**SQ Environmental, LLC**
P.O. Box 1991
Austin, TX 78767-1991
(512) 900-7731
www.SQEnv.com

8 November 2024

Shelly Wells
New Mexico Oil Conservation Division
New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Via E-Mail: shelly.wells@emnrd.nm.gov

**RE: Response to NMOCD Comments Email, Dated 29 October 2024**
**Myrtle Myra SWD #001 Well (API No. 30-015-21515) Site Assessment Plan**
**2.24 Acres of Section 21, Township 21S, Range 27E, Subdivision NENW (and Assoc. ROW)**
**Eddy County, New Mexico**
**SQE PN: 1180.082.001**

Dear Ms. Wells:

SQ Environmental, LLC (SQE) prepared this letter in response to the New Mexico Oil Conservation Division (NMOCD) e-mail dated 29 October 2024 regarding the Site Assessment Plan (SAP) for the Myrtle Myra Salt Water Disposal (SWD) #001 Well (API No. 30-015-21515) located at latitude 32.4709549, longitude -104.1971588 and associated Right-of-Way (ROW) in Eddy County, New Mexico (Myrtle Myra Facility). The Myrtle Myra Facility is located on land owned by the Bureau of Land Management (BLM). This letter has been prepared on behalf of Select Agua Libre Midstream, LLC (grantee of BLM ROW Grant #NMNM-144986).

The SAP for the Myrtle Myra Facility was submitted to NMOCD online portal system on 22 October 2024. In an e-mail dated 29 October 2024, NMOCD stated that the SAP was approved with the conditions described below. The NMOCD e-mail dated 29 October 2024 is provided in **Attachment A.**

## RESPONSE TO NMOCD COMMENTS, DATED 29 OCTOBER 2024

The NMOCD comments are provided in italics in this section followed by the responses.

**Comment 1**: *If nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, data must be no more than 25 years old, and well construction information must be provided. OSE-POD C-04251 is.5 miles away and has a depth to groundwater of exactly 100 feet, therefore Table 1 51 feet-100 feet RRALs apply. Pursuant to 19.15.29.11(A)5(c) NMAC, "if the release occurred outside of a lined containment area and is in an area where depth to ground water is greater than 50 feet and less than or equal to 100 feet, the responsible party must delineate the vertical extent of the release to the greater of 600 mg/kg chloride or background level, if the release is of an unknown quantity or results in greater than 200 barrels of unrecovered produced water."*

Response to Comment 1: As described in the SAP, two nearby wells were identified and used to determine depth to groundwater at the Myrtle Myra Facility. Both of these identified wells are approximately 0.5 miles from the Myrtle Myra Facility and depth to groundwater data is no more than 25 years old.

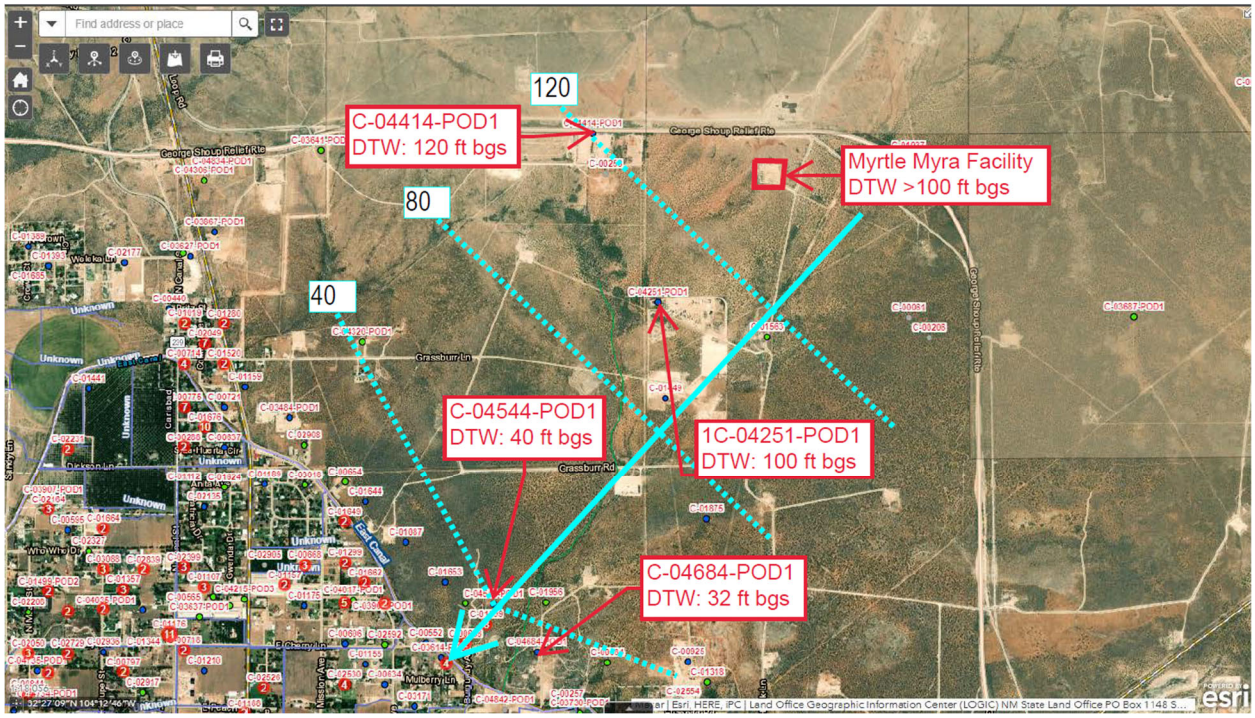
- C-04251-POD1. This well is 0.5 miles southwest of the Myrtle Myra Facility and reportedly had a depth to water (DTW) of 100 feet (ft) below ground surface (bgs) in 2018 (6 years ago).
- C-04414-POD1. This well is 0.5 miles west-northwest of the Myrtle Myra Facility and reportedly had a DTW of 120 ft bgs in 2020 (4 years ago).

Well construction information for both of the above wells was obtained online from the New Mexico Office of the State Engineer (NMOSE) database, which are included within **Attachment B** of this letter. As described in NMAC 19.15.29.11(A)2: "The responsible party must determine the depth to ground water where the release occurred. If the exact depth to ground water is unknown, the responsible party must provide a reasonable determination of probable ground water depth using data generated by numeric models, cathodic well lithology, water well data, published information or other tools as approved by the appropriate division district office. If the responsible party uses water well data, the responsible party must provide all pertinent well information."

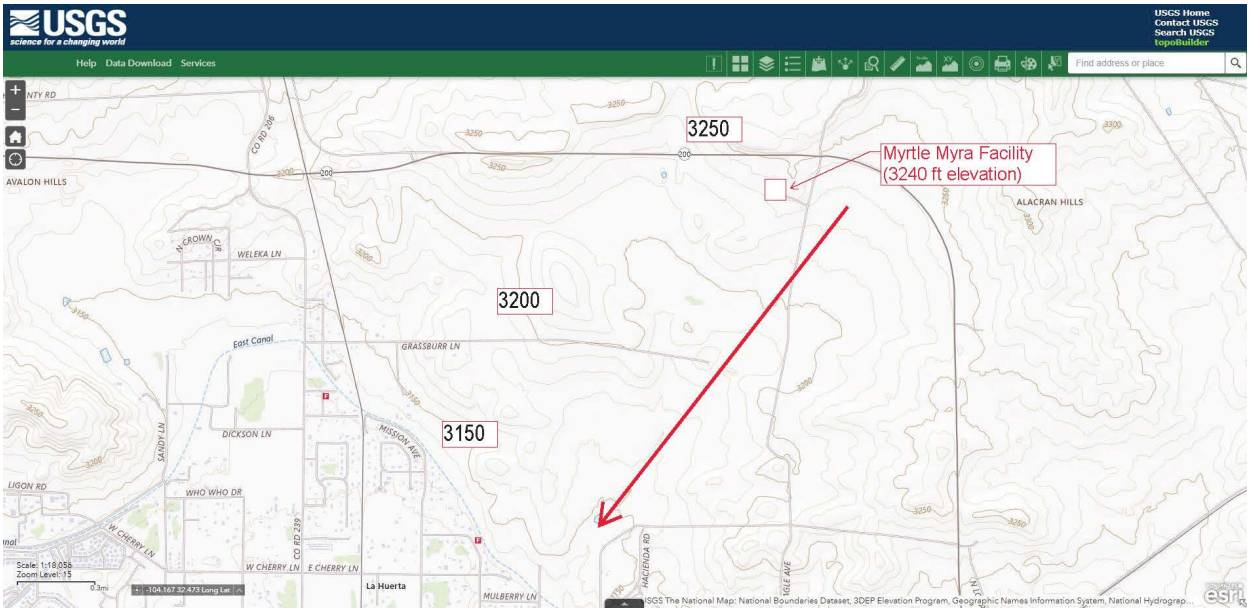
Since the exact depth to water is not available, a reasonable determination of probable groundwater depth is provided below by the following lines of evidence:

- DTW appears to be increasing (deepening) when moving northeast from the City of Carlsbad (where the Pecos River and East Canal are located) towards the Myrtle Myra Facility. See below image (basemap from New Mexico Office of State Engineer website). Wells between the Pecos River and East Canal generally have reported DTWs between 20 and 30 ft bgs. Wells just northeast of the East Canal in the direction of the Myrtle Myra appear to generally have reported DTWs between 30 and 40 ft bgs. For further evidence of this, well C-04544-POD1 and C-04684 were selected as case studies. Well C-04544-POD1 was drilled in 2021 (3 years ago) and reported with a DTW of 40 ft bgs. Well C-04684-POD1 was drilled in 2023 (1 year ago) and reported with a DTW of 32 ft bgs.

  A figure showing the general locations of wells described in this bullet, along with a simplified groundwater elevation map is provided below. Groundwater elevations appear to decrease (shallow) when moving southwest from the Myrtle Myra Facility towards the City of Carlsbad East Canal.




Additionally, the above observations are consistent with the topographic profile of the region. As shown in the below figure (basemap from the USGS website), land elevations (relative to sea level) appear to decrease when moving southwest from the Myrtle Myra Facility towards the City of Carlsbad East Canal.




Based on these data provided, the depth to groundwater at the Myrtle Myra is believed to be greater than 100 ft. A conservative estimate for current DTW at the Myrtle Myra Facility would likely be 120 to 130 ft bgs, based on the trends and information described above. Based on this evaluation, we respectfully request to use the NMOCD Limits that are respective for this groundwater depth (greater than 100 ft), as

described in Table 1 of NMAC 19.15.29.12. As such, the conditions of NMAC 19.15.29.11.A(5)(c) does not apply to the Myrtle Myra facility; therefore, delineation to 600 mg/kg is not necessary.

**Comment 2**: *Samples should be grab samples collected at surface, 1', 2', 3' and 4'. Due to this being a historical release, all samples obtained must be submitted to a laboratory for analysis. In addition, samples must be tested for all Table 1 constituents.*

Response to Comment 2: As requested by NMOCD, SQE proposes to collect samples at the surface, 1 ft, 2 ft, 3 ft, and 4 ft depths at each sample location. SQE also proposes to immediately analyze the samples collected at the surface and 1 ft depth at each location for all Table 1 constituents. SQE further proposes that samples collected at the 2 ft, 3 ft, and 4 ft depths be placed on 'hold' at the laboratory. If necessary, the 2 ft sample will be analyzed for the parameter(s) that exceed closure criteria for the respective 1 ft sample. Additionally, the 3 ft and/or 4 ft samples will be analyzed for the parameter(s) that exceed closure criteria for the respective 2 ft sample. This strategy is proposed based on the expectation for concentrations to attenuate with depth, and analysis of deeper samples may not be necessary if the upper two samples confirm parameters at concentrations less than NMOCD limits. This approach will ultimately reach the same end goal but will allow for significant cost and laboratory resource savings.

**Comment 3**: *It is noted that the Area of Impact shown on pg. 4, Figure B is larger than the area of impact that is drawn on Figure 3. Referring to Figure B, the ruler box located to the left of the yellow polygon is covering more impacts. It appears the berm was breached as there are scraping striations seen off pad on the west side that are similar to the scrapes on pad. This area will also require delineation. OCD will email a kmz file or a screenshot providing suggested sampling locations as the 3 provided in this Site Assessment Plan are not enough to delineate such a large release area.*

Response to Comment 3: NMOCD followed up to the above comment with a screenshot providing suggested sampling locations. This screenshot is shown below:


In total, NMOCD has requested 16 sampling locations, with 14 located on the well pad (as shown above). If areas above NMOCD limits are identified, soils will be remediated in accordance with NMAC 19.15.29.12, and restored, reclaimed, and re-vegetated in accordance with NMAC 19.15.29.13.

Based on the ~41,000 square foot ($ft^2$) area of impacts, this is a requested sampling density of one sample per approximately 3,000 $ft^2$ (or one sample per 0.07 acres) on the well pad. SQE is amenable to collecting additional samples to identify constituents at levels above Table 1 closure criteria; however, we propose a sampling density of one sample per approximately 5,000 $ft^2$ (or one sample per 0.11 acres) on the well pad (eight samples). SQE agrees with the plan to collect two samples to the west side of the pad in the area where NMOCD suggested the berm may have been breached. In total, SQE proposes ten sampling locations for identifying constituents at levels above Table 1 closure criteria, as shown by the revised **Figure 3** attached to this letter.

The reasoning behind this approach is that the 10 proposed sample locations will be sufficient to identify whether constituents are present at the Area of Impact above Table 1 closure criteria. In the event exceedances of any of the Table 1 closure criteria are identified, the impacted soil will be remediated in accordance with NMAC 19.15.29.12, and restored, reclaimed, and re-vegetated in accordance with NMAC 19.15.29.13. The remediation of impacted soil will include a confirmation sampling methodology (typically one five-point composite sample per 200 square feet) that will confirm the lateral and vertical extent of impacted soil above Table 1 closure criteria has been successfully removed.

**Comment 4**: *The proposed background sample locations are not acceptable. It looks like you may need to collect them greater than 100 feet off pad (which is completely acceptable in this situation), well away from any disturbed areas, and upgradient. They must be tested for all Table 1 constituents as well. Submit remediation plan to OCD by 1/27/2025.*

Response to Comment 4: SQE concurs with Comment 4. Revised background sample locations are proposed on the revised **Figure 3** attached to this letter. Background samples will be tested for total petroleum hydrocarbons (TPH), BTEX constituents (benzene, toluene, ethylbenzene, and xylenes), and chloride using the analytical methods presented in Table 1.

## CLOSING

Please let us know if you have any questions or comments regarding this information. Eric may be reached by e-mail at E.Friedman@SQEnv.com or by phone at 561-906-8028, and Randy may be reached by e-mail at R.Gonzalez@SQEnv.com or by phone at 512-541-6028.

Sincerely,

**SQ Environmental, LLC**

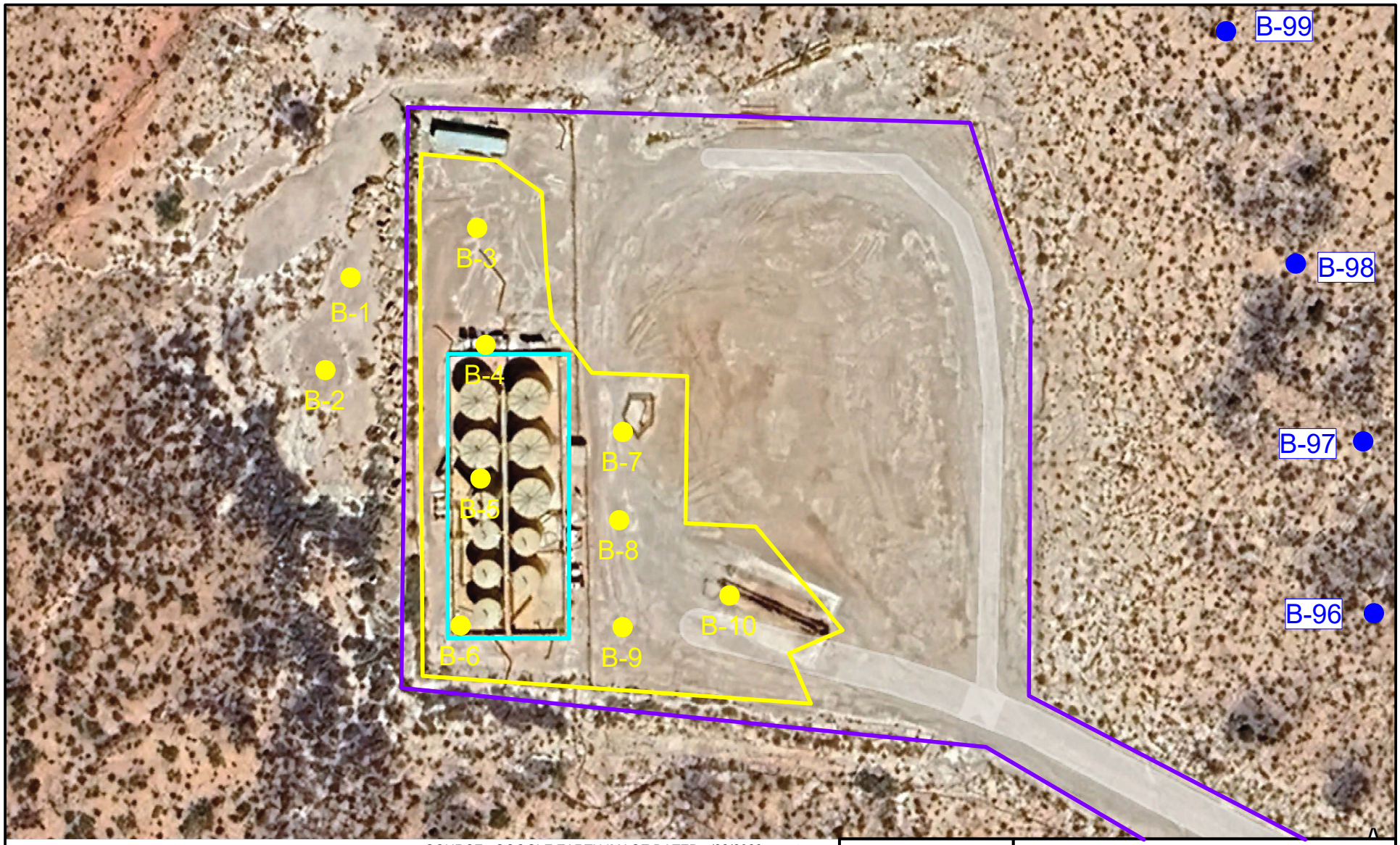
Eric Friedman, P.G.
Project Manager

Randy Gonzalez
Senior Project Manager

cc: Dan Dear, Select (DDear@selectwater.com)

Attachments

Figure 3 – Proposed Sample Map (Revised)
Attachment A – NMOCD Approval E-Mail Dated 29 October 2024
Attachment B – Supporting Information




LEGEND

- MYRTLE MYRA SWD #001 WELL PAD AND ACCESS ROAD
- CURRENT TANK BATTERY
- EXTENT OF IMPACTS FROM 9 JUNE 2011 RELEASE
- PROPOSED SOIL SAMPLE LOCATION
- PROPOSED BACKGROUND SOIL SAMPLE LOCATION

SOURCE: GOOGLE EARTH IMAGE DATED 7/22/2023.

0 37.5 75

SCALE IN FEET

N

NOTE: ALL LOCATIONS ARE APPROXIMATE.

SQ Environmental, LLC

# FIGURE 3 (REVISED)

## PROPOSED SAMPLE MAP

MYRTLE MYRA SWD #001 WELL FACILITY
32.4709549°, -104.1971588°
EDDY COUNTY, NEW MEXICO

| SCALE: | DATE: | PN: |
|---|---|---|
| 1 IN = 75 FT | NOVEMBER 2024 | 1180.082.001 |

# ATTACHMENT A
# NMOCD APPROVAL E-MAIL

## Randy Gonzalez

**From:** OCDOnline@state.nm.us
**Sent:** Tuesday, October 29, 2024 11:30 AM
**To:** r.gonzalez@sqenv.com
**Subject:** The Oil Conservation Division (OCD) has approved the application, Application ID: 394489

To whom it may concern (c/o Randy Gonzalez for SELECT AGUA LIBRE MIDSTREAM, LLC),

The OCD has approved the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nMLB1122141620,
with the following conditions:

- **Site Assessment Approved with the Following Conditions: 1) If nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, data must be no more than 25 years old, and well construction information must be provided. OSE-POD C-04251 is.5 miles away and has a depth to groundwater of exactly 100 feet, therefore Table 1 51 feet-100 feet RRALs apply. Pursuant to 19.15.29.11(A)5(c) NMAC, "if the release occurred outside of a lined containment area and is in an area where depth to ground water is greater than 50 feet and less than or equal to 100 feet, the responsible party must delineate the vertical extent of the release to the greater of 600 mg/kg chloride or background level, if the release is of an unknown quantity or results in greater than 200 barrels of unrecovered produced water."**
- **1 continued) Samples should be grab samples collected at surface, 1', 2', 3' and 4'. Due to this being a historical release, all samples obtained must be submitted to a laboratory for analysis. In addition, samples must be tested for all Table 1 constituents.**
- **2) It is noted that the Area of Impact shown on pg. 4, Figure B is larger than the area of impact that is drawn on Figure 3. Referring to Figure B, the ruler box located to the left of the yellow polygon is covering more impacts. It appears the berm was breached as there are scraping striations seen off pad on the west side that are similar to the scrapes on pad. This area will also require delineation. OCD will email a kmz file or a screenshot providing suggested sampling locations as the 3 provided in this Site Assessment Plan are not enough to delineate such a large release area.**
- **3) The proposed background sample locations are not acceptable. It looks like you may need to collect them greater than 100 feet off pad (which is completely acceptable in this situation), well away from any disturbed areas, and upgradient. They must be tested for all Table 1 constituents as well. Submit remediation plan to OCD by 1/27/2025.**

The signed C-141 can be found in the OCD Online: Imaging under the incident ID (n#).

If you have any questions regarding this application, please contact me.

Thank you,
Shelly Wells
Environmental Specialist-A
505-469-7520
Shelly.Wells@emnrd.nm.gov

**New Mexico Energy, Minerals and Natural Resources Department**
1220 South St. Francis Drive
Santa Fe, NM 87505

# ATTACHMENT B
# SUPPORTING INFORMATION

# WELL RECORD & LOG

## OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

STATE ENGINEER OFFICE
ROSWELL, NEW MEXICO

2018 NOV -5 PM 1:46

### 1. GENERAL AND WELL LOCATION

| OSE POD NO. (WELL NO.) | WELL TAG ID NO. | OSE FILE NO(S). |
|---|---|---|
| | | C-4251 |

| WELL OWNER NAME(S) | PHONE (OPTIONAL) |
|---|---|
| Brian Stevens | |

| WELL OWNER MAILING ADDRESS | CITY | STATE | ZIP |
|---|---|---|---|
| | | | |

| WELL LOCATION (FROM GPS) | DEGREES | MINUTES | SECONDS | |
|---|---|---|---|---|
| LATITUDE | 32 46 52 143 | 27 | 54.77 | N |
| LONGITUDE | -104 20 29 23012 | | 10.52 | W |

* ACCURACY REQUIRED: ONE TENTH OF A SECOND
* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE

### 2. DRILLING & CASING INFORMATION

| LICENSE NO. | NAME OF LICENSED DRILLER | NAME OF WELL DRILLING COMPANY |
|---|---|---|
| WD-1778 | Travis Mann | Third Generation Drilling |

| DRILLING STARTED | DRILLING ENDED | DEPTH OF COMPLETED WELL (FT) | BORE HOLE DEPTH (FT) | DEPTH WATER FIRST ENCOUNTERED (FT) |
|---|---|---|---|---|
| 9-19-18 | 10-9-18 | 160 | 160 | 100 |

COMPLETED WELL IS: ☐ ARTESIAN ☐ DRY HOLE ☒ SHALLOW (UNCONFINED)

STATIC WATER LEVEL IN COMPLETED WELL (FT): 73

DRILLING FLUID: ☒ AIR ☐ MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ☒ ROTARY ☐ HAMMER ☐ CABLE TOOL ☐ OTHER – SPECIFY:

| DEPTH (feet bgl) FROM | DEPTH (feet bgl) TO | BORE HOLE DIAM (inches) | CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen) | CASING CONNECTION TYPE (add coupling diameter) | CASING INSIDE DIAM. (inches) | CASING WALL THICKNESS (inches) | SLOT SIZE (inches) |
|---|---|---|---|---|---|---|---|
| 0 | 25 | 12 1/4 | Steel | weld | 8 | 1/4 | |
| 25 | 120 | 12 1/4 | Steel | weld | 8 | 1/4 | 050 |
| 120 | 155 | 12 1/4 | Steel | weld | 8 | 1/4 | |

### 3. ANNULAR MATERIAL

| DEPTH (feet bgl) FROM | DEPTH (feet bgl) TO | BORE HOLE DIAM. (inches) | LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL | AMOUNT (cubic feet) | METHOD OF PLACEMENT |
|---|---|---|---|---|---|
| 0 | 20 | 12 1/4 | cement | 9.34 | Poured |
| 20 | 155 | 12 1/4 | Gravel | 63.5 | Poured |

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/30/17)

| FILE NO. C-4251 | POD NO. 1 | TRN NO. 626193 | |
|---|---|---|---|
| LOCATION 21S-27E-21 311 | | WELL TAG ID NO. N-A | PAGE 1 OF 2 |

STATE ENGINEER OFFICE
ROSWELL, NEW MEXICO
2018 NOV -5 PM 1:10

**4. HYDROGEOLOGIC LOG OF WELL**

| DEPTH (feet bgl) FROM | TO | THICKNESS (feet) | COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units) | WATER BEARING? (YES / NO) | ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm) |
|---|---|---|---|---|---|
| 0 | 5 | 5 | Top Soil | Y (N) | |
| 5 | 10 | 5 | Sand / caleche | Y (N) | |
| 10 | 15 | 5 | Sand | Y (N) | |
| 15 | 20 | 5 | Clay | Y (N) | |
| 20 | 40 | 20 | caleche | Y (N) | |
| 40 | 60 | 20 | Sand | Y (N) | |
| 80 | 100 | 20 | Sand / caleche | Y (N) | |
| 100 | 120 | 20 | Gravel | (Y) N | 10 |
| 120 | 130 | 15 | Clay | Y (N) | |
| 135 | 150 | 15 | Sand / Gravel | (Y) N | 60 |
| 150 | 160 | 10 | silt | Y (N) | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:
☐ PUMP ☒ AIR LIFT ☐ BAILER ☐ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm): 0.00
70

**5. TEST; RIG SUPERVISION**

WELL TEST — TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION:

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:
Luther White

**6. SIGNATURE**

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:

Travis Man — SIGNATURE OF DRILLER / PRINT SIGNEE NAME

11-4-18 — DATE

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/30/2017)

| FILE NO. C-4251 | POD NO. 1 | TRN NO. 626193 | |
|---|---|---|---|
| LOCATION 21S-27E-21 | 3-1-1 | WELL TAG ID NO. N-A | PAGE 2 OF 2 |

# WELL RECORD & LOG

## OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

**1. GENERAL AND WELL LOCATION**

| OSE POD NO. (WELL NO.) | WELL TAG ID NO. | OSE FILE NO(S). |
|---|---|---|
| POD1 | 22408 | C-4414 |

| WELL OWNER NAME(S) | PHONE (OPTIONAL) |
|---|---|
| Branson Properties LLC | |

| WELL OWNER MAILING ADDRESS | CITY | STATE | ZIP |
|---|---|---|---|
| 1501 Mountain Shadow | Carlsbad | NM | 88220 |

| WELL LOCATION (FROM GPS) | | DEGREES | MINUTES | SECONDS | |
|---|---|---|---|---|---|
| | LATITUDE | 32 | 28 | 22 | N |
| | LONGITUDE | 104 | 12 | 23 | W |

* ACCURACY REQUIRED: ONE TENTH OF A SECOND
* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE

SECTION 20 TOWNSHIP 21S RANGE 27E

**2. DRILLING & CASING INFORMATION**

| LICENSE NO. | NAME OF LICENSED DRILLER | NAME OF WELL DRILLING COMPANY |
|---|---|---|
| 1753 | JACOBO FRIESSEN | VANGUARD |

| DRILLING STARTED | DRILLING ENDED | DEPTH OF COMPLETED WELL (FT) | BORE HOLE DEPTH (FT) | DEPTH WATER FIRST ENCOUNTERED (FT) |
|---|---|---|---|---|
| 4-27-20 | 4-27-20 | 255 | 255 | 120 |

COMPLETED WELL IS: ☐ ARTESIAN ☐ DRY HOLE ☑ SHALLOW (UNCONFINED)

STATIC WATER LEVEL IN COMPLETED WELL (FT): 120

DRILLING FLUID: ☐ AIR ☑ MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ☑ ROTARY ☐ HAMMER ☐ CABLE TOOL ☐ OTHER – SPECIFY:

| DEPTH (feet bgl) FROM | DEPTH (feet bgl) TO | BORE HOLE DIAM (inches) | CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen) | CASING CONNECTION TYPE (add coupling diameter) | CASING INSIDE DIAM. (inches) | CASING WALL THICKNESS (inches) | SLOT SIZE (inches) |
|---|---|---|---|---|---|---|---|
| -2 | 135 | 9.875 | BLANK PVC | GLUE 5.5 | 5 | .25 | |
| 135 | 255 | 9.875 | SCREEN PVC | GLUE 5.5 | 5 | .25 | .035 |
| | | | | | | | |
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**3. ANNULAR MATERIAL**

| DEPTH (feet bgl) FROM | DEPTH (feet bgl) TO | BORE HOLE DIAM. (inches) | LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL | AMOUNT (cubic feet) | METHOD OF PLACEMENT |
|---|---|---|---|---|---|
| 0 | 20 | 9.875 | CONCRETE | 7.8 | POURED |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 04/30/19)

| FILE NO. | C-4414 | POD NO. | 1 | TRN NO. | 669964 | |
|---|---|---|---|---|---|---|
| LOCATION | 21S.27E.20.221 | | | WELL TAG ID NO. | 22408 | PAGE 1 OF 2 |

**4. HYDROGEOLOGIC LOG OF WELL**

| DEPTH (feet bgl) FROM | DEPTH (feet bgl) TO | THICKNESS (feet) | COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units) | WATER BEARING? (YES / NO) | ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm) |
|---|---|---|---|---|---|
| 0 | 5 | 5 | TOPSOIL | Y ✓ N | |
| 5 | 50 | 45 | SAND | Y ✓ N | |
| 50 | 120 | 70 | CLAY | Y ✓ N | |
| 120 | 152 | 32 | SAND & GRAVEL | ✓ Y N | |
| 152 | 159 | 7 | SAND & CLAY | ✓ Y N | |
| 159 | 255 | 96 | ROCK | Y ✓ N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
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| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

☐ PUMP ☐ AIR LIFT ☐ BAILER ☐ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm): 0.00

**5. TEST; RIG SUPERVISION**

WELL TEST — TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION:

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

WILLIAM KROHN

**6. SIGNATURE**

BY SIGNING BELOW, I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED WELL. I ALSO CERTIFY THAT THE WELL TAG, IF REQUIRED, HAS BEEN INSTALLED AND THAT THIS WELL RECORD WILL ALSO BE FILED WITH THE PERMIT HOLDER WITHIN 30 DAYS AFTER THE COMPLETION OF WELL DRILLING.

JACOB FRIESSEN — SIGNATURE OF DRILLER / PRINT SIGNEE NAME

5-1-20 — DATE

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 04/30/2019)

| FILE NO. C-4414 | POD NO. 1 | TRN NO. 669964 | |
|---|---|---|---|
| LOCATION | | WELL TAG ID NO. | PAGE 2 OF 2 |

# WELL RECORD & LOG

## OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

**1. GENERAL AND WELL LOCATION**

| OSE POD NO. (WELL NO.) | WELL TAG ID NO. | OSE FILE NO(S). |
|---|---|---|
| POD1 C-4544 | 20EBA | C-4544 |

| WELL OWNER NAME(S) | PHONE (OPTIONAL) |
|---|---|
| PAULETTE ANGEL | |

| WELL OWNER MAILING ADDRESS | CITY | STATE | ZIP |
|---|---|---|---|
| 1608 W TANSILL | CARLSBAD | NM | 88220 |

| WELL LOCATION (FROM GPS) | | DEGREES | MINUTES | SECONDS | |
|---|---|---|---|---|---|
| | LATITUDE | 32 | 27 | 6 | N |
| | LONGITUDE | -104 | 12 | 42 | W |

* ACCURACY REQUIRED: ONE TENTH OF A SECOND
* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE

SECTION 29 TOWNSHIP 21S RANGE 27E

**2. DRILLING & CASING INFORMATION**

| LICENSE NO. | NAME OF LICENSED DRILLER | NAME OF WELL DRILLING COMPANY |
|---|---|---|
| WD-1753 | JACOB FRIESSEN | VANGUARD |

| DRILLING STARTED | DRILLING ENDED | DEPTH OF COMPLETED WELL (FT) | BORE HOLE DEPTH (FT) | DEPTH WATER FIRST ENCOUNTERED (FT) |
|---|---|---|---|---|
| 6-23-21 | 6-23-21 | 97 | 97 | 40 |

COMPLETED WELL IS: ☐ ARTESIAN ☐ DRY HOLE ☑ SHALLOW (UNCONFINED)

STATIC WATER LEVEL IN COMPLETED WELL (FT): 40

DRILLING FLUID: ☐ AIR ☑ MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ☑ ROTARY ☐ HAMMER ☐ CABLE TOOL ☐ OTHER – SPECIFY:

| DEPTH (feet bgl) FROM | DEPTH (feet bgl) TO | BORE HOLE DIAM (inches) | CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen) | CASING CONNECTION TYPE (add coupling diameter) | CASING INSIDE DIAM. (inches) | CASING WALL THICKNESS (inches) | SLOT SIZE (inches) |
|---|---|---|---|---|---|---|---|
| -2 | 57 | 9.875 | BLANK SCH40 PVC | GLUE 5.5 | 5 | .25 | |
| 57 | 97 | 9.875 | SCREEN SCH40 PVC | GLUE 5.5 | 5 | .25 | .035 |
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**3. ANNULAR MATERIAL**

| DEPTH (feet bgl) FROM | DEPTH (feet bgl) TO | BORE HOLE DIAM. (inches) | LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL | AMOUNT (cubic feet) | METHOD OF PLACEMENT |
|---|---|---|---|---|---|
| 0 | 20 | 9.875 | CONCRETE | 7.5 | POURED |
| 20 | 97 | 9.875 | PEA GRAVEL | 28 | POURED |
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FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 04/30/19)

| FILE NO. C-4544 | POD NO. 1 | TRN NO. 696853 | |
|---|---|---|---|
| LOCATION Dom 21S.27E.29.233 | | WELL TAG ID NO. 20EBA | PAGE 1 OF 2 |

**4. HYDROGEOLOGIC LOG OF WELL**

| DEPTH (feet bgl) FROM | DEPTH (feet bgl) TO | THICKNESS (feet) | COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units) | WATER BEARING? (YES / NO) | ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm) |
|---|---|---|---|---|---|
| 0 | 2 | 2 | TOPSOIL | Y ✔ N | |
| 2 | 8 | 6 | CALICHE & ROCK | Y ✔ N | |
| 8 | 44 | 36 | SAND | ✔ Y N | 20.00 |
| 44 | 57 | 13 | ROCK | Y ✔ N | |
| 57 | 92 | 35 | SANDSTONE & CLAY | ✔ Y N | 5.00 |
| 92 | 97 | 5 | CLAY | Y ✔ N | |
| | | | | Y N | |
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| | | | | Y N | |

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

☐ PUMP ☐ AIR LIFT ☑ BAILER ☐ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm): 25.00

**5. TEST; RIG SUPERVISION**

WELL TEST — TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION:

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

**6. SIGNATURE**

BY SIGNING BELOW, I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED WELL. I ALSO CERTIFY THAT THE WELL TAG, IF REQUIRED, HAS BEEN INSTALLED AND THAT THIS WELL RECORD WILL ALSO BE FILED WITH THE PERMIT HOLDER WITHIN 30 DAYS AFTER THE COMPLETION OF WELL DRILLING.

JACOB FRIESSEN — SIGNATURE OF DRILLER / PRINT SIGNEE NAME

7-17-21 — DATE

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 04/30/2019)

| FILE NO. C-4544 | POD NO. 1 | TRN NO. 696853 |
|---|---|---|
| LOCATION | WELL TAG ID NO. | PAGE 2 OF 2 |

# WELL RECORD & LOG

## OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

**1. GENERAL AND WELL LOCATION**

| OSE POD NO. (WELL NO.) | WELL TAG ID NO. | OSE FILE NO(S). |
|---|---|---|
| POD-1 | 2119F | C 04684 |

| WELL OWNER NAME(S) | PHONE (OPTIONAL) |
|---|---|
| Louis H. Stephens Sr | 575-200-6763 |

| WELL OWNER MAILING ADDRESS | CITY | STATE | ZIP |
|---|---|---|---|
| 1620 Tokay AVE | Carlsbad | NM | 88220 |

| WELL LOCATION (FROM GPS) | | DEGREES | MINUTES | SECONDS | |
|---|---|---|---|---|---|
| | LATITUDE | 32 | 26 | 58.36 | N |
| | LONGITUDE | -104 | 12 | 33.67 | W |

* ACCURACY REQUIRED: ONE TENTH OF A SECOND
* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE

NE NW SE Section 29 T21S R27E

**2. DRILLING & CASING INFORMATION**

| LICENSE NO. | NAME OF LICENSED DRILLER | NAME OF WELL DRILLING COMPANY |
|---|---|---|
| 1055 | John Norris | Hungry Horse, LLC |

| DRILLING STARTED | DRILLING ENDED | DEPTH OF COMPLETED WELL (FT) | BORE HOLE DEPTH (FT) | DEPTH WATER FIRST ENCOUNTERED (FT) |
|---|---|---|---|---|
| 16MAY23 | 17May23 | | 44' | 32' |

COMPLETED WELL IS: ☐ ARTESIAN *add Centralizer info below ☐ DRY HOLE ☑ SHALLOW (UNCONFINED)

STATIC WATER LEVEL IN COMPLETED WELL (FT): 32'

DATE STATIC MEASURED:

DRILLING FLUID: ☐ AIR ☑ MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ☑ ROTARY ☐ HAMMER ☐ CABLE TOOL ☐ OTHER – SPECIFY:

CHECK HERE IF PITLESS ADAPTER IS INSTALLED ☐

| DEPTH (feet bgl) FROM | DEPTH (feet bgl) TO | BORE HOLE DIAM (inches) | CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen) | CASING CONNECTION TYPE (add coupling diameter) | CASING INSIDE DIAM. (inches) | CASING WALL THICKNESS (inches) | SLOT SIZE (inches) |
|---|---|---|---|---|---|---|---|
| 0 | 24' | 8 7/8" | PVC | Glued | 6" | .5 | |
| 24' | 44' | 8 7/8" | PVC | Glued | 6" | .5 | .125 |
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| | | | | | OSE DIT SEP 6 2023 PM 1:31 | | |
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**3. ANNULAR MATERIAL**

| DEPTH (feet bgl) FROM | DEPTH (feet bgl) TO | BORE HOLE DIAM. (inches) | LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL *(if using Centralizers for Artesian wells- indicate the spacing below) | AMOUNT (cubic feet) | METHOD OF PLACEMENT |
|---|---|---|---|---|---|
| 0 | 20' | 8 7/8" | Cement Grout | 8cf | TP |
| 20' | 44 | 8 7/8" | N/A | | |
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FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 09/22/2022)

| FILE NO. C-4684-POD1 | POD NO. 1 | TRN NO. 738813 | |
|---|---|---|---|
| LOCATION Dom 21.27.29.214 | | WELL TAG ID NO. 2119F | PAGE 1 OF 2 |

**4. HYDROGEOLOGIC LOG OF WELL**

| DEPTH (feet bgl) FROM | TO | THICKNESS (feet) | COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units) | WATER BEARING? (YES / NO) | ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm) |
|---|---|---|---|---|---|
| 0' | 1' | 1' | Topsoil | Y (N) | |
| 1' | 20' | 19' | Caliche | Y (N) | |
| 20' | 44' | 24' | Rock | (Y) N | |
| | | | | Y N | |
| | | | | Y N | |
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| | | | | Y N | |
| | | | | Y N | |

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

☐ PUMP ☐ AIR LIFT ☐ BAILER ☐ OTHER – SPECIFY: Not Tested

TOTAL ESTIMATED WELL YIELD (gpm):

**5. TEST; RIG SUPERVISION**

WELL TEST — TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION:

OSE DIT SEP 6 2023 PM1:31

John Nobles

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

**6. SIGNATURE**

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:

John Nobles — John Nobles — 8-28-23

SIGNATURE OF DRILLER / PRINT SIGNEE NAME — DATE

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 09/22/2022)

| FILE NO. C-4684-POD 1 | POD NO. 1 | TRN NO. 738813 | |
|---|---|---|---|
| LOCATION Dow 21.27.29.214 | | WELL TAG ID NO. 2119F | PAGE 2 OF 2 |

**From:** Wells, Shelly, EMNRD
**To:** Eric Friedman
**Cc:** Randy Gonzalez; Emily Danger; Nick Danger; Bratcher, Michael, EMNRD
**Subject:** RE: [EXTERNAL] Fwd: FW: The Oil Conservation Division (OCD) has approved the application, Application ID: 394489
**Date:** Monday, November 18, 2024 11:37:00 AM

Hi Eric,

OCD has reviewed the submitted comments. I will address each point below:

1. 19.15.29.11(A)5(c) NMAC does not apply based on depth to groundwater information.
2. Due to the historical nature of this release, all delineation samples collected must be submitted to a laboratory for analysis.
3. The amount of delineation samples collected is not up for debate. Based on the Google Earth imagery the day after the release occurred, the release area spread further east on the pad than your proposed delineation sampling locations cover. OCD wants all locations identified to be sampled.
4. The background chloride locations need to be both upgradient and higher elevation than the pad itself. The proposed locations of B-98 and B-99 are less than or equal in elevation to the pad itself and as such those areas are not acceptable.

Sincerely,

Shelly

Shelly Wells * Environmental Specialist-Advanced
Environmental Bureau
EMNRD-Oil Conservation Division
1220 S. St. Francis Drive|Santa Fe, NM 87505
(505)469-7520|Shelly.Wells@emnrd.nm.gov
http://www.emnrd.state.nm.us/OCD/

**From:** Eric Friedman <e.friedman@sqenv.com>
**Sent:** Friday, November 8, 2024 10:55 AM
**To:** Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
**Cc:** Randy Gonzalez <r.gonzalez@sqenv.com>; Emily Danger <e.danger@sqenv.com>; Nick Danger <n.danger@sqenv.com>
**Subject:** [EXTERNAL] Fwd: FW: The Oil Conservation Division (OCD) has approved the application, Application ID: 394489

Shelly,

Attached is a response to the comments you provided for the Myrtle Myra SWD #001 Well (API No. 30-015-21515) Site Assessment Plan. This includes the assessment of incident nMLB1122141620. Please let myself andor Randy Gonzalez know if you have any questions or would like to discuss the contents of this letter.

thank you,

**Eric Friedman, P.G.**

SQ Environmental, LLC

E.Friedman@SQEnv.com

www.SQEnv.com

561-906-8028

---------- Forwarded message ---------

From: **Randy Gonzalez** <r.gonzalez@sqenv.com>

Date: Tue, Oct 29, 2024 at 1:17 PM

Subject: FW: The Oil Conservation Division (OCD) has approved the application, Application ID: 394489

To: Eric Friedman <e.friedman@sqenv.com>

Cc: Emily Danger <e.danger@sqenv.com>, Nick Danger <n.danger@sqenv.com>

See NMOCD comments on the Myrtle Myra Site Assessment Plan below.

*Randy Gonzalez*
**SQ Environmental**
512-541-6028

**From:** OCDOnline@state.nm.us [mailto:OCDOnline@state.nm.us]
**Sent:** Tuesday, October 29, 2024 11:30 AM
**To:** r.gonzalez@sqenv.com
**Subject:** The Oil Conservation Division (OCD) has approved the application, Application ID: 394489

To whom it may concern (c/o Randy Gonzalez for SELECT AGUA LIBRE MIDSTREAM, LLC),

The OCD has approved the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nMLB1122141620,

with the following conditions:

- **Site Assessment Approved with the Following Conditions: 1) If nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, data must be no more than 25 years old, and well construction information must be provided. OSE-POD C-04251 is.5 miles away and has a depth to groundwater of exactly 100 feet, therefore Table 1 51 feet-100 feet RRALs apply. Pursuant to 19.15.29.11(A)5(c) NMAC, "if the release occurred outside of a lined containment area and is in an area where depth to ground water is greater than 50 feet and less than or equal to 100 feet, the responsible party must delineate the vertical extent of the release to the greater of 600 mg/kg chloride or background level, if the release is of an unknown quantity or results in greater than 200 barrels of unrecovered produced water."**
- **1 continued) Samples should be grab samples collected at surface, 1', 2', 3' and 4'. Due to this being a historical release, all samples obtained must be submitted to a laboratory for analysis. In addition, samples must be tested for all Table 1 constituents.**
- **2) It is noted that the Area of Impact shown on pg. 4, Figure B is larger than the area of impact that is drawn on Figure 3. Referring to Figure B, the ruler box located to the left of the yellow polygon is covering more impacts. It appears the berm was breached as there are scraping striations seen off pad on the west side that are similar to the scrapes on pad. This area will also require delineation. OCD will email a kmz file or a screenshot providing suggested sampling locations as the 3 provided in this Site Assessment Plan are not enough to delineate such a large release area.**
- **3) The proposed background sample locations are not acceptable. It looks like you may need to collect them greater than 100 feet off pad (which is completely acceptable in this situation), well away from any disturbed areas, and upgradient. They must be tested for all Table 1 constituents as well. Submit remediation plan to OCD by 1/27/2025.**

The signed C-141 can be found in the OCD Online: Imaging under the incident ID (n#).

If you have any questions regarding this application, please contact me.

Thank you,
Shelly Wells
Environmental Specialist-A
505-469-7520
Shelly.Wells@emnrd.nm.gov

**New Mexico Energy, Minerals and Natural Resources Department**

1220 South St. Francis Drive
Santa Fe, NM 87505

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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



## CONDITIONS

| | |
|---|---|
| Operator:<br>BASIC ENERGY SERVICES, LP<br>P.O. Box 1375<br>Artesia, NM 88210 | OGRID:<br>246368 |
| | Action Number:<br>404444 |
| | Action Type:<br>[REPORT] Alternative Remediation Report (C-141AR) |

**CONDITIONS**

| Created By | Condition | Condition Date |
|---|---|---|
| scwells | None | 11/18/2024 |