## R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW 🛦 Suite F-142 🛦 Albuquerque, NM 87104 🛦 505.266.5004 🛦 Fax: 505.266-0745

August 16, 2013

Mr. Mike Bratcher NMOCD District 2 811 South First Street Artesia, New Mexico 88210

AUG 2 3 2013 NMOCD ARTESIA

RE: NMOCD 2RP-1674 - XTO Nash Unit 29 Modular Impoundment Spill Report and Remediation Plan

Dear Mike:

We sampled a background location per C-141/Part 29 approval conditions/stipulations for release event 2RP-1674. Attached is a map (Plate 1) showing the location and results of the Background Sample collected on June 24, 2013. Results are shown in the white box with red outline. Included is the laboratory Certificate of Analysis.

The Background Sample shows an average chloride concentration of 2,773 mg/kg between 1.5 and 4.5 feet below ground surface (bgs). Below 4.5 feet chloride concentration is less than 2,000 mg/kg. The Trench Sample shows a higher chloride concentration of approximately 520 mg/kg between 1.5 and 2-feet bgs.

Comparing the Trench Sample to the Background Sample, the average chloride concentration in the Trench Sample between 4 and 6 feet bgs is lower.

- average concentration of chloride between 4 and 6 feet bgs in the Trench Sample is 2,060 mg/kg.
- average concentration of chloride between 4.5 and 6 feet bgs in the Background Sample is 2,400 mg/kg.

Removing the upper 2-feet of soil within the remediation area as shown on Plate 2 will remediate the observed higher chlorides.

For your convenience, we reproduced a portion of our remediation plan as presented in our March 15 spill report, below:

XTO Energy proposes to excavate and dispose of the western third (30%) of the caliche pad that was in contact with the modular impoundment. The 30% area includes the release area and out beyond to the edge of the caliche pad. Plate 2 identifies the area proposed for remediation. The excavated material will be transported to R360 or equivalent for proper disposal.

The remediated area will be contoured and seeded using BLM Seed Mixture Type 4 with Giant Sacaton seed added to the mixture.

We anticipate starting remedial activities within the next few weeks. We will notify NMOCD 48-hours prior to remedial activities.

August 17, 2013 Page 2

,

,

Please contact me at 970-570-9535 if you have any questions or comments.

Sincerely, R.T. Hicks Consultants Durango Field Office

as

Andrew Parker

Cc: David Luna, XTO Energy, via email

|  | 440<br>920<br>880<br>380 |
|--|--------------------------|
|  |                          |
| W       0       35       70       R.T. Hicks Consultants, Ltd       Chloride Concentrations in         Note Hole       State       Feet       901 Rio Grande Blvd NW Suite F-142       Chloride Concentrations in         Note Hole       State       Feet       901 Rio Grande Blvd NW Suite F-142       XTO Energy: Nash Unit State         Nubuquerque, NM 87104       Ph: 505.266.5004       API: 30-015-29434 |                          |

֥

ś

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 5 of

| 101 East Marland, | Hobbs, NM   | 88240 |
|-------------------|-------------|-------|
| (FTF) 600 0000 F  | V (ETE) DOG | 0470  |

| (5/5) 393-2320 FAX (5/5) 393-2470 |                                       |                  |              |                           |              |                    |                   |                          |         |        |                  |                       |          |          |  |          |          |   |         |  |              |     |
|-----------------------------------|---------------------------------------|------------------|--------------|---------------------------|--------------|--------------------|-------------------|--------------------------|---------|--------|------------------|-----------------------|----------|----------|--|----------|----------|---|---------|--|--------------|-----|
| Company Name                      | Name: R.T. Hicks Consultants          |                  |              |                           |              | BILLITO            |                   |                          |         |        | ANALYSIS REQUEST |                       |          |          |  |          |          |   |         |  |              |     |
| Project Manage                    | Project Manager: Kristin Pope         |                  |              |                           |              |                    | P.O. #:           |                          |         |        |                  |                       |          | •        |  |          |          |   | ·       |  |              |     |
| Address:                          |                                       |                  |              |                           |              |                    | Company: RT HICKS |                          |         |        |                  |                       | (        |          |  |          | ĺ        |   |         |  | [            |     |
| City:                             | State:                                | Zip              | :            |                           |              |                    | Attn:             |                          |         |        |                  |                       |          |          |  |          |          |   | ] .     |  |              |     |
| Phone #:                          |                                       |                  |              |                           |              |                    | Address:          |                          |         |        |                  |                       |          |          |  |          | Į        |   |         |  |              |     |
| Project #:                        | Project Owne                          | r:               | X            | TO                        |              |                    | City:             |                          |         |        |                  |                       |          |          |  |          | ]        |   |         |  |              |     |
| Project Name:                     | XTO Nash Draw 29                      |                  |              | •                         |              | 5                  | State: Zip:       |                          |         |        |                  | ]                     | 1        |          |  |          | · ·      | ļ |         |  |              |     |
| Project Locatio                   | n: Eddy County                        |                  |              |                           |              | ļ                  | Phone #:          |                          |         |        |                  |                       |          |          |  |          |          | ł |         |  |              |     |
| Sampler Name:                     | K. Pope                               |                  | _            |                           |              | 7                  | Fax #:            |                          |         |        |                  |                       | 1        |          |  |          | ł        | 1 |         |  |              |     |
| FOR LAB USE ONLY                  |                                       |                  |              |                           | MATRI        | <b>(</b>           | PRESERV. SAMPLING |                          |         |        |                  |                       |          |          |  |          |          | 1 | . 1     |  |              |     |
| Lab I.D.<br>H30149                | Sample I.D.                           | (G)RAB OR (C)OMP | # CONTAINERS | GROUNDWATER<br>MASTEWATER | SOIL<br>SOIL | SLUDGE             | OTHER :           | ACIU/BASE:<br>ICE / COOL | OTHER : | DATE   | TIME             | C1-                   |          |          |  |          |          |   |         |  |              |     |
| l                                 | Background Q 1.5'                     | G                | 1            |                           | (            |                    |                   |                          |         | 062413 |                  |                       | [        |          |  |          |          |   |         |  |              |     |
| 2                                 | J # 3'                                | 1                | 1            |                           |              |                    |                   | _                        |         | il     |                  | 1/                    |          | <br>     |  |          |          |   |         |  | <br>         |     |
| 3                                 |                                       | 17               | 1            |                           |              |                    | _                 | _                        |         | "      | ·                | 4                     |          |          |  |          | ļ        |   | <b></b> |  |              | · . |
| 4                                 | 4 6                                   | 44               | 14           |                           | +H           |                    | 4                 | _                        |         | 11     |                  |                       | <u> </u> |          |  |          | [        |   |         |  | <br>         |     |
| 5                                 | " 7.5'                                | 1/-              | 14           | · .                       |              | $\left  \right $   | -                 |                          |         | 11     |                  | $\left \right\rangle$ |          |          |  |          | <b> </b> |   |         |  | <br><u> </u> |     |
| 6                                 | 14 <b>B</b> 4                         | <u> </u>         | $I_{\perp}$  |                           | 11           | $\left  - \right $ | -                 |                          |         | 11     |                  | $\vdash$              | [        | <u> </u> |  |          | <b>_</b> |   | [       |  | <br>         | ·   |
|                                   |                                       |                  |              |                           | +            | ┝━┤                |                   |                          |         |        |                  | <b> </b>              |          |          |  |          |          |   |         |  | <br>         |     |
| ·                                 |                                       | <b> </b>         | ŀ            |                           |              | ┝╌╄                | ╉                 |                          |         |        |                  | <b> </b>              |          |          |  | <u> </u> |          |   |         |  | <br>         |     |
|                                   | · · · · · · · · · · · · · · · · · · · |                  |              |                           | ++           | + +                | ╉                 |                          |         |        |                  | <b> </b>              |          |          |  |          |          |   |         |  | <br>·        |     |

PLEASE NOTE: Lability and Damages. Cardinal's liability and client's exclusive remedy for any dalm arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries,

| affiliates or successors arising out of or related to the performa<br>Relinquished By: | Date:         | Cardinal, recardless of whether such claim is based upon any of the<br>Received By: | Phone Result:  Yes No  Add'  Phone #: |
|--|---------------|---|---------------------------------------|
| Keiniguisneu Dy.   | 062613        |   | Fax Result:                           |
| Knutin Page  | Time:<br>0700 | Noughos lan   | REMARKS:                              |
| Relinquished By:   | Date:         | Received By:  |                                       |
|  | Time:         | ADAI Menson   | Email to and rew@rthicks consult.com  |
| Delivered By: (Circle One)   |               | Sample Condition CHECK  | Has and Kristin @ "                   |
| Sampler - UPS - Bus - Other:   |               | 50 Cool Intact Inter<br>10 Tres 7 Yes<br>10 No No                                   |                                       |
|  |               |   |                                       |

+ Cardinal cannot accept verbal changes. Please fax written changes to (576) 393-3326 #54