



March 26, 2020

Rick Rickman
District Supervisor
Oil Conservation Division, District 1
1625 N. French Dr.
Hobbs, NM 88240

**Re: Release Characterization and Remediation Work Plan
ConocoPhillips
Britt B-21 Flowline Release
Unit Letter O, Section 10, Township 20 South, Range 37 East
Lea County, New Mexico
1RP-5296
Tracking Number NCH1836256201**

Dear Mr. Rickman:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips (COP) to assess a release that occurred from the Britt B-21 Flowline, Unit Letter O, Section 10, Township 20 South, Range 37 East, Lea County, New Mexico (Site). The release site coordinates are 32.582014°, -103.238916°. The Site location is shown on Figures 1 and 2.

BACKGROUND

According to the State of New Mexico C-141 Initial Report (Appendix A), a release occurred on December 1, 2018. Per the initial C-141, the site name is listed as the Britt B-24. This is a clerical error, recognized by NMOCD upon receipt. After conversation and research with COP personnel, the release was determined to have originated from the Britt B-21 flowline, approximately ¾ miles to the southwest of the Britt B-24 well pad location. The C-141 states that approximately 5 barrels (bbls) of oil and 13 bbls of produced water were released and approximately 2 bbls of oil and 2 bbls of produced water were recovered.

According to the initial C-141, the cause of the release was a flow line leak that resulted in a 18 bbl release that ran off the pad ran and affected a 12' X 435' X 1" area. However, after conversation and research with COP personnel, the release was determined to have originated from the Britt B-21 flowline at the lease road crossing located at approximately 32.582014°, -103.238916°. The volumes released are accurate, however the dimensions are inaccurate. The actual release was approximately 5' X 235' X 1". The release flowed west along the lease road toward a topographical low, where it pooled in two low lying areas on each side of the lease road. The southern footprint is approximately 25' X 50' and the northern footprint is approximately 15 X 25'. Figure 3 depicts the footprint and extent of the original release.

The initial C-141 was submitted and that version was modified by NMOCD (Christina Hernandez) upon receipt (red pdf boxes) and appeared in the administrative order database online. Based on conversations with NMOCD Compliance Officer Ramona Lopez Marcus, that C-141 for 1RP-5296 was revised and corrected with text edits and callout boxes reflecting corrections. This revised C-141 was submitted via the fee portal and this version was accepted by the NMOCD in an email dated March 10, 2020.

TETRA TECH

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SITE CHARACTERIZATION

A site characterization was performed and no watercourses, lakebeds, sinkholes, playa lakes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, springs, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the specified distances and the site is in a low karst potential area.

No water wells are listed in Section 10 on the New Mexico Office of the State Engineer (NMOSE) database. There are 55 water wells located in Township 20S and Range 37E. The average depth to groundwater in the area is 44 feet. The NMOSE groundwater data is included as Appendix B.

REGULATORY FRAMEWORK

A risk-based evaluation was performed for the Site in accordance with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills, and Releases, updated August 14, 2018. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene, and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil.

Based upon the Site characterization and average depth to groundwater, the proposed RRALs for soil are:

- Benzene: 10 milligrams per kilogram (mg/kg);
- Total BTEX (sum of benzene, toluene, ethylbenzene, and xylene): 50 mg/kg;
- TPH (GRO + DRO + ORO): 100 mg/kg;
- Chloride: 600 mg/kg

INITIAL RESPONSE

In accordance with 19.15.29.8. B. (4) NMAC that states “the responsible party may commence remediation immediately after discovery of a release”, ConocoPhillips elected to begin remediation of the impacted area in February 2019. The footprint of the release in the lease road extending from the flow line west to the low-lying areas was scraped to approximately six inches below ground surface (Figure 3). The release area south of the lease road, shown in Figure 3, was excavated to a depth of 2-3.5 feet below grade to remove the impacted soils. Impacted soil was disposed of in a permitted landfill facility.

INITIAL SITE ASSESSMENT

Following initial response excavation activities, COP personnel were onsite to assess and sample the release area in February 2019. Four (4) borings (SP-1 through SP-4) were installed to a total depth of 5 feet below ground surface to evaluate the vertical extents of the release. A total of eight soil samples were collected from these boring locations on February 19, 2019 (Figure 4). In addition to the borings, eight (8) sidewall samples (WALL 1 – WALL 8) were collected from the excavated area south of the lease road. The samples were submitted to an analytical laboratory for Total Petroleum Hydrocarbons (TPH), benzene, toluene, ethylbenzene and xylenes (BTEX) and chlorides (SM4500CI-B) analysis. A copy of the analytical report and chain-of-custody documentation are included in Appendix C.

ADDITIONAL SITE ASSESSMENT

In order to more fully characterize the vertical and horizontal extent of the release area, Tetra Tech personnel were onsite to further delineate and sample the release area in September 2019. Seven (7) borings (BH-1 – BH-7) were installed using an air rotary drilling rig to various depths. A total of two (2) additional soil samples were collected (ESW-1 and WSW-1) from the east and west sidewalls north of the lease road. ESW-1 and WSW-2 were collected from the edges of the low-lying area north of the lease road. Samples were submitted to an analytical laboratory for TPH, BTEX, and chlorides (Method 300.0). Copies of analytical reports and chain-of-custody documentation are included in Appendix C. Boring logs, included

as Appendix D, present soil descriptions, sample depths and field screening data from the additional site assessment.

SUMMARY OF SAMPLING RESULTS

The results of the initial sampling events in February 2019 are summarized in Table 1. The sample locations are shown on Figure 4. The analytical results associated with SP-1 through SP-4 had RRAL exceedances for either TPH or chloride to a depth of 5 feet. The analytical results associated with sidewall sample WALL 3 had a chloride concentration that exceeded the RRAL. All other sidewall sample results were below RRAL for BTEX, TPH and chloride.

The results of the additional sampling event in September 2019 are summarized in Table 2. The sample locations are shown in Figure 4. The analytical results associated with borings BH-1 and BH-3 had chloride concentrations above the RRAL of 600 mg/kg within the 4 to 5-foot interval. The BH-6 analytical results had RRAL exceedances for chloride in the 0 to 3-foot interval. The analytical results for BH-5, located at the downgradient extent of the release, had a TPH concentration at the surface that slightly exceeded the RRAL. All other sample results were below the RRAL for BTEX, TPH and chloride.

REMEDIATION WORK PLAN

Based on the soil sample results, ConocoPhillips proposes to remove the impacted material exceeding RRALs shown in Tables 1 and 2 and as depicted in Figure 5. Excavation in the area will be performed using heavy equipment (backhoes and track hoes) to a maximum depth of 6 feet below ground surface within the release area. Photographic documentation of the Site release area is included as Appendix E.

Excavated soils will be transported offsite and disposed of at an NMOCD-approved or permitted facility. Confirmation floor and sidewall samples will be collected for verification of remedial activities, and analyzed for TPH, BTEX and chloride. Once the sample results are received, NMOCD will be notified and the excavation will then be backfilled with clean material to surface grade. The estimated volume of material to be remediated is 300 cubic yards.

ALTERNATIVE CONFIRMATION SAMPLING PLAN

In accordance with 19.15.29.12(D)(1)(b) NMAC, ConocoPhillips proposes the following alternative confirmation sampling plan to adhere with NMOCD requirements. The proposed confirmation sample locations are depicted in Figure 6. Six (6) confirmation floor samples and fourteen (14) confirmation sidewall samples are proposed for verification of remedial activities. The proposed excavation encompasses an area of approximately 2,200 square feet.

These confirmation sidewall and floor samples will be representative of no more than approximately 500 square feet of excavated area. Confirmation samples will be sent to Pace Laboratories for analysis of TPH, BTEX and chloride. The new sidewall confirmation samples will be used in conjunction with the previously collected sidewall samples to verify impacted soils were removed.

REVEGETATION PLAN

The backfilled areas north and south of the lease road will be seeded in Spring 2020 (first favorable growing season) to aid in revegetation. Based on the soil types present at the site, the New Mexico State Land Office (NMSLO) Shallow (SH) Sites Seed Mixture will be used for seeding and will be planted in the amount specified in the pounds pure live seed (PLS) per acre. The seed mixture will be spread by a drill equipped with a depth regulator or a hand-held broadcaster and raked. If a hand-held broadcaster is used for dispersal, the PLS per acre will be doubled.

Site inspections will be performed to assess the revegetation progress and evaluate the site for the presence of primary or secondary noxious weeds. If noxious weeds are identified, the NMSLO will be

contacted to determine an effective method for eradication. If the site does not show revegetation after one growing season, the area will be reseeded as appropriate. The NMSLO seed mixture details and corresponding pounds pure live seed per acre are included in Appendix F.

CONCLUSION

ConocoPhillips proposes to complete remediation activities at the Site within 90 days of the date of NMOCD approval of this submittal. Upon completion of the proposed work, a final closure report detailing the remediation activities and the results of the confirmation sampling will be submitted to NMOCD. If you have any questions concerning the soil assessment or the proposed remediation activities for the Site, please call me at (512) 338-2861 or Greg at (432) 682-4559.

Sincerely,

Tetra Tech, Inc.



Christian M. Llull, P.G.
Project Manager



Greg W. Pope, P.G.
Program Manager

cc:

Mr. Marvin Soriwei, RMR – ConocoPhillips
Mr. Charles Beauvais, GPBU - ConocoPhillips
Mr. Gustavo Fejervary-Morena, ConocoPhillips
Ms. Jim Amos, BLM

List of Attachments

Figures:

- Figure 1 – Site Location/Overview Map
- Figure 2 – Site Location/Topographic Map
- Figure 3 – Approximate Release Extent and Initial Response Actions
- Figure 4 – Release Assessment Map
- Figure 5 – Proposed Remediation Areas
- Figure 6 – Alternative Confirmation Sampling Plan

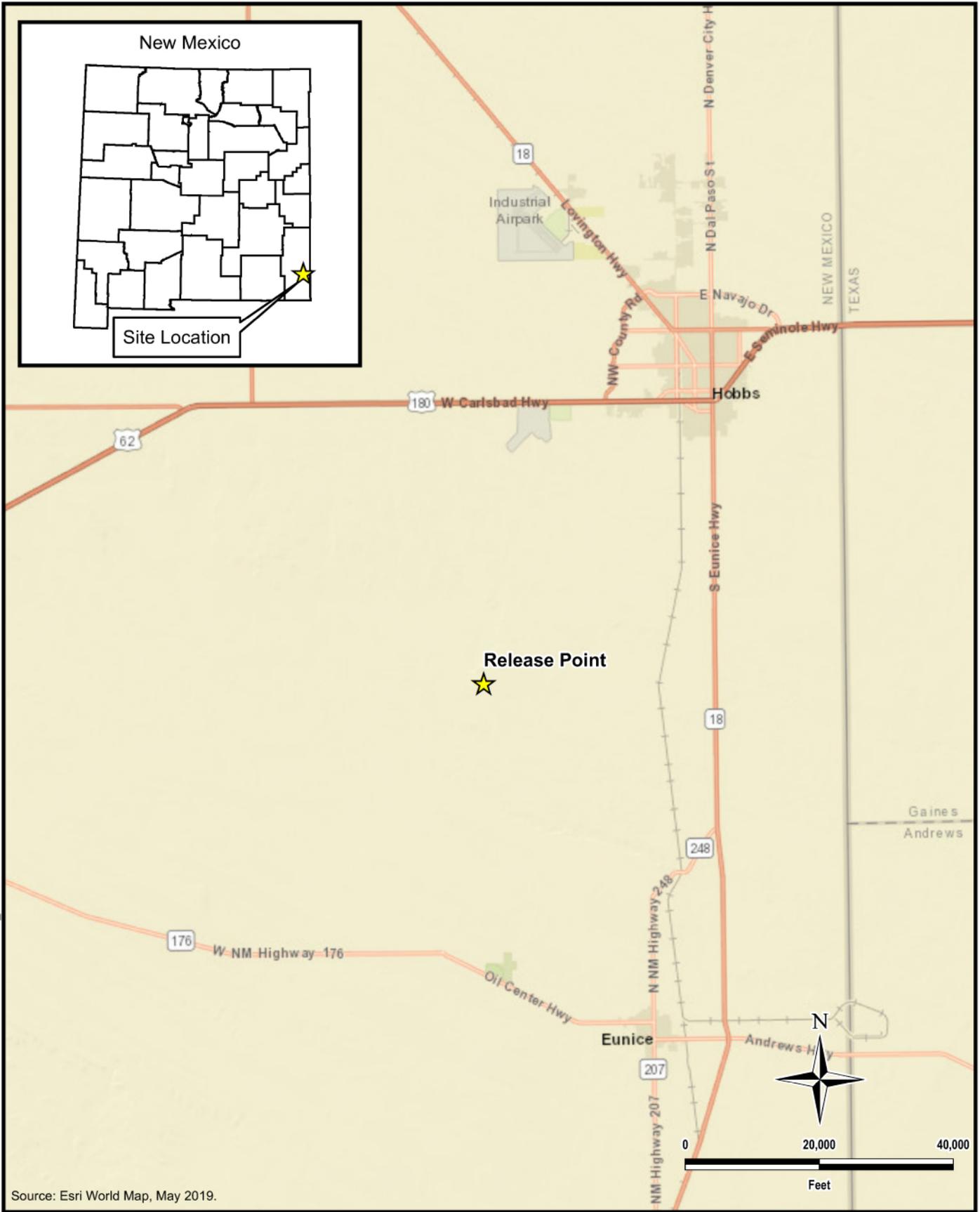
Tables:

- Table 1 – Summary of Analytical Results – Initial Soil Assessment
- Table 2 – Summary of Analytical Results – Additional Soil Assessment

Appendices:

- Appendix A – C-141 Form
- Appendix B – NMOSE Groundwater Data/Karst Potential Map
- Appendix C – Laboratory Analytical Data
- Appendix D – Soil Boring Logs
- Appendix E – Photographic Documentation
- Appendix F – NMSLO Seed Mixture Details

FIGURES



Source: Esri World Map, May 2019.

DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\BRITT\FIGURE 1 OVERVIEW MAP - BRITT.MXD



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(32.58198°, -103.239962°)
 LEA COUNTY, NEW MEXICO

**BRITT B-21 FLOWLINE RELEASE
 OVERVIEW MAP**

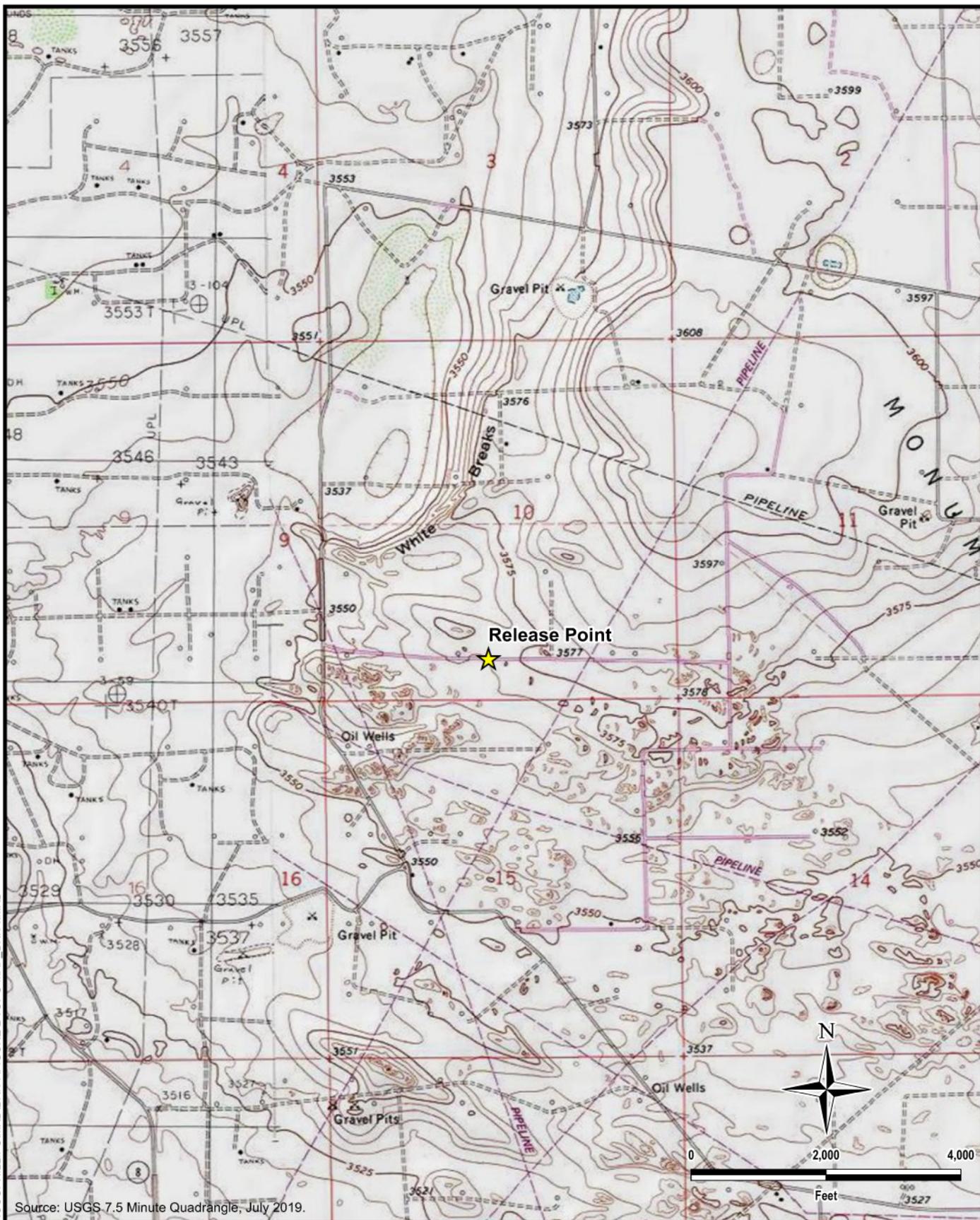
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DATE: NOVEMBER 25, 2019

DESIGNED BY: AAM

Figure No.

1



Source: USGS 7.5 Minute Quadrangle, July 2019.

DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\BRITT\FIGURE 2 TOPO MAP BRITT.MXD



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**BRITT B-21 FLOWLINE RELEASE
 TOPOGRAPHIC MAP**

PROJECT NO.: 212C-MD-01852

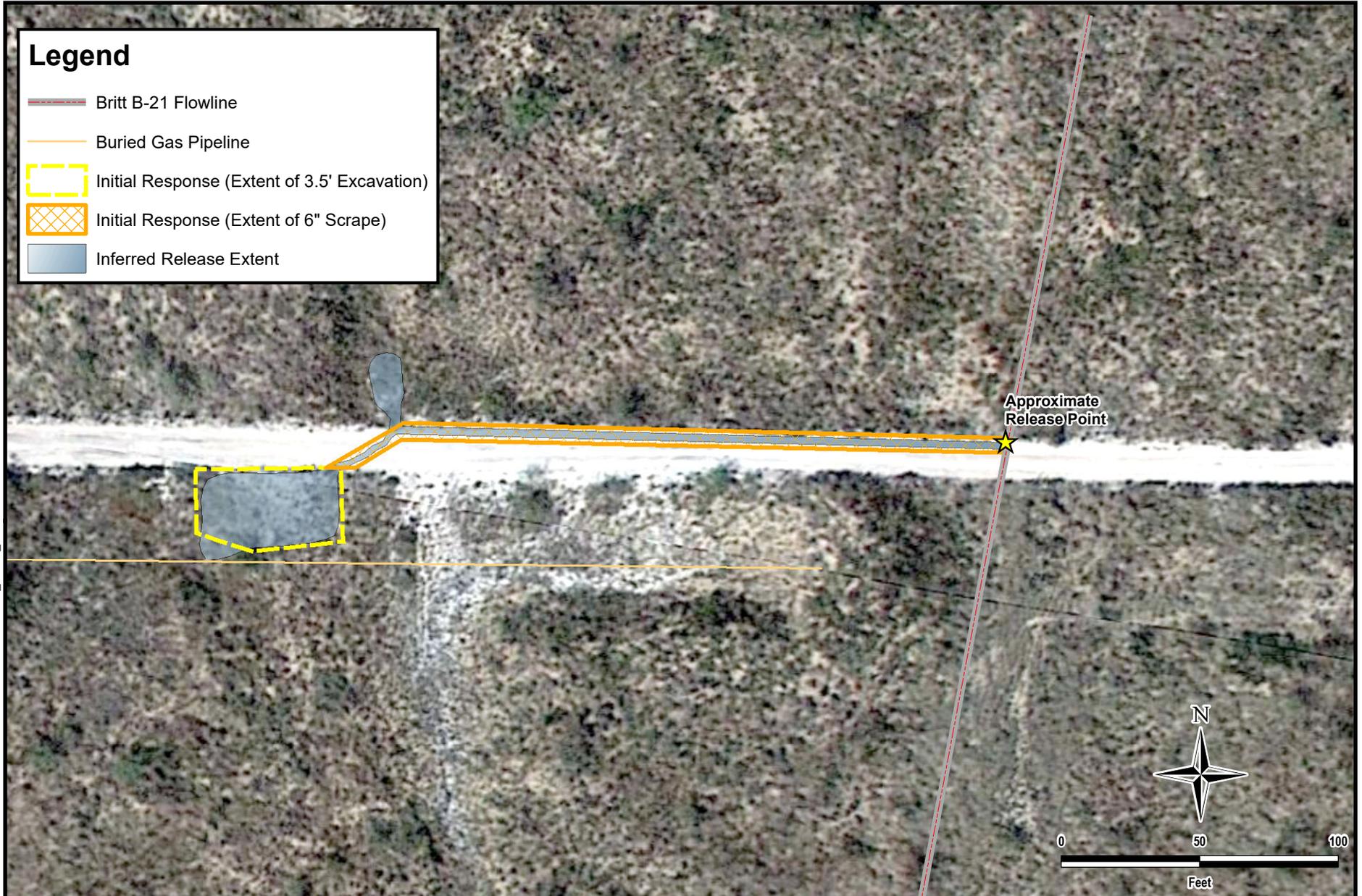
DATE: NOVEMBER 25, 2019

DESIGNED BY: AAM

Figure No.

2

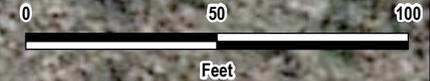
DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\BRITT\FIGURE 3 RELEASE EXTENT_BRITT_21.MXD



Legend

-  Britt B-21 Flowline
-  Buried Gas Pipeline
-  Initial Response (Extent of 3.5' Excavation)
-  Initial Response (Extent of 6" Scrape)
-  Inferred Release Extent

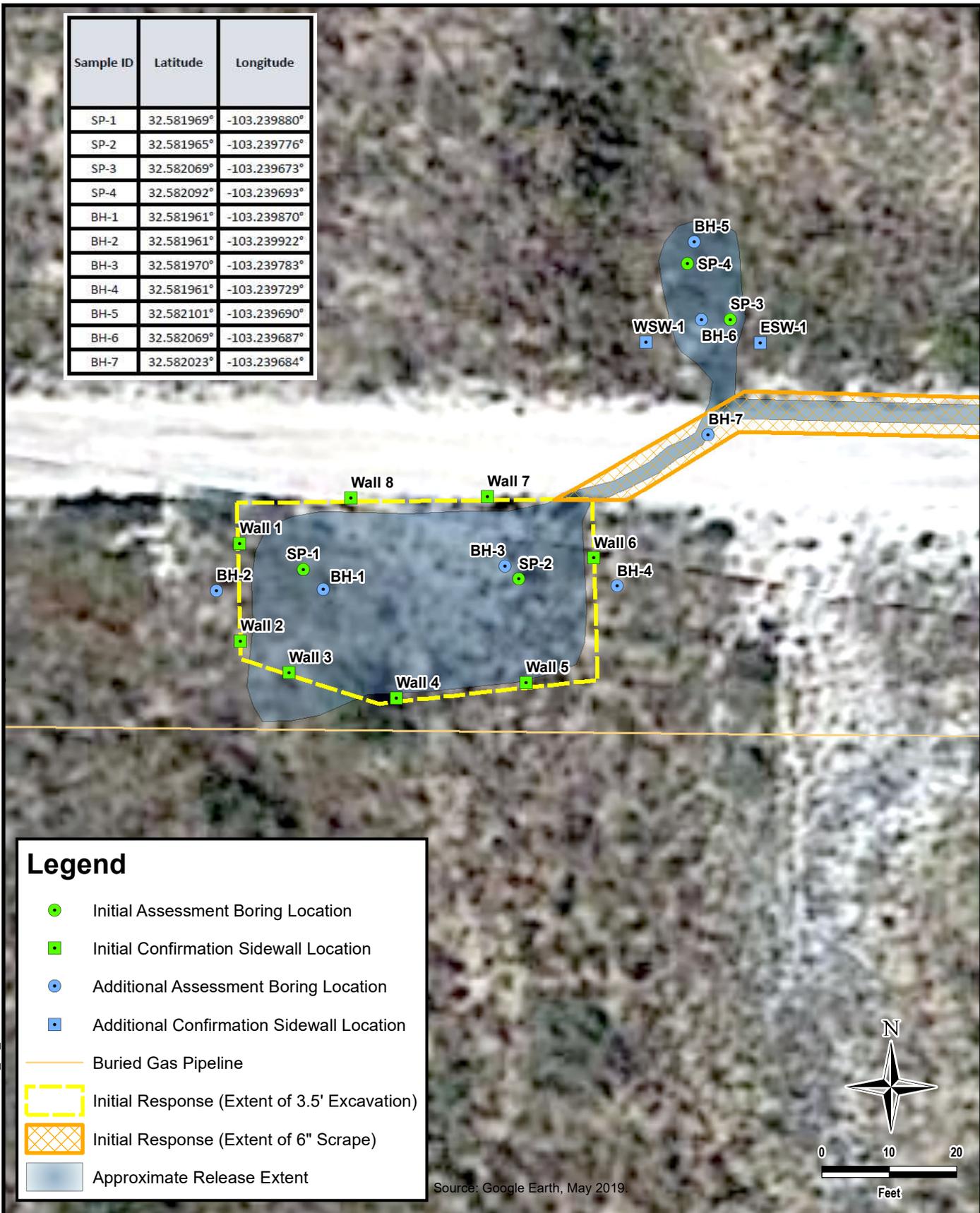
Approximate Release Point



| | | |
|--|---|---|
|  TETRA TECH www.tetrattech.com 901 West Wall Street, Suite 100 Midland, Texas 79701 Phone: (432) 682-4559 Fax: (432) 682-3946 | CONOCOPHILLIPS (32.58198° , -103.239962°) LEA COUNTY, NEW MEXICO | PROJECT NO.: 212C-MD-01852 DATE: FEBRUARY 27, 2020 DESIGNED BY: AAM |
| | BRITT B-21 FLOWLINE RELEASE APPROXIMATE RELEASE EXTENT AND INITIAL RESPONSE ACTIONS | |
| | | Figure No. 3 |

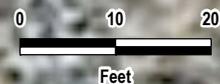
Source: Google Earth, May 2019.

| Sample ID | Latitude | Longitude |
|-----------|------------|--------------|
| SP-1 | 32.581969° | -103.239880° |
| SP-2 | 32.581965° | -103.239776° |
| SP-3 | 32.582069° | -103.239673° |
| SP-4 | 32.582092° | -103.239693° |
| BH-1 | 32.581961° | -103.239870° |
| BH-2 | 32.581961° | -103.239922° |
| BH-3 | 32.581970° | -103.239783° |
| BH-4 | 32.581961° | -103.239729° |
| BH-5 | 32.582101° | -103.239690° |
| BH-6 | 32.582069° | -103.239687° |
| BH-7 | 32.582023° | -103.239684° |



Legend

- Initial Assessment Boring Location
- Initial Confirmation Sidewall Location
- Additional Assessment Boring Location
- Additional Confirmation Sidewall Location
- Buried Gas Pipeline
- Initial Response (Extent of 3.5' Excavation)
- Initial Response (Extent of 6" Scrape)
- Approximate Release Extent



Source: Google Earth, May 2019.

I:\TTS194FS1\SUP-GIS\ARCP\R12\NERT\MXD\FIGURE1_TTS_LOCATION.MXD



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**BRITT B-21 FLOWLINE RELEASE
 RELEASE ASSESSMENT MAP**

PROJECT NO.: 212C-MD-01852

DATE: FEBRUARY 27, 2020

DESIGNED BY: AAM

Figure No.

4



Legend

- Initial Boring Location
- Initial Sidewall Sample
- Additional Boring Location
- Additional Sidewall Sample
- Buried Gas Pipeline
- 6' Excavation
- Approximate Release Extent

Source: Google Earth, May 2019.



\\TTS134FS1\SUP-GIS\ARCP\RJ2\NERT\MXD\FIGURE1_TS_LOCATION.MXD



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 LEA COUNTY, NEW MEXICO

BRITT B-21 FLOWLINE RELEASE PROPOSED REMEDIATION AREAS

PROJECT NO.: 212C-MD-01852

DATE: FEBRUARY 27, 2020

DESIGNED BY: AAM

Figure No.

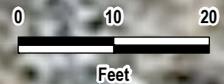
5



Legend

- Floor Confirmation Sample Location
- Sidewall Confirmation Sample Location
- Buried Gas Pipeline
- 6' Excavation
- Approximate Release Extent

Source: Google Earth, May 2019.



\\TTS194FS1\UP-GIS\ARCP\RJ2\NERT\MXD\FIGURE1_TS_LOCATION.MXD



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**BRITT B-21 FLOWLINE RELEASE
 ALTERNATIVE CONFIRMATION SAMPLING PLAN**

PROJECT NO.: 212C-MD-01852

DATE: FEBRUARY 27, 2020

DESIGNED BY: AAM

Figure No.

6

TABLES

TABLE 1
 SUMMARY OF ANALYTICAL RESULTS
 INITIAL SOIL ASSESSMENT
 1RP-5296
 BRITT B-21 FLOWLINE RELEASE
 LEA COUNTY, NEW MEXICO

| Sample ID | Sample Date | Sample Interval | Chloride ¹ | BTEX ² | | | | | | | | | | TPH ³ | | | | | | |
|-----------|-------------|-----------------|-----------------------|-------------------|---|---------|---|--------------|---|--------|---|------------|---|------------------|---|-------|---|---------|---|---|
| | | | | Benzene | | Toluene | | Ethylbenzene | | Xylene | | Total BTEX | | GRO | | DRO | | EXT DRO | | Total TPH (C ₆ - C ₃₆) |
| | | | | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | |
| SP-1 | 02/19/19 | 3-4 | 46400 | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <0.10 | | <0.10 | | <0.10 | | <0.10 |
| | | 4-5 | 752 | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <0.10 | | <0.10 | | <0.10 | | <0.10 |
| SP-2 | 02/19/19 | 3-4 | 8660 | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <0.10 | | <0.10 | | <0.10 | | <0.10 |
| | | 4-5 | 3600 | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <0.10 | | <0.10 | | <0.10 | | <0.10 |
| SP-3 | 02/19/19 | 2-3 | 1040 | <0.050 | | <0.050 | | 0.051 | | <0.150 | | <0.300 | | 75.7 | | 3200 | | 1040 | | 4315.7 |
| | | 4-5 | 48 | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <0.10 | | 218 | | 87.5 | | 305.5 |
| SP-4 | 02/19/19 | 2-3 | 752 | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <0.10 | | 1050 | | 232 | | 1282 |
| | | 4-5 | 4000 | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <0.10 | | 22.6 | | 22.7 | | 45.3 |
| WALL | 02/19/19 | WALL 1 | 32 | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <0.10 | | <0.10 | | <0.10 | | <0.10 |
| | | WALL 2 | 32 | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <0.10 | | <0.10 | | <0.10 | | <0.10 |
| WALL | 02/19/19 | WALL 3 | 1570 | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <0.10 | | <0.10 | | <0.10 | | <0.10 |
| | | WALL 4 | 336 | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <0.10 | | <0.10 | | <0.10 | | <0.10 |
| WALL | 02/19/19 | WALL 5 | 384 | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <0.10 | | 21.9 | | <0.10 | | 21.9 |
| | | WALL 6 | 48 | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <0.10 | | <0.10 | | <0.10 | | <0.10 |
| WALL | 02/19/19 | WALL 7 | 80 | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <0.10 | | <0.10 | | <0.10 | | <0.10 |
| | | WALL 8 | 48 | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <0.10 | | <0.10 | | <0.10 | | <0.10 |

NOTES:

ft. Feet
 bgs Below ground surface
 mg/kg Milligrams per kilogram
 ppm Parts per million
 TPH Total Petroleum Hydrocarbons
 * Field screening measurement
 1 Method 300.0
 2 Method 8260B
 3 Method 8015M
 DRO Diesel Range Organics
 GRO Gasoline Range Organics
 ORO Oil Range Organics

Bold values exceed the proposed RRALS for the Site.

Shaded rows indicate depth intervals proposed for excavation and remediation.

B The same analyte is found in the associated blank.
 J The identification of the analyte is acceptable; the reported value is an estimate.
 J3 The associated batch QC was outside the established quality control range for precision.
 J5 The sample matrix interfered with the ability to make accurate determination; spike value is high.
 J6 The sample matrix interfered with the ability to make accurate determination; spike is low.
 V The sample concentration is too high to evaluate accurate spike recoveries.
 U Not detected at the Sample Detection Limit (SDL).

TABLE 2
SUMMARY OF ANALYTICAL RESULTS
ADDITIONAL SOIL ASSESSMENT
1RP-5296
BRITT B-21 FLOWLINE RELEASE
LEA COUNTY, NM

| Sample ID | Sample Date | Sample Interval ft bgs | Field Screening Results Chlorides | Chloride ¹ | | BTEX ² | | | | | | | | | TPH ³ | | | | | | | | |
|-----------|-------------|---------------------------|--------------------------------------|-----------------------|-----|-------------------|---|-----------|---|--------------|---|-----------|---|------------|------------------|--|-----|--|---------|--|---|---|---|
| | | | | | | Benzene | | Toluene | | Ethylbenzene | | Xylene | | Total BTEX | | GRO (C ₃ - C ₁₀) ⁴ | | DRO (C ₁₀ - C ₂₈) | | ORO (C ₂₈ - C ₄₀) | | Total TPH (C ₃ - C ₄₀) | |
| | | | | | | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q |
| BH-1 | 09/17/19 | 4-5 | | 3740 | | < 0.00117 | | < 0.00585 | | < 0.00293 | | < 0.00761 | | - | | < 0.117 | | 5.05 | | 5.34 | | 10.39 | |
| | | 6-7 | | 432 | | < 0.00107 | | < 0.00536 | | < 0.00268 | | < 0.00697 | | - | | < 0.107 | | 12.1 | | 13.8 | | 25.9 | |
| | | 9-10 | | 125 | | < 0.00117 | | < 0.00586 | | < 0.00293 | | < 0.00762 | | - | | < 0.117 | | < 4.69 | | < 4.69 | | - | |
| BH-2 | 09/17/19 | 0-1 | | 213 | | < 0.00110 | | < 0.00550 | | < 0.00275 | | < 0.00715 | | - | | < 0.110 | | 35.0 | | 45.5 | | 80.5 | |
| | | 2-3 | | 25.7 | B | < 0.00101 | | < 0.00527 | | < 0.00253 | | < 0.00659 | | - | | < 0.101 | | 5.00 | | 10.7 | | 15.7 | |
| | | 4-5 | | 8.22 | B J | < 0.00107 | | < 0.00534 | | < 0.00267 | | < 0.00694 | | - | | < 0.107 | | < 4.27 | | < 4.27 | | - | |
| | | 6-7 | | 13.1 | B | < 0.00110 | | < 0.00548 | | < 0.00274 | | < 0.00713 | | - | | < 0.110 | | < 4.39 | | < 4.39 | | - | |
| BH-3 | 09/17/19 | 4-5 | | 1630 | | < 0.00117 | | < 0.00583 | | < 0.00291 | | < 0.00758 | | - | | < 0.117 | | 8.52 | | 24.7 | | 33.22 | |
| | | 6-7 | | 158 | | < 0.00115 | | < 0.00574 | | < 0.00287 | | < 0.00747 | | - | | < 0.115 | | 3.11 | J | 6.82 | | 9.93 | |
| | | 9-10 | | 324 | | < 0.00118 | | < 0.00591 | | < 0.00296 | | < 0.00768 | | - | | < 0.118 | | 4.00 | J J3 J6 | 4.78 | | 8.78 | |
| BH-4 | 09/17/19 | 0-1 | | 55.3 | | < 0.00107 | | < 0.00533 | | < 0.00266 | | < 0.00693 | | - | | < 0.107 | | 8.93 | | 32.8 | | 41.73 | |
| | | 2-3 | | 29.1 | B | < 0.00101 | | < 0.00506 | | < 0.00253 | | < 0.00658 | | - | | < 0.101 | | 3.58 | J | 9.88 | | 13.46 | |
| | | 4-5 | | 80.7 | | < 0.00107 | | < 0.00533 | | < 0.00267 | | < 0.00693 | | - | | < 0.107 | | 3.74 | J | 13.2 | | 16.94 | |
| | | 6-7 | | 83.6 | | < 0.00109 | | < 0.00544 | | < 0.00272 | | < 0.00707 | | - | | < 0.109 | | < 4.35 | | 0.97 | J | 0.97 | |
| BH-5 | 09/17/19 | 0-1 | | 53.9 | | < 0.00108 | | < 0.00540 | | < 0.00270 | | < 0.00702 | | - | | < 0.108 | | 32.6 | | 74.9 | | 107.5 | |
| | | 2-3 | | 74.5 | | < 0.00107 | | < 0.00535 | | < 0.00267 | | < 0.00695 | | - | | < 0.107 | | 11.7 | | 36.8 | | 48.5 | |
| | | 4-5 | | 25.9 | B | < 0.00111 | | < 0.00553 | | < 0.00276 | | < 0.00719 | | - | | < 0.111 | | 2.99 | J | 1.02 | J | 4.01 | |
| BH-6 | 09/17/19 | 0-1 | | 2660 | | < 0.00116 | | < 0.00582 | | < 0.00291 | | < 0.00757 | | - | | < 0.116 | | 19.8 | | 37.3 | | 57.1 | |
| | | 2-3 | | 681 | | < 0.00115 | | < 0.00575 | | < 0.00288 | | < 0.00748 | | - | | < 0.115 | | 19.1 | | 28.3 | | 47.4 | |
| | | 4-5 | | 51.0 | | < 0.00119 | | < 0.00597 | | < 0.00298 | | < 0.00760 | | - | | < 0.119 | | < 4.77 | | < 4.77 | | - | |
| BH-7 | 09/17/19 | 0-1 | | 25.9 | | < 0.00105 | | < 0.00527 | | < 0.00263 | | < 0.00685 | | - | | < 0.105 | | 2.22 | J | 12.1 | | 14.32 | |
| | | 2-3 | | 50.9 | | < 0.00105 | | < 0.00523 | | < 0.00261 | | < 0.00679 | | - | | < 0.105 | | 1.79 | J | 3.86 | J | 5.65 | |
| | | 4-5 | | 562 | | < 0.00108 | | < 0.00540 | | < 0.00270 | | < 0.00702 | | - | | < 0.108 | | < 4.32 | | 0.797 | J | 0.797 | |
| ESW-1 | 09/17/19 | - | | 18.7 | B | < 0.00110 | | < 0.00551 | | < 0.00275 | | < 0.00716 | | - | | < 0.110 | | 2.64 | J | 32.8 | | 35.44 | |
| WSW-1 | 09/17/19 | - | | 18.6 | B | < 0.00113 | | < 0.00565 | | < 0.00283 | | < 0.00735 | | - | | < 0.030 | B J | < 4.52 | | 7.27 | | 7.27 | |

NOTES:

- ft. Feet
- bgs Below ground surface
- mg/kg Milligrams per kilogram
- ppm Parts per million
- TPH Total Petroleum Hydrocarbons
- * Field screening measurement
- 1 Method 300.0
- 2 Method 8260B
- 3 Method 8015M
- DRO Diesel Range Organics
- GRO Gasoline Range Organics
- ORO Oil Range Organics

Bold values exceed the proposed RRALs for the Site.

Shaded rows indicate depth intervals proposed for excavation and remediation.

- B The same analyte is found in the associated blank.
- J The identification of the analyte is acceptable; the reported value is an estimate.
- J3 The associated batch QC was outside the established quality control range for precision.
- J5 The sample matrix interfered with the ability to make accurate determination; spike value is high.
- J6 The sample matrix interfered with the ability to make accurate determination; spike is low.
- V The sample concentration is too high to evaluate accurate spike recoveries.
- U Not detected at the Sample Detection Limit (SDL).

APPENDIX A C-141 Forms

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

State of New Mexico
Energy Minerals and Natural
Resources Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

| | |
|----------------|---------------|
| Incident ID | NCH1836256201 |
| District RP | 1RP-5296 |
| Facility ID | |
| Application ID | pCH1836256467 |

Release Notification

Responsible Party

| | |
|---|--|
| Responsible Party ConocoPhillips | OGRID 217817 |
| Contact Name Justin Wright | Contact Telephone +1-575-631-9092 |
| Contact email Justin.Wright@conocophillips.com | Incident # NCH1836256201 BRITT B 24 @ |
| Contact mailing address 29 Vacuum Complex Lane, Lovington | 30-025-21223 ← Britt B-21 |

**Incorrect GPS
Coordinates**

Location of Release Source

Latitude ~~32°32'08.80" N~~ ← **32.582014°** Longitude ~~103°13'37.92"~~ ← **-103.238916°**
(NAD 83 in decimal degrees to 5 decimal places)

| | |
|---------------------------------------|--|
| Site Name: Britt B 24 ← 21 | Site Type: Producing well Flowline release |
| Date Release Discovered: Dec. 1, 2018 | API# (if applicable) 30-025-21223 ← 30-025-20649 |

| Unit Letter | Section | Township | Range | County |
|-------------------------|---------------------------|----------|-------|--------|
| L ← O | 11 ← 10 | 20S | 37E | Lea |

Surface Owner: State Federal Tribal Private (Name: _____)

Federal minerals

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

| | | |
|--|--|--|
| <input checked="" type="checkbox"/> Crude Oil | Volume Released (bbls) 5 | Volume Recovered (bbls) 2 |
| <input checked="" type="checkbox"/> Produced Water | Volume Released (bbls) 13 | Volume Recovered (bbls) 2 |
| | Is the concentration of dissolved chloride in the produced water >10,000 mg/l? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Condensate | Volume Released (bbls) | Volume Recovered (bbls) |
| <input type="checkbox"/> Natural Gas | Volume Released (Mcf) | Volume Recovered (Mcf) |
| <input type="checkbox"/> Other (describe) | Volume/Weight Released (provide units) | Volume/Weight Recovered (provide units) |

Cause of Release – Flow line leak resulted in a 18 BBL release that ran ~~off the pad~~ **down the lease road to the west.**

Dimensions ~~12' x 435' x 1'~~ **5' X 235' X 1"**

State of New Mexico
Oil Conservation Division

| | |
|----------------|---------------|
| Incident ID | NCH1836256201 |
| District RP | 1RP-5296 |
| Facility ID | |
| Application ID | pCH183625646 |

| | |
|---|--|
| Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, for what reason(s) does the responsible party consider this a major release? |
| If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? | |

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

| |
|--|
| <input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately. |
| If all the actions described above have <u>not</u> been undertaken, explain why: |
| Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation. |
| I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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. |
| Printed Name: <u>Cullen Rosine</u> Title: <u>HSE Specialist</u> Signature: <u><i>Cullen Rosine</i></u> Date: <u>12-5-2018</u> email: <u>Cullen.j.rosine@conocophillips.com</u> Telephone: <u>973-727-4779</u> |
| C-141 resubmitted with additional corrections via the payment portal on 3/10/2020 . cml. |
| OCD Only <div style="border: 2px solid blue; border-radius: 15px; padding: 5px; display: inline-block;"> RECEIVED By <i>CHernandez</i> at 3:46 pm, Dec 28, 2018 </div> |

| | |
|----------------|--|
| Incident ID | |
| District RP | |
| Facility ID | |
| Application ID | |

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

| | |
|---|--|
| What is the shallowest depth to groundwater beneath the area affected by the release? | _____ (ft bgs) |
| Did this release impact groundwater or surface water? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Are the lateral extents of the release within 1000 feet of any other fresh water well or spring? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Are the lateral extents of the release within 300 feet of a wetland? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Are the lateral extents of the release overlying a subsurface mine? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Are the lateral extents of the release overlying an unstable area such as karst geology? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Are the lateral extents of the release within a 100-year floodplain? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Did the release impact areas not on an exploration, development, production, or storage site? | <input type="checkbox"/> Yes <input type="checkbox"/> No |

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: Each of the following items must be included in the report.

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- Depth to water determination
- Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- Boring or excavation logs
- Photographs including date and GIS information
- Topographic/Aerial maps
- Laboratory data including chain of custody

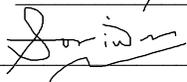
If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

| | |
|----------------|--|
| Incident ID | |
| District RP | |
| Facility ID | |
| Application ID | |

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name: _____ Title: _____

Signature:  _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

| | |
|----------------|--|
| Incident ID | |
| District RP | |
| Facility ID | |
| Application ID | |

Remediation Plan

Remediation Plan Checklist: *Each of the following items must be included in the plan.*

- Detailed description of proposed remediation technique
- Scaled sitemap with GPS coordinates showing delineation points
- Estimated volume of material to be remediated
- Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- Extents of contamination must be fully delineated.
- Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name: _____ Title: _____
 Signature:  Date: _____
 email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

- Approved Approved with Attached Conditions of Approval Denied Deferral Approved

Signature:  Date: _____

| | |
|----------------|--|
| Incident ID | |
| District RP | |
| Facility ID | |
| Application ID | |

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

APPENDIX B
NMOSE Groundwater Data/Karst Potential
Map

APPENDIX C

Laboratory Analytical Data

APPENDIX D Soil Boring Logs

APPENDIX E

Photographic Documentation

APPENDIX F NMSLO Seed Mixture Details