

**STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE HEARING CALLED BY  
THE OIL CONSERVATION DIVISION FOR THE  
PURPOSE OF CONSIDERING:**

**APPLICATION OF FOUNDATION MANAGEMENT ENERGY LLC FOR APPROVAL  
OF A SALT WATER DISPOSAL WELL, LEA COUNTY, NEW MEXICO.**

**CASE NO. 21145  
ORDER NO. R-22215**

**ORDER OF THE DIVISION**

This case came in for hearing before the Oil Conservation Division (“OCD”) at 8:15 a.m. on February 18, 2021, in Santa Fe, New Mexico.

The OCD Director, having considered the testimony, the record, the recommendations of Hearing Examiners Dylan Rose-Coss and Leonard Lowe, these findings of fact, and conclusions of law issues this Order.

**FINDINGS OF FACT**

1. Due public notice has been given, and the OCD has jurisdiction of this case and the subject matter.
2. Foundation Energy Management, LLC (“Applicant” or “Foundation”) seeks authority to utilize its Blue Quail Federal Well No. 1 (API No. 30-025-33222; “Subject Well”), located 660 feet from the South line and 1980 feet from the East line (Unit O) of Section 7, Township 23 South, Range 32 East, NMPM, Lea County, New Mexico, as an Underground Injection Control (“UIC”) Class II well for disposal of produced water into the Bell Canyon formation of the Delaware Mountain Group (“DMG”) through a perforated interval from 4640 feet to 4850 feet below surface.
3. Applicant submitted a Form C-108 application (Administrative Application No. pMAM1921950277) on August 7, 2019, for authority to inject into the Subject Well which was protested by the Devon Energy Production Company, LP (“Devon”).
4. On February 7, 2020, Applicant submitted an application for hearing for approval of the Subject Well for disposal of produced water. Subsequently, Devon filed an entry of appearance for this application on March 5, 2020. An entry of appearance as an intervenor for this application was filed by the OCD on March 9, 2020.

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5. Following a status conference on May 28, 2020, the OCD Examiner issued a pre-hearing order which detailed the evidentiary requirements for the hearing and set the hearing date for February 18, 2021.

6. Foundation, through counsel, provided exhibits and testimony at hearing geologic and engineering evidence in support of the approval of the injection authority for the Subject Well.

a. Applicant proposed an injection interval within the Bell Canyon formation with an upper confining layer composed of the Lamar limestone and the Castile anhydrite and a lower confining layer composed of siltstones of the Bell Canyon formation. Applicant stated that the proposed injection interval is sufficient isolated as not to impact either deeper producing interval or intervals with potential for future development.

b. The proposed injection interval was characterized as a 140-foot-thick section of sand with a porosity of up to 22 percent and an average permeability of 50 millidarcies.

c. Applicant identified five active wells and one plugged well that penetrated the proposed injection interval within the one-half mile Area of Review (AOR) of the surface location of the Subject Well. The completion information indicates the wells are properly cased and cemented to prevent vertical migration of injection fluids.

d. Based on the records of the New Mexico Office of the State Engineer and confirmed by the Department of Energy, there are no freshwater wells within one mile of the surface location of the Subject Well.

e. The analyses of produced water samples provided by Applicant showed the compatibility of the injection fluids with formation fluids in the proposed disposal interval.

f. Applicant testified that additional disposal capacity of the Subject Well was necessary for continued development as their current UIC Class II disposal well in this area (Bitsy Federal No. 1; API No. 30-025-33398) could not accommodate the expected volumes at the current permitted pressure. The Bitsy Federal No. 1 utilizes deeper sections of the DMG (reported perforations from 5301 feet to 6206 feet) but has no record of shallower perforations in the same interval proposed for the Subject Well.

7. Devon appeared through counsel at hearing and provided testimony regarding the potential impacts on oil and gas operations in the vicinity of the Subject Well with approval of the application.

a. Devon stated that it is planning multiple horizontal wells (designated the Boundary-Raider and Purrito federal wells) with surface locations for within the AOR of the Subject Well for completion.

b. Devon stated that the DMG is mostly comprised of siltstone and sandstones and lacks the geologic barriers or impermeable zones within the formations to control or limit the

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dispersion of produced water. Devon's geologist opined that injection into the Bell Canyon formation will likely migrate horizontally out and vertically down through the DMG potentially to the base of the Brushy Canyon formation.

c. Devon contended that approval of the Subject Well would increase well costs and would reduce production efficiency of the completed wells. Devon also opposed the injection into the shallower stratum since the operation of the Subject Well will potentially interfere with their opportunity to recover its just and fair share of hydrocarbons in the Bone Spring and Wolfcamp formations, thereby impairing correlative rights.

d. In their closing statement, Devon stated that Foundation had not demonstrated the need for the additional disposal capacity of the Subject Well for its production operation and contended that Foundation was utilizing the application in an effort to avoid the cost of plugging the Subject Well. However, Devon did state that if the application were to be approved, then the OCD should at least adopt the conditions provided in their pre-hearing statement.

8. OCD appeared through counsel at hearing and provided testimony regarding the Division's position for disposal with the DMG as the injection interval. OCD opposes large-volume disposal within the DMG in northern portion of the Delaware Basin where there is a record of impacts to hydrocarbon production and correlative rights. However, OCD has continued to approve UIC permits for small-volume disposal operations with restrictions as to the source of the produced water and the maximum injection rate.

9. As part of its pre-hearing statement, OCD submitted the following conditions for consideration by Foundation and Devon for incorporation in any UIC permit for the Subject Well:

a. Applicant shall dispose UIC Class II fluids only from production wells operated by Applicant.

b. Applicant shall conduct a step-rate test ("SRT") on the Well and obtain OCD's written approval of the test results prior to commencing injection into the Well.

c. The Well's maximum daily injection rate shall not exceed 1,000 BWD per day or 31,000 BWD in any 30-day period unless OCD requires a lower rate of injection based on the SRT.

d. The Well shall be equipped with a pressure limiting device in workable condition which shall limit the surface tubing pressure at all times to the maximum surface injection pressure of 928 psi.

e. Foundation shall not transfer the injection authority granted by the permit without OCD's written approval, which may be conditioned on a demonstration of the Well's mechanical integrity.

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f. Prior to commencing injection, Applicant shall conduct a production test on new perforations in the Bell Canyon formation and provide the results to the Engineering Bureau and to the Carlsbad Field Office of the Bureau of Land Management. If the production test indicates a significant hydrocarbon show, Applicant shall notify OCD, and shall not commence injection without OCD's approval.

g. Prior to commencing injection, Applicant shall obtain and submit to OCD a Form C-103 identifying the static bottom-hole pressure of the perforated completion.

h. If an operator who proposes to drill or who already operates a production well that penetrates the injection interval within the AOR believes that injection would impair its correlative rights, it may file an application for hearing, and if such application is filed, Applicant shall, if requested by OCD, reduce or suspend injection into the Subject Well until OCD issues the final decision.

10. NGL Water Solutions Permian, LLC filed an entry of appearance but did not oppose the application at hearing. No other party appeared at hearing or otherwise opposed the granting of this application.

**The OCD concludes as follows:**

11. Applicant provided the information required by 19.15.26 NMAC and the Form C-108 for an application to inject produced water into a Class II UIC well.

12. Applicant complied with the notice requirements of 19.15.4 NMAC.

13. Applicant affirmed in a sworn statement by a qualified person that it examined the available geologic and engineering data and found no evidence of open faults or other hydrologic connections between the approved injection interval and any underground sources of drinking water.

14. Applicant is in compliance with 19.15.5.9 NMAC.

15. The evidence and testimony by Devon demonstrates the potential for impact on drilling operations of proposed horizontal wells that must penetrate the injection interval for completion in deeper pools. Similar issues were recognized by OCD in Order No. R-13889 (Case No. 15059) with the approval of a UIC Class II disposal well in the DMG.

16. Applicant's proposed scale of operation and the restricted source of produced water is consistent with the current practices of OCD for permitting disposal of "operator only" UIC Class II fluids in the DMG. OCD applied corresponding criteria for the approval to re-instatement the injection authority for a disposal well in the DMG in Order No. R-14394 (Case No. 15676).

17. OCD does find Devon's assessment regarding the operation of the Subject Well and the impacts on future drilling operations within the immediate area substantial. Consequently, the

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Applicant shall be required to coordinate with Devon (and successive operators) of any planned drilling activities the operation of the Subject Well as to minimize the effects in the shallower DMG stratum. Relief from this requirement shall be granted only following notice and adjudicatory hearing.

18. Having considered the evidence, approval of disposal in the Subject Well with specific conditions and restrictions will enable Applicant to support existing production and future exploration in this area, thereby preventing waste while not impairing correlative rights and protecting fresh water or underground sources of drinking water.

**IT IS THEREFORE ORDERED THAT:**

1. Foundation Energy Management, LLC is hereby authorized by **UIC Permit SWD-2231** to utilize its Blue Quail Federal SWD Well No. 1, located Unit O) of Section 7, Township 23 South, Range 32 East, NMPM, Lea County, New Mexico, for the disposal of UIC Class II fluids from their exploration and production operations into the Bell Canyon formation of the Delaware Mountain Group
2. Jurisdiction is retained by the OCD for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh or protectable waters or (2) consistent with the requirements in this order; whereupon the OCD may, after notice and hearing or prior to notice and hearing in event of an emergency, terminate the disposal authority granted herein.

  
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ADRIENNE E. SANDOVAL  
DIVISION DIRECTOR

Date: 8/29/2022

**STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION**

**UIC CLASS II PERMIT SWD-2231**

**APPENDIX A – AUTHORIZED INJECTION**

Permittee: Foundation Energy Management, LLC

OGRID No.: 370740

Well name: Blue Quail Federal Well No. 1

Surface location: Lat: N 32.3134766; Long: W 103.711647; NAD27  
660 feet from the South line and 1983 feet from the East line (Unit O) of  
Section 7, Township 23 South, Range 32 East, NMPM, Lea County, New  
Mexico.

Bottom hole location (if different): NA

Type of completion: Perforations

Type of injection: Limited to UIC Class II fluids from Permittee's production wells

Injection fluid: Produced water from Permittee's operations which includes water from the  
following formations: Bone Spring formation, Wolfcamp formation, and  
Delaware Mountain Group.

Injection interval: Bell Canyon formation of the Delaware Mountain Group

Injection interval thickness (feet): 4,640 to 4,850 (210 feet)

Confining layer(s): Upper confining: Lamar limestone and Castile formation  
Lower confining: siltstone of the lower Bell Canyon formation

Prohibited injection interval(s): Cherry Canyon and deeper formations.

Liner, tubing, and packer set: No liner; 2 $\frac{7}{8}$ -inch lined tubing with packer set within 100 feet of  
uppermost perforation.

Maximum daily injection rate: Shall not exceed 1,000 barrels of water per day (BWD) or 31,000  
BWD in any 30-day period unless OCD requires a lower rate of  
injection based on testing.

Maximum surface injection pressure: 928 PSI

**STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION**

**UIC CLASS II PERMIT SWD- 2231**

Pursuant to the Oil and Gas Act, NMSA 1978, §§70-2-1 *et seq.*, (“Act”) and its implementing regulations, 19.15.1 *et seq.* NMAC, (“Rules”) and the federal Safe Drinking Water Act, 42 U.S.C. 300f *et seq.*, and its implementing regulations, 40 CFR 144 *et seq.*, the Oil Conservation Division (“OCD”) issues this Permit to Foundation Energy Management, LLC (“Permittee”) to authorize the construction and operation of a well to inject produced water at the location and under the terms and conditions specified in this Permit and Appendix A.

**I. GENERAL CONDITIONS**

**A. AUTHORIZATION**

**1. Scope of Permit.** This Permit authorizes the injection of produced water into the well described on Appendix A (“Well”). Any injection not specifically authorized by this Permit is prohibited. Permittee shall be the “operator” of the Well as defined in 19.15.2.7(O)(5) NMAC.

a. Injection is limited to the approved injection interval described in Appendix A. Permittee shall not allow the movement of fluid containing any contaminant into an underground source of drinking water (“USDW”) if the presence of that contaminant may cause a violation of a Primary Drinking Water Regulation adopted pursuant to 40 CFR Part 142 or that may adversely affect the health of any person. [40 CFR 144.12(a)]

b. The wellhead injection pressure for the Well shall not exceed the value identified in Appendix A.

c. Permittee shall not commence to drill, convert, or recompleting the Well until receiving this approval and until OCD approves a Form C-101 Application for Permit to Drill (“APD”) pursuant to 19.15.14 NMAC or receives an approved federal Form 3160-3 APD for the Well. [40 CFR 144.11; 19.15.14.8 and 19.15.26.8 NMAC]

d. Permittee shall not commence injection into the Well until the Permittee complies with the conditions in Section I. C. of this Permit.

e. This Permit authorizes injection of any UIC Class II fluid or oil field waste defined in 19.15.2.7(E)(6) NMAC.



f. This Permit does not authorize injection for an enhanced oil recovery project as defined in 19.15.2.7(E)(2) NMAC.

**2. Notice of Commencement.** Permittee shall provide written notice on Form C-103 to OCD E-Permitting and notify OCD Engineering Bureau by email of the submittal no later than two (2) business days following the date on which injection commenced into the Well. [19.15.26.12(B) NMAC]

**3. Termination.** Unless terminated sooner, this Permit shall remain in effect for a term of twenty (20) years beginning on the date of issuance. Permittee may submit an application for a new permit prior to the expiration of this Permit. If Permittee submits an application for a new permit, then the terms and conditions of this Permit shall remain in effect until OCD denies the application or grants a new permit.

a. This Permit shall terminate one (1) year after the date of issuance if Permittee has not commenced injection into the Well, provided, however, that OCD may grant a single extension of no longer than one (1) year for good cause shown. Permittee shall submit a written request for an extension to OCD Engineering Bureau no later than thirty (30) days prior to the deadline for commencing injection.

b. One (1) year after the last date of reported injection into the Well, OCD shall consider the Well abandoned, the authority to inject pursuant to this Permit shall terminate automatically, and Permittee shall plug and abandon the Well as provided in Section I. E. of this Permit. Upon receipt of a written request by the Permittee no later than one year after the last date of reported injection into the Well, OCD may grant an extension for good cause. [19.15.26.12(C) NMAC]

## **B. DUTIES AND REQUIREMENTS**

**1. Duty to Comply with Permit.** Permittee shall comply with the terms and conditions of this Permit. Any noncompliance with the terms and conditions of this Permit, or of any provision of the Act, Rules or an Order issued by OCD or the Oil Conservation Commission, shall constitute a violation of law and is grounds for an enforcement action, including revocation of this Permit and civil and criminal penalties. Compliance with this Permit does not relieve Permittee of the obligation to comply with any other applicable law, or to exercise due care for the protection of fresh water, public health and safety and the environment. The contents of the Application and Appendix A shall be enforceable terms and conditions of this Permit. [40 CFR 144.51(a); 19.15.5 NMAC]

**2. Duty to Halt or Reduce Activity to Avoid Permit Violations.** Permittee shall halt or reduce injection to avoid a violation of this Permit or other applicable law. It shall not be a defense in an enforcement action for Permittee to assert that it would have been necessary to halt or reduce injection in order to maintain compliance with this Permit. [40 CFR 144.51(c)]

**3. Duty to Mitigate Adverse Effects.** Permittee shall take all reasonable steps to minimize, mitigate and correct any waste or effect on correlative rights, public health, or the



environment resulting from noncompliance with the terms and conditions of this Permit. [40 CFR 144.51(d)]

**4. Duty to Operate and Maintain Well and Facilities.** Permittee shall operate and maintain the Well and associated facilities in compliance with the terms and conditions of this Permit. [40 CFR 144.51(e)]

**5. Duty to Provide Information.** In addition to any other applicable requirement, Permittee shall provide to OCD by the date and on the terms specified by OCD any information which OCD requests for the purpose of determining whether Permittee is complying with the terms and conditions of this Permit. [40 CFR 144.51(h)]

**6. Private Property.** This Permit does not convey a property right or authorize an injury to any person or property, an invasion of private rights, or an infringement of state or local law or regulations. [40 CFR 144.51(g)]

**7. Inspection and Entry.** Permittee shall allow OCD's authorized representative(s) to enter upon the Permittee's premises where the Well is located and where records are kept for the purposes of this Permit at reasonable times and upon the presentation of credentials to:

- a. Inspect the Well and associated facilities;
- b. Have access to and copy any record required by this Permit;
- c. Observe any action, test, practice, sampling, measurement or operation of the Well and associated facilities; and
- d. Obtain a sample, measure, and monitor any fluid, material or parameter as necessary to determine compliance with the terms and conditions of this Permit. [40 CFR 144.51(i)]

**8. Certification Requirement.** Permittee shall sign and certify the truth and accuracy of all reports, records, and documents required by this Permit or requested by OCD. [40 CFR 144.51(k)]

**9. Financial Assurance.** Permittee shall provide and maintain financial assurance for the Well in the amount specified by OCD until the Well has been plugged and abandoned and the financial assurance has been released by OCD. [40 CFR 144.52; 19.15.8.12 NMAC]

## **C. PRIOR TO COMMENCING INJECTION**

### **1. Construction Requirements.**

- a. Permittee shall construct the Well as described in the Application,

Appendix A and as required by the Special Conditions.

b. Permittee shall construct and operate the Well in a manner that ensures the injected fluid enters only the approved injection interval and is not permitted to escape to other formations or onto the surface.

**2. Tests and Reports.** Permittee shall complete the following actions prior to commencing injection in the Well.

a. Permittee shall obtain and comply with the terms and conditions of an approved APD prior to commencing drilling of the Well, or other OCD approval, as applicable, prior to converting or recompleting the Well. If the APD is approved by the OCD, the Well shall be subject to the construction, testing, and reporting requirements of 19.15.16 NMAC.

b. Permittee shall circulate to surface the cement for the surface and intermediate casings. If cement does not circulate on any casing string, Permittee shall run a cement bond log ("CBL") to determine the top of cement, then notify the OCD Engineering Bureau and the appropriate OCD Inspection Supervisor and submit the CBL prior to continuing with any further cementing on the Well. If the cement did not tie back into next higher casing shoe, Permittee shall perform remedial cement action to bring the cement to a minimum of two hundred (200) feet above the next higher casing shoe.

c. If a liner is approved for the construction of the Well, Permittee shall run and submit to OCD E-Permitting and notify the OCD Engineering Bureau by email, a CBL for the liner to demonstrate placement cement and the cement bond with the tie-in for the casing string.

d. Permittee shall submit to the appropriate OCD Engineering Bureau the mudlog, geophysical logs, and a summary of depths (picks) for the contacts of the formations demonstrating that only the permitted formation is open for injection. OCD may amend this Permit to specify the depth of the approved injection interval within the stratigraphic interval requested in the application. If Permittee detects a hydrocarbon show during the drilling of the Well, it shall notify OCD Engineering Bureau by email and obtain written approval prior to commencing injection into the Well.

e. Permittee shall obtain and submit to the OCD E-permitting on a Form C-103 a calculated or measured static bottom-hole pressure measurement representative of the completion in the approved injection interval.

f. Permittee shall conduct an initial mechanical integrity test ("MIT") on the Well in compliance with the terms and conditions of this Permit and 19.15.26 NMAC, and shall not commence injection into the Well until the results of the

initial MIT have been approved by the appropriate OCD Inspection Supervisor. [19.15.26.11(A) NMAC]

g. OCD retains authority to require a wireline verification of the completion and packer setting depths in this Well. [19.15.26.11(A) NMAC]

## **D. OPERATION**

### **1. Operation and Maintenance.**

a. Permittee shall equip, operate, monitor and maintain the Well to facilitate periodic testing, assure mechanical integrity, and prevent significant leaks in the tubular goods and packing materials used and significant fluid movements through vertical channels adjacent to the well bore. [19.15.26.10(A) NMAC]

b. Permittee shall operate and maintain the Well and associated facilities in a manner that confines the injected fluid to the approved injection interval and prevents surface damage and pollution by leaks, breaks and spills. [19.15.26.10(B) NMAC]

c. OCD may authorize an increase in the maximum surface injection pressure upon a showing by the Permittee that such higher pressure will not result in the migration of the disposed fluid from the approved injection interval or induced seismicity. Such proper showing shall be demonstrated by sufficient evidence, including an acceptable step-rate test.

d. If OCD has reason to believe that operation of the Well may have caused or determined to be contributing to seismic activity, Permittee shall, upon OCD's written request:

i. Take immediate corrective action, which could include testing and evaluating of the injection interval and confining layers; suspending or reducing of the rate of injection or maximum surface injection pressure, or both; and providing increased monitoring of the Well's operation; and

ii. Submit a remedial work plan or an application to modify the Permit to implement the corrective action, plug back the injection interval, or incorporate another modification required by OCD.

OCD may approve the remedial work plan, modify the Permit or issue an emergency order or temporary cessation order as it deems necessary.

## 2. Pressure Limiting Device.

a. The Well shall be equipped with a pressure limiting device, which is in workable condition and can be tested for proper calibration at the well site, that shall limit surface tubing pressure to the maximum surface injection pressure specified in Appendix A.

b. Permittee shall test the pressure limiting device and all gauges and other metering requirement to ensure their accuracy and proper function no less than every five (5) years.

**3. Mechanical Integrity.** Permittee shall conduct a MIT prior to commencing injection, at least every five (5) years after the date of the previous MIT, and whenever the tubing is removed or replaced, the packer is reset, mechanical integrity is lost, Permittee proposes to transfer the Well, or requested by OCD.

a. MITs shall be conducted in accordance with 19.15.26 NMAC.

b. Permittee shall submit a sundry notice on Form C-103 of intent to install or replace injection equipment or conduct a MIT no later than three (3) business days prior to the event.

c. Permittee shall report the result of a MIT no later than two (2) business days after the test.

d. Permittee shall cease injection and shut-in the Well no later than twenty-four (24) hours after discovery if:

i. The Well fails a MIT; or

ii. Permittee observes conditions at the Well that indicate the mechanical failure of tubing, casing, or packer.

e. Permittee shall take all necessary actions to address the effects resulting from the loss of mechanical integrity in accordance with 19.15.26.10 NMAC.

f. Permittee shall conduct a successful MIT pursuant to 19.15.26.11 NMAC, including written approval from OCD prior to recommencing injection and the requirements contained in Section I G.3.

**4. Additional Tests.** Permittee shall conduct any additional test requested by OCD, including but not limited to step-rate tests, tracer surveys, injection surveys, noise logs, temperature logs, and casing integrity logs [19.15.26.11(A)(3) NMAC]

## **5. Records.**

a. Permittee shall retain a copy of each record required by this Permit for a period of at least five (5) years and shall furnish a copy to OCD upon request. [40 CFR 144.51(h)]

b. Permittee shall retain a record of each test, sample, measurement, and certification of accuracy and function collected for the Well, including:

- i. Date, location, and time of sample, measurement or calibration;
- ii. Person who conducted the sample event, -measurement or calibration;
- iii. Calibration of gauge or other equipment in accordance with the manufacturer's specifications;
- iv. Description of method and procedures;
- v. Description of handling and custody procedures; and
- vi. Result of the analysis.

## **E. PLUGGING AND ABANDONMENT**

1. Upon the termination of this Permit, Permittee shall plug and abandon the Well and restore and remediate the location in accordance with 19.15.25 NMAC.

2. If Permittee has received an extension pursuant to Section I. A. 2. b., Permittee shall apply for approved temporary abandonment pursuant to 19.15.25 NMAC.

3. If this Permit expires pursuant to 19.15.26.12 NMAC and OCD has not issued a new permit, then Permittee shall plug and abandon the Well and restore and remediate the location in accordance with 19.15.25 NMAC.

4. Permittee's temporary abandonment of the Well shall not toll the abandonment of injection in accordance with 19.15.26.12(C) NMAC.

## **F. REPORTING**

1. **Monthly Reports.** Permittee shall submit a report using Form C-115 using the OCD's web-based online application on or before the 15th day of the second month following the month of injection, or if such day falls on a weekend or holiday, the first workday following the 15<sup>th</sup>, with the number of days of operation, injection volume, and injection pressure. [19.15.26.13 NMAC; 19.15.7.24 NMAC]

**2. Corrections.** Permittee shall promptly disclose to OCD any incorrect information in the Application or any record required by this Permit and submit corrected information. [40 CFR 144.51(h)(8)]

#### **G. CORRECTIVE ACTION**

**1. Releases.** Permittee shall report any unauthorized release of injection fluid at the Well or associated facilities in accordance with 19.15.29 and 19.15.30 NMAC.

**2. Failures and Noncompliance.** Permittee shall report the following incidents to appropriate OCD Inspection Supervisor and OCD Engineering Bureau verbally and by e-mail no later than 24 hours after such incident:

a. Any mechanical integrity failures identified in Section I. D. 3. d;

b. The migration of injection fluid from the injection interval [19.15.26.10 NMAC]; or

c. A malfunction of the Well or associated facilities that may cause waste or affect the public health or environment, including: (a) monitoring or other information which indicates that a contaminant may affect a USDW; or (b) noncompliance or malfunction which may cause the migration of injection fluid into or between USDWs. [40 CFR 144.51(l)(6)]

**3. Corrective Action.** Permittee shall submit a written report describing the incident in Sections I.G.1 or I.G.2, including a corrective active plan, no later than five (5) calendar days after discovery of the incident. [40 CFR 144.51(l)(6)] For an unauthorized release, Permittee also shall comply with the site assessment, characterization and remediation requirements of 19.15.29 and 19.15.30 NMAC.

**4. Restriction or Shut-In.** OCD may restrict the injected volume and pressure or shut-in the Well if OCD determines that the Well has failed or may fail to confine the injected fluid to the approved injection interval or has caused induced seismicity until OCD determines that Permittee has identified and corrected the failure. [19.15.26.10(E) NMAC]

#### **H. PERMIT CHANGES**

**1. Transfer.** This Permit shall not be transferred without the prior written approval of OCD. Permittee shall file Form C-145 for a proposed transfer of the Well. OCD may require, as a condition of approving the transfer, that this Permit be amended to ensure compliance and consistency with applicable law. If the Well has not been spud prior to the transfer, the OCD may require that the new operator reapply and submit to the OCD a new Form C-108 prior to constructing and injecting into the well. [19.15.26.15 NMAC; 19.15.9.9 NMAC]

**2. Insolvency.** Permittee shall notify OCD Engineering Bureau of the commencement of a voluntary or involuntary proceeding in bankruptcy which names Permittee or an entity which operates the Well on behalf of Permittee as a debtor no later than ten (10) business days after the commencement of the proceeding.

**3. OCD Authority to Modify Permit and Issue Orders**

a. The OCD may amend, suspend, or revoke this Permit after notice and an opportunity for hearing if it determines that:

i. The Permit contains a material mistake;

ii. Permittee made an incorrect statement on which OCD relied to establish a term or condition of the Permit or grant this Permit;

iii. this Permit must be amended to ensure compliance and consistency with applicable law, including a change to the financial assurance requirements;

iv. The Well's operation may affect the water quality of fresh water;

v. Injected fluid is escaping from the approved injection interval;

vi. Injection may be caused or contributed to seismic activity:  
or

vii. Injection may cause or contribute to the waste of oil, gas or potash resources or affect correlative rights, public health, or the environment.

b. OCD retains jurisdiction to enter such orders as it deems necessary to prevent waste and to protect correlative rights, protect public health, and the environment.

c. OCD retains jurisdiction to review this Permit as necessary and no less than once every five (5) years, and may determine whether this Permit should be modified, revoked and reissued, or terminated. [40 CFR 144.36(a)]

**4. Permittee Request to Modify Permit.** Permittee may apply to modify the terms of this Permit.

a. **Minor Modifications.** OCD may make a minor modification to this Permit without notice and an opportunity for hearing for:



- i. Non-substantive changes such as correction of typographical errors;
- ii. Requirements for more frequent monitoring or reporting;
- iii. Changes to the Well construction requirements provided that any alteration shall comply with the conditions of the Permit and does not change the Area of Review considered in the application for the Permit;
- iv. Amendments to the plugging and abandonment plan;
- v. Changes in the types of fluids injected which are consistent with sources listed in the application for the Permit and do not change the classification of the Well;
- vi. Corrections of the actual injection interval if within the approved formation; or
- vii. Transfer of a Permit for a Well that has been spud. [40 CFR 144.41]

b. **Major Modifications.** OCD shall require notice and an opportunity for hearing for any modification that is not minor. For such modifications, Permittee shall submit Form C-108 and comply with the notice requirements of 19.15.26 NMAC.

## II. SPECIAL CONDITIONS

Permittee shall comply with the following special conditions:

1. The Permittee shall not operate the Well as to impede the drilling and completion of new production wells within the one-half (1/2) mile Area of Review that penetrate the approved injection interval. Additionally, the Permittee shall be required to reduce or suspend injection for a sufficient period for the new well to be completed for that portion which penetrates the approved injection interval. Operators of the new production wells must provide a proposed completion schedule to the Engineering Bureau and the Permittee at least 30 days prior to commencing drilling as to determine the length of reduced or suspended injection activity. The Operator of the new production wells and the Permittee shall agree on a plan for operation of the Well and shall provide a record of the proposed plan to the Engineering Bureau using Form C-103 Notice of Intent. The Director shall have the authority to administratively impose a plan for the Well's operation to allow for drilling of the new production wells if the Operator and the Permittee cannot negotiate an agreement.

2. As stated in Appendix A, the Permittee shall only dispose UIC Class II

fluids from production wells operated by the Permittee.

3. The Permittee shall conduct a step-rate test ("SRT") on the Well and obtain OCD's written approval of the test results prior to commencing injection into the Well. The OCD Director reserves the right to lower the maximum injection pressure if the results of the SRT indicate that fracturing would occur at the administratively approved maximum injection pressure.

4. Prior to commencing injection, the Permittee shall conduct a production test on new perforations in the Bell Canyon formation and provide the results to the Engineering Bureau and to the Carlsbad Field Office of the Bureau of Land Management. If the production test indicates a significant hydrocarbon show, Permittee shall notify OCD's Engineering Bureau by filing a Form C-103 Sundry Subsequent Report with the results of the production test and shall not commence injection without OCD's written approval.

### **III. ATTACHMENT**

Well Completion Diagram as Provided in the C-108 Application for Case No. 21145.

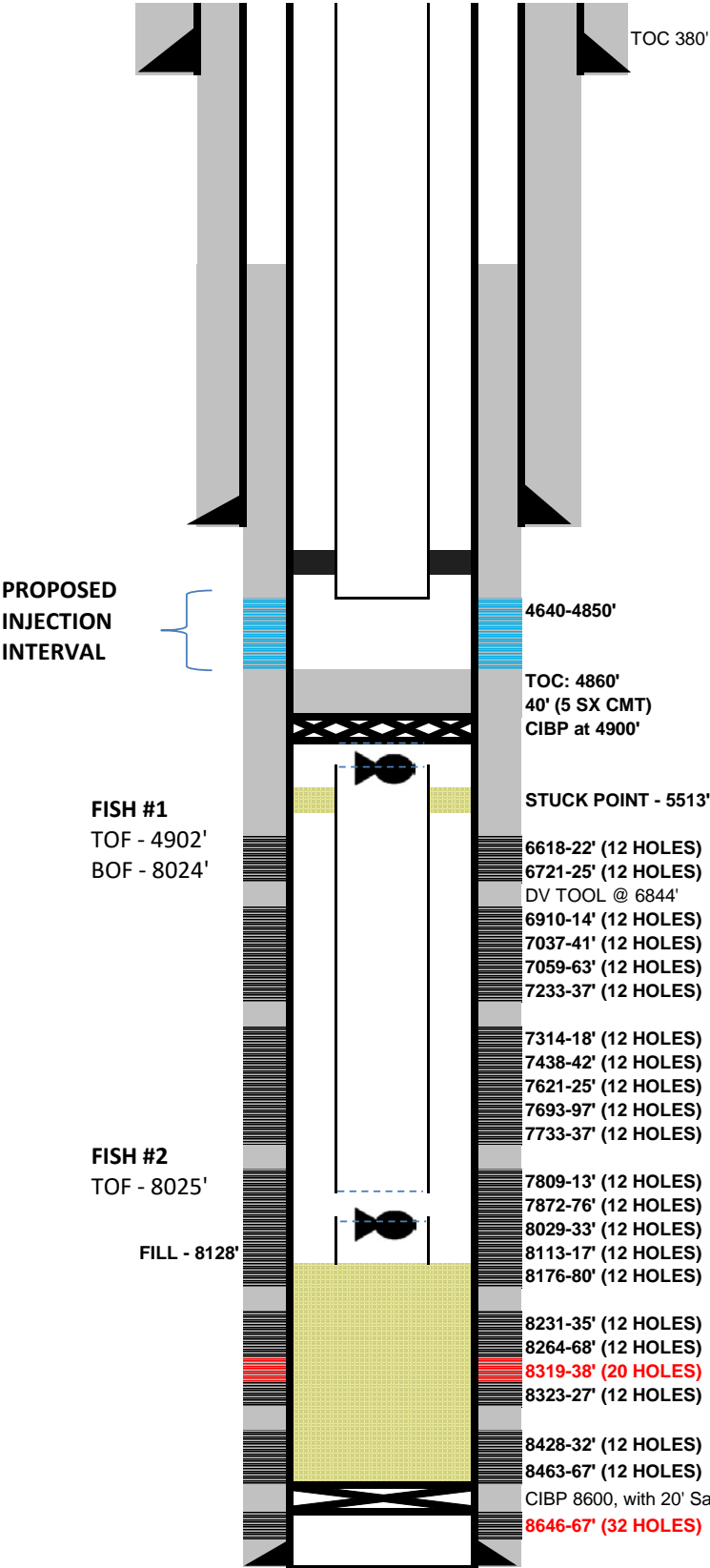
Well / Battery	Prospect Name		Total Depth	Current Status
Blue Quail Federal #1	SWD CONVERSION		8850	SI
API Number	Sec-Twn-Rng		Producing Horizon	County & State
30-025-33222	7H-23S-32E		DELAWARE / BRUSHY CANYON	LEA, NEW MEXICO

Wellbore Diagram

Updated Date: 5/29/2019

Tubing Detail

2-7/8 inch(OD)  
# (weight)  
N80 grade



Surface Casing

13-3/8" inch (OD)  
48 # (weight)  
H-40 grade  
850 depth from KB  
surface cement top  
600 sacks of cement  
17-1/2" inch (OD) HOLE SIZE

Intermediate Casing

8-5/8" inch (OD)  
32 # (weight)  
J-55 grade  
4527 depth from KB  
surface cement top  
1600 sacks of cement  
12-1/4" inch (OD) HOLE SIZE

Production Casing

5-1/2" inch (OD)  
17 # (weight)  
J55/N80 grade  
8849 depth from KB  
7-7/8" inch (OD) HOLE SIZE  
450 CMT STAGE 1 (SX)  
6844 DV TOOL  
900 CMT STAGE 2 (SX)  
1906 TOC (CALC)

PBTD:8128 (10/17)  
TD: 8850

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
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**District II**  
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**District III**  
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Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS  
  
Action 218576

CONDITIONS

Operator: FOUNDATION ENERGY MANAGEMENT, LLC 5057 KELLER SPRINGS RD ADDISON, TX 75001	OGRID: 370740
	Action Number: 218576
	Action Type: [IM-SD] Admin Order Support Doc (ENG) (IM-AAO)

CONDITIONS

Created By	Condition	Condition Date
pgoetze	None	5/19/2023