District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

## State of New Mexico **OIL CONS. DIV DIST.** 3 Energy Minerals and Natural Resources

es Form C-141
Revised August 8, 2011

OCT (Submit 1 Copy to appropriate District Office to

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 OCT (Submit 1 Copy to appropriate District Office to accordance with 19.15.29 NMAC.

| Release Notification and Corrective Action   |             |               |             |                  |                     |   |  |               |                      |            |          |              |  |
|--|-------------|---------------|-------------|------------------|---------------------|---|--|---------------|----------------------|------------|----------|--------------|--|
|  |             |               |             |                  |                     | <b>OPERA</b>  |  |               |                      | al Report  |          | Final Report |  |
|  |             | St. Houston   |             |                  |                     | Contact Lindsay Dumas Telephone No. (281)794-9159                                     |  |               |                      |            |          |              |  |
| Address 1111 Travis St. Houston, TX 77002 Telephone No. (281)794-9159 Facility Name: San Juan 28-5 Unit 88 Facility Type: Gas Well   |             |               |             |                  |                     |   |  |               |                      |            |          |              |  |
| Surface Owner Private Mineral Owner I  |             |               |             |                  |                     |   | Private API No.3003920475                      |               |                      |            |          |              |  |
| LOCATION OF RELEASE  |             |               |             |                  |                     |   |  |               |                      |            |          |              |  |
| Unit Letter M  |             |               |             |                  | South Line<br>South | Feet from the 800'  | East/West Line<br>West                         |               | County<br>Rio Arriba |            |          |              |  |
| Latitude <u>36.6566658</u> Longitude <u>-107.3528671</u>   |             |               |             |                  |                     |   |  |               |                      |            |          |              |  |
| NATURE OF RELEASE  |             |               |             |                  |                     |   |  |               |                      |            |          |              |  |
| Type of Release Condensate & Produced Water Volume of Release 27.3bbl & Volume Recovered 0  9.6bbls  Source of Release Production Tonk  Date and Hour of Occurrence Date and Hour of Discovery   |             |               |             |                  |                     |   |  |               |                      |            |          |              |  |
| Source of Release Production Tank  |             |               |             |                  |                     | Date and Hour of Occurrence Unknown  Date and Hour of Discovery 03/28/17 @ 10:00 a.m. |  |               |                      |            |          |              |  |
| Was Immediate Notice Given?   ☐ Yes ☐ No ☐ Not Required  |             |               |             |                  |                     | If YES, To Whom?  |  |               |                      |            |          |              |  |
| By Whom? Lisa Hunter   |             |               |             |                  |                     | Date and Hour 03/29/17 @ 1:38 p.m.  |  |               |                      |            |          |              |  |
| Was a Watercourse Reached?  ☐ Yes ☐ No   |             |               |             |                  |                     |   | If YES, Volume Impacting the Watercourse.  N/A |               |                      |            |          |              |  |
| If a Watercou  | irse was Im | pacted, Descr | ibe Fully.* |                  |                     |   |  |               |                      |            |          |              |  |
| IN/A   |             |               |             |                  |                     |   |  |               |                      |            |          |              |  |
| Describe Cause of Problem and Remedial Action Taken.*  During routine tank gauging of Production Tank it was discovered product was missing. Further examination found condensate in rain and snow   |             |               |             |                  |                     |   |  |               |                      |            |          |              |  |
|  |             |               |             | d the tank. Well |                     |   |  |               |                      | u condensa | ic in re | in and snow  |  |
| Describe Area Affected and Cleanup Action Taken.*  |             |               |             |                  |                     |   |  |               |                      |            |          |              |  |
| ConocoPhillips will have the affected area assessed using a hallow stem auger rig with split spoon sampling; lab and field samples to identify extent of contamination horizontally and vertically, and to determine remediation path forward. Delineation assessment to be completed October                |             |               |             |                  |                     |   |  |               |                      |            |          |              |  |
| 2 <sup>nd</sup> and 3 <sup>rd</sup> , 2017.  |             |               |             |                  |                     |   |  |               |                      |            |          |              |  |
| I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger |             |               |             |                  |                     |   |  |               |                      |            |          |              |  |
| public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability  |             |               |             |                  |                     |   |  |               |                      |            |          |              |  |
| should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other  |             |               |             |                  |                     |   |  |               |                      |            |          |              |  |
| federal, state, or local laws and/or regulations.  OIL CONSERVATION DIVISION   |             |               |             |                  |                     |   |  |               |                      |            |          |              |  |
| Signature:   | mdoa        | y Du          | nar         |                  |                     |   | OIL COIN                                       | <u>JLIC (</u> | /                    | 1          |          | - 4          |  |
| Printed Name: Lindsay Dumas  |             |               |             |                  |                     | Approved by Environmental Specialist:   |  |               |                      |            |          |              |  |
| Title: Environmental Specialist  |             |               |             |                  |                     | Approval Date: 10/20/17 Expiration Date:  |  |               |                      |            |          |              |  |
| E-mail Address: Ldumas@hilcorp.com   |             |               |             |                  |                     | Conditions of Approval: Samples to Attached   |  |               |                      |            |          |              |  |
| Date: 9/25/20  | 017         | Phone:        | (281)794-9  | 9159             | 1                   | Be Test   | FOR TPH(                                       | DRU-          | 6RO-MRO              |            |          | /            |  |
| Attach Addit   | ional Shee  | ets If Necess | ary         |                  |                     |   |  |               |                      |            |          |              |  |
|  |             |               |             |                  | 5                   | >: /inachton  | perator was                                    | 2 CX          | D AND                |            |          |              |  |
| PATL FOWARD. B. Nov 1, 2017  |             |               |             |                  |                     |   |  |               | 1,20                 | 17         |          |              |  |



848 East 2nd Avenue Durango, Colorado 81301 T 970.385.1096 / F 303.433.1432

September 20, 2017

Lindsay Dumas Hilcorp Energy – L48 West 5525 Highway 64 Farmington, New Mexico 87401

RE: Revised Proposal for Subsurface Investigation Hilcorp Energy San Juan 28-5 #88 San Juan County, New Mexico

Dear Ms. Dumas:

LT Environmental, Inc. (LTE) is pleased to present to Hilcorp Energy (Hilcorp) the following revised scope of work to delineate impact to soil at the San Juan 28-5 #88 natural gas well (Site). LTE will use a CME-75 drilling rig equipped with hollow stem augers to advance boreholes and collect soil samples from the borehole with a split-spoon hammer sampler. This cost estimate includes the following tasks and assumptions:

- Advance 8 holes to approximately 35 feet below ground surface (bgs). Proposed boreholes
  will generally be located as presented in Figure 1; however, the final location of boreholes
  will be determined based on field observations and findings.
- LTE will work outward from the known source area until clean soil is identified. Soil borings will be advanced until one of four criteria are met: the depth of the impacted soil is defined, groundwater is encountered, bedrock is encountered, or auger refusal.
- Collect split-spoon samples every five feet from all boreholes.
- Conduct field screening for volatile aromatic hydrocarbons. Screening will be conducted with a photo-ionization detector (PID) equipped with a 10.6 electron volt lamp in accordance with the NMOCD's Guidelines for Remediation of Leaks, Spills and Releases, August 13, 1993. Additionally, a PetroFlag field test kit will be used to analyze total petroleum hydrocarbons (TPH) and better quantify field screening results.
- Soil samples for laboratory analysis will be collected from the section of core containing the highest field screening results and/or from the bottom of soil borings to document lateral and vertical extent of soil impact. The final number of soil samples submitted for laboratory analysis will be determined in the field.
- The Site is in Unit M of Section 15 within Township 15 North and Range 5 West. There are no water wells within a 1-mile radius of the Site, but cathodic reports for two adjacent production wells (approximately 1,180 feet to the northeast and approximately 1,070 feet to the north) reported depth to water as 100 feet to 110 feet bgs. The nearest surface water bodies are dry arroyos that are higher-order tributaries of Gobernador Canyon. One



tributary is approximately 165 feet north-northwest of the Site. A stock pond is approximately 260 feet east of the Site. Based on the proximity of the tributary to the north, the New Mexico Oil Conservation Division (NMOCD) ranking criteria triggers the following remediation action levels: 10 milligrams per kilogram (mg/kg) for benzene, 50 mg/kg for total BTEX (benzene, toluene, ethylbenzene, and xylenes), and 100 mg/kg for (TPH).

- Samples will be hand delivered in a cooler on ice to Hall Environmental Analysis Laboratory for analysis of BTEX by EPA Method 8021B and TPH using EPA Method 8015M.
- For the purposes of this cost estimate, LTE anticipates no more than 10 soil borings.
- A Trimble® GeoExplorer® 3000 series GPS will be used to determine the latitude and longitude location of each soil boring and pertinent site features.
- LTE will provide a short summary report documenting sampling and analysis activities
  and a discussion of the subsurface lithology and lateral and vertical extent of potential
  impact. The report will include site layout maps, analytical results, and recommendations.
- LTE will contact New Mexico One Call at least 48 hours prior to any subsurface activities to have all subsurface utilities identified and clearly marked.
- LTE will prepare a site-specific health and safety plan (HASP) in accordance with the Occupational Health and Safety Administration (OSHA) regulations specified in 29 CFR 1910.120.

## COSTS

The estimated cost for the Scope of Services described above is \$13,150.90 and detailed on Table 1. If you have questions or comments regarding the content of this cost estimate, please telephone me at (970) 385-1096.

Sincerely,

LT ENVIRONMENTAL, INC.

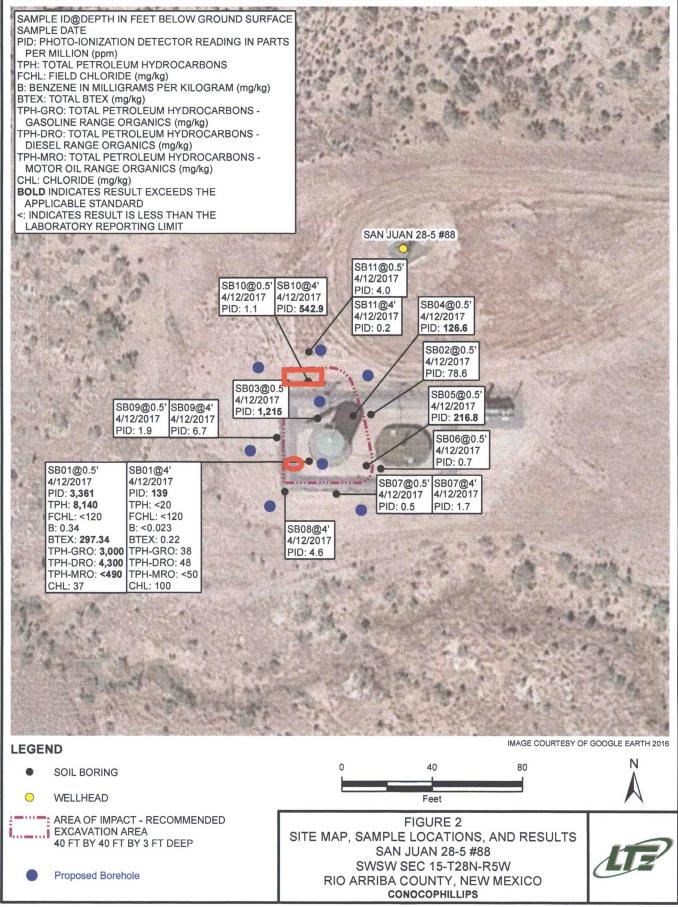
Ashley L. Ager, M.S., P.G.

Senior Geologist

Ashley L. Ager

Attachments (2)





## TABLE 1 ESTIMATED COSTS - REVISED

## SAN JUAN 28-5 #88 SUBSURFACE INVESTIGATION SAN JUAN COUNTY, NEW MEXICO HILCORP ENERGY

| LABOR  |         |           | Project      | Staff         | GIS        | Admin/      |
|--|---------|-----------|--------------|---------------|------------|-------------|
|  |         | Principal | Scientist II | Scientist III | Figures    | Clerical    |
| Task 1 - Preperation                                       |         |           | 1            | 2             |            | 0.5         |
| Task 2 - Site Investigation                                |         | 1         | 2            | 20            |            |             |
| Task 3 - Reporting   |         | . 4       | 2            | 4             | 2          | 0.5         |
| TOTAL H  | OURS    | 5         | 5            | 26            | 2          | 1           |
| RA   | TE (\$) | \$140.00  | \$100.00     | \$72.00       | \$72.00    | \$55.00     |
| LABOR  | COST    | \$700.00  | \$500.00     | \$1,872.00    | \$144.00   | \$55.00     |
|  |         |           |              |               | SUBTOTAL   | \$3,271.00  |
| SUBCONTRACTORS   |         |           | QTY.         | COST/UNIT     | UNIT       | UNIT TOTAL  |
| Drilling - up to 10 boreholes with Geoprobe Advance Push R | lig     | -         |              |               |            |             |
| Mobe/Demobe (Rig)  |         |           | 1            | \$400.00      | EACH       | \$400.00    |
| Crew Travel, w/o rig                                       |         |           | 8            | \$150.00      | HOUR       | \$1,200.00  |
| Support Vehicle  |         |           | 2            | \$110.00      | EACH       | \$220.00    |
| Soil Boring and Sampling; 7.25" HSA                        |         |           | 350          | \$14.00       | FEET       | \$4,900.00  |
| Crew Time  |         |           | 5            | \$150.00      | HOUR       | \$750.00    |
| Materials  |         |           | 1            | \$228.00      | EACH       | \$228.00    |
|  |         |           |              |               |            | \$7,698.00  |
|  |         |           |              |               | Fee (5%)   | \$384.90    |
|  |         |           |              |               | SUBTOTAL   | \$8,082.90  |
| Laboratory Analysis - soil samples (BTEX, TPH)             |         |           | 10           | \$115         | EACH       | \$1,150.00  |
|  |         |           |              | •             | Fee (10%)  | \$184.00    |
|  |         |           |              |               | SUBTOTAL   | \$1,334.00  |
|  |         |           |              |               | SUBTOTAL   | \$9,416.90  |
| OTHER DIRECT COSTS   |         |           | QTY.         | COST/UNIT     | UNIT       | UNIT TOTAL  |
| GPS  |         |           | 2            | \$60          | /DAY       | \$120.00    |
| Photo-ionization Detector                                  |         |           | 2            | \$50          | /DAY       | \$100.00    |
| Vehicle  |         |           | 2            | \$110         | /DAY       | \$220.00    |
| Misc Field Supplies  |         |           | <u></u>      | \$23          | /DAY       | \$23.00     |
| PetroFlag  |         |           | 20           | \$15.75       | / SAMPLE   | \$315.00    |
|  |         |           |              | *             | SUBTOTAL   | \$463.00    |
| ·  |         |           | ı            | TOTAL FORM    | MATER COST | 612 150 00  |
|  |         |           |              | IOIAL ESTI    | MATED COST | \$13,150.90 |

