

MM 10/16/2018
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NEW MEXICO OIL CONSERVATION DIVISION
 - Geological & Engineering Bureau -
 1220 South St. Francis Drive, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Applicant: 3Bear Field Service **OGRID Number:** 320495
Well Name: Libby Berry SWD #2 **API:**
Pool: SWD: Silurian-Devonian **Pool Code:** 96101 97869

SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED BELOW

1) TYPE OF APPLICATION: Check those which apply for [A]

A. Location - Spacing Unit - Simultaneous Dedication

☐ NSL ☐ NSP (PROJECT AREA) ☐ NSP (PRORATION UNIT) ☐ SD

B. Check one only for [I] or [II]

[I] Commingling - Storage - Measurement

☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[II] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery

☐ WFX ☐ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR

2) NOTIFICATION REQUIRED TO: Check those which apply.

A. ☒ Offset operators or lease holders

B. ☐ Royalty, overriding royalty owners, revenue owners

C. ☒ Application requires published notice

D. ☒ Notification and/or concurrent approval by SLO

E. ☒ Notification and/or concurrent approval by BLM

F. ☒ Surface owner

G. ☒ For all of the above, proof of notification or publication is attached, and/or,

H. ☐ No notice required

FOR OCD ONLY

☒ Notice Complete
☒ Application Content Complete

3) CERTIFICATION: I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

October 4, 2018

Christopher Weyand - Agent of 3Bear Field Service

Print or Type Name

Signature

Date

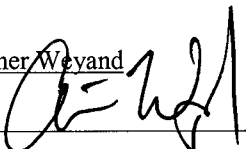
(512) 600-1764

Phone Number

chris@lonquist.com

e-mail Address

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage
Application qualifies for administrative approval? X Yes No
- II. OPERATOR: 3Bear Field Services, LLC
ADDRESS: 415 W. Wall St., Suite 1212
CONTACT PARTY: Kevin Burns PHONE: 432-686-2973
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? Yes X No
If yes, give the Division order number authorizing the project: _____
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- *XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: Christopher Weyand TITLE: Consulting Engineer – Agent for 3Bear Field Service
SIGNATURE:  DATE: 10/04/2018
E-MAIL ADDRESS: chris@lonquist.com
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

INJECTION WELL DATA SHEET

OPERATOR: 3Bear Field Services, LLC

WELL NAME & NUMBER: Libby Berry SWD #2

WELL LOCATION: 540' FNL & 269' FEL
FOOTAGE LOCATION

A UNIT LETTER 22 SECTION 20S TOWNSHIP 34E RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 26.000"
Cemented with: 328 sacks
Top of Cement: surface
Casing Size: 20.00"
or 361 ft³
Method Determined: circulation

1st Intermediate Casing

Hole Size: 17.500"
Cemented with: 1,695 sacks
Top of Cement: surface
Casing Size: 13.375"
or 2,703 ft³
Method Determined: circulation

2nd Intermediate Casing

Hole Size: 12.250"
Cemented with: 2,195 sacks
Top of Cement: surface
Casing Size: 9.625"
or 4,843 ft³
Method Determined: circulation

Production Liner

Hole Size: 8.500"
Cemented with: 620 sacks
Top of Cement: 8,175'
Total Depth: 16,254'
Casing Size: 7.625"
or 758 ft³
Method Determined: calculation

Injection Interval

14,614 feet to 16,254 feet
(Open Hole)

INJECTION WELL DATA SHEET

Tubing Size: 5.5", 17 lb/ft, HCL-80 BTC from 0' – 14,515'

Lining Material: Duoline

Type of Packer: 7-5/8" X 5-1/2" permanent packer

Packer Setting Depth: 14,515'

Other Type of Tubing/Casing Seal (if applicable): _____

Additional Data

1. Is this a new well drilled for injection? X Yes No

If no, for what purpose was the well originally drilled?

2. Name of the Injection Formation: Devonian

3. Name of Field or Pool (if applicable): SWD; Silurian-Devonian (Code: 96101)

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.

No, new drill.

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:

Delaware: 5,755'
Bone Spring: 8,365'
Wolfcamp: 11,346'
Strawn: 12,256'
Atoka: 12,495'

District I

1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

District III

1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico

Form C-101
Revised July 18, 2013

Energy Minerals and Natural Resources**Oil Conservation Division****1220 South St. Francis Dr.****Santa Fe, NM 87505**☐ AMENDED REPORT**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

¹ Operator Name and Address 3BEAR FIELD SERVICE, LLC 415 W. WALL ST., STE 1212 MIDLAND, TEXAS 79701		² OGRID Number 320495
		³ API Number 30-075-TBD
⁴ Property Code	⁵ Property Name LIBBY BERRY SWD	⁶ Well No. 2

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
A	22	20S	34E		540	N	269	E	LEA

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
-	-	-	-		-	-	-	-	-

9. Pool Information

Pool Name SWD; Silurian-Devonian	Pool Code 96101
-------------------------------------	--------------------

Additional Well Information

¹¹ Work Type N	¹² Well Type SWD	¹³ Cable/Rotary R	¹⁴ Lease Type Private	¹⁵ Ground Level Elevation
¹⁶ Multiple N	¹⁷ Proposed Depth 16,254'	¹⁸ Formation Silurian-Devonian	¹⁹ Contractor TBD	²⁰ Spud Date ASAP
Depth to Ground water 210		Distance from nearest fresh water well 186'		Distance to nearest surface water > 1 mile

☒ We will be using a closed-loop system in lieu of lined pits**21. Proposed Casing and Cement Program**

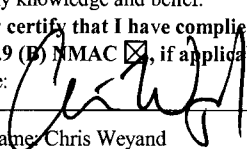
Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Conductor	26"	20"	94 lb/ft	120'	328	Surface
Intermediate 1	17-1/2"	13-3/8"	54.5 lb/ft	1,950'	1,695	Surface
Intermediate 2	12-1/4"	9-5/8"	40 lb/ft	8,365'	2,195	Surface
Production Liner	8-1/2"	7-5/8"	39 lb/ft	8,175'-14,614'	620	8,175'
Tubing	6-1/2"	5-1/2"	17 lb/ft	14,515'		

Casing/Cement Program: Additional Comments

See attached schematic.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Hydraulic/Blinds, Pipe	8,000 psi	10,000 psi	TBD - Schaffer/Cameron

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that I have complied with 19.15.14.9 (A) NMAC <input type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> if applicable. Signature: 		OIL CONSERVATION DIVISION	
Printed name: Chris Weyand		Approved By:	
Title: Consulting Engineer		Title:	
E-mail Address: chris@lonquist.com		Approved Date:	Expiration Date:
Date: October 4, 2018	Phone: 512-600-1764	Conditions of Approval Attached	

District I
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State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number		² Pool Code 96101	³ Pool Name SWD; Silurian-Devonian
⁴ Property Code	⁵ Property Name Libby Berry SWD		⁶ Well Number #2
⁷ OGRID No. 372603	⁸ Operator Name 3BEAR FIELD SERVICES, LLC		⁹ Elevation

* Surface Location

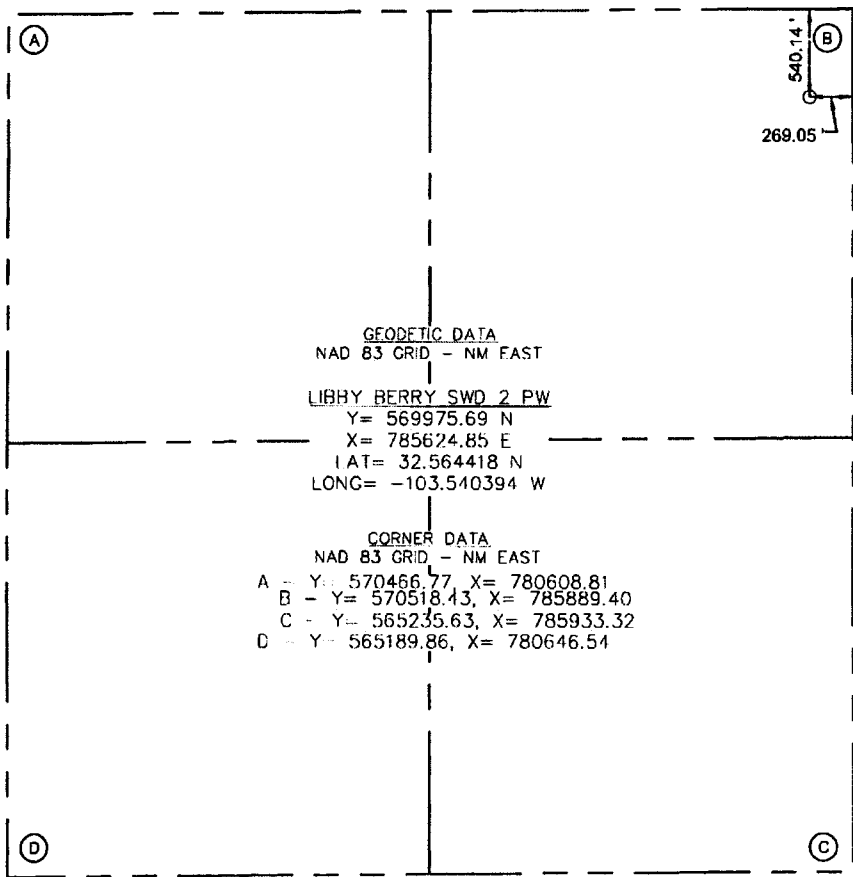
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	22	20 S	34 E		540	NORTH	269	EAST	LEA

" Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

 <p>GEODETIC DATA NAD 83 GRID - NM EAST LIBBY BERRY SWD 2 PW Y= 569975.69 N X= 785624.85 E LAT= 32.564418 N LONG= -103.540394 W</p> <p>CORNER DATA NAD 83 GRID - NM EAST A - Y= 570466.77, X= 780608.81 B - Y= 570518.43, X= 785889.40 C - Y= 565235.63, X= 785933.32 D - Y= 565189.86, X= 780646.54</p>		<p>" OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Christopher Weyand</i> 10/4/2012 Signature Date</p> <p>Christopher Weyand Printed Name chris@lanquist.com E-mail Address</p>
		<p>"SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>AUGUST 16, 2012 Date of Survey JEFFERY E. HURSON Signature and Seal of Professional Surveyor: 20559 Professional Surveyor Certificate Number 20559</p>



Application for Authorization to Inject
Libby Berry SWD #2
Lea County, NM

October 4, 2018

LONQUIST & CO. LLC

**PETROLEUM
ENGINEERS**

**ENERGY
ADVISORS**

HOUSTON · CALGARY
AUSTIN · WICHITA · DENVER

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Figure 3: Southwest-Northeast Cross Section
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Figure 5: Map of Wells within Two Mile, One Mile, and Half Mile AOR Map and Associated Lists
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APPENDICES:

Appendix A: Information on Produced Water within One Mile of Proposed SWD well
Appendix B: Information on Land Tracts within One Mile of Proposed SWD well
Appendix C: Notice Letters, Documentation and Affidavit of Publication of Newspaper Notice

1.0 EXECUTIVE SUMMARY

On behalf of 3Bear Field Services, LLC (3Bear), Lonquist & Co. (Lonquist) is submitting a complete C-108 application for approval to drill, complete and operate a new salt water disposal well, Libby Berry SWD #2, in Section 22, T20S, R34E approximately 25 miles Southwest of Hobbs in Lea County, New Mexico. The Libby Berry SWD #2 well will be drilled at a surface location approximately 540 feet from the north line (FNL) and 269 feet from the east line (FEL) of the section boundary.

3Bear plans to safely inject up to a maximum of 25,000 BBLS and an average of 20,000 BBLS per day for at least 25 years. Geological studies conducted demonstrate the proposed injection zone is able to receive the proposed salt water injection volumes within the NMOCD's recommended injection pressures.

The proposed injection zone includes both the Devonian, Fusselman, and the top 100 of the Montoya in an open hole interval. This gross injection interval is proposed to be from approximately 14,614'-16,254'. Libby Berry SWD #2 will be drilled as a vertical well to a total depth of 16,254' and completed as an open hole interval. The proposed well will be constructed with four casing strings cemented to surface and a production liner set.

Lonquist has reviewed all the surface owners, operators, leaseholders and mineral owners within one-mile of the proposed Libby Berry SWD #2 well. A total of 14 impacted parties were identified. There are no wells within the one-mile area of review that penetrate the injection zone. A search of the New Mexico State Engineer's files shows 3 water wells that are located within one mile of the proposed Libby Berry SWD #2 well.

Based on this detailed evaluation, Lonquist and 3Bear have determined that the proposed SWD well is safe and environmentally sound well for the disposal of salt water into the injection zone. The highly cemented carbonate nature of the Devonian and Fusselman formations indicate that a favorable open hole integrity will exist, allowing for the saltwater to be injected without concern of collapse in the open hole injection zone.

PROPOSED WELL CONSTRUCTION AND OPERATION DETAILS

1.1 LOCATION DETAILS:

Well Information	
Lease Name	Libby Berry SWD
Well No.	2
Location	S-22 T-20S R-34E
Footage Location	540' FNL & 269' FEL

1.2 CALCULATED MAXIMUM INJECTION PRESSURE

The maximum allowable surface injection pressure is calculated to be 2,923 psi. The maximum allowable surface pressure for saltwater is calculated by $0.2 \times$ top of injection zone (top of Devonian @ 14,614'). The average injection pressure is calculated to be 2,193 psi. The average surface pressure for saltwater is calculated by $0.15 \times$ top of injection zone (top of Devonian @ 14,614').

$$IP_{\max} = 0.2(D_{\text{top}})$$

where: IP_{\max} = maximum surface injection pressure (psig)

D_{top} = depth of top of injection interval (feet)

$$IP_{\text{avg}} = 0.15(D_{\text{top}})$$

where: IP_{avg} = maximum surface injection pressure (psig)

D_{top} = depth of top of injection interval (feet)

1.3 INJECTION VOLUMES

Using offset log data, we estimate that the gross injection interval will be approximately 14,614' – 16,254' which equates to approximately 1,640 feet of reservoir rock in the proposed injection. 3Bear anticipates injecting an average daily volume of 20,000 BWPD at an average injection pressure of 2,193 psi up to a maximum daily volume of 25,000 BWPD at a maximum injection pressure of 2,923 psi.

1.4 WELL DESIGN

The preliminary well design for the proposed Libby Berry SWD #2 well is shown in Figure 1. The well will have four strings of telescoping casing cemented to the surface and one production liner fully cemented.

The well will be drilled vertically to a projected total depth of 16,254'. The injection zone (14,614'-16,254') will be completed as an open hole interval into the Devonian and Fusselman formations and very top of the Montoya.

An appropriate drilling rig will be selected and will include appropriate blowout preventer and choke manifold. Visual inspections of cement returns to surface will be noted in the surface, intermediate and production casing jobs. Casing and cement integrity will be validated by pressure tests and cement bond logs after each cement job.

The four proposed casing strings and cement programs are shown in Figure 1, and Tables 1 and 2 below, and summarized as follows:

1. Conductor casing will be set approximately 120' into the surface. The borehole will be drilled with a 26-inch bit. Casing will be run and cemented to surface with approximately 328 sacks of Class H cement or equivalent.
2. The first intermediate casing string will be set approximately 20' into the Salado, at approximately 1,950 feet to protect any water zones above the Salado formation. The borehole will be drilled with a 17.5" bit and 13-3/8" 54.5 lb/ft, J-55 BTC casing will be run and cemented to surface with approximately 1,695 sacks of HalCem™ cement or equivalent.
3. The second intermediate casing string will be set approximately 10' into the Bone Spring. Productive zones in this region such as the Bone Spring and the Wolfcamp are tight and possess good integrity. A production liner will be set past these zones in the following production liner. This interval will be drilled with a 12-1/4" bit to a depth of approximately 8,365 feet. The 9-5/8", 40 lb/ft HCL-80 casing will be cemented to the surface with approximately 2,245 total sacks of HalCem™, NeoCem™ and ExtendaCem™ cement or equivalent.
4. A production liner will be set at the top of the Devonian Formation, at approximately 14,614 feet in an 8-3/4" borehole. The 7-5/8" 39 lb/ft, P-110 UFJ liner will be hung at the base of the second intermediate string at a depth of 8,460 feet. The production liner will be fully cemented with 620 sacks of VersaCem™ cement with gas migration control properties or equivalent.

Casing Information				
Type	Conductor	Intermediate	Intermediate 2	Production Liner
OD	20"	13-3/8"	9-5/8"	7-5/8"
WT	0.876"	0.76"	0.79"	0.5"
ID	19.124"	12.615"	8.835"	6.625"
Drift ID	18.936"	12.459"	8.679"	6.5"
COD	21"	14.375"	10.625"	7.625"
Weight	94 lb/ft	54.5 lb/ft	40 lb/ft	39 lb/ft
Grade	H-40	J-55 BTC	HCL-80	P-110 UFJ
Hole Size	26"	17.5"	12.25"	8.5"
Depth Set	120'	1,950'	8,375'	8,175'-14,614'

Table 1: Casing Design

Cement Information (or equivalent products)				
Casing String	Conductor	Intermediate 1	Intermediate 2	Production Liner
Lead Cement	Class H	HalCem	Stage 1: NeoCem Stage 2: NeoCem Stage 3: ExtendaCem	VERSACEM w/ gas migration control additives
Lead Cement Volume	328 sks	1,255 sks	Stage 1: 405 sks Stage 2: 845 sks Stage 3: 405 sks	620 sks
Tail Cement	-	HalCem	Stage 1: HalCem Stage 2: HalCem	-
Tail Cement Volume	-	440 sks	Stage 1: 540 sks Stage 2: 50 sks	-
Cement Excess	100%	100%	100%	50%
TOC	Surface	Surface	Surface	8,375'
Method	Circulate to Surface	Circulate to Surface	Circulate to Surface	Logged

Table 2: Cement Design

The proposed open hole logging suite for the Production section includes Dual Induction, Density-Neutron, Gamma Ray, and Sonic logs. This logging suite will provide us with useful information on the proposed injection interval. No stimulation is proposed for this well.

After the production liner is cemented and set, a cement bond log and mechanical integrity test will be run, then an injection step-test will be performed to determine injection pressures and volumes. After testing, the tubing will be installed with a packer set at approximately 14,515 feet as shown in Figure 1.

OD	5.5"
WT	0.304"
ID	4.892"
Drift ID	4.767"
Weight	17 lb/ft
Grade	HCL-80 BTC
Depth Set	0'-14,515'

Table 3: Tubing Specifications

Other considerations taken with the design of the proposed well include the packer and the wellhead. The packer to be used will be a 7-5/8" X 5-1/2" permanent packer. The wellhead will be designed to handle greater than maximum allowable surface injection pressure. The wellhead will be equipped with a pressure shut-off valve and monitor to ensure that the MASIP is not exceeded.

2.0 GEOLOGICAL DATA

The proposed injection interval includes the Devonian and Fusselman formations with the very top (~100') of the Montoya included. It is desired to drill into the very top of the Montoya to ensure that the entire Fusselman has been opened and to yield an open hole log across the entire injection horizon. Figure 2 shows a structure map of the top of the Devonian formation. Figures 3 and 4 provide cross-sections showing the stratigraphy and relative thickness of the formations in the area of the proposed wells.

2.1 Devonian/Silurian Lithology:

The Devonian/Silurian section is a dolomitic ramp carbonate sequence that occurs below the Woodford Shale and above the Fusselman Formation. The Woodford is the upper confining layer for the proposed Libby Berry SWD #2 well. The Devonian/Silurian interval is composed of two members: the Thirtyone Formation in the upper part and the lower Wristen Group. The Thirtyone Formation contains two end-member reservoir facies: skeletal packstones/grainstones and spiculitic chert, with most of the porosity and permeability found in coarsely crystalline, cherty dolomite. The Wristen Group is composed of mixed limestone and dolomite lithologies with mudstone, grainstone and boundstone textures. Porosity in the Wristen member is the result of both primary and secondary development. Moldic, vugular, and karst facies (including collapse breccias) have higher porosities and permeabilities. These characteristics allow for the Devonian to be a potentially prolific horizon for disposal. The Devonian section is approximately 1,119 feet thick at the proposed location. These particular characteristics allow for this formation to be a tremendous salt water disposal horizon.

2.2 Fusselman Formation lithology:

The Silurian/Ordovician Fusselman Formation is stratigraphically below the Wristen Group and is above and separated from the Montoya Formation by the Sylvan Shale. The Sylvan Shale is the lower confining layer for the proposed Libby Berry SWD well. Fusselman facies include a laminated skeletal wackestone in the upper part and a buildup complex in the lower part composed of ooid and bryozoan grainstones. These grainstones can also be potentially prolific zones for disposal.

2.3 Montoya Formation lithology:

The Montoya Group of Late Ordovician age unconformably overlies the Simpson Group. The Montoya is composed of light gray to medium-dark gray, fine- to medium-crystalline, calcareous dolomite, some units of which are interbedded with shale or dark-gray limestone and some units of which contain white to very light-gray chert. The Montoya carbonate limestone dolomite sequence is dense, impermeable, and non-porous.

POD1 is currently permitted, and no drilling date is available for CP 00655-POD1. Fresh water samples are being obtained from the two wells. A map and the Water Right Summaries from the New Mexico Office of the State Engineer are included in Appendix A. The chemical analysis of these samples were not retrievable as the wells were found to be dry at the time samples went to be retrieved. The shallow aquifers from which these wells are sourced will be protected by the surface, intermediate and production casing strings in the proposed Libby Berry SWD #2 well.

Which ones?

- Alluvial / Rustler ; no Capitan Wells ; possible shallow Santa Rosa

WR File Number	Owner	Primary Purpose	Primary Status	X (Nad 83 UTM)	Y (Nad 83 UTM)	Depth (ft)
CP 00655-POD1	Kenneth Smith	Livestock Watering	Declaration	637294	3605108	210
CP-00800-POD1	Daniel Berry	Livestock Watering	Declaration	637007	3603994	220
CP-00567-POD1	Phillips Petroleum Company	Cathodic Protection Well	Permit	637227	3602793	

Table 5: Water wells within 1-mile of Libby Berry SWD #2

2.6 Zones that Contain Oil and Gas, Water and/or Mineral Bearing Formations

The proposed Libby Berry SWD #2 well is located in the Middle Lynch Oil Field, which produced primarily from the Bone Spring reservoir. 29 wells are listed as active in 2018, 3 gas and 26 oil. There is 1 salt water disposal well which is injecting in a much shallower formation than the Libby Berry SWD #2.

Potential Oil and Gas Bearing Zones within area of well:

Formation	Depth
Delaware	5,755'
Bone Spring	8,365'
Wolfcamp	11,346'
Strawn	12,256'
Atoka	12,495'

3.0 AREA OF REVIEW

Within two miles of the proposed Libby Berry SWD #2 well, there are 225 recorded oil and/or gas wells as shown in Figure 5. Of these only 29 wells are within the one-mile AOR and currently active. The map depicting active wells are included in Figure 6. No wells within the AOR penetrate the proposed injection zone. Table 6 lists all the active wells within a 1-mile radius of the proposed Libby Berry SWD #2.

API (30-025-...)	WELL NAME	OPERATOR	TVD (FT.)	LATITUDE (NAD83 DD)	LONGITUDE (NAD83 DD)	DATE DRILLED
02449	R AND B FEDERAL #001	CHESTNUT EXPLORATION AND PRODUCTION, INC.	3,625	32.5522652000	-103.546974200	6/3/1960
02467	BALLARD DE FEDERAL #004	MARATHON OIL PERMIAN LLC	3,690	32.5504532000	-103.542678800	12/31/9999
20284	HANSON C #003	BURK ROYALTY CO., LTD.	3,702	32.5522690000	-103.534118700	9/15/1963
29365	LAURIE D FEDERAL #001	READ & STEVENS INC	13,821	32.5786133000	-103.542755100	12/31/9999
30586	LUCY FEDERAL #001	READ & STEVENS INC	3,762	32.5779877000	-103.538467400	12/31/9999
38469	MUD SLIDE SLIM 15 FEDERAL #001	CAZA OPERATING, LLC	13,514	32.5749702000	-103.550277700	1/12/2008
39546	MARATHON ROAD 14 FEDERAL #001	MEWBOURNE OIL CO	13,400	32.5686111000	-103.525558500	12/5/2009
39822	LAURIE D FEDERAL #002	READ & STEVENS INC	3,685	32.5783577000	-103.542373700	7/31/2010
40055	LUCY FEDERAL #002	READ & STEVEN S INC	3,860	32.5713387000	-103.538452100	2/14/2011
40115	LYNCH 23 FEDERAL COM #001H	CIMAREX ENERGY CO.	11,056	32.5649834000	-103.528274500	9/22/2011
40123	LYNCH 23 FEDERAL COM #002H	CIMAREX ENERGY CO.	11,045	32.5649834000	-103.524475100	6/13/2011
40697	LAGUNA 23 FEDERAL COM #002H	CHISHOLM ENERGY OPERATING, LLC	11,079	32.5514984000	-103.537429800	1/11/2014
40724	LYNCH 23 FEDERAL COM #003H	CIMAREX ENERGY CO.	10,486	32.5650520000	-103.524154700	9/27/2012
40726	LYNCH 23 FEDERAL COM #004	CIMAREX ENERGY CO.	9,619	32.5649948000	-103.527938800	11/4/2012
40742	LAGUNA 23 FEDERAL COM #001H	CHISHOLM ENERGY OPERATING, LLC	10,874	32.5522690000	-103.533042900	8/18/2013
40984	MARATHON ROAD 14 NC FEDERAL #001H	MEWBOURNE OIL CO	10,904	32.5654259000	-103.533081100	11/17/2014
41195	LYNCH 23 FEDERAL COM #006H	CIMAREX ENERGY CO.	9,606	32.5650902000	-103.523582500	7/14/2013
41215	MARATHON ROAD 14 MD FEDERAL #001H	MEWBOURNE OIL CO	10,930	32.5654259000	-103.536880500	8/1/2014
41575	MARATHON ROAD 15 PA FEDERAL #001H	MEWBOURNE OIL CO	7,269	32.5667191000	-103.540580700	1/11/2014
41605	PERRY 22 FEDERAL COM #001H	CIMAREX ENERGY CO.	11,073	32.5649719000	-103.540573100	7/21/2014
41608	PERRY 22 FEDERAL COM #004H	CIMAREX ENERGY CO.	11,260	32.5641280000	-103.555428000	12/15/2017
41945	MARATHON ROAD 15 B30B FEDERAL #001H	MEWBOURNE OIL CO	10,927	32.5662956000	-103.547981300	10/5/2014
41946	LAGUNA 23 FEDERAL COM #003H	CHISHOLM ENERGY OPERATING, LLC	9,620	32.5522690000	-103.532562300	9/19/2014
41947	PALOMA 21 FEDERAL COM #004H	FA5KEN OIL & RANCH LTD	11,085	32.5653267000	-103.557281500	7/28/2014
42201	MARATHON ROAD 15 NC FEDERAL #001H	MEWBOURNE OIL CO	10,914	32.5663820195	-103.550814535	1/10/2015
42949	LEA UNIT #054H	LEGACY RESERVES OPERATING, LP	10,892	32.5860868100	-103.527983100	11/23/2015
44023	LEA UNIT #055H	LEGACY RESERVES OPERATING, LP	10,409	32.5944175600	-103.527816270	9/22/2017
44044	BLACK & TAN 27 FEDERAL COM #307H	APACHE CORPORATION	11,086	32.5374365700	-103.542035730	1/7/2018
44045	BLACK & TAN 27 FEDERAL COM #308H	APACHE CORPORATION	11,125	32.5374366200	-103.541906050	1/30/2018

Table 6: Active wells within 1-mile radius of proposed Libby Berry SWD #2

4.0 IDENTIFICATION AND REQUIRED NOTIFICATION OF AFFECTED PARTIES WITHIN THE AREA OF REVIEW

Lonquist has reviewed the land status and operators within one mile of the proposed well location. There are no active operators within the one-mile radius with wells penetrating the injection zone. There are 14 potentially impacted parties with details provided in Appendix B.

A public notification appeared in the Hobbs newspaper on August 19, 2018 and ran for one day. —

Appendix C contains copies of the registered mail receipts, letters and the newspaper affidavit of publication.

5.0 AFFIRMATIVE STATEMENT OF EXAMINATION OF GEOLOGIC AND ENGINEERING DATA

Based on the available engineering and geologic data we find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water. 3D mapping and subsurface well control do not indicate that the regional faulting in the Devonian age rock extend vertically beyond the Pennsylvanian age rock. Therefore there is no apparent hydrologic connection between the disposal zone and any underground sources of drinking water.

6.0 REFERENCES

Geology and Ground-Water Conditions in Southern Lea County, New Mexico GROUND-WATER REPORT 6; 1961; ALEXANDER NICHOLSON, Jr. and ALFRED CLEBSCH, JR.; UNITED STATES GEOLOGICAL SURVEY-New Mexico Institute of Mining and Technology, State Bureau of Mines and Mineral Resources Division and the New Mexico State Engineer.

MIDDLE PERMIAN BASINAL SILICICLASTIC DEPOSITION IN THE DELAWARE BASIN: THE DELAWARE MOUNTAIN GROUP (GUADALUPIAN); 2006; H. S. Nance; Bureau of Economic Geology Jackson School of Geosciences; The University of Texas at Austin; Austin, Texas.

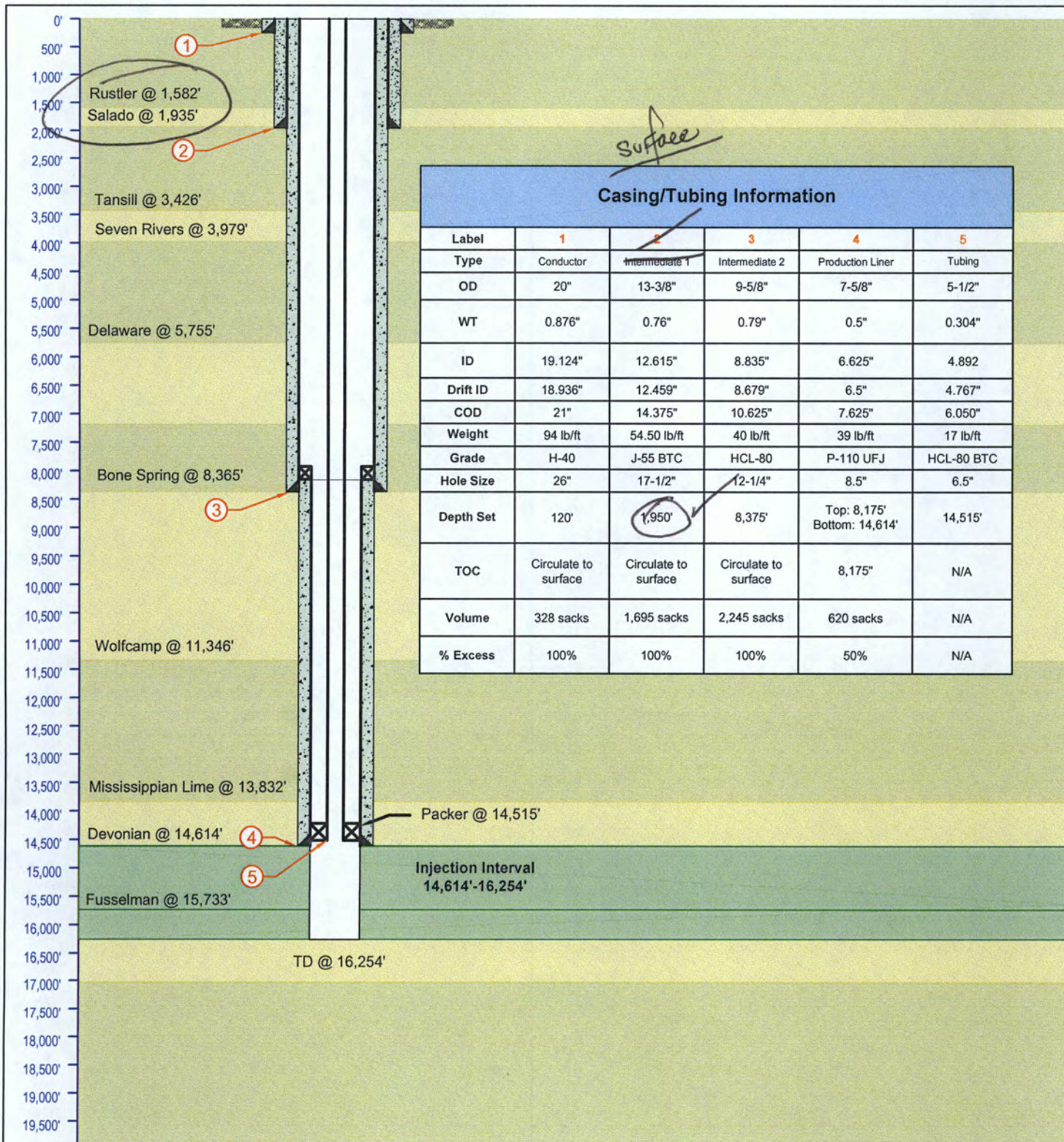
Stratigraphic Analysis of the Upper Devonian Woodford Formation, Permian Basin, West Texas and Southeastern New Mexico, 1991, John B. Comer, Report of Investigations No. 201 Bureau of Economic Geology.

All Constituents in mg/l

API	Section	Formation	TDS	Sodium	Calcium	Iron	Magnesium	Chloride	Bicarbonate	Sulfate
3002531696	2	DELAWARE	152064	51632	13150	6		102148	404	691
3002532105	2	DELAWARE	296822	87728	45355	9		215237	143	294
3002532466	2	DELAWARE	340838	125179	29657	4		245270	229	147
3002508462	22	ARTESIA	19994					10950	532	811
3002526625	19	ARTESIA	24817	8847	298	17	285	14919	457	170
3002523861	20	ARTESIA	33296	10688	1248	5	513	20220	425	454
3002502408	1	SAN ANDRES	187065					114800	146	220
3002502424	11	BONE SPRING	29436					16720	634	1142
3002502427	12	ARTESIA	16150					7600	185	2750
3002502427	12	DELAWARE	214787					132700	208	1816
3002502427	12	ARTESIA	16595					8000	170	2500
3002502427	12	BONE SPRING	15429							
3002502427	12	BONE SPRING	180701					108300	1016	670
3002502429	12	BONE SPRING	202606					118100	5196	992
3002502429	12	BONE SPRING	121800							
3002502431	12	PENNSYLVANIAN	44800					25320	1401	1038
3002502431	12	PENNSYLVANIAN	35094					19020	1272	1096
3002502431	12	DEVONIAN	33414					18570	227	1961
3002502431	12	PENNSYLVANIAN	42216					24000	1256	920
3002502431	12	BONE SPRING	147229					89640	108	1038
3002502432	13	DEVONIAN	45778					26440	1145	729
3002502449	22	ARTESIA	20395					9800	1360	2020
3002502478	29	ARTESIA	31894					17830	588	1640
3002502511	35	ARTESIA	18174					7932	46	3647
3002521346	22	ARTESIA	15685					5925	1003	3450
3002502439	21	ARTESIA	9610					3760	295	2340
3002526625	19	ARTESIA	4911	0	12	4061	3	268	423	111

wellname	api	latitude	longitude	section	township	range	unit	figsw	county	state	field	formation	sampledate	ph	specificgravity	tds_mg_l	resistivity_ohm_cm	sodium_mg_l	calcium_mg_l	magnesium_mg_l	chloride_mg_l	carbonate_mg_l	bicarbonate_mg_l	sulfate_mg_l	
R AND B FEDERAL #001	3002502449	32.55227	-103.547	22	20S	34E	O	330S	2310E	LEA	NM	LYNCH	ARTESIA				20395				9800			1360	2020
	WILLS A FEDERAL #001	3002502478	32.55046	29	20S	34E	D	330N	330W	LEA	NM	TEAS	ARTESIA				31894				17830		588	1640	
	NEAL #001	3002502511	32.52683	-103.53	35	20S	34E	J	1650S	2310E	LEA	NM	LYNCH	ARTESIA			18174				7932		46	3647	
BALLARD DE FEDERAL #006	3002502511	32.52683	-103.53	22	20S	34E	L	1650S	990W	LEA	NM	LYNCH	ARTESIA	6/2/1965 0:00	7.92		15685				5925		1003	3450	
	3002521346	32.55589	-103.553	21	20S	34E	A	660N	660E	LEA	NM	LYNCH MIDDLE	ARTESIA				9610				3760		295	2340	
	MUSE #001	3002502439	32.56406	-103.559	21	20S	34E	O	330S	1650E	LEA	NM	TEAS	ARTESIA	4/26/1957 0:00	7	1.001	4910.55	0	12.012	3.003	268.268	0	423.423	111.111
WEST LYNCH FEDERAL #001	3002526625	32.55227	-103.596	19	20S	34E	O	330S	990E	LEA	NM	TEAS	ARTESIA	1/13/1998 0:00	8.02		19994				10950		532	811	
PERRY FEDERAL #001	3002508462	32.55227	-103.543	22	20S	34E	P	330S	1650E	LEA	NM	LYNCH	ARTESIA			1.02	24816.5	8947.48	297.84	284.58	14918.5	0	456.96	170.34	
WEST LYNCH FEDERAL #001	3002526625	32.55227	-103.596	19	20S	34E	O	330S	990E	LEA	NM	TEAS	ARTESIA	6/18/1999 0:00	6.6		19994				7600		185	2750	
LEA UNIT #001	3002502427	32.58585	-103.52	12	20S	34E	L	1980S	660W	LEA	NM	LEA	ARTESIA				16150				8000		170	2500	
WALLEN FEDERAL #001	3002502427	32.58585	-103.52	12	20S	34E	L	1980S	660W	LEA	NM	LEA	ARTESIA	2/23/1998 0:00	7.83	1.028	33296.1	10688.1	1247.99	512.972	20219.7	0	424.564	454.376	
LEA UNIT #001	3002502427	32.58585	-103.52	12	20S	34E	L	1980S	660W	LEA	NM	LEA	BONE SPRING				16595							634	1142
LEA UNIT #001	3002502427	32.58585	-103.52	12	20S	34E	L	1980S	660W	LEA	NM	LEA	BONE SPRING				15429				16720			1016	670
LEA UNIT #004H	3002502424	32.58951	-103.525	11	20S	34E	H	1980W	660E	LEA	NM	LEA	BONE SPRING				29436				108300			5196	992
LEA UNIT #001	3002502427	32.58585	-103.52	12	20S	34E	L	1980S	660W	LEA	NM	LEA	BONE SPRING				180701				118100				
LEA UNIT #005	3002502429	32.58585	-103.512	12	20S	34E	J	1980S	1980E	LEA	NM	LEA	BONE SPRING				202606				89640			108	1038
LEA UNIT #008	3002502431	32.59272	-103.512	12	20S	34E	B	810N	1980E	LEA	NM	LEA	BONE SPRING				147229								
LEA UNIT #005	3002502429	32.58585	-103.512	12	20S	34E	J	1980S	1980E	LEA	NM	LEA	BONE SPRING	9/30/2015 0:00	7.5		121800							292.8	740
GAUCHO UNIT #013H	3002541565	32.38417	-103.485	20	22S	34E	A	225N	575E	Lea	NM	BONE SPRING 2ND	9/30/2015 0:00	7.5		139904.6	0.046	46238.1	6396.8	863.7	85080.8		268.4	765	
GAUCHO UNIT #015H	3002541566	32.38419	-103.498	20	22S	34E	D	300N	660W	Lea	NM	BONE SPRING 2ND	9/30/2015 0:00	7.5		184420.1	0.035	55686.4	10540.1	1426	115274		305	1005	
GAUCHO UNIT #011H	3002541184	32.38501	-103.489	17	22S	34E	O	200S	1730E	Lea	NM	BONE SPRING 3RD	9/30/2015 0:00	7.5		156141.2	0.041	48642.5	6969.8	943.9	97977.9		404.43	690.625	
MOBIL LEA STATE #001	3002531696	32.59991	-103.533	2	20S	34E	K	1800S	1980W	LEA	NM	LEA NORTHEAST	DELAWARE	5/9/2000 0:00	6.3	1.105	152064		51632.2	13149.5	102148				
MOBIL LEA STATE #003	3002532105	32.59769	-103.537	2	20S	34E	M	990S	870W	LEA	NM	LEA NORTHEAST	DELAWARE	5/9/2000 0:00	5.5	1.175	296822	87727.9	45355	215237	143.35	291.75			
MOBIL LEA STATE #005	3002532466	32.60286	-103.537	2	20S	34E	E	2440N	870W	LEA	NM	LEA NORTHEAST	DELAWARE	5/9/2000 0:00	5.5	1.175	340838	340838	29657	245270	229.125	146.875			
LEA UNIT #001	3002502427	32.58585	-103.512	12	20S	34E	L	1980S	660W	LEA	NM	LEA	DELAWARE				214787				132700		208	1816	
LEA UNIT #008	3002502431	32.59272	-103.512	12	20S	34E	B	810N	1980E	LEA	NM	LEA	DELAWARE				39414				18570		227	1961	
LEA UNIT #009	3002502432	32.5786	-103.512	13	20S	34E	B	660N	2130E	LEA	NM	LEA	DEVONIAN				45778				26440		1145	729	
LEA UNIT #008	3002502431	32.59272	-103.512	12	20S	34E	B	810N	1980E	LEA	NM	LEA	DEVONIAN				45778				25320		1401	1038	
LEA UNIT #008	3002502431	32.59272	-103.512	12	20S	34E	B	810N	1980E	LEA	NM	LEA	PENNSYLVANIAN				44800								
LEA UNIT #008	3002502431	32.59272	-103.512	12	20S	34E	B	810N	1980E	LEA	NM	LEA	PENNSYLVANIAN				35094				19020		1272	1096	
LEA UNIT #008	3002502431	32.59272	-103.512	12	20S	34E	B	810N	1980E	LEA	NM	LEA	PENNSYLVANIAN				42216				24000		1256	920	
K F QUAIL FEDERAL #001	3002502408	32.60068	-103.521	1	20S	34E	L	2086S	556W	LEA	NM	LEA SOUTH	SAN ANDRES				187065				114800		146	220	
LAGUNA PLATA FEDERAL #001	3002501678	32.64389	-103.645	22	19S	33E	I	1980S	710E	LEA	NM	TONTO	WOLF CAMP				46915				27270	714		1116	

FIGURE 1: PROPOSED WELLBORE SCHEMATIC



<div>LONQUIST & CO. LLC</div> <div>PETROLEUM ENGINEERSENERGY ADVISORS</div> <div>HOUSTON CALGARY AUSTIN WICHITA DENVER</div>	3Bear Field Service	Libby Berry SWD #2	
	Country: USA	State/Province: New Mexico	County/Parish: Lea
	Location:	Site: 540 FNL 269 FEL	Survey: S22-T20S-R34E
	API No: NA	Field:	Well Type/Status: SWD
	Texas License F-9147	NMOCD District No: 1	Project No: 1747
12912 Hill Country Blvd. Ste F-200 Austin, Texas 78738 Tel: 512.732.9812 Fax: 512.732.9816	Drawn: TFM	Reviewed: WHG	Approved:
	Rev No: 8	Notes:	

FIGURE 2: TOP OF DEVONIAN STRUCTURE MAP

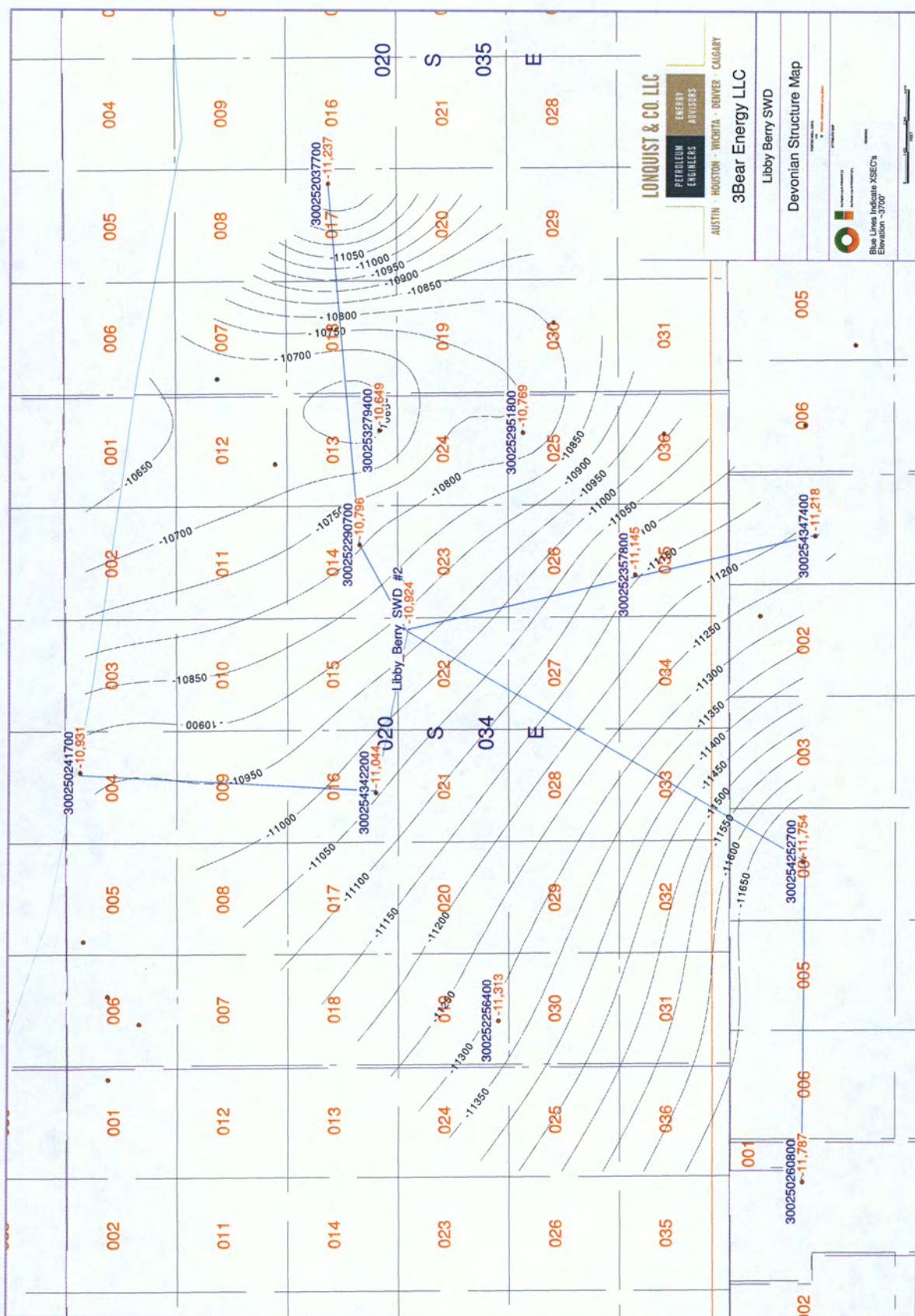


FIGURE 5: 2-MILE, 1-MILE, 0.5-MILE AOR MAP

FIGURE 6: 1-MILE WATER WELLS MAP

Libby Berry SWD No. 2
2 Mile Area of Review
3Bear Field Services LLC

Lea County, NM

PCS: NAD 1983 SPCS NM-E FIPS 3001 (US FL.)

Drawn by: SJL

Date: 8/27/2018

Approved by: ELR

LONGQUIST & CO. LLC

PETROLEUM
ENGINEERS

ENERGY
ADVISORS

AUSTIN · HOUSTON · WICHITA · DENVER · CALGARY

Libby Berry SWD No. 2

1/2 Mile Radius

1 Mile Radius

2 Mile Radius

QQ-Section (NM-PLSS 2nd Div.)

Section (NM-PLSS 1st Div.)

Township/Range (NM-PLSS)

County Boundary

Laterals

API (30-015-...) SHL Status - Type (Count)

Horizontal Surface Location (93)

Active - Oil (43)

Active - Gas (13)

Active - Salt Water Disposal (7)

Active - Injection (1)

Canceled Location (13)

Permitted - Salt Water Disposal (1)

Plugged (Not Released) - Oil (1)

Plugged (Site Released) - Oil (46)

Plugged (Site Released) - Gas (3)

Plugged (Site Released) - Salt Water Disposal (5)

API (30-015-...) BHL Status - Type (Count)

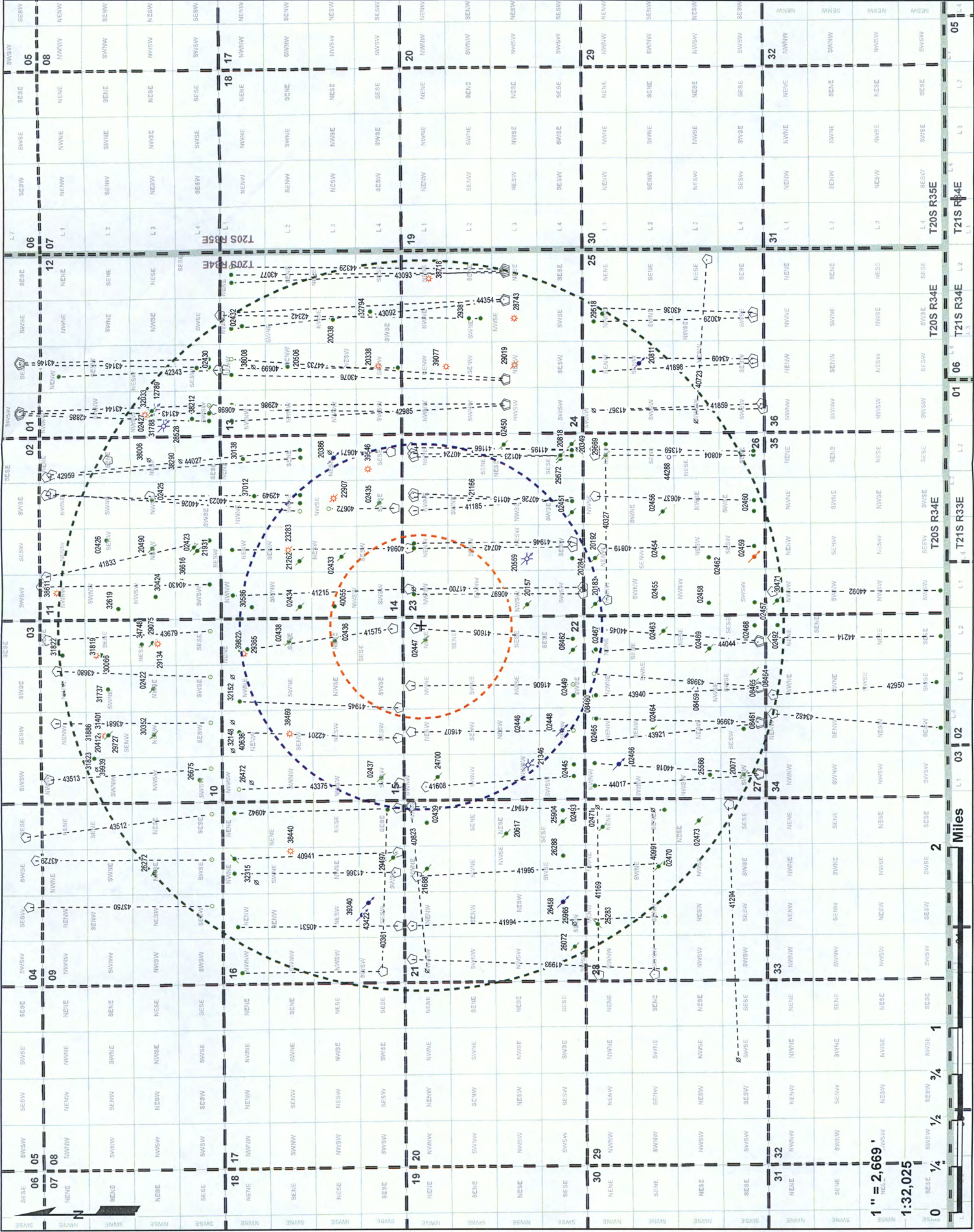
Active - Oil (64)

Permitted - Oil (18)

Canceled Location (10)

Plugged (Not Released) - Oil (1)

Source: Well SHL/BHL/Directional Data - NM-OCD/DrillingInfo (2018)



Libby Berry SWD No. 2

Water Wells within 1 Mile

3Bear Field Services LLC

Lea County, NM

PCS: NAD 1983 SPCS NM-E FIPS 3001 (US Ft.)

Drawn by: SJL

Date: 8/27/2018

Approved by: ELR

LONGQUIST & CO. LLC

PETROLEUM
ENGINEERS

ENERGY
ADVISORS

AUSTIN · HOUSTON · WICHITA · DENVER · CALGARY

+

Libby Berry SWD No. 2

•

Water Well (3) [NM-OSE 2018]

1 Mile Radius

QQ-Section (NM-PLSS 2nd Div.)

Section (NM-PLSS 1st Div.)

Township/Range (NM-PLSS)

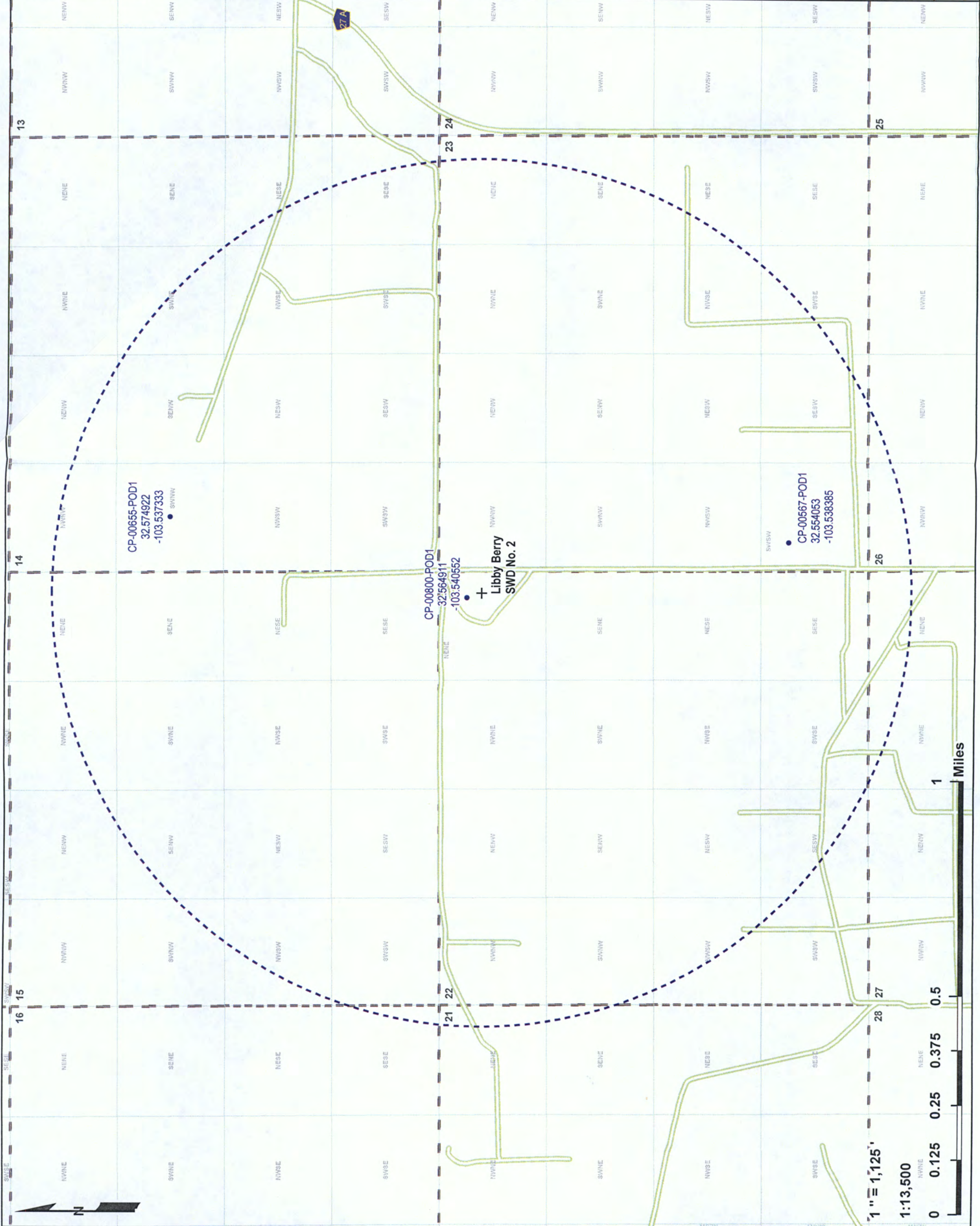
Source: Water Well Data - NM-OSE (2018)

CHAVES
LEA
EDDY
YOKUM
TERRY
GAINES
ANDREWS
ECTOR
LOVING
WINKLER
REEVES
CULBERSON

NEW MEXICO

TEXAS

Map Extent





New Mexico Office of the State Engineer

Water Right Summary



WR File Number: CP 00655 Subbasin: CP Cross Reference:-
Primary Purpose: PLS NON 72-12-1 LIVESTOCK WATERING
Primary Status: DCL DECLARATION
Total Acres: 0 Subfile: -
Total Diversion: 2 Cause/Case: -
Owner: KENNETH SMITH

Documents on File

	Trn #	Doc	File/Act	Status		Transaction Desc.	From/ To	Acres	Diversion	Consumptive
				1	2					
	546893	COWNF	1993-08-23	CHG	PRC	CP 00655	T	0	0	
	546889	DCL	1982-11-17	DCL	PRC	CP 00655	T	0	2	

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Source	Q	Q	Q	Sec	Tws	Rng	X	Y	Other Location Desc
CP 00655 POD1	Shallow	3	1	14	20S	34E		637294	3605108*	

An () after northing value indicates UTM location was derived from PLSS - see Help

Priority Summary

Priority	Status	Acres	Diversion	Pod Number	Source
12/31/1940	DCL	0	2	CP 00655 POD1	Shallow

Place of Use

Q	Q	Q	Q	Sec	Tws	Rng	Acres	Diversion	CU	Use	Priority	Status	Other Location Desc
256	64	16	4				0	2		PLS	12/31/1940	DCL	NO PLACE OF USE GIVEN

Source

Acres	Diversion	CU	Use	Priority	Source Description
0	2		PLS	12/31/1940	GW



New Mexico Office of the State Engineer

Water Right Summary



WR File Number: CP 00800 Subbasin: CP Cross Reference:-
Primary Purpose: PLS NON 72-12-1 LIVESTOCK WATERING
Primary Status: DCL DECLARATION
Total Acres: 0 Subfile: -
Total Diversion: 3 Cause/Case: -
Owner: DANIEL C BERRY

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/ To	Acres	Diversion	Consumptive
			1	2					
535953	DCL	1993-07-21	DCL	PRC	CP 00800	T	0	3	

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Source	Q	Q	Q	Sec	Tws	Rng	X	Y	Other Location Desc
CP 00800 POD1		2	2	2	22	20S	34E	637007	3603994*	NORTH WELL

An () after northing value indicates UTM location was derived from PLSS - see Help

Priority Summary

Priority	Status	Acres	Diversion	Pod Number	Source
12/31/1930	DCL	0	3	CP 00800 POD1	

Place of Use

Q	Q	Q	Q	Sec	Tws	Rng	Acres	Diversion	CU	Use	Priority	Status	Other Location Desc
256	64	16	4				0	3		PLS	12/31/1930	DCL	NO PLACE OF USE GIVEN

Source

Acres	Diversion	CU	Use	Priority	Source Description
0	3		PLS	12/31/1930	GW



New Mexico Office of the State Engineer

Water Right Summary



WR File Number: CP 00567 Subbasin: CP Cross Reference:-
Primary Purpose: CPS CATHODIC PROTECTION WELL
Primary Status: PMT PERMIT
Total Acres: Subfile: -
Total Diversion: 0 Cause/Case: -
Owner: PHILLIPS PETROLEUM COMPANY

Documents on File

	Trn #	Doc	File/Act	Status		Transaction Desc.	From/ To	Acres	Diversion	Consumptive
				1	2					
get images	546575	EXPL	1977-10-12	PMT	APR	CP 00567	T	0	0	

Current Points of Diversion

		Q Q Q			(NAD83 UTM in meters)					
POD Number	Source	64	16	4	Sec	Tws	Rng	X	Y	Other Location Desc
CP 00567 POD1		1	3	3	23	20S	34E	637227	3602793*	

An () after northing value indicates UTM location was derived from PLSS - see Help

Source

Acres	Diversion	CU	Use	Priority	Source Description
0	0				CPS 10/12/1977 GW

Libby Berry SWD No. 2
1 Mile Offset Operators and Lessees List

ST/R	QQ UNIT LETTER(S)	OPERATOR	MINERAL LESSEE	MINERAL OWNER	ADDRESS 1	ADDRESS 2
16/20S/34E	P	FASKEN OIL & RANCH LTD	-	-	6101 HOLIDAY HILL ROAD	MIDLAND, TX 79707
15/20S/34E	B,E,G,H,I,J,K,L,M,N,O,P	MEWBOURNE OIL CO	-	-	PO BOX 5270	HOBBS, NM 88241
	A	MEWBOURNE OIL CO	-	-	PO BOX 5270	HOBBS, NM 88241
	F	READ & STEVENS INC	-	-	PO BOX 1518	ROSWELL, NM 88202
		MEWBOURNE OIL CO	-	-	PO BOX 5270	HOBBS, NM 88241
14/20S/34E	G	CAZA OPERATING, LLC	-	-	200 N LORRAINE ST SUITE 1550	MIDLAND, TX 79701
	I	LEGACY RESERVES OPERATING, LP	-	-	303 W WALL SUITE 1600	MIDLAND, TX 79701
	D,L	NEW MEXICO SALT WATER DISPOSAL COMPANY	-	-	PO BOX 1518	ROSWELL, NM 88202
		READ & STEVENS INC	-	-	PO BOX 5270	ROSWELL, NM 88202
	C,E,F,J,K,M,N,O,P	MEWBOURNE OIL CO	-	-	PO BOX 5270	HOBBS, NM 88241
23/20S/34E	A,B,G,H,I,J,O	MEWBOURNE OIL CO	-	-	PO BOX 5270	HOBBS, NM 88241
	N	CIMAREX OIL CO.	-	-	202 S. CHEYENNE AVE. SUITE 1000	TULSA, OK 74103
		BURK ROYALTY CO., LTD.	-	-	PO BOX 94903	WICHITA FALLS, TX 76308
		CHISHOLM ENERGY OPERATING, LLC	-	-	801 CHERRY STREET	FORT WORTH, TX 76102
	C,D,E,F,K,L,M	MEWBOURNE OIL CO	-	-	PO BOX 5270	HOBBS, NM 88241
		CHISHOLM ENERGY OPERATING, LLC	-	-	801 CHERRY STREET	FORT WORTH, TX 76102
	M	MEWBOURNE OIL CO	-	-	PO BOX 5270	HOBBS, NM 88241
22/20S/34E		MARATHON OIL PERMIAN LLC	-	-	5555 SAN FELIPE ST.	HOUSTON, TX 77056
		CIMAREX OIL CO.	-	-	202 S. CHEYENNE AVE. SUITE 1000	TULSA, OK 74103
	N,O	CHESTNUT EXPLORATION AND PRODUCTION, INC.	-	-	2201 N CENTRAL EXPRESSWAY SUITE 240	RICHARDSON, TX 75080
		CIMAREX OIL CO.	-	-	202 S. CHEYENNE AVE. SUITE 1000	TULSA, OK 74103
21/20S/34E	A,B,C,D,E,F,G,H,I,J,K,L,P	CIMAREX OIL CO.	-	-	202 S. CHEYENNE AVE. SUITE 1000	TULSA, OK 74103
	A	FULFER OIL & CATTLE LLC	-	-	PO BOX 1224	JAL, NM 88252
	B	FASKEN OIL & RANCH LTD	-	-	6101 HOLIDAY HILL ROAD	MIDLAND, TX 79707
27/20S/34E	A	FASKEN OIL & RANCH LTD	-	-	6101 HOLIDAY HILL ROAD	MIDLAND, TX 79707
		APACHE CORPORATION	-	-	303 VETERANS AIRPARK LN #1000	MIDLAND, TX 79705
	B	MARATHON OIL PERMIAN LLC	-	-	5555 SAN FELIPE ST.	HOUSTON, TX 77056
		APACHE CORPORATION	-	-	303 VETERANS AIRPARK LN #1000	MIDLAND, TX 79705
26/20S/34E	C,D	CHESTNUT EXPLORATION AND PRODUCTION, INC.	-	-	2201 N CENTRAL EXPRESSWAY SUITE 240	RICHARDSON, TX 75080
		CIMAREX OIL CO.	-	-	202 S. CHEYENNE AVE. SUITE 1000	TULSA, OK 74103

FIGURE 7: 1-MILE LEASE TRACTS

FIGURE 8: 1-MILE OFFSET OPERATORS

Libby Berry SWD No. 2
1 Mile Offset Operators
3Bear Field Services LLC
Lea County, NM

PCS: NAD 1983 SPCS NM-E FIPS 3001 (US Ft.)

Drawn by: SJL Date: 8/28/2018 Approved by: ELR

LONQUIST & CO. LLC

PETROLEUM
ENGINEERS

ENERGY
ADVISORS

AUSTIN · HOUSTON · WICHITA · DENVER · CALGARY

Libby Berry SWD No. 2

1 Mile Radius

QQ-Section (NM-PLSS 2nd Div.)

Section (NM-PLSS 1st Div.)

Township/Range (NM-PLSS)

Surface Owner Property Boundary (T Over V Ranch Land LLLP)

Lateral

API (30-015-...) SHL Status - Type (Count)

Horizontal Surface Location (31)

Active - Oil (6)

Active - Gas (3)

Active - Salt Water Disposal (1)

Canceled Location (1)

Plugged (Site Released) - Oil (13)

Plugged (Site Released) - Gas (2)

Plugged (Site Released) - Salt Water Disposal (5)

API (30-015-...) BHL Status - Type (Count)

Active - Oil (20)

Permitted - Oil (6)

Canceled Location (5)

Operators

-APACHE CORPORATION; -CHESTNUT EXPLORATION AND PRODUCTION, INC

-APACHE CORPORATION; -MARATHON OIL PERMIAN LLC

-BURK ROYALTY CO., LTD.; -CHISHOLM ENERGY OPERATING, LLC; -MEWBOURNE OIL CO

-CAZA OPERATING, LLC; -MEWBOURNE OIL CO

-CHESTNUT EXPLORATION AND PRODUCTION, INC; -CIMAREX ENERGY CO.

-CHISHOLM ENERGY OPERATING, LLC; -MEWBOURNE OIL CO

-CIMAREX ENERGY CO.

-FASKEN OIL & RANCH LTD

-FULFER OIL & CATTLE LLC; -FASKEN OIL & RANCH LTD

-LEGACY RESERVES OPERATING, LP

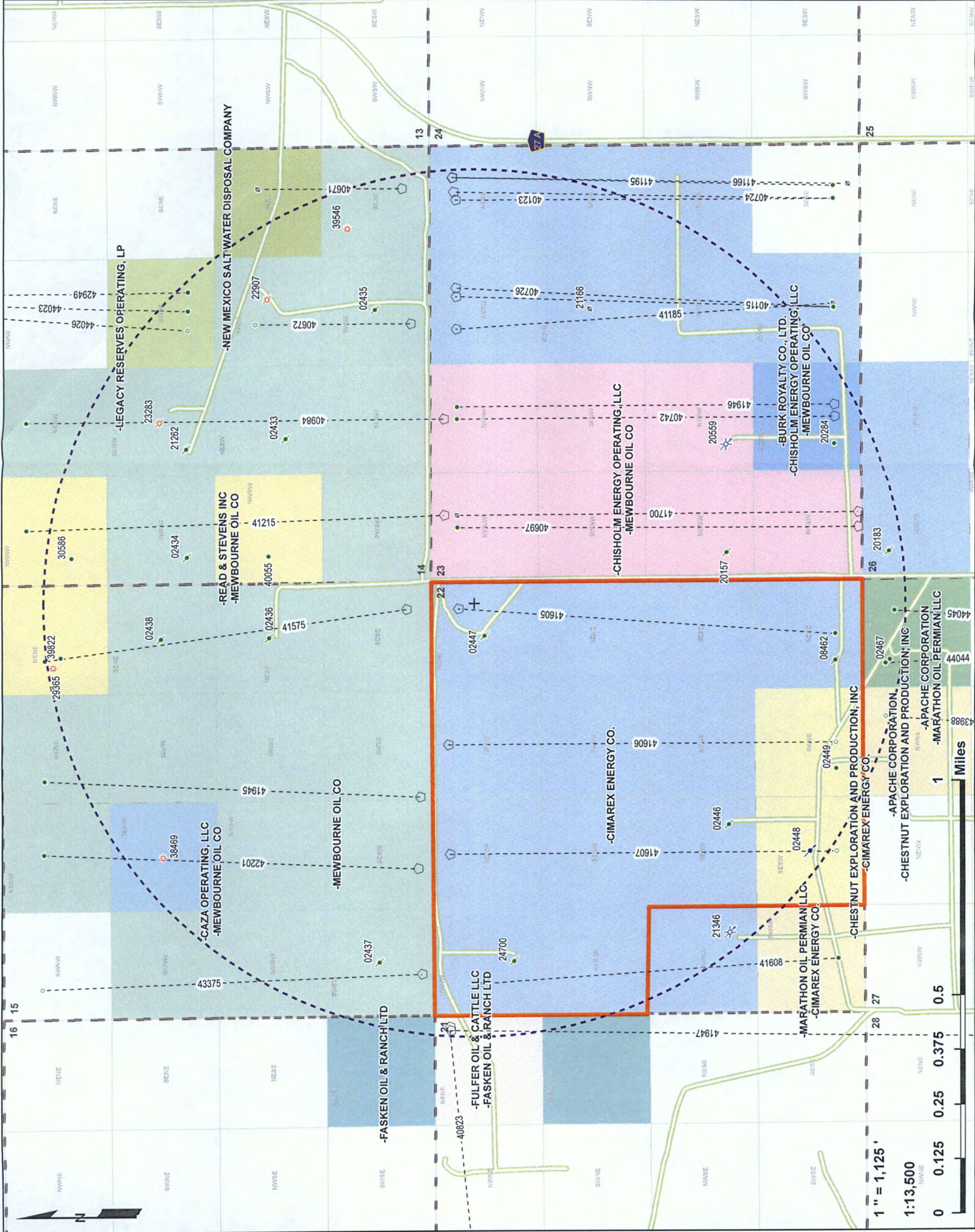
-MARATHON OIL PERMIAN LLC; -CIMAREX ENERGY CO.

-MEWBOURNE OIL CO

-NEW MEXICO SALT WATER DISPOSAL COMPANY

-READ & STEVENS INC; -MEWBOURNE OIL CO

Source: Well SHL/BHL/Directional Data - NM-OCD/DrillingInfo (2018)



APPENDIX A: PRODUCED WATER SUMMARY

wellname	api	latitude	longitude	section	township	range	unit	figa	flow	county	state	field	formation	reservoir	depth	specific gravity	lea unit	permeability, dm/cm	sediment, g/g	calcium, mg/l	magnesium, mg/l	chloride, mg/l	carbonate, mg/l	barbwaite, mg/l	silica, mg/l
MOBIL LEA STATE #001	300251696	32.59991	-103.533	2	205	34E	K	1800S	1800W	LEA	NM	LEA	LEA NORTH EAST	DELAWARE	5/9/2000 0.00	6.3	1.105	320664	2135.5	31632.2	41395	10148	404.43	690.025	
MOBIL LEA STATE #003	300251205	32.59769	-103.537	2	205	34E	M	990S	1700W	LEA	NM	LEA	LEA NORTH EAST	DELAWARE	5/9/2000 0.00	5.5	1.175	298822	41395	81727.9	245270	215237	143.35	293.25	
MOBIL LEA STATE #005	3002512466	32.60286	-103.537	2	205	34E	E	2440N	1700W	LEA	NM	LEA	LEA NORTH EAST	DELAWARE	5/9/2000 0.00	5.5	1.175	298822	29857	123179	245270	215237	229.125	146.275	
PERRY FEDERAL #001	3002508462	32.55227	-103.543	22	205	34E	P	350S	1940E	LEA	NM	LYNCH	ARTESIA	ARTESIA	6/18/1990 0.00	6.6	1.00	248324	29857	123179	10950	532	811		
WEST LYNCH FEDERAL #001	3002508675	32.55227	-103.536	19	205	34E	O	350S	1900E	LEA	NM	TEAS	ARTESIA	ARTESIA	6/18/1990 0.00	6.6	1.00	248324	8847.48	297.84	284.58	456.96	170.34		
WALLEN FEDERAL #001	3002513861	32.56958	-103.59	20	205	34E	D	350N	1900W	LEA	NM	TEAS	ARTESIA	ARTESIA	2/23/1998 0.00	7.83	1.038	32396.1	10668.1	1247.99	20219.7	424.554	454.376		
K Y QUAIL FEDERAL #001	3002502498	32.60688	-103.512	20	205	34E	H	1800S	1800W	LEA	NM	LEA SOUTH	SAN ANTONIO	ARTESIA	2/23/1998 0.00	7.83	1.038	32396.1	10668.1	1247.99	20219.7	424.554	454.376		
LEA UNIT #001H	3002502498	32.60688	-103.512	20	205	34E	H	1800S	1800W	LEA	NM	LEA	BOHE SPRING	ARTESIA				294346			16720	146	1342		
LEA UNIT #001	3002502497	32.58565	-103.512	11	205	34E	L	1800S	1800W	LEA	NM	LEA	BOHE SPRING	ARTESIA				16150			133700	208	1816		
LEA UNIT #001	3002502497	32.58565	-103.512	11	205	34E	L	1800S	1800W	LEA	NM	LEA	BOHE SPRING	ARTESIA				16150			133700	208	1816		
LEA UNIT #001	3002502497	32.58565	-103.512	11	205	34E	L	1800S	1800W	LEA	NM	LEA	BOHE SPRING	ARTESIA				16150			133700	208	1816		
LEA UNIT #001	3002502497	32.58565	-103.512	11	205	34E	L	1800S	1800W	LEA	NM	LEA	BOHE SPRING	ARTESIA				16150			133700	208	1816		
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LEA UNIT #001	3002502497	32.58565	-103.512	11	205	34E	L	1800S	1800W	LEA	NM	LEA	BOHE SPRING	ARTESIA				16150			133700	208	1816		
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LEA UNIT #001	3002502497	32.58565	-103.512	11	205	34E	L	1800S	1800W	LEA	NM	LEA	BOHE SPRING	ARTESIA				16150			133700	208	1816		
LEA UNIT #001</																									

APPENDIX B: LEASE TRACTS INFORMATION

APPENDIX C: NOTICE INFORMATION

Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA

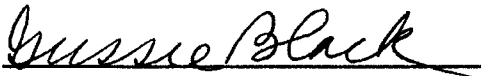
I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

Beginning with the issue dated
September 19, 2018
and ending with the issue dated
September 19, 2018.



Publisher

Sworn and subscribed to before me this
19th day of September 2018.

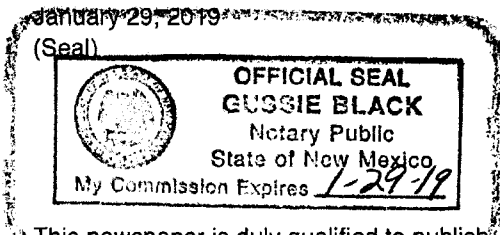


Business Manager

My commission expires

January 29, 2019

(Seal)



This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

LEGALS

LEGAL NOTICE September 19, 2018

3Bear Field Service, LLC, 415 W. Wall St., Suite 1212, Midland, Texas 79701, is filling Form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division for administrative approval for its salt water disposal well Libby Berry SWD No. 2. The proposed well will be located 540' FNL & 269' FEL in Section 22, Township 20S, Range 34E in Lea County, New Mexico. Disposal water will be sourced from area production, and will be injected into the Siluro-Devonian Formation (determined by offset log analysis) through an open hole completion between a maximum applied for top of 14,614 feet to a maximum depth of 16,254 feet. The maximum surface injection pressure will not exceed 2,922 psi with a maximum rate of 25,000 BWPD. Interested parties opposing the action must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505, within 15 days. Additional information can be obtained from the applicant's agent, Lonquist & Co., LLC, at (512) 600-1774. #33239

67112661

00218072

LONQUIST & CO., LLC
12912 HILL COUNTRY BLVD, STE F200
AUSTIN, TX 78738

LONQUIST & CO. LLC

PETROLEUM
ENGINEERS

ENERGY
ADVISORS

AUSTIN HOUSTON WICHITA DENVER CALGARY

October 4, 2018

New Mexico Energy, Minerals, and Natural Resources Department
Oil Conservation Division District IV
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
(505) 476-3440

RE: LIBBY BERRY SWD NO. 2 AUTHORIZATION TO INJECT

To Whom It May Concern:

Attached for your review is Form C-108, Application for Authorization to Inject, and its supplemental documents prepared for 3Bear Field Service, LLC's (3Bear") Libby Berry SWD No. 2. In addition, Forms C-101 and C-102 have also been included with this package. Notices have been sent to offset, operators, leaseholders and the surface owner. Proof of notice will be sent to the OCD upon receipt.

Any questions should be directed towards 3Bear Field Service, LLC's agent Lonquist & Co., LLC.

Regards,



Christopher B. Weyand
Staff Engineer
Lonquist & Co., LLC

(512) 600-1764
chris@lonquist.com

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if you require permits.

1. Article's Returnment Fee

T O V E R V R A N C H L A N D L L P
P.O. BOX 160
EUNICE, NM 88231

9590 9402 2957 7094 4828 36

Article Number (Transfer from service label)

7017 2640 0000 7062 7610

Article Number (from 9500-9599)

COMPLETE THIS SECTION ON DELIVERY

A. Signature

☐ Agent

☐ Addressee

☒ X

B. Received by (Printed Name)

C. Date of Delivery

☐ Yes

☐ No

D. Is delivery address different from item 1? ☐ Yes

If YES, write delivery address below:

1485-UBBX-#2

3. Service Type

☐ Registered Mail Restricted Delivery

☐ Certified Mail Restricted Delivery

☐ Certified Mail Restricted Delivery

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☐ Certified Mail Restricted Delivery

☐ Certified Mail Restricted Delivery

☐ Certified Mail Restricted Delivery

☐ Certified Mail Restricted Delivery

☐ Priority Mail Express

☐ Registered Mail Restricted Delivery

☐ Registered Mail Restricted Delivery

☐ Registered Mail Restricted Delivery

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☐ Registered Mail Restricted Delivery

<p>SENDER: COMPLETE THIS SECTION</p> <p>■ Complete Items 1, 2, and 3.</p> <p>■ Attach your name and address on the reverse so that we can return the card to you.</p> <p>■ Attach this card to the back of the mailpiece, or on the front if space permits.</p> <p>1. Article Addressed to:</p>	<p>COMPLETE THIS SECTION ON DELIVERY</p> <p>A. Signature _____</p> <p>X B. Received by (Printed Name) _____</p> <p>C. <input type="checkbox"/> Agent <input type="checkbox"/> Addressee <input type="checkbox"/> Address</p> <p>D. Is delivery address different from Item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: _____</p>
<p>1015 N. FRENCH DRIVE DISTRICT 1 HOBBS, NM 88240</p>	<p>1625 N. FRENCH DRIVE DISTRICT 1 HOBBS, NM 88240</p>
<p>2. Article Number (Transfer from service label) 7017 2560 0000 7052 7803</p>	<p>3. Service Type _____</p> <p><input checked="" type="checkbox"/> Priority Mail Signature <input checked="" type="checkbox"/> Registered Mail Signature <input checked="" type="checkbox"/> Adult Signature Restricted Delivery <input checked="" type="checkbox"/> Registered Mail Restricted Delivery <input checked="" type="checkbox"/> Certified Mail Restricted Delivery <input checked="" type="checkbox"/> Collect on Delivery <input checked="" type="checkbox"/> Return Receipt for Merchandise <input checked="" type="checkbox"/> Return Receipt for Signature Confirmation <input checked="" type="checkbox"/> Insured Mail Restricted Delivery <input checked="" type="checkbox"/> Insured Mail Restricted Delivery (over \$500)</p>
<p>Domestic Return Receipt</p>	

[illegible]

<p>SENDER, COMPLETE THIS SECTION</p> <p>1. Article Addressed to:</p> <p>READ & STEVENS, INC PO BOX 4518 ROSOWELL, NM 88202</p>		<p>COMPLETE THIS SECTION ON DELIVERY</p> <p>A. Signature _____</p> <p>B. Received by (Printed Name) _____</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes <input type="checkbox"/> No If YES, enter delivery address below:</p>	
<p>2. Article Number (transfer from service label)</p> <p>7017 2660 0000 7062 7834</p>		<p>3. Service Type</p> <p><input checked="" type="checkbox"/> Registered Mail <input type="checkbox"/> Registered Mail Restricted Delivery</p> <p><input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Registered Mail Restricted Delivery</p> <p><input type="checkbox"/> Collect on Delivery <input type="checkbox"/> Collect on Delivery Restricted Delivery</p> <p><input type="checkbox"/> Insured Mail <input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)</p>	

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

CAZA OPERATING LLC
200 N LORANE ST. STE 1550
MIDLAND TX 79701



9590 9402 2957 7094 4828 05

7017 2560 0000 7052 7841

PS Form 3811, July 2015 PSN 7530-02-000-9053

COMPLETE THIS SECTION ON DELIVERY

- A. Signature ☒ Agent ☐ Addressee
- B. Received by (Printed Name) C. Date of Delivery
- D. Is delivery address different from item 1? ☐ Yes ☐ No
If YES, enter delivery address below:

1685-LIBBY #2

- Service Type ☐ Priority Mail Express® ☐ Registered Mail™ ☐ Registered Mail Restricted Delivery ☐ Return Receipt for Merchandise ☐ Signature Confirmation™ ☐ Signature Restricted Delivery ☐ Restricted Delivery (over \$500)

Domestic Return Receipt

**U.S. Postal Service™
CERTIFIED MAIL® RECEIPT**
Domestic Mail Only

For delivery information, visit our website at www.usps.com™

OFFICIAL USE

- Certified Mail Fee \$
- Extra Services & Fees (check one, and fee as appropriate):
☐ Return Receipt (hardcopy) \$
☐ Certified Mail Restricted Delivery \$
☐ Adult Signature Required \$
☐ Adult Signature Restricted Delivery \$
 Postage \$
- Total Postage and Fees \$

Sent to **CAZA OPERATING LLC**
200 N LORANE ST. STE 1550
MIDLAND TX 79701
1685-LIBBY #2

PS Form 3800, April 2015 PSN 7530-02-000-9051 See Reverse for Instructions

7017 2560 0000 7052 7841



7017 2560 0000 7052 7841

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

LEGACY RESERVES OPERATING, LP
303 W WALL, SUITE 1600
MIDLAND TX 79701



9590 9402 2957 7094 4827 99

7017 2560 0000 7052 7858

PS Form 3811, July 2015 PSN 7530-02-000-9053

COMPLETE THIS SECTION ON DELIVERY

- A. Signature ☒ Agent ☐ Addressee
- B. Received by (Printed Name) C. Date of Delivery
- D. Is delivery address different from item 1? ☐ Yes ☐ No
If YES, enter delivery address below:

1685-LIBBY #2

- Service Type ☐ Priority Mail Express® ☐ Registered Mail™ ☐ Registered Mail Restricted Delivery ☐ Return Receipt for Merchandise ☐ Signature Confirmation™ ☐ Signature Restricted Delivery ☐ Restricted Delivery (over \$500)

Domestic Return Receipt

**U.S. Postal Service™
CERTIFIED MAIL® RECEIPT**
Domestic Mail Only

For delivery information, visit our website at www.usps.com™

OFFICIAL USE

- Certified Mail Fee \$
- Extra Services & Fees (check one, and fee as appropriate):
☐ Return Receipt (hardcopy) \$
☐ Certified Mail Restricted Delivery \$
☐ Adult Signature Required \$
☐ Adult Signature Restricted Delivery \$
 Postage \$
- Total Postage and Fees \$

Sent to **LEGACY RESERVES OPERATING, LP**
303 W WALL, SUITE 1600
MIDLAND TX 79701
1685-LIBBY #2

PS Form 3800, April 2015 PSN 7530-02-000-9051 See Reverse for Instructions

7017 2560 0000 7052 7858



7017 2560 0000 7052 7858

SENDER: COMPLETE THIS SECTION

■ Complete items 1, 2, and 3.
■ Print your name and address on the reverse so that we can return the card to you.
■ Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

NEW MEXICO SALT WATER DISPOSAL CO
PO BOX 1518
ROSOWELL, NM 88202

2. Article Number (Transfer from service label)
9590 9402 2957 7094 4827 82
7017 2680 0000 7062 7865

3. Service Type
☐ Adult Signature
☐ Adult Signature Restricted Delivery
☐ Certified Mail
☐ Certified Mail Restricted Delivery
☐ Collect on Delivery
☐ Collect on Delivery Restricted Delivery
☐ Insured Mail
☐ Insured Mail Restricted Delivery (over \$500)
☐ Priority Mail Express®
☐ Registered Mail™
☐ Registered Mail Restricted Delivery
☐ Return Receipt for Merchandise
☐ Signature Confirmation™
☐ Signature Confirmation Restricted Delivery

4. Article Addressed to:
1685-LIBBY #2

5. PS Form 3811, July 2015 PSN 7530-02-000-4063 Domestic Return Receipt

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com.

OFFICIAL USE

Certified Mail Fee

Extra Services & Fees (check box, add fee to appropriate amount)

☐ Return Receipt (hardcopy) \$
☐ Certified Mail Restricted Delivery \$
☐ Adult Signature Restricted \$
☐ Adult Signature Restricted Delivery \$
☐ Insured Mail Restricted Delivery \$

Postage

Total Postage and Fees

Sent to: N.M. SALT WATER DISPOSAL CO
PO BOX 1518
ROSOWELL NM 88202

Street and Apt. No., PO Box No., Ave., Ste., etc.

City, State, Zip+4

PS Form 3809, April 2015 PSN 7530-02-000-5097 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

■ Complete items 1, 2, and 3.
■ Print your name and address on the reverse so that we can return the card to you.
■ Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

CIMAREX OIL CO.
202 S. CHEYENNE AVE, SUITE 1000
TULSA, OK 74103

2. Article Number (Transfer from service label)
9590 9402 2957 7094 4827 75
7017 2680 0000 7062 7872

3. Service Type
☐ Adult Signature
☐ Adult Signature Restricted Delivery
☐ Certified Mail
☐ Certified Mail Restricted Delivery
☐ Collect on Delivery
☐ Collect on Delivery Restricted Delivery
☐ Insured Mail
☐ Insured Mail Restricted Delivery (over \$500)
☐ Priority Mail Express®
☐ Registered Mail™
☐ Registered Mail Restricted Delivery
☐ Return Receipt for Merchandise
☐ Signature Confirmation™
☐ Signature Confirmation Restricted Delivery

4. Article Addressed to:
1685-LIBBY #2

5. PS Form 3811, July 2015 PSN 7530-02-000-4063 Domestic Return Receipt

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com.

OFFICIAL USE

Certified Mail Fee

Extra Services & Fees (check box, add fee to appropriate amount)

☐ Return Receipt (hardcopy) \$
☐ Certified Mail Restricted Delivery \$
☐ Adult Signature Restricted \$
☐ Adult Signature Restricted Delivery \$
☐ Insured Mail Restricted Delivery \$

Postage

Total Postage and Fees


Sent to: CIMAREX OIL CO
202 S. CHEYENNE AVE, SUITE 1000
TULSA, OK 74103

Street and Apt. No., PO Box No., Ave., Ste., etc.

City, State, Zip+4

PS Form 3809, April 2015 PSN 7530-02-000-5097 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY			
<p>1. Article Addressed to:</p> <p>■ Complete Items 1, 2, and 3.</p> <p>■ Print your name and address on the reverse so that we can return the card to you.</p> <p>■ Attach this card to the back of the mailpiece, or on the front if space permits.</p>		<p>A. Signature _____</p> <p>X B. Received by (Printed Name) _____</p> <p>C. Date of Delivery _____</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If YES, enter delivery address below:</p>			
<p>CHISHOLM ENERGY OPERATING, LLC</p> <p>801 CHERRY SHIRET</p> <p>FT WORTH, TX 76102</p>		<p>1685-UBBY #2</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 2px;"> <p>3. Service Type _____</p> <p>4. Addressee's Name _____</p> <p>5. Addressee's Address _____</p> <p>6. Certified Mail _____</p> <p>7. Collect on Delivery _____</p> <p>8. Insured Mail _____</p> <p>9. Return Receipt _____</p> </td> <td style="width: 50%; padding: 2px;"> <p>10. Signature Restricted Delivery _____</p> <p>11. Certified Mail Restricted Delivery _____</p> <p>12. Collect on Delivery Restricted Delivery _____</p> <p>13. Insured Mail Restricted Delivery _____</p> <p>14. Return Receipt Restricted Delivery _____</p> </td> </tr> </table>		<p>3. Service Type _____</p> <p>4. Addressee's Name _____</p> <p>5. Addressee's Address _____</p> <p>6. Certified Mail _____</p> <p>7. Collect on Delivery _____</p> <p>8. Insured Mail _____</p> <p>9. Return Receipt _____</p>	<p>10. Signature Restricted Delivery _____</p> <p>11. Certified Mail Restricted Delivery _____</p> <p>12. Collect on Delivery Restricted Delivery _____</p> <p>13. Insured Mail Restricted Delivery _____</p> <p>14. Return Receipt Restricted Delivery _____</p>
<p>3. Service Type _____</p> <p>4. Addressee's Name _____</p> <p>5. Addressee's Address _____</p> <p>6. Certified Mail _____</p> <p>7. Collect on Delivery _____</p> <p>8. Insured Mail _____</p> <p>9. Return Receipt _____</p>	<p>10. Signature Restricted Delivery _____</p> <p>11. Certified Mail Restricted Delivery _____</p> <p>12. Collect on Delivery Restricted Delivery _____</p> <p>13. Insured Mail Restricted Delivery _____</p> <p>14. Return Receipt Restricted Delivery _____</p>				
<p>7. Article Number (Indicate item outside mail)</p> <p>7017 2600 0000 7012 7896</p>		<p>10. Signature Restricted Delivery _____</p> <p>11. Certified Mail Restricted Delivery _____</p> <p>12. Collect on Delivery Restricted Delivery _____</p> <p>13. Insured Mail Restricted Delivery _____</p> <p>14. Return Receipt Restricted Delivery _____</p>			

U.S. Postal Service™ CERTIFIED MAIL® RECEIPT Domestic Mail Only		OFFICIAL USE	
For delivery information, visit our website at www.epsc.com .			
Certified Mail fee _____		Postmark _____	
Return Receipt requested <input type="checkbox"/>		Return Receipt requested <input type="checkbox"/>	
Restricted Registered Mail <input type="checkbox"/>		Restricted Registered Mail <input type="checkbox"/>	
Certified Mail Restricted Delivery <input type="checkbox"/>		Certified Mail Restricted Delivery <input type="checkbox"/>	
Adult Signature Required <input type="checkbox"/>		Adult Signature Required <input type="checkbox"/>	
Adult Signature Restricted Delivery <input type="checkbox"/>		Adult Signature Restricted Delivery <input type="checkbox"/>	
Postage _____		Total Postage and Fees _____	
Sent to DAVIDSON EXCELBY 27084T1126 Street or Post Office Box 501 N. HERRA STREET City, State, ZIP+4® DAVIDSON, NC 27013-1126		165-24341-2	
70127 2680 0000 70127 2680		70127 2680 0000 70127 2680	
			
CERTIFIED MAIL PLACE STICKER AT TOP OF ENVELOPE OR TO THE RIGHT OF THE RETURN ADDRESS, OR AT BOTTOM OF ENVELOPE			

SENDER: COMPLETE THIS SECTION

■ Complete items 1, 2, and 3.
■ Print your name and address on the reverse so that we can return the card to you.
■ Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

BURK ROYALTY CO., LTD
PO BOX 94903
WICHITA FALLS, TX 76308

9590 9402 2957 7094 4927 88

Article Number (Transfer from service label)

7017 2680 0000 7062 7859

See Form 3511, 1-6-2015 ISBN 7530-02-900-9033

U.S. Postal Service™ CERTIFIED MAIL® RECEIPT Domestic Mail Only		OFFICIAL USE For delivery information, visit our website at www.usps.com ™	
Certified Mail Fee Extra Services & Fees (Check box, add fee and zip separately) <input type="checkbox"/> Return Receipt (hardcopy) \$ <input type="checkbox"/> Return Receipt (electronic) \$ <input type="checkbox"/> Certified Mail Restricted Delivery \$ <input type="checkbox"/> Adult Signature Required \$ <input type="checkbox"/> Adult Signature Restricted Delivery \$ Postage Total Postage and Fee		# 1485-LIBRY 1 76308	
Sent to BAKK ROYALTY Co. Special Delivery PO BOX 44903 City, State, ZIP+4® Falls, TX 76308		See Reverse for Instructions	
7012	9690	0000	2907
7012	9690	0000	2907

COMPLETE THIS SECTION ON DELIVERY

A. Signature ☐ Agent ☐ Addressee

X ☒ **B. Received by (Printed Name)** **C. Date of Delivery**

D. Is delivery address different from item 1? ☐ Yes ☐ No
 If YES, enter delivery address below:

E. Service Type

<input type="checkbox"/> Priority Mail Express	<input type="checkbox"/> Registered Mail Restricted Delivery
<input type="checkbox"/> Registered Mail	<input type="checkbox"/> Registered Mail Signature
<input type="checkbox"/> Registered Mail Restricted Delivery	<input type="checkbox"/> Registered Mail Signature Restricted Delivery
<input type="checkbox"/> Certified Mail	<input type="checkbox"/> Certified Mail Restricted Delivery
<input type="checkbox"/> Collect on Delivery	<input type="checkbox"/> Signature Confirmation
<input type="checkbox"/> Collect on Delivery Restricted Delivery	<input type="checkbox"/> Signature Confirmation Restricted Delivery
<input type="checkbox"/> Return Receipt by First-Class Mail	<input type="checkbox"/> Return Receipt by Registered Mail
<input type="checkbox"/> Return Receipt by Restricted Delivery	<input type="checkbox"/> Return Receipt by Signature Confirmation

1. Article Addressed to:

MARATHON OIL PERMIAN LLC
5555 SAN FELIPE ST.
HOUSTON, TX 77056

2. Article Number (Transfer from service label)
 9590 9402 2957 7094 4827 44

3. Domestic Return Receipt

7017 2640 0000 7062 7902

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
<p>1. Article addressed to:</p> <p>CHESTNUT EXPLORATION & PRODUCTION INC. 2201 N CENTRAL EXPRESSWAY, SITE 240 RICHARDSON, TX 75080</p>		<p>A. Signature X</p> <p>B. Received by (Printed Name)</p> <p>C. Date of Delivery</p> <p>D. Is delivery address different from 1? <input type="checkbox"/> Yes <input type="checkbox"/> No If YES, enter delivery address below:</p>	
<p>2. Article Number (Master file service label)</p> <p>7012 2560 0000 7062 7419</p>		<p>3. Service Type</p> <p><input checked="" type="checkbox"/> Adult Signature <input checked="" type="checkbox"/> Adult Signature Restricted Delivery <input checked="" type="checkbox"/> Collect on Delivery <input checked="" type="checkbox"/> Collect on Delivery Restricted Delivery <input checked="" type="checkbox"/> Insured Mail <input checked="" type="checkbox"/> Insured Mail Restricted Delivery</p> <p>Priority Mail Express Registered Mail Restricted Delivery Registered Mail Signature Registered Mail Signature Restricted Delivery Return Receipt for Merchandise Signature Confirmation Signature Confirmation Restricted Delivery</p> <p>Post #5507</p>	

COMPLETE THIS SECTION ON DELIVERY

SENDER: COMPLETE THIS SECTION

■ Complete items 1, 2, and 3.
■ Print your name and address on the reverse so that we can return the card to you.
■ Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

A. Signature ☒ Agent ☐
B. Received by (Printed Name) ☐ C. Date of Delivery ☐
D. Is delivery address different from item 1? ☐ Yes ☐ No
If YES, enter delivery address below:

2. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

3. Service Type ☒ Priority Mail Express®
☐ Registered Mail™
☐ Registered Mail Restricted Delivery
☐ Adult Signature Restricted Delivery
☐ Certified Mail Restricted Delivery
☐ Collect on Delivery Restricted Delivery
☐ Signature Confirmation™
☐ Insured Mail Restricted Delivery (over \$500)

4. Is delivery address different from item 1? ☐ Yes ☐ No
If YES, enter delivery address below:

5. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

6. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

7. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

8. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

9. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

10. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

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APACHE CORPORATION
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SUITE 1000
MIDLAND, TX 79705

12. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

13. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

14. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

15. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

16. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

17. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

18. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

19. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

20. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

21. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

22. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

23. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

24. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

25. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

26. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

27. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

COMPLETE THIS SECTION ON DELIVERY

SENDER: COMPLETE THIS SECTION

■ Complete items 1, 2, and 3.
■ Print your name and address on the reverse so that we can return the card to you.
■ Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

A. Signature ☒ Agent ☐
B. Received by (Printed Name) ☐ C. Date of Delivery ☐
D. Is delivery address different from item 1? ☐ Yes ☐ No
If YES, enter delivery address below:

2. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

3. Service Type ☒ Priority Mail Express®
☐ Registered Mail™
☐ Registered Mail Restricted Delivery
☐ Adult Signature Restricted Delivery
☐ Certified Mail Restricted Delivery
☐ Collect on Delivery Restricted Delivery
☐ Signature Confirmation™
☐ Insured Mail Restricted Delivery (over \$500)

4. Is delivery address different from item 1? ☐ Yes ☐ No
If YES, enter delivery address below:

5. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

6. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

7. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

8. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

9. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

10. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

11. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

12. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

13. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

14. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

15. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

16. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

17. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

18. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

19. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

20. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

21. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

22. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

23. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

24. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

25. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

26. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

27. Article Addressed to:

APACHE CORPORATION
303 VETERANS AIRPARK LN
SUITE 1000
MIDLAND, TX 79705

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

FASKEN OIL & RANCH LTD
6101 HOLIDAY HILL ROAD
MIDLAND, TX 79707



9590 9402 2957 7094 4827 06

2. Article Number (Transfer from service label)

7017 2680 0000 7052 7940

PS Form 3811, July 2015 PSN 7530-02-000-9053

COMPLETE THIS SECTION ON DELIVERY

- A. Signature ☒ Agent ☐ Addressee
- B. Received by (Printed Name) C. Date of Delivery
- D. Is delivery address different from item 1? ☐ Yes ☐ No
If YES, enter delivery address below:

1455-UBB9 #2

3. Service Type ☐ Priority Mail Express® ☐ Registered Mail™ ☐ Registered Mail Restricted Delivery® ☐ Certified Mail® ☐ Return Receipt for Merchandise® ☐ Signature Confirmation™ ☐ Signature Confirmation Restricted Delivery® ☐ Insured Mail™ (over \$500) ☐ Insured Mail Restricted Delivery® (over \$500)

Domestic Return Receipt

**U.S. Postal Service™
CERTIFIED MAIL® RECEIPT**
Domestic Mail Only

For delivery information, visit our website at www.usps.com.

OFFICIAL USE

Certified Mail Fee

- Extra Services & Fees (Print box, add fee as appropriate)
- ☐ Return Receipt (hardcopy) ☐ Return Receipt (electronic) ☐ Adult Signature Restricted Delivery ☐ Adult Signature Restricted Delivery ☐ Adult Signature Restricted Delivery ☐ Adult Signature Restricted Delivery

Postage

Total Postage and Fees

1455-UBB9 #2

Sent to FASKEN OIL & RANCH LTD

Street address, city, state, and ZIP+4®

6101 HOLIDAY HILL ROAD

MIDLAND, TX 79707

PS Form 3800, April 2012 PSN 7530-02-000-9057 See Reverse for Instructions

McMillan, Michael, EMNRD

From: McMillan, Michael, EMNRD
Sent: Monday, October 15, 2018 2:52 PM
To: 'Chris Weyand'
Subject: 3bear Field Services LLC Libby Berry SWD Well No. 2

Chris:

I do not see proof of mailing to the surface owner, and affected parties.
Your application is suspended until the OCD receives them

Mike

Michael McMillan
1220 South St. Francis
Santa Fe, New Mexico
505-476-3448
Michael.mcmillan@state.nm.us

McMillan, Michael, EMNRD

From: McMillan, Michael, EMNRD
Sent: Wednesday, October 24, 2018 12:36 PM
To: 'Gorman, Jessica (MRO)'; Chris Weyand
Cc: Jones, William V, EMNRD; Goetze, Phillip, EMNRD; Lowe, Leonard, EMNRD
Subject: RE: Notification of Protest for Application to Inject -Libby Berry SWD Well No. 2-Marathon

The Libby Berry SWD Well No.2 will still be in the administrative process

From: Gorman, Jessica (MRO) <jgorman1@marathonoil.com>
Sent: Wednesday, October 24, 2018 12:32 PM
To: Chris Weyand <chris@lonquist.com>
Cc: Jones, William V, EMNRD <WilliamV.Jones@state.nm.us>; Goetze, Phillip, EMNRD <Phillip.Goetze@state.nm.us>; Lowe, Leonard, EMNRD <Leonard.Lowe@state.nm.us>; McMillan, Michael, EMNRD <Michael.McMillan@state.nm.us>
Subject: [EXT] RE: Notification of Protest for Application to Inject -Libby Berry SWD Well No. 2-Marathon

Yes, it was, I was intending to protest the Libby Berry 3, not #2.

From: Chris Weyand <chris@lonquist.com>
Sent: Wednesday, October 24, 2018 10:48 AM
To: Gorman, Jessica (MRO) <jgorman1@marathonoil.com>
Cc: Jones, William V, EMNRD <WilliamV.Jones@state.nm.us>; Goetze, Phillip, EMNRD <Phillip.Goetze@state.nm.us>; Lowe, Leonard, EMNRD <Leonard.Lowe@state.nm.us>; McMillan, Michael, EMNRD <Michael.McMillan@state.nm.us>
Subject: [External] RE: Notification of Protest for Application to Inject -Libby Berry SWD Well No. 2-Marathon

Beware of links/attachments.

Jessica,

Is this the protest you intended to recall?

Thanks,

Chris Weyand
Staff Engineer
Lonquist & Co., LLC
(512) 600-1764 Direct
(210) 846-2673 Mobile

From: McMillan, Michael, EMNRD [mailto:Michael.McMillan@state.nm.us]
Sent: Wednesday, October 24, 2018 10:46 AM
To: Chris Weyand
Cc: Jones, William V, EMNRD; Goetze, Phillip, EMNRD; Lowe, Leonard, EMNRD
Subject: Notification of Protest for Application to Inject -Libby Berry SWD Well No. 2-Marathon

RE: Libby Berry SWD Well No. 2 (API 30-025-Pending; Admin. Appl. No pMAM1828852542) Unit A; Sec 22, T20S, R34E, NMPM, Lea County

Mr. Weyand:

McMillan, Michael, EMNRD

From: Gorman, Jessica (MRO) <jgorman1@marathonoil.com>
Sent: Wednesday, October 24, 2018 12:32 PM
To: Chris Weyand
Cc: Jones, William V, EMNRD; Goetze, Phillip, EMNRD; Lowe, Leonard, EMNRD; McMillan, Michael, EMNRD
Subject: [EXT] RE: Notification of Protest for Application to Inject -Libby Berry SWD Well No. 2-Marathon

Yes, it was, I was intending to protest the Libby Berry 3, not #2.

From: Chris Weyand <chris@lonquist.com>
Sent: Wednesday, October 24, 2018 10:48 AM
To: Gorman, Jessica (MRO) <jgorman1@marathonoil.com>
Cc: Jones, William V, EMNRD <WilliamV.Jones@state.nm.us>; Goetze, Phillip, EMNRD <Phillip.Goetze@state.nm.us>; Lowe, Leonard, EMNRD <Leonard.Lowe@state.nm.us>; McMillan, Michael, EMNRD <Michael.McMillan@state.nm.us>
Subject: [External] RE: Notification of Protest for Application to Inject -Libby Berry SWD Well No. 2-Marathon

Beware of links/attachments.

Jessica,

Is this the protest you intended to recall?

Thanks,

Chris Weyand
Staff Engineer
Lonquist & Co., LLC
(512) 600-1764 Direct
(210) 846-2673 Mobile

From: McMillan, Michael, EMNRD [<mailto:Michael.McMillan@state.nm.us>]
Sent: Wednesday, October 24, 2018 10:46 AM
To: Chris Weyand
Cc: Jones, William V, EMNRD; Goetze, Phillip, EMNRD; Lowe, Leonard, EMNRD
Subject: Notification of Protest for Application to Inject -Libby Berry SWD Well No. 2-Marathon

RE: Libby Berry SWD Well No. 2 (API 30-025-Pending; Admin. Appl. No pMAM1828852542) Unit A; Sec 22, T20S, R34E, NMPM, Lea County

Mr. Weyand:

OCD was notified by Marathon Oil Permian, LLC that they are protesting this application. This party is identified as an affected person for the location being considered for the application. You are being notified that if 3Bear Field Services, LLC wishes for this application to be considered, they must either go to hearing or may be reviewed administratively if the protest is withdrawn as a result of a negotiated resolution with this party. The application will be retained pending resolution of the protest. Please continue to provide OCD with information regarding the standing of this application. Please me call with any questions on this matter.

Contact Information:

Ms. Jessica Gorman
Advanced Land Specialist
Marathon Oil Permian, LLC
5555 San Felipe Street
Houston, Tx
713-296-3024 (phone)

e-mail: jgorman1@marathonoil.com

Michael McMillan
1220 South St. Francis
Santa Fe, New Mexico
505-476-3448
Michael.mcmillan@state.nm.us

McMillan, Michael, EMNRD

From: McMillan, Michael, EMNRD
Sent: Wednesday, October 24, 2018 9:46 AM
To: 'Chris Weyand'
Cc: Jones, William V, EMNRD; Goetze, Phillip, EMNRD; Lowe, Leonard, EMNRD
Subject: Notification of Protest for Application to Inject -Libby Berry SWD Well No. 2-Marathon
Attachments: 3Bear LibbyBerrySWD#2 Marathon.pdf

RE: Libby Berry SWD Well No. 2 (API 30-025-Pending; Admin. Appl. No pMAM1828852542) Unit A; Sec 22, T20S, R34E, NMPM, Lea County

Mr. Weyand:

OCD was notified by Marathon Oil Permian, LLC that they are protesting this application. This party is identified as an affected person for the location being considered for the application. You are being notified that if 3Bear Field Services, LLC wishes for this application to be considered, they must either go to hearing or may be reviewed administratively if the protest is withdrawn as a result of a negotiated resolution with this party. The application will be retained pending resolution of the protest. Please continue to provide OCD with information regarding the standing of this application. Please me call with any questions on this matter.

Contact Information:

Ms. Jessica Gorman
Advanced Land Specialist
Marathon Oil Permian, LLC
5555 San Felipe Street
Houston, Tx
713-296-3024 (phone)

e-mail: jgorman1@marathonoil.com

Michael McMillan
1220 South St. Francis
Santa Fe, New Mexico
505-476-3448
Michael.mcmillan@state.nm.us

McMillan, Michael, EMNRD

From: Gorman, Jessica (MRO) <jgorman1@marathonoil.com>
Sent: Wednesday, October 24, 2018 9:02 AM
To: Goetze, Phillip, EMNRD; chris@lonquist.com
Cc: McGowen, Matthew (MRO); Brown, Matthew D. (MRO); Angel, Robert E. (MRO); Jones, William V, EMNRD; Brooks, David K, EMNRD; McMillan, Michael, EMNRD; Lowe, Leonard, EMNRD; Dawson, Scott, EMNRD; Gyllenband, Ryan (MRO); Jennifer L. Bradfute
Subject: [EXT] Libby Berry SWD #2

Mr. Phillip Goetze,

I hope that all is well. I wanted to follow up with you on proposed Application for For Authorization to Inject prepared by 3Bear Field Service, LLC, Salt Water Well: Libby Berry SWD #2 Well (API No. Not Assigned) located in NENE, Section 22, 20S-34E, Lea County, NM and Marathon would like to protest this application. Marathon's current records show that the proposed injection zone for the well may impact its correlative rights.

Please let me know if you need any additional information.

Respectfully,

Jessica Gorman



Advanced Land Specialist – Permian
Telephone: 713-296-3024
5555 San Felipe St.
Houston, Texas 77056

Goetze, Phillip, EMNRD

From: Kevin Burns <kburns@3bearllc.com>
Sent: Monday, January 28, 2019 12:32 PM
To: Goetze, Phillip, EMNRD
Subject: [EXT] RE: Libby Berry Fee SWD No. 2 - Review of Application
Attachments: Libby Berry Fee SWD 2 Water Sources.pdf

Phillip,

I apologize this wasn't included in the original application.

3Bear Energy

Kevin Burns
Sr. Operations Engineer
3 Bear Energy, LLC
415 W. Wall St., Suite 1212
Midland, TX 79701
Cell: 432-312-0843
Office: 432-686-2973
Email: kburns@3bearllc.com

From: Goetze, Phillip, EMNRD [mailto:Phillip.Goetze@state.nm.us]
Sent: Monday, January 28, 2019 12:56 PM
To: Chris Weyand <chris@lonquist.com>
Cc: McMillan, Michael, EMNRD <Michael.McMillan@state.nm.us>; Kevin Burns <kburns@3bearllc.com>
Subject: Libby Berry Fee SWD No. 2 - Review of Application
Importance: High

Chris:

Unless I missed something, I cannot find a single sentence or supporting data as to the sources for disposal as per Section VII, Part 4. Do you have this information? PRG

Phillip Goetze, PG

Engineering Bureau, Oil Conservation Division
New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive, Santa Fe, NM 87505
Direct: 505.476.3466
E-mail: phillip.goetze@state.nm.us



Township 20 South Range 34 East of the New Mexico Principal Meridian, New Mexico

County: Lea - 025

BLM Field Office: Carlsbad

BUREAU OF LAND MANAGEMENT
STATUS OF PUBLIC DOMAIN
LAND AND MINERALS

OG Plat

T20S R34E

Entire Township included in
NM 05354, EO 11611, NM 1701, Res 6 (3/11/1936)

Designated Pot Area SO 10/7/1975 (Partial)

CI of Public Lands NM 056202 (CI No 30-06-01)

UNITIZATION AGREEMENTS

Lea UA

NM 070976X

Tess Yares Sand UA

NM 071049X

Quail Ridge UA

NM 091041X

COMMUNITIZATION AGREEMENTS

NM 082107

NM 088489

NM 091026

NM 094488

NM 100722

NM 109632

NM 121888

NM 127606

NM 127960

NM 132395

NM 132812

NM 132988

NM 134725

NM 134720

NM 134724

NM 134729

NM 134768

NM 134773

NM 135022

NM 137539

NOTE: The Serial Numbers displayed are in the Bureau's LR2000 system format:
-if there is a zero in the 7th position (from the right),
the serial number has a "prefix" zero;
example NM 0012345.
-if there is not a zero in the 7th position (from the right) then the
serial number does not have a "prefix" zero;
example NM 012345.

For Index to Segregated Tracts, see survey plat.

Revised Date: 11/21/2017

T 20 S
R 34 E
NMMP

DISCLAIMER
This plat is the Bureau's record of title and should be used
only as a graphic display of the township survey data. Records
hereon do not reflect the changes which may have been affected
by subsequent surveys or by the passage of time. Refer to the
cadastral surveys for official survey information.

0 0.25 0.5 1 Mile
1 inch = 30 chains
1:23,760

FORM C-108 Technical Review Summary [Prepared by reviewer and included with application; V16.2]

DATE RECORD: First Rec: 10/5/18 Admin Complete: 10/16/18 or Suspended: _____ ^{No IS assessment} Add. Request/Reply: _____

ORDER TYPE: WFX / PMX / 8WD Number: 1777 Order Date: 1/28/19 Legacy Permits/Orders: —

Well No. 1 Well Name(s): Libby Berry Fee SWD

API #: 30-0 25-45344 Spud Date: TBD New or Old (EPA): New (UIC Class II Primacy 03/07/1982)

Footages 540 FNL / 269 FEL Lot - gr Unit A Sec 22 Tsp 20S Rge 34 E County Lea

General Location: ~10 mi east of Halfway / 5 mi S of US180 Pool: SWD; Silurian-Devonian Pool No.: 96101

BLM 100K Map: Hobbs Operator: 3Bear Field Services, LLC OGRID: 372603 Contact: Longquist & Co. LLC

COMPLIANCE RULE 5.9: Total Wells: 15 Inactive: 0 Fincl Assur: OK Compl. Order? No IS 5.9 OK? Yes Date: 1/29/11

WELL FILE REVIEWED ☒ Current Status: APD filed; Paul K. changed Surface to 1530';

WELL DIAGRAMS: NEW: Proposed ☒ or **RE-ENTER:** Before Conv. ☐ After Conv. ☐ Logs in Imaging: _____

Planned Rehab Work to Well: Conductor: 120 ft of 20" - cemented

Well Construction Details		Sizes (in) Borehole / Pipe	Setting Depths (ft)	Cement Sx or Cf	Cement Top and Determination Method
Planned <input checked="" type="checkbox"/> or Existing <input type="checkbox"/> Surface	12 1/4	13 3/8	0 to 1400	1675	Car to surface
Planned <input checked="" type="checkbox"/> or Existing <input type="checkbox"/> Interm/Prod	12 1/4	9 5/8	0 to 8375	2245	Car to surface
Planned <input type="checkbox"/> or Existing <input type="checkbox"/> Interm/Prod	8 1/2				
Planned <input checked="" type="checkbox"/> or Existing <input type="checkbox"/> Prod/Liner	12 1/4	7 5/8	8175 to 14614	620	Calc. 10L *
Planned <input type="checkbox"/> or Existing <input type="checkbox"/> Liner					
Planned <input checked="" type="checkbox"/> or Existing <input type="checkbox"/> (OH) PERF	6 1/2		14614 - 16254		
Injection Lithostratigraphic Units:		Depths (ft)	Injection or Confining Units	Tops	
Adjacent Unit: Litho. Struc. Por.			Mississippian Lm	13832	
Confining Unit: Litho. Struc. Por.		0 ± 50'	Woodford	14	
Proposed Inj Interval TOP:		14614	Dixonian	14614	
Proposed Inj Interval BOTTOM:		16254	Silurian	15733	
Confining Unit: Litho. Struc. Por.		± 100	Montoya 10rd	?	
Adjacent Unit: Litho. Struc. Por.					
AOR: Hydrologic and Geologic Information					
POTASH: R-111-P No Noticed? <input type="checkbox"/> BLM Sec Ord <input checked="" type="checkbox"/> WIPP No Noticed? <input type="checkbox"/> Salt/Salado F: 1935 B: 3400 NW: Cliff House fm					
FRESH WATER: Aquifer <input checked="" type="checkbox"/> / Capital P / transition Max Depth < 1300' HYDRO AFFIRM STATEMENT By Qualified Person <input checked="" type="checkbox"/>					
NMOSE Basin: Capital CAPITAN REEF: thru <input checked="" type="checkbox"/> adj. NA No. GW Wells in 1-Mile Radius? 1+2 FW Analysis? Not obtained					
Disposal Fluid: Formation Source(s) <input checked="" type="checkbox"/> SR-Q / BS / Perm / DNG / Dm / Lm / Ls / Lc On Lease <input type="checkbox"/> Operator Only <input type="checkbox"/> or Commercial <input checked="" type="checkbox"/>					
Disposal Interval: Inject Rate (Avg/Max BWPD): 20000/25000 Protectable Waters? No Source: Historical System: Closed or Open <input checked="" type="checkbox"/>					
HC Potential: Producing Interval? No Formerly Producing? No Method: Logs/DST/P&A / Other Mydlog Requested 1-Mi Radius Pool Map <input checked="" type="checkbox"/>					
AOR Wells: 1/2-M Radius Map and Well List? <input checked="" type="checkbox"/> No. Penetrating Wells: <input checked="" type="checkbox"/> [AOR Horizontals: AOR SWDs:]					
Penetrating Wells: No. Active Wells <input checked="" type="checkbox"/> Num Repairs? on which well(s)? Diagrams?					
Penetrating Wells: No. P&A Wells <input checked="" type="checkbox"/> Num Repairs? on which well(s)? Diagrams? No evidence of notice					
NOTICE: Newspaper Date 08/11/2018 Mineral Owner BLM / Federal Surface Owner Fee / Tower Ranch N. Date 9/4/18					
RULE 26.7(A): Identified Tracts? Yes Affected Persons: 23 parties identified N. Date 9/4/18					

Order Conditions:	Issues:	HC potential	incomplete cement	Calculated TOR cement
-------------------	---------	--------------	-------------------	-----------------------

Additional COAs: Mudlog / formation picks; CBL for liner; BH pressure / cement circulation CCA

[illegible]

PREPERATION: PRG; Draft 12/31/2018