88.6 | % 70-130 | | | | | | | |
| Surrogate: 1-Chlorooctadecane | 95.1 | % 70-130 | | | | | | | |

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Celuy D.Kune

Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

Rice Operating Company Hack Conder 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

| Received: | 01/14/2011 | Sampling Date: | 01/13/2011 |
|-------------------|--------------|---------------------|---------------|
| Reported: | 01/25/2011 | Sampling Type: | Soil |
| Project Name: | BD G-16 VENT | Sampling Condition: | Cool & Intact |
| Project Number: | NONE GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | BD G-16 VENT | | |

Sample ID: MW 1 @ 80 FT. (H100097-03)

| Chloride, SM4500Cl-B | mg, | /kg | Analyze | d By: HM | | | | | |
|-------------------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 1390 | 16.0 | 01/17/2011 | ND | 432 | 108 | 400 | 3.77 | |
| TPH 8015M | mg/kg | | Analyzed By: AB | | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 01/15/2011 | ND | 224 | 112 | 200 | 0.319 | |
| DRO >C10-C28 | <10.0 | 10.0 | 01/15/2011 | ND | 160 | 80.1 | 200 | 3.86 | |
| Surrogate: 1-Chlorooctane | 85.5 | % 70-130 |) | | | | | | |
| Surrogate: 1-Chlorooctadecane | 91.3 | % 70-130 | , | | | | | | |

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Celuy D.1 Tune

Celey D. Keene, Lab Director/Quality Manager

Page 3 of 5

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

Notes and Definitions

 ND
 Analyte NOT DETECTED at or above the reporting limit

 RPD
 Relative Percent Difference

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

 Insufficient time to reach temperature.

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

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

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Celur Sune 1.1

Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ARDINAL LABORATORIES

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|------------------------------|--|-----------------|--------------|--|---------------------------------------|--|--------------|----------|------------------|-------|-------------------------|--------------|---------------|-------|---|----|---|---|
| Company Name | Rice Operating Company | | | | BILL TO | | | | ANALYSIS REQUEST | | | | | | · | | | |
| Project Manager: Hack Conder | | | | P.O. #. | - | | | | | | 0 | | · · · | | | | | |
| Address: 122 | | | | | Company: | | | | | | S | C40 | | | | | ; | |
| City: Hobbs | State: NM | Zip: | 882 | 240 | Attn: | | | | | | j | Thru | | ľ. | | ÷. | | |
| Phone #: 575- | 393-9174 Fax #: 575-39 | 7-14 | 71 | | Address: | | ľ | | | | Yn | 4 | | | | | | |
| Project #: | Project Owner | | | | City | · · · · · · · · · · · · · · · · · · · | 1 10 | Σ | | Î | sli | D | | | | | | |
| Project Náme: | 3D G-16 Vent. | | | | State: | Zip: | ğ | <u>i</u> | × | TPH | i U O | مر م | | | | | | |
| Project Location | n: BD G-16 Vent | | · • | | Phone #: | | Chlorides | 801 | BTEX | ່ທັ | ati | 5 M Extended | | | | | | |
| Sampler Name: | Jordan Woodfin | | | | Fax #: | | Ξ | | Ш | Texas | Ö | Ш | | | t | | | |
| FOR LAB USE ONLY | | | | MATRIX | PRESER | V. SAMPLING | U | H | | e | fe | Σ | | | | | | |
| Lab I.D. | Sample I.D. | (G)RAB OR (C)OM | # CONTAINERS | GROUNDWATER WASTEWATER SOIL OIL SLUDGE | OTHER: ACID/BASE: ICE / COOL | DATE TIME | | | | | Complete Cations/Anions | TPH 8015 | | | | | | - |
| H100097-1 | MW.1 @ 10ft | | <u>Î.</u> | 1 | | 1/13/11 9:00 | 1 | 1. | | | | | | | | | | |
| 2 | MW 1 @ 75ft | | 1 | | | 1/13/11 9:15 | 1 | 1 | | | | | | | | | | |
| 3 | MW 1 @ 80ft | | 1. | | | 1/13/11 9:20 | <u> </u> | 1 | | | | | . | ••••• | | | | |
| <u></u> | | | غن | | <u> </u> | | - i | | | | | · | | | | | | · |
| | | ; | ; | | | | | | | | | | | | | | | |
| ····· | | | | | · · · · · · · · · · · · · · · · · · · | - i | | | · | | | <u></u> | | | | | | |
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| | e <u>a piete di anno 1995 e consecta a consecta a consecta da consecta a consecuta da cons</u> | | ļ. | | - | | | <u> </u> | | | | | | | | | | |
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101 East Marland, Hobbs, NM, 88240 2111 Beechwood, Abilene, TX, 79603

PLEASE NOTE: Listelary and Damages, Cardma's kubdy and clerit's exclusive remedy for any clein action whether fused in contact or tot, shall be lenied to the unount paid by the clerit for the, improver, Al clains, inclusing these for negligence and any other cashe whatever shall be denied valued crites a mich a writing and received by Card all whith 30 days after completion of the applicable survice, in no event shall Continable fable for incidental or consequential damages including whether that the burness instructions (loss of use; or base of protain round by dient, its substantias) of fabors of successory substantiation of the performance of services bereating to your for successory substantiation of the state researce or preference.

| | Date 14/11 Received By: | Phone Result: |
|----------------------------|---|--|
| Relinguished By: | Date: 14/11 Received By | email results |
| Delivered By: (Circle One) | Tripe OT Other Checked By: Sample Condition CHECKED BY: (Infitials) | Hconder@riceswd.com; jwoodfin@riceswd.com; |
| Sampler UPS - Bus - Other: | | Lweinheimer@riceswd.com kjones@riceswd.com |

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

#26

NEED SAMPLES BACK, PLEASE

Page 5 of 5

Appendix B Monitor Well Sampling Analysis

RICE Environmental Consulting and Safety (RECS) P.O. Box 5630 Hobbs, NM 88241 Phone 575.393.4411 Fax 575.393.0293



October 31, 2011

Hack Conder Rice Operating Company 112 W. Taylor Hobbs, NM 88240

RE: BD G-16 VENT

Enclosed are the results of analyses for samples received by the laboratory on 10/24/11 12:00.

Cardinal Laboratories is accredited through Texas NELAP for:

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

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



Rice Operating Company Hack Conder 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

| Received: | 10/24/2011 | Sampling Date: | 10/21/2011 |
|-------------------|----------------------------------|---------------------|----------------|
| Reported: | 10/31/2011 | Sampling Type: | Water |
| Project Name: | BD G-16 VENT | Sampling Condition: | Cool & Intact |
| Project Number: | NOT GIVEN | Sample Received By: | Celey D. Keene |
| Project Location: | T22S R37E SEC 16G - LEA CTY., NM | | |

Sample ID: MONITOR WELL #1 (H102304-01)

| BTEX 8260B | mg/ | L | Analyze | d By: CMS | | | | | |
|---------------------------------|--------|-----------------|------------|--------------|-------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.001 | 0.001 | 10/24/2011 | ND | 0.021 | 103 | 0.0200 | 3.72 | |
| Toluene* | <0.001 | 0.001 | 10/24/2011 | ND | 0.020 | 99.8 | 0.0200 | 2.44 | |
| Ethylbenzene* | <0.001 | 0.001 | 10/24/2011 | ND | 0.021 | 103 | 0.0200 | 1.56 | |
| Total Xylenes* | <0.003 | 0.003 | 10/24/2011 | ND | 0.061 | 102 | 0.0600 | 1.88 | |
| Surrogate: Dibromofluoromethane | 149 9 | % 59.8-16 | 1 | | | | | | |
| Surrogate: Toluene-d8 | 102 9 | 75.2-11 | 5 | | | | | | |
| Surrogate: 4-Bromofluorobenzene | 78.8 | 53.7-12 | 0 | | | | | | |
| Chloride, SM4500CI-B | mg/ | L | Analyze | d By: AP | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 64.0 | 4.00 | 10/28/2011 | ND | 108 | 108 | 100 | 0.00 | |
| Sulfate 375.4 | mg/ | L | Analyze | d By: HM | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Sulfate | 87.3 | 10.0 | 10/28/2011 | ND | 20.9 | 104 | 20.0 | 13.8 | |
| TDS 160.1 | mg/ | L | Analyze | d By: HM | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| TDS | 410 | 5.00 | 10/26/2011 | ND | 235 | 97.9 | 240 | 0.00 | |

Cardinal Laboratories

*=Accredited Analyte

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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 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 |

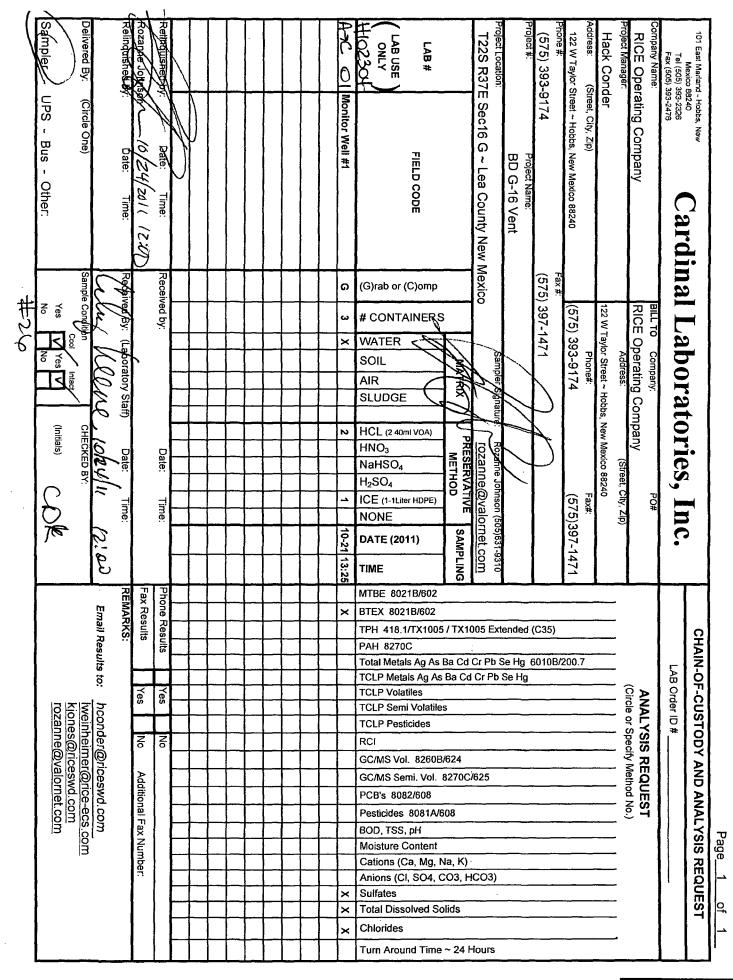
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Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager



Hansen, Edward J., EMNRD

From:Hack Conder [hconder@riceswd.com]Sent:Tuesday, April 17, 2012 10:10 AMTo:Hansen, Edward J., EMNRDCc:Katie Jones; Laura PenaSubject:ROC - BD G-16 vent (1R426-29)Attachments:ROC - BD G-16 vent (1R426-29) Sampling Notes.pdf

Mr. Hansen,

Attached is a description of the aquifer beneath the BD G-16 vent (1R426-29) site. If you have any questions or require any additional information, please contact me at (575)631-6432.

Thank you.

Hack Conder Environmental Manager RICE Operating Company

Arc Envíronmental

P. O. Box 1772 Lovington, New Mexico 88260 (575) 631-9310 Rozanne Johnson ~ rozanne@valornet.com

April 16, 2012

<u>NOTES</u>

The following summarizes the field activities at the RICE BD G-16 Vent, Lea County T22S, R37E, Sec 16 Unit Letter G:

- There is one 2-inch monitor well drilled at the site. A Solinist Water Level Meter is used during each sampling event to check the depth to water prior to pumping and bailing the well. The meter indicated on January 27, 2012 water within the well at a depth of 96.67 with the total depth of the well of 100.51 feet, giving 3.84 feet (0.61 gallons) of water within the well bore. The well is pumped at 0.25 gallons per minute until the well will no longer pump. The well is then bailed dry with a bailer. The well recovers to within 10 percent of the original depth in just over an hour and a half or about 0.04 feet per minute. Purging the well dry is done three times before allowing the well to recover for 24 hours before sampling with a bailer.
- The site is located in the eastern Eunice Plain area of Lea County, which is underlain by a hard caliche surface and is covered by a thin layer of reddishbrown dune sand. The dominant vegetation is bear grass, mesquite and grama grass. Cattle ranchers and oil production activities currently use the area.
- In this arid region the rate of recharge is very slow due to small rainfall amounts, the porosity of the formation consisting of low permeable rock and a presence of clay, which leaves sediments that are thinly saturated or dry. There is little underground flow of water in the area, again due to the formation.

Sincerely, Arc Environmental

Rozanne Johnson Rozanne Johnson

Electronic Copy:

Hack Conder Katie Jones