

Initial Application Part I

Received: 10/25/2019

This application is placed in file for record. It MAY or MAY NOT have been reviewed to be determined Administratively Complete

LONQUIST & CO. LLC

PETROLEUM
ENGINEERS

ENERGY
ADVISORS

AUSTIN · HOUSTON · WICHITA · DENVER · CALGARY

October 25, 2019

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: BEAR TRACKER SWD NO. 1 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") Bear Tracker SWD No. 1. 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,



Ramona K. Hovey
Sr. Petroleum Engineer
Lonquist & Co., LLC

(512) 600-1777
ramona@lonquist.com

RECEIVED:	REVIEWER:	TYPE:	APP NO:
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ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

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 Services _____ **OGRID Number:** 372603 _____
Well Name: Bear Tracker SWD No. 1 _____ **API:** _____
Pool: SWD: SWD: Devonian-Silurian _____ **Pool Code:** 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 25, 2019

Ramona Hovey – Agent of 3Bear Field Service

Print or Type Name

Signature

Date

(512) 600-1777

Phone Number

ramona@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: Mike Solomon PHONE: 303-862-3962
- 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: Ramona Hovey

TITLE: Consulting Engineer – Agent for 3Bear Field Service

SIGNATURE:  DATE: 10/25/18

E-MAIL ADDRESS: ramona@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: _____

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: _____ Secondary Recovery _____ Pressure Maintenance _____ ☒ Disposal _____ Storage
Application qualifies for administrative approval? _____ ☒ Yes _____ No
- II. OPERATOR: 3Bear Field Services, LLC
ADDRESS: 415 W. Wall St., Suite 1212
CONTACT PARTY: Mike Solomon PHONE: 303-862-3962
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Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? _____ Yes _____ ☒ 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.).
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- IX. Describe the proposed stimulation program, if any.
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- 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: Ramona Hovey TITLE: Consulting Engineer – Agent for 3Bear Field Service
SIGNATURE: _____ DATE: 10/25/18
E-MAIL ADDRESS: ramona@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: Bear Tracker SWD No. 1

WELL LOCATION: 1,099' FNL & 712' FWL
FOOTAGE LOCATION

D
UNIT LETTER

16
SECTION

26S
TOWNSHIP

27E
RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 26.000"

Casing Size: 20.00"

Cemented with: 5,146 sacks.

or ft³

Top of Cement: surface

Method Determined: circulation

1st Intermediate Casing

Hole Size: 17.500"

Casing Size: 13.375"

Cemented with: 2,597 sacks.

or ft³

Top of Cement: surface

Method Determined: circulation

2nd Intermediate Casing

Hole Size: 12.250"

Casing Size: 9.625"

Cemented with: 1,582 sacks.

or ft³

Top of Cement: surface

Method Determined: circulation

Production Liner

Hole Size: 8.500"

Casing Size: 7.625"

Cemented with: 465 sacks.

or ft³

Top of Cement: 8,700'

Method Determined: calculation

Total Depth: 15,150'

Injection Interval

13,650 feet to 15,150 feet

(Open Hole)

INJECTION WELL DATA SHEET

Tubing Size: 5.5", 17 lb/ft, HCL-80, BTC from 0' – 13,600'

Lining Material: Duoline

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

Packer Setting Depth: 13,600'

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, Fusselman

3. Name of Field or Pool (if applicable): SWD; Devonian-Silurian (Code: 97869)

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: 2,158'

Bone Spring: 5,752'

Wolfcamp: 8,881'

Strawn: 11,271'

Atoka: 11,557'



3Bear Field Services, LLC

Bear Tracker SWD No. 1

FORM C-108 Supplemental Information

III. Well Data

A. Wellbore Information

1.

Well information	
Lease Name	Bear Tracker SWD
Well No.	1
Location	S-16 T-26S R-27E
Footage Location	1,099' FNL & 712' FWL

2.

a. Wellbore Description

Casing Information				
Type	Surface	Intermediate	Production	Liner
OD	20"	13.375"	9.625"	7.625"
WT	0.635"	0.514"	0.435"	0.500"
ID	18.730"	12.347"	8.755"	6.625"
Drift ID	18.542"	12.259"	8.599"	6.500"
COD	21"	14.375"	10.625"	7.625"
Weight	133 lb/ft	72 lb/ft	43.5 lb/ft	39 lb/ft
Grade	J-55 STC	HCP-110	HCL-80 LTC	P-110 UFJ
Hole Size	26"	17-1/2"	12-1/4"	8-1/2"
Depth Set	2,170'	5,580'	8,900'	8,700'-13,650'

b. Cementing Program

Cement Information				
Casing String	Conductor	Intermediate 1	Intermediate 2	Liner
Lead Cement	HalCem	NeoCem	Stage 1: NeoCem Stage 2: VersaCem	VERSACEM w/ gas migration control additives
Lead Cement Volume	640 sks	2,129 sks	Stage 1: 312 sks Stage 2: 640 sks	465
Lead Cement Density	1.682 ft3/sk	2.767 ft3/sk	Stage 1: 2.731 ft3/sk Stage 2: 2.731 ft3/sk	1.223 f3/sk
Tail Cement	HalCem	HalCem	Stage 1: VersaCem Stage 2: VersaCem	
Tail Cement Volume	54 sks	468 sks	Stage 1: 577 sks Stage 2: 54 sks	
Tail Cement Density	1.347 ft3/sk	1.441 ft3/sk	Stage 1: 1.22 ft3/sk Stage 2: 1.334 ft3/sk	
Cement Excess	150%	75%	50%, 50%	50%
Total Sacks	5,146 sks	2,597 sks	1,582 sks	465 sks
TOC	Surface	Surface	Surface	8,700'
Method	Circulate to Surface	Circulate to Surface	Circulate to Surface	Logged

3. Tubing Description

Tubing Information	
OD	5.5"
WT	0.304"
ID	4.892"
Drift ID	4.767
COD	6.050"
Weight	17 lb/ft
Grade	HCL-80 BTC
Depth Set	0-13,600'

Tubing will be lined with Duoline.

4. Packer Description

7-5/8" x 5-1/2" TCPC Permanent Packer with High Temp Elastomer and Full Inconel 925 trim

B. Completion Information

1. Injection Formation: Devonian, Fusselman

2. Gross Injection Interval: 13,650'-15,150'

Completion Type: Open Hole

3. Drilled for injection.

4. See the attached wellbore schematic.

5. Oil and Gas Bearing Zones within area of well:

Formation	Depth
Delaware	2,158'
Bone Spring	5,752'
Wolfcamp	8,881'
Strawn	11,271'
Atoka	11,557'

VI. Area of Review

No wells within the area of review penetrate the proposed injection zone.

VII. Proposed Operation Data

1. Proposed Daily Rate of Fluids to be Injection:

Average Volume: 20,000 BPD

Maximum Volume: 25,000 BPD

2. Closed System

3. Anticipated Injection Pressure:

Average Injection Pressure: 2,048 PSI (surface pressure)

Maximum Injection Pressure: 2,730 PSI (surface pressure)

4. The injection fluid is to be locally produced water. It is expected that the source water will predominantly be from the Bone Spring and Wolfcamp formations. Attached are produced water sample analyses taken from the closest wells that feature samples from the Bone Spring, Delaware, Morrow, Pennsylvanian, and Wolfcamp formations.

5. The disposal interval is non-productive. No water samples are available from the surrounding area.

VIII. Geological Data

Devonian Formation Lithology:

The Devonian formation is a dolomitic ramp carbonate that occurs below the Woodford shale and above the Fusselman formation. Strata found in the Devonian formation include two major groups, the Wristen Buildups and the Thirtyone Deepwater Chert, with the Wristen being more abundant. The Wristen Groups is composed of mixed limestone and dolomites with mudstone to grainstone and boundstone textures. Porosity in the Wristen group is a result of both primary and secondary development. Present are moldic, vugular, karstic (including collapse breccia) features that allow for higher porosities and permeabilities. The Thirtyone Formation contains two end-member reservoir facies, skeletal packstones/grainstones and spiculitic chert, with most of the porosity and permeability found in the coarsely crystalline cherty dolomite. These particular characteristics allow for this formation to be a tremendous Salt Water Disposal horizon.

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 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.

A. Injection Zone: Devonian-Siliurian Formation

Formation	Depth
Salado	429'
Delaware	2,158'
Cherry Canyon	3,050'
Bone Spring	5,752'
Wolfcamp	8,881'
Strawn	11,271'
Atoka	11,557'
Morrow	12,016'
Mississippian Lime	13,297'
Woodford	13,521'
Devonian	13,650'
Fusselman	14,054'

B. Underground Sources of Drinking Water

Within 1-mile of the proposed Bear Tracker SWD #1 location, there is one water well. The water well has an unknown depth. Water wells in the surrounding area have an average depth of 98 ft and an average water depth of 28 ft. The upper Rustler may also be another USDW and will be protected.

IX. Proposed Stimulation Program

No stimulation program planned.

X. Logging and Test Data on the Well

There are no logs or test data on the well. During the process of drilling and completion resistivity, gamma ray, and density logs will be run.

XI. Chemical Analysis of Fresh Water Wells

Attached is a map of the one (1) water well that exist within one mile of the well location. Sampling from this well was attempted but the well was dry and no samples were able to be recovered. A Water Right Summary from the New Mexico Office of the State Engineer is attached for water well RA-03587.

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**☐ AMENDED REPORT**1220 South St. Francis Dr.****Santa Fe, NM 87505****APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

¹ Operator Name and Address 3BEAR FIELD SERVICES, LLC 415 W. WALL ST., STE 1212 MIDLAND, TEXAS 79701		² OGRID Number 372603
		³ API Number 30-015-TBD
⁴ Property Code	⁵ Property Name BEAR TRACKER SWD	⁶ Well No. 1

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
D	16	26S	27E		1,099	N	712	W	EDDY

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 97869
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Additional Well Information

¹¹ Work Type N	¹² Well Type SWD	¹³ Cable/Rotary R	¹⁴ Lease Type Private	¹⁵ Ground Level Elevation 3,296.55
¹⁶ Multiple N	¹⁷ Proposed Depth 15,150'	¹⁸ Formation Devonian	¹⁹ Contractor TBD	²⁰ Spud Date ASAP
Depth to Ground water 28'	Distance from nearest fresh water well 3,938'	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"	133 lb/ft	2,170'	5,146	Surface
Surface	17-1/2"	13-3/8"	72 lb/ft	5,580'	2,597	Surface
Production	12-1/4"	9-5/8"	43.5 lb/ft	8,900'	1,582	Surface
SurfLiner	8-1/2"	7-5/8"	39 lb/ft	8,700'-13,650'	465	8,700
Tubing	-	5.5"	17 lb/ft	13,600'		

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 ☐ and/or 19.15.14.9 (B) NMAC ☒, if applicable.

Signature:

Printed name: Ramona Hovey

Title: Consulting Engineer

E-mail Address: ramona@lonquist.com

Date: October 25, 2018

Phone: 512-600-1777

OIL CONSERVATION DIVISION

Approved By:

Title:

Approved Date:

Expiration Date:

Conditions of Approval Attached

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazon Road, Artec, NM 87410
District IV
1220 S. St Francis Dr., NM 87505
Phone: (505) 476-3460 Fax (505) 476-3462

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 97869	³ Pool Name SWD; Silurian-Devonian
⁴ Property Code	⁵ Property Name BEAR TRACKER SWD		⁶ Well Number #1
⁷ OGRID No. 372603	⁸ Operator Name 3BEAR FIELD SERVICES, LLC		⁹ Elevation 3296.55'

¹⁰ Surface Location

UL or lot no. D	Section 16	Township 26 S	Range 27 E	Lot Idn	Feet from the 1099	North/South line NORTH	Feet from the 712	East/West line WEST	County EDDY
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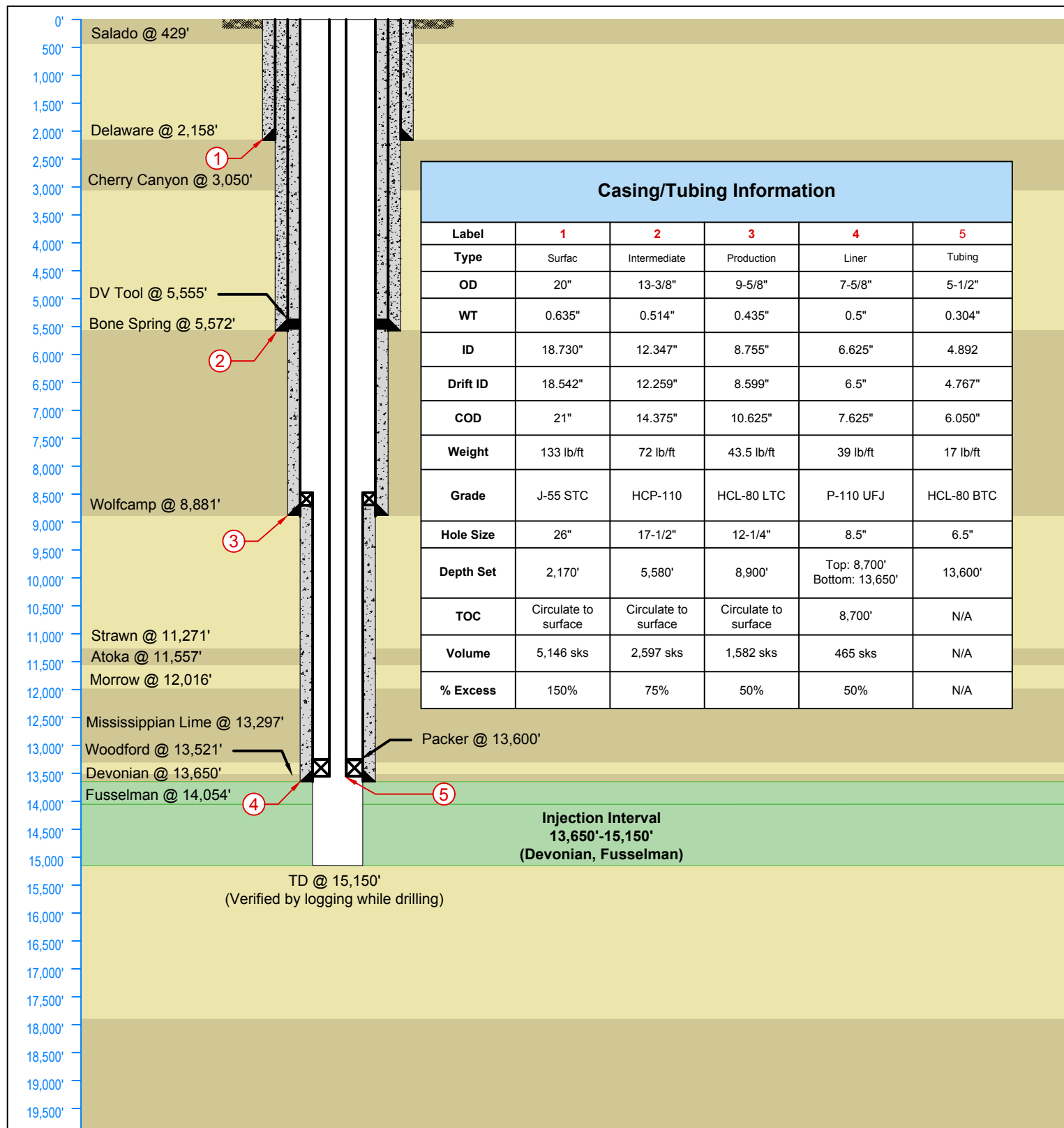
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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>①</p> <p>1099.36'</p> <p>711.70'</p> <p>②</p> <p>GEODETIC DATA NAD 83 GRID - NM EAST</p> <p>BEAR TRACKER SWD NO. 1 Y= 380744.78 N X= 582209.71 E LAT= 32.048679 N LONG= -104.201416 W</p> <p>1 - Y= 381856.16, X= 581487.45 2 - Y= 381768.72, X= 586805.84 3 - Y= 376471.11, X= 586837.32 4 - Y= 376532.13, X= 581537.79</p> <p>③</p> <p>④</p>	<p>¹⁷ OPERATOR CERTIFICATION</p> <p>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>Ramona K. Hovey</i> 11/2/10 Signature Date</p> <p>RAMONA K. HOVEY Date</p> <p>ramona@longquist.com Date</p> <p>Email Address</p>
	<p>¹⁸ SURVEYOR CERTIFICATION</p> <p>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>29 OCT 2010 Date of Survey</p> <p><i>Jeffrey E. Hudson</i> Date</p> <p>Signature and Seal of Professional Surveyor</p> <p>JEFFREY E. HUDSON NEW MEXICO 20559 PROFESSIONAL SURVEYOR</p> <p>Certificate Number 20559</p>



LONQUIST & CO. LLC PETROLEUM ENGINEERS ENERGY ADVISORS HOUSTON CALGARY AUSTIN WICHITA DENVER	3Bear Field Services, LLC		Bear Tracker SWD #1	
	Country: USA		State/Province: New Mexico	County/Parish: Eddy
	Location:		Site: 1,099 FNL 712 FWL	Survey: S16-T26S-R33E
	API No: NA		Field: Devonian-Silurian	Well Type/Status: SWD
	TX License: F-9147		Project No: 1784	Date: 10/25/2019
12912 Hill Country Blvd. Ste F-200 Austin, Texas 78738 Tel: 512.732.9812 Fax: 512.732.9816	Drawn: TFM		Reviewed:	Approved:
	Rev No: 1		Notes:	

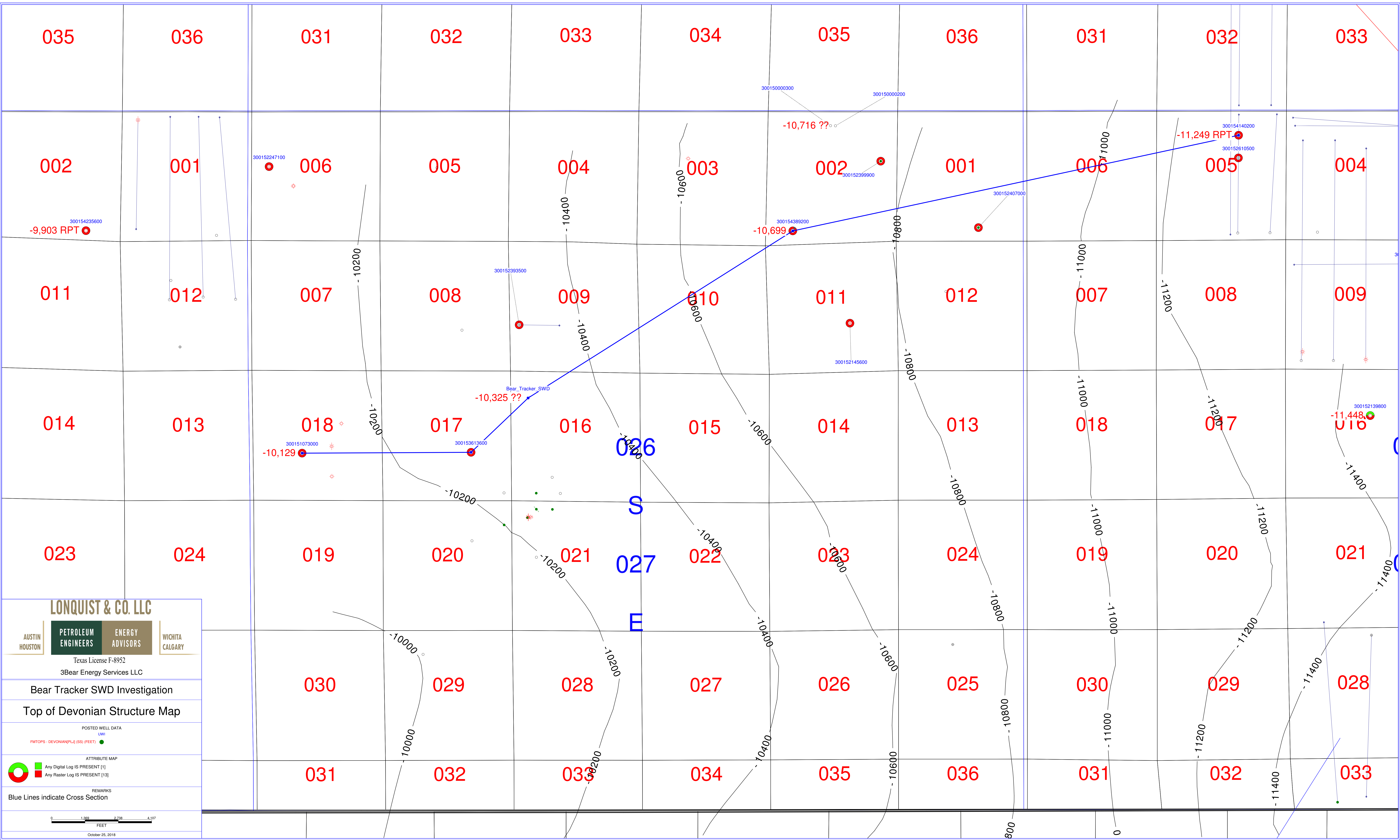
GEOLOGIC AFFIRMATION

I have examined available geologic and engineering data and have found no evidence of open faults or other hydrologic connection between the disposal interval and underground sources of drinking water.



Parker Jessee
Geologist

Project: 3Bear Field Services, LLC
Bear Tracker SWD No. 1



LONGQUIST & CO. LLC

AUSTIN HOUSTON

PETROLEUM ENGINEERS

ENERGY ADVISORS

WICHITA CALGARY

Texas License F-8952
3Bear Energy Services LLC

Bear Tracker SWD Investigation

Top of Devonian Structure Map

POSTED WELL DATA
UWI
FMTOPS - DEVONIAN(PLJ) (SS) (FEET)

Any Digital Log IS PRESENT [1]

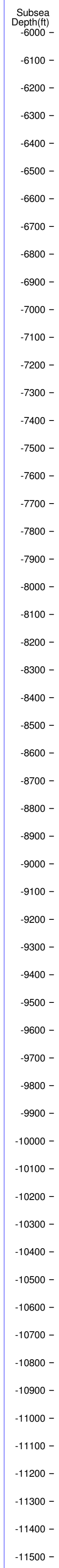
Any Raster Log IS PRESENT [13]

REMARKS
Blue Lines Indicate Cross Section

0 1,268 2,536 4,072

FEET

October 25, 2018



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OWL DRAW UNIT 001
001
BTA OIL PRODUCERS, LLC
TD : 13,510
ELEV_KB : 3,333

<6,936FT>

300153613600
BLAST BLA FEDERAL
001
EOG Y RESOURCES, INC.
TD : 12,850
ELEV_KB : 3,352

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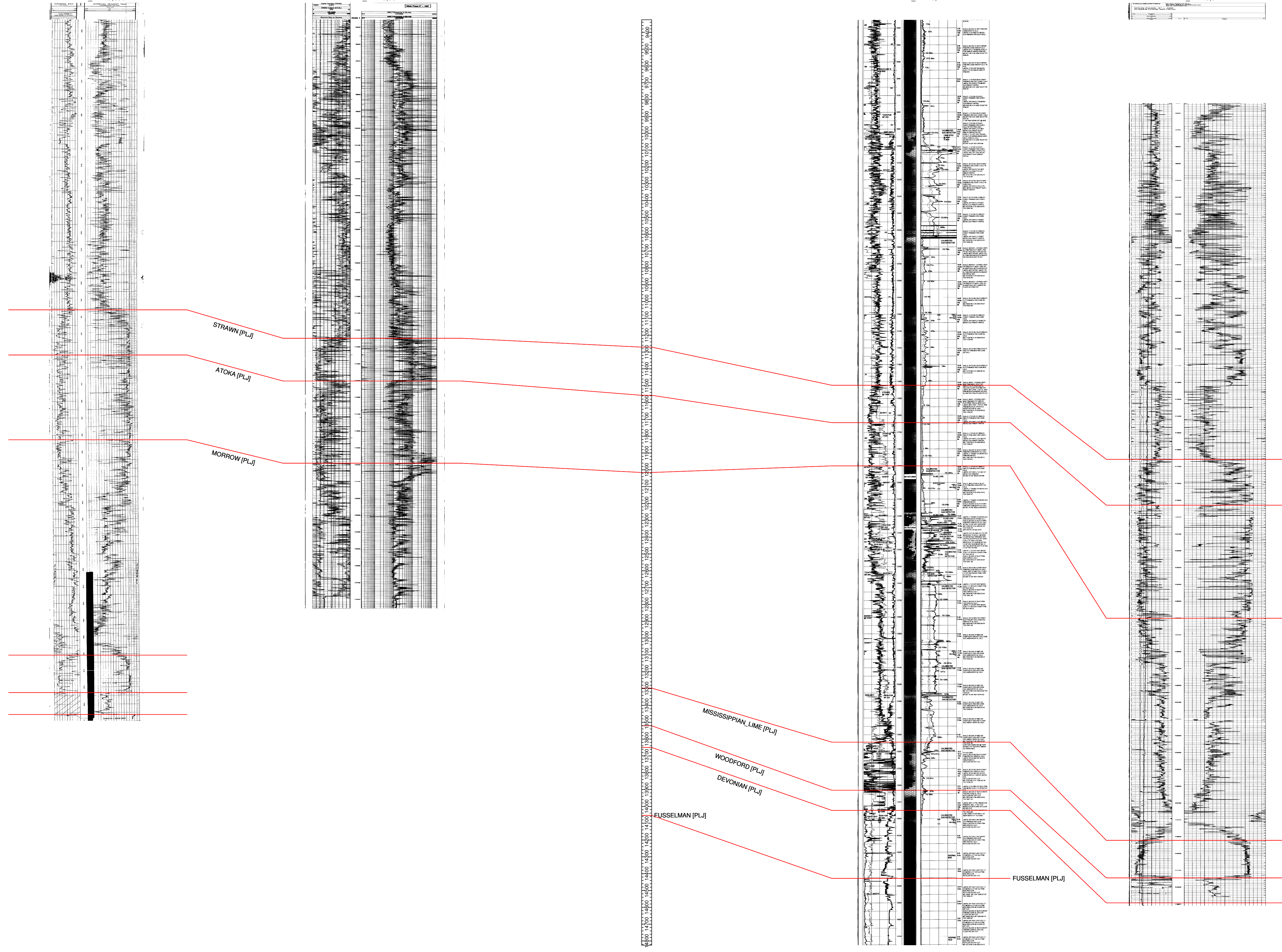
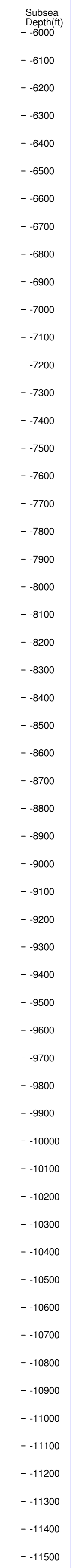
Bear Tracker SWD
3Bear Energy Services
ELEV_KB : 3,325

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GRAVITAS 2 STATE SWD
002
CHEVRON U S A INC
TD : 14,960
ELEV_KB : 3,247

<18,616FT>

300154140200
APPLE 5 STATE SWD
001
COG OPERATING LLC
TD : 15,400
ELEV_KB : 3,044



LONQUIST & CO. LLC

AUSTIN HOUSTON

PETROLEUM ENGINEERS

WICHITA CALGARY

ENERGY ADVISORS

Texas License F-8952

Bear Tracker SWD Investigation

W-E Structural Cross Section

TOPS AND MARKERS

STRAWN PLJ

ATOKA PLJ

MORROW PLJ

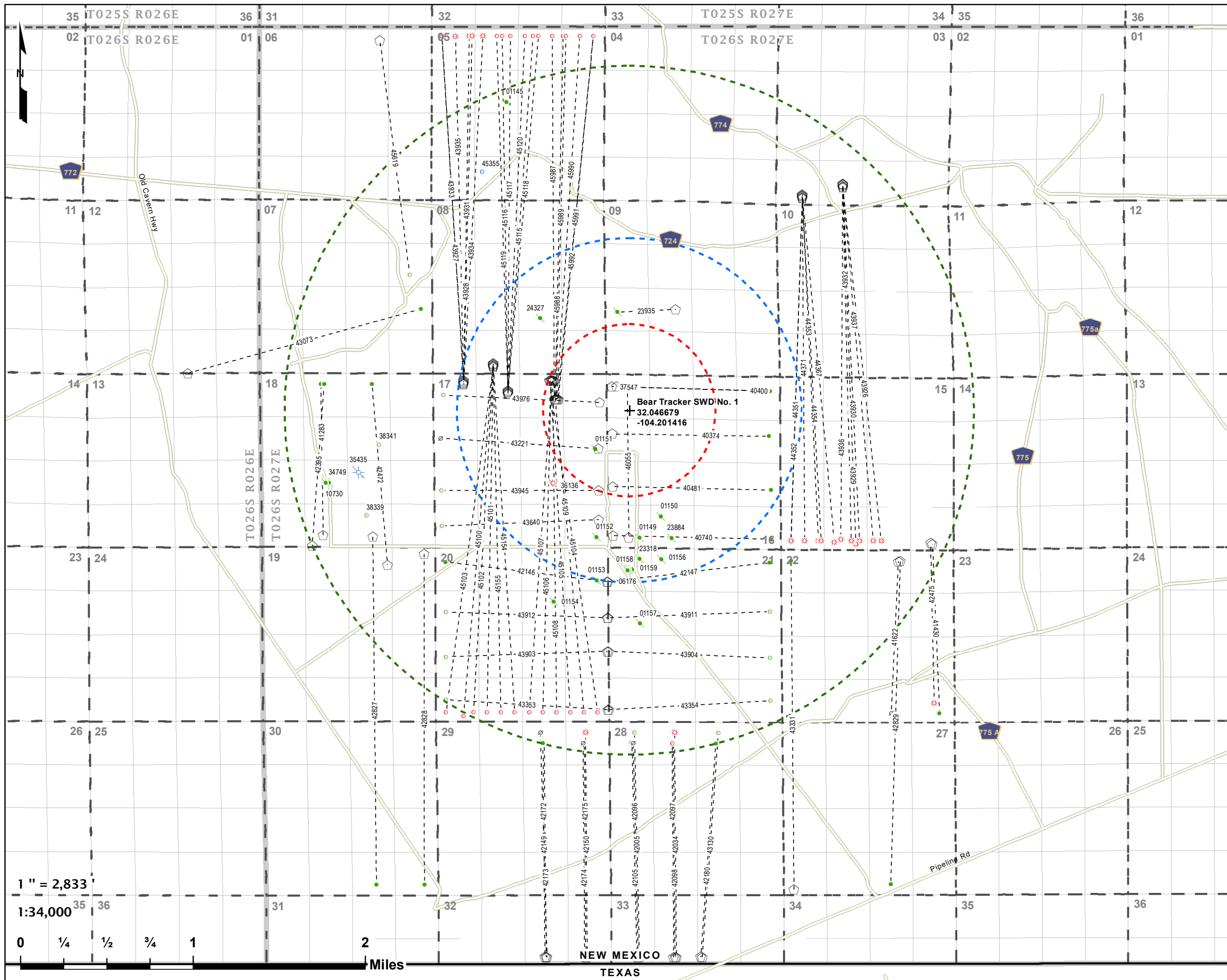
MISSISSIPPIAN LIME PLJ

WOODFORD PLJ

DEVONIAN PLJ

FUSSELMAN PLJ

October 25,2018 11:05 AM



Bear Tracker SWD No. 1

2 Mile Area of Review

3Bear Field Services LLC

Eddy Co., NM

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

Drawn by: SJL

Date: 10/21/2019









Approved by: SLP

LONQUIST & CO. LLC


**PETROLEUM
ENGINEERS**

ENERGY
ADVISORS

AUSTIN • HOUSTON • WICHITA • DENVER • CALGARY

-  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]
-  State Boundary
-  Laterals

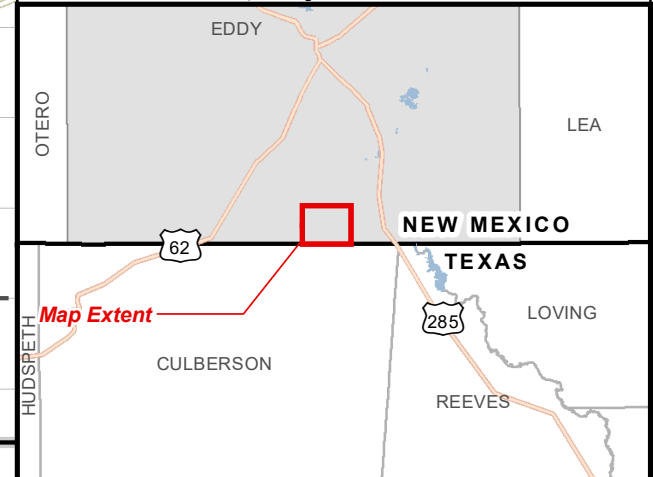
API (30-015-...) SHL Status - Type (Count)

-  Horizontal Surface Location (87)
-  Permitted - Oil (2)
-  Permitted - Salt Water Disposal (1)
-  Plugged (Site Released) - Oil (17)
-  Plugged (Site Released) - Gas (1)
-  Plugged (Site Released) - Salt Water Disposal (1)

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

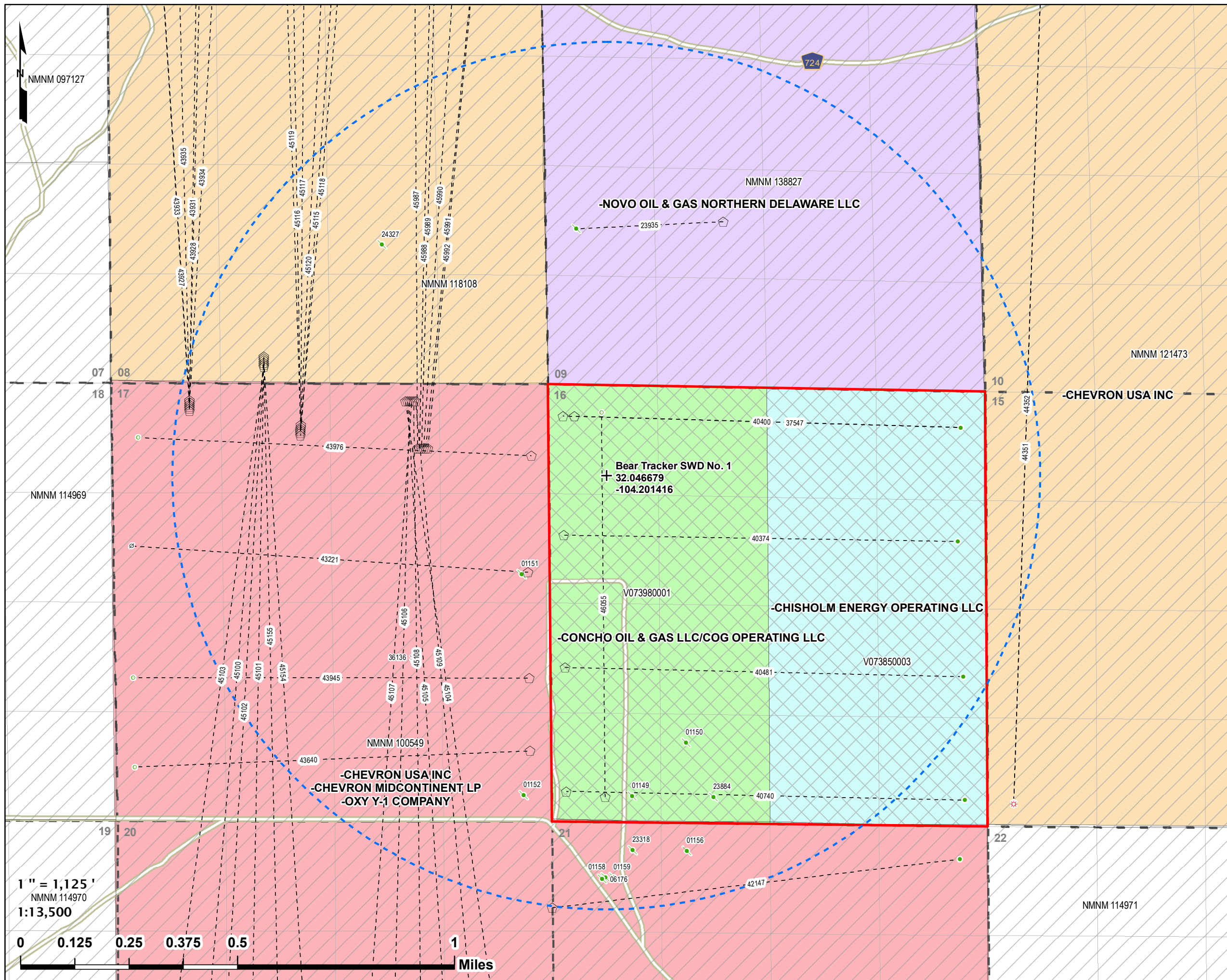
- Active - Oil (21)
- ⚠ Active - Gas (22)
- Permitted - Oil (13)
- Permitted - Gas (25)
- 🌿 Plugged (Site Released) - Oil (1)
- ∅ Canceled Location (5)

*Well Data Source: NM-OCD/DrillingInfo (2019)



Bear Tracker SWD No. 1
1 Mile Area of Review List

API (30-015-....)	WELL NAME	WELL TYPE	STATUS	OPERATOR	TVD (FT.)	LATITUDE (NAD83 DD)	LONGITUDE (NAD83 DD)	DATE DRILLED	FIELD
01149	WELCH UNIT #003	O	P	EL PASO NATURAL GAS CO	2236	32.03595350	-104.2004242	2/3/1958	[64030] WELCH, DELAWARE
01150	WELCH UNIT #008	O	P	EL PASO NATURAL GAS CO	2226	32.03774260	-104.1983109	4/1/1959	[64030] WELCH, DELAWARE
01151	WELCH UNIT #006	O	P	EL PASO NATURAL GAS CO	2300	32.04338070	-104.2047501	8/29/1958	[64030] WELCH, DELAWARE
01152	WELCH UNIT #009	O	P	EL PASO NATURAL GAS CO	2230	32.03598790	-104.2046890	8/28/1960	[64030] WELCH, DELAWARE
01156	WELCH UNIT #005	O	P	EL PASO NATURAL GAS CO	2175	32.03411480	-104.1982803	3/22/1958	[64030] WELCH, DELAWARE
01158	WELCH UNIT #001	O	P	EL PASO NATURAL GAS CO	12853	32.03324130	-104.2014771	4/18/1954	WILDCAT
01159	WELCH ABV FEDERAL #001	O	P	EOG Y RESOURCES, INC.	8000	32.03323750	-104.2011490	1/20/1985	[66052] EDDY UNDESIGNATED, GROUP 2
06176	WELCH UNIT #002	O	P	EL PASO NATURAL GAS CO	2115	32.03318020	-104.2015991	12/3/1957	[64030] WELCH, DELAWARE
23318	YATES FEDERAL #001	O	P	EOG Y RESOURCES, INC.	2500	32.03413770	-104.2004166	6/4/1980	[64030] WELCH, DELAWARE
23884	CHAPARRAL STATE #001	O	P	COLLIER ENERGY, INC.	2175	32.03591920	-104.1972351	9/16/1981	[64030] WELCH, DELAWARE
23935	HAY B FEDERAL #001	O	P	CIRCLE DIAMOND DRILLING, LLC	5840	32.05517200	-104.1968155	11/30/2006	[64010] WELCH, BONE SPRING; [97012] WC, DELAWARE; [97651] WC HAY HALLOW, DELAWARE,EAST
24327	FEDERAL "X" #001	O	P	CITIES SERVICE OIL & GAS CORPORATION	12900	32.05442050	-104.2102203	2/26/1982	WILDCAT
36136	BLAST BLA FEDERAL #001	G	P	EOG Y RESOURCES, INC.	12850	32.04053120	-104.2089844	11/7/2008	[97338] WC: MISSISSIPPIAN GAS; [97489] WILDCAT, WOLFCAMP GAS (ABOLISHED); [97744] WILDCAT S262717J, MORROW (GAS); [98220] PURPLE SAGE, WOLFCAMP (GAS)
37547	CLUSTER STATE COM #001H	O	A	COG OPERATING LLC	6240	32.04866790	-104.2026672	2/26/2010	[64010] WELCH, BONE SPRING
40374	CLUSTER STATE COM #003H	O	A	COG OPERATING LLC	7646	32.04468920	-104.2030869	6/27/2012	[64010] WELCH, BONE SPRING
40400	CLUSTER STATE COM #002H	O	A	COG OPERATING LLC	7637	32.04867550	-104.2031174	4/7/2013	[64010] WELCH, BONE SPRING
40481	CLUSTER STATE COM #004H	O	A	COG OPERATING LLC	7688	32.04026030	-104.2030487	11/21/2012	[64010] WELCH, BONE SPRING
40740	CLUSTER STATE COM #005H	O	A	COG OPERATING LLC	7560	32.03611760	-104.2030106	3/21/2013	[64010] WELCH, BONE SPRING
42147	BLAST BLA FEDERAL #003H	O	A	CHEVRON U S A INC	7633	32.03221890	-104.2035522	5/20/2014	[64010] WELCH, BONE SPRING
43221	BLAST BLA FEDERAL COM #011H	O	C	EOG Y RESOURCES, INC.	0	32.02364100	-104.1216160	-	[64010] WELCH, BONE SPRING
43640	BLAST BLA FEDERAL COM #013H	O	N	EOG RESOURCES INC	0	32.02148800	-104.1215950	-	[64010] WELCH, BONE SPRING
43927	HH SO 8 P2 #021H	G	A	CHEVRON U S A INC	9020	32.04921200	-104.2177910	5/17/2017	[96890] SAGE DRAW, WOLFCAMP, E (G)(ABOLISH); [98220] PURPLE SAGE, WOLFCAMP (GAS)
43928	HH SO 8 P2 #022H	G	A	CHEVRON U S A INC	9178	32.04914400	-104.2177900	5/16/2017	[96890] SAGE DRAW, WOLFCAMP, E (G)(ABOLISH); [98220] PURPLE SAGE, WOLFCAMP (GAS)
43931	HH SO 8 P2 #014H	G	A	CHEVRON U S A INC	10001	32.04885590	-104.2177870	5/1/2017	[96890] SAGE DRAW, WOLFCAMP, E (G)(ABOLISH); [98220] PURPLE SAGE, WOLFCAMP (GAS)
43933	HH SO 8 P2 #013H	G	A	CHEVRON U S A INC	9938	32.04893700	-104.2177870	5/13/2017	[96890] SAGE DRAW, WOLFCAMP, E (G)(ABOLISH); [98220] PURPLE SAGE, WOLFCAMP (GAS)
43934	HH SO 8 P2 #006H	G	A	CHEVRON U S A INC	9711	32.04900600	-104.2177880	5/15/2017	[96890] SAGE DRAW, WOLFCAMP, E (G)(ABOLISH); [98220] PURPLE SAGE, WOLFCAMP (GAS)
43935	HH SO 8 P2 #005H	G	A	CHEVRON U S A INC	9608	32.04907500	-104.2177890	5/15/2017	[96890] SAGE DRAW, WOLFCAMP, E (G)(ABOLISH); [98220] PURPLE SAGE, WOLFCAMP (GAS)
43945	BLAST BLA FEDERAL #012H	O	N	EOG RESOURCES INC	0	32.02236800	-104.1216030	-	[64010] WELCH, BONE SPRING
43976	BLAST BLA FEDERAL #010H	O	N	EOG RESOURCES INC	0	32.02504500	-104.1215740	-	[64010] WELCH, BONE SPRING
44351	CICADA UNIT #016H	G	A	CHEVRON U S A INC	9753	32.06466400	-104.1842690	2/25/2018	[98220] PURPLE SAGE, WOLFCAMP (GAS)
45100	HH SO 17 20 FEDERAL 001 #001H	G	N	CHEVRON U S A INC	0	32.05067500	-104.2148620	8/24/2018	[98220] PURPLE SAGE, WOLFCAMP (GAS)
45101	HH SO 17 20 FEDERAL 001 #002H	G	N	CHEVRON U S A INC	0	32.05060600	-104.2148620	8/26/2018	[98220] PURPLE SAGE, WOLFCAMP (GAS)
45102	HH SO 17 20 FEDERAL 001 #005H	G	N	CHEVRON U S A INC	0	32.05040001	-104.2148630	8/29/2018	[98220] PURPLE SAGE, WOLFCAMP (GAS)
45103	HH SO 17 20 FEDERAL 001 #006H	G	N	CHEVRON U S A INC	0	32.05033200	-104.2148630	-	[98220] PURPLE SAGE, WOLFCAMP (GAS)
45104	HH SO 17 20 FEDERAL 002 #001H	G	N	CHEVRON U S A INC	0	32.04916900	-104.2093030	5/5/2019	[98220] PURPLE SAGE, WOLFCAMP (GAS)
45105	HH SO 17 20 FEDERAL 002 #002H	G	N	CHEVRON U S A INC	0	32.04916900	-104.2092220	-	[98220] PURPLE SAGE, WOLFCAMP (GAS)
45106	HH SO 17 20 FEDERAL 002 #003H	G	N	CHEVRON U S A INC	0	32.04916800	-104.2091410	-	[98220] PURPLE SAGE, WOLFCAMP (GAS)
45107	HH SO 17 20 FEDERAL 002 #004H	G	N	CHEVRON U S A INC	0	32.04916800	-104.2090600	-	[98220] PURPLE SAGE, WOLFCAMP (GAS)
45108	HH SO 17 20 FEDERAL 002 #005H	G	N	CHEVRON U S A INC	0	32.04916800	-104.2089800	-	[98220] PURPLE SAGE, WOLFCAMP (GAS)
45109	HH SO 17 20 FEDERAL 002 #006H	G	N	CHEVRON U S A INC	0	32.04916800	-104.2088990	-	[98220] PURPLE SAGE, WOLFCAMP (GAS)
45115	HH SO 8 5 FED 003 #001H	G	N	CHEVRON U S A INC	0	32.04803400	-104.2134210	9/18/2018	[98220] PURPLE SAGE, WOLFCAMP (GAS)
45116	HH SO 8 5 FED 003 #002H	G	N	CHEVRON U S A INC	0	32.04810300	-104.2134210	-	[98220] PURPLE SAGE, WOLFCAMP (GAS)
45117	HH SO 8 5 FED 003 #003H	G	N	CHEVRON U S A INC	0	32.04817200	-104.2134210	9/20/2018	[98220] PURPLE SAGE, WOLFCAMP (GAS)
45118	HH SO 8 5 FED 003 #004H	G	N	CHEVRON U S A INC	0	32.04824100	-104.2134210	9/21/2018	[98220] PURPLE SAGE, WOLFCAMP (GAS)
45119	HH SO 8 5 FED 003 #005H	G	N	CHEVRON U S A INC	0	32.04830900	-104.2134200	9/22/2018	[98220] PURPLE SAGE, WOLFCAMP (GAS)
45120	HH SO 8 5 FED 003 #006H	G	N	CHEVRON U S A INC	0	32.04837800	-104.2134200	9/23/2018	[98220] PURPLE SAGE, WOLFCAMP (GAS)
45154	HH SO 17 20 FEDERAL 001 #003H	G	N	CHEVRON U S A INC	0	32.05053800	-104.2148620	8/27/2018	[98220] PURPLE SAGE, WOLFCAMP (GAS)
45155	HH SO 17 20 FEDERAL 001 #004H	G	N	CHEVRON U S A INC	0	32.05046900	-104.2148620	8/28/2018	[98220] PURPLE SAGE, WOLFCAMP (GAS)
45987	HH SO 8 5 FEDERAL 004 #001H	G	N	CHEVRON U S A INC	0	32.04759900	-104.2088330	-	[98220] PURPLE SAGE, WOLFCAMP (GAS)
45988	HH SO 8 5 FEDERAL 004 #002H	G	N	CHEVRON U S A INC	0	32.07824500	-104.2079040	-	[98220] PURPLE SAGE, WOLFCAMP (GAS)
45989	HH SO 8 5 FEDERAL 004 #003H	G	N	CHEVRON U S A INC	0	32.04759800	-104.2086720	-	[98220] PURPLE SAGE, WOLFCAMP (GAS)
45990	HH SO 8 5 FEDERAL 004 #004H	G	N	CHEVRON U S A INC	0	32.04759700	-104.2085910	-	[98220] PURPLE SAGE, WOLFCAMP (GAS)
45991	HH SO 8 5 FEDERAL 004 #005H	G	N	CHEVRON U S A INC	0	32.04759700	-104.2085110	-	[98220] PURPLE SAGE, WOLFCAMP (GAS)
45992	HH SO 8 5 FEDERAL 004 #006H	G	N	CHEVRON U S A INC	0	32.04759600	-104.2084300	-	[98220] PURPLE SAGE, WOLFCAMP (GAS)
46055	BLUE MOON STATE UNIT #001H	O	N	REGENERATION ENERGY, CORPORATION	0	32.03592900	-104.2014790	-	[64030] WELCH, DELAWARE



<h2 style="margin: 0;">Bear Tracker SWD No. 1</h2> <h3 style="margin: 0;">1 Mile Offset Lessees</h3> <h3 style="margin: 0;">3Bear Field Services LLC</h3> <h3 style="margin: 0;">Eddy Co., NM</h3>		
PCS: NAD 1983 SPCS NM-E FIPS 3001 (US Ft.)		
Drawn by: SJL	Date: 10/22/2019	Approved by: SLP
<h1 style="margin: 0; color: #8B4513;">LONQUIST & CO. LLC</h1> <div style="display: flex; justify-content: space-around; margin: 10px 0;"> <div style="background-color: #2E4D3E; color: white; padding: 5px 10px; text-align: center;"> PETROLEUM ENGINEERS </div> <div style="background-color: #6B5D3E; color: white; padding: 5px 10px; text-align: center;"> ENERGY ADVISORS </div> </div> <p style="margin: 0; color: #8B4513; font-weight: bold;"> AUSTIN · HOUSTON · WICHITA · DENVER · CALGARY </p>		
<div style="margin-bottom: 10px;"> + Bear Tracker SWD No. 1 </div> <div style="margin-bottom: 10px;"> □ 1 Mile Radius </div> <div style="margin-bottom: 10px;"> □ QQ-Section [NM-PLSS 2nd Div.] </div> <div style="margin-bottom: 10px;"> _ Section [NM-PLSS 1st Div.] </div> <div style="margin-bottom: 10px;"> ▬ Township/Range [T26S R27E] </div> <div style="margin-bottom: 10px;"> ▭ Surface Owner (STATE OF NEW MEXICO) </div> <div style="margin-bottom: 10px;"> ▨ NM - BLM (O&G Leases) </div> <div style="margin-bottom: 10px;"> ▩ NM - SLO (O&G Leases) </div> <div style="margin-bottom: 10px;"> --- Laterals </div> <div style="margin-bottom: 10px;"> API (30-015-...) SHL Status - Type (Count) <ul style="list-style-type: none"> ◇ Horizontal Surface Location (43) ● Plugged (Site Released) - Oil (11) ✱ Plugged (Site Released) - Gas (1) </div> <div style="margin-bottom: 10px;"> API (30-015-...) BHL Status - Type (Count) <ul style="list-style-type: none"> ● Active - Oil (6) ✱ Active - Gas (8) ○ Permitted - Oil (4) ◌ Permitted - Gas (24) ● Plugged (Site Released) - Oil (1) ∅ Canceled Location (1) </div> <div> Lessees <ul style="list-style-type: none"> ▭ -CHEVRON USA INC ▭ -CHEVRON USA INC; -CHEVRON MIDCONTINENT LP; -OXY Y-1 COMPANY ▭ -CHISHOLM ENERGY OPERATING LLC ▭ -CONCHO OIL & GAS LLC/COG OPERATING LLC ▭ -NOVO OIL & GAS NORTHERN DELAWARE LLC </div>		
*Well Data Source: NM-OCDDrillingInfo (2019)		

Bear Tracker SWD No. 1: Offsetting Produced Water Analysis																		
Well Name	API	Section	Township	Range	Unit	County	Formation	ph	tds_mgl	sodium_mgl	calcium_mgl	iron_mgl	magnesium_mgl	manganese_mgl	chloride_mgl	bicarbonate_mgl	sulfate_mgl	co2_mgl
IRRITABLE 22 STATE COM #002H	3001541359	22	25S	27E	B	EDDY	BONE SPRING 2ND SAND	6.8	161087	48367	8782.3	48.9	1151.9		100324.4		544	560
DOC HOLLIDAY 32 STATE COM #001H	3001541145	32	24S	27E	D	EDDY	BONE SPRING 2ND SAND	6.7	193316.3	59944.7	8287.7	63.6	1065.9	1.03	120600	170.8	17	350
PREACHER 19 FEDERAL #003H	3001541887	19	24S	27E	O	EDDY	BONE SPRING 2ND SAND	6.5	193786.1	67996.2	3049.5	50	455.6	0	119000	130	34	300
PREACHER 19 FEDERAL #003H	3001541887	19	24S	27E	O	EDDY	BONE SPRING 2ND SAND	7	177819.6	60298.5	5557.4	49.5	721.3	0	108940.6	366	0	470
JOSEY WALES 16 STATE COM #003H	3001541090	16	24S	27E	O	EDDY	BONE SPRING 2ND SAND	6.47	179419.7	56191	7263	34	907	0.8	112857	146.4	573	350
DOC HOLLIDAY 32 STATE COM #001H	3001541145	32	24S	27E	D	EDDY	BONE SPRING 2ND SAND	6.3	205799.3	64141.4	9202.6	68.4	1164.7	1.1	128748.7	122	17	430
PREACHER 19 FEDERAL #003H	3001541887	19	24S	27E	O	EDDY	BONE SPRING 2ND SAND	5.8	203717.6	70834.8	3255.7	51	483.4	0	125604.7	144	34	360
JOSEY WALES 16 STATE COM #003H	3001541090	16	24S	27E	O	EDDY	BONE SPRING 2ND SAND	7.6	176588.8	56605.8	7257.2	41.9	919.6	0	109722	146	0	430
DOC HOLLIDAY 32 STATE COM #001H	3001541145	32	24S	27E	D	EDDY	BONE SPRING 2ND SAND	7.3	197760.1	61580.1	8480.7	68.7	1113.9	1.11	123849.8	146	0	430
DOC HOLLIDAY 32 STATE COM #001H	3001541145	32	24S	27E	D	EDDY	BONE SPRING 2ND SAND	7.3	127681.6	43933.7	2003.8	31.4	394.2	0	77098	195.2	0	50
PREACHER 19 FEDERAL #003H	3001541887	19	24S	27E	O	EDDY	BONE SPRING 2ND SAND	7.4	312558	120501	1427.3	43.3	362.7	0	186000	201.4	3947	180
PREACHER 19 FEDERAL #003H	3001541887	19	24S	27E	O	EDDY	BONE SPRING 2ND SAND	7.4	312550	120501	1427.3	43.3	362.7	0	186000	201.4	0	180
JOSEY WALES 16 STATE COM #003H	3001541090	16	24S	27E	O	EDDY	BONE SPRING 2ND SAND	6.5	179141.4	59469	7527.1	41	943.9	0	109122.7	73.2	0	250
DOC HOLLIDAY 32 STATE COM #001H	3001541145	32	24S	27E	D	EDDY	BONE SPRING 2ND SAND	7	203230.2	65823.6	9280.1	59.4	1154	1.17	124268.5	48.8	0	300
FED J #001	3001522471	6	26S	27E	E	EDDY	DELAWARE	5.7	255599						160000	24	330	
FED J #001	3001522471	6	26S	27E	E	EDDY	DELAWARE	7.4	265727						158000	37	3600	
FED J #001	3001522471	6	26S	27E	E	EDDY	DELAWARE	7.6	255336						156000	76	790	
FED J #001	3001522471	6	26S	27E	E	EDDY	DELAWARE	8.5	263830						157000	78	3700	
CRAWFORD #001	3001501121	9	24S	27E	K	EDDY	DELAWARE		95055						58570	95	187	
ST HAMILTON #001	3001501126	15	24S	27E	M	EDDY	DELAWARE		301812						189600	192	2040	
MONA LISA #002	3001523094	7	25S	27E	K	EDDY	MORROW	6.17	92832.7	32968.1	2979.66	621.16	387.96		59225.4	204.58	293.62	
MONA LISA #002	3001523094	7	25S	27E	K	EDDY	MORROW			0	0	0	0		0	0	0	
R.S. STATE #001	3001501132	27	24S	27E	N	EDDY	PENNSYLVANIAN		48387						26570	1505	2263	
SERRANO 29 FEDERAL #001H	3001537763	29	24S	27E	H	EDDY	WOLFCAMP	6.5	100994.9	28702.1	5341.9	46.2	619.5	1.46	63450.1	268	0	350
HABANERO 17 FEDERAL COM #001H	3001536108	17	24S	27E	A	EDDY	WOLFCAMP	6.5	108205	35110.8	4480.2	28.5	627.9	0.61	65927.2	146	0	300
SERRANO 29 FEDERAL #001H	3001537763	29	24S	27E	H	EDDY	WOLFCAMP	6.9	102136.2	30415.1	5311.5	40.2	643.7	1.47	62812.7	183	0	350



New Mexico Office of the State Engineer

Water Right Summary

WR File Number: RA 03587 Subbasin: RA Cross Reference: -
Primary Purpose: OIL OIL PRODUCTION
Primary Status: PMT PERMIT
Total Acres: Subfile: - Header: -
Total Diversion: 0 Cause/Case: -
Owner: WESTERN VENTURA

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/	Acres	Diversion	Consumptive
			1	2		To			
259803	EXPL	1956-07-23	PMT	APR	RA 03587	T	0	0	

Current Points of Diversion

POD Number	Well Tag	Source	Q		(NAD83 UTM in meters)		X	Y	Other Location Desc		
			64Q16Q4Sec	Tws Rng							
RA 03587			3	1	4	17	26S	27E	574484	3545105*	

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

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

10/25/19 8:13 AM

WATER RIGHT SUMMARY

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
October 30, 2018
and ending with the issue dated
October 30, 2018.



Publisher

Sworn and subscribed to before me this
30th day of October 2018.

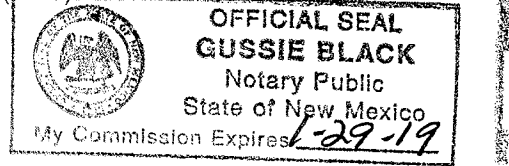


Business Manager

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 OCTOBER 30, 2018

3Bear Field Service, LLC, 415 W. Wall St., Suite 1212, Midland, Texas 79701, is filing Form G-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division for administrative approval for its salt water disposal well Bear Tracker SWD No. 1. The proposed well will be located 1,099' FNL & 712' FWL in Section 16, Township 26S, Range 27E in Eddy 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 13,650 feet to a maximum depth of 15,150 feet. The maximum surface injection pressure will not exceed 2,730 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. #33406

67112661

00220163

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

Bear Tracker SWD No. 1
1 Mile Offset Operators and Lessees List

S/T/R	QQ UNIT LETTER(S)	OPERATOR	MINERAL LESSEE	MINERAL OWNER	SURFACE OWNER	ADDRESS 1	ADDRESS 2
8/26S/27E	A,F,G,H,I,J,K,M,N,O,P	CHEVRON USA INC	-	-	-	6301 DEAUVILLE BLVD	MIDLAND, TX 79706
9/26S/27E	C,D,E,F,G,H,I,J,K,L,M,N,O,P	-	NOVO OIL & GAS NORTHERN DELAWARE LLC	-	-	1001 W WILSHERE BLVD STE 206	OKLAHOMA CITY, OK 73116
10/26S/27E	L,M	CHEVRON USA INC	-	-	-	6301 DEAUVILLE BLVD	MIDLAND, TX 79706
15/26S/27E	D,E,L	CHEVRON USA INC	-	-	-	6301 DEAUVILLE BLVD	MIDLAND, TX 79706
16/26S/27E	A,B,C,F,G,H,I,J,K,N,O,P	COG OPERATING LLC	-	-	-	600 W ILLINOIS AVE	MIDLAND, TX 79701
	D,E,L,M	COG OPERATING LLC	-	-	-	600 W ILLINOIS AVE	MIDLAND, TX 79701
		REGENERATION ENERGY CORPORATION	-	-	-	PO BOX 210	ARTESIA, NM 88210
17/26S/27E	A,B,C,D,I,J,K,L,N,O,P	CHEVRON USA INC	-	-	-	6301 DEAUVILLE BLVD	MIDLAND, TX 79706
		EOG RESOURCES INC	-	-	-	PO BOX 2267	MIDLAND, TX 79702
	E,F,G,H	CHEVRON USA INC	-	-	-	6301 DEAUVILLE BLVD	MIDLAND, TX 79706
20/26S/27E	A,B	CHEVRON USA INC	-	-	-	6301 DEAUVILLE BLVD	MIDLAND, TX 79706
21/26S/27E	B,C,D	CHEVRON USA INC	-	-	-	6301 DEAUVILLE BLVD	MIDLAND, TX 79706
Surface Location	-	-	-	-	STATE OF NEW MEXICO	310 OLD SANTA FE TRAIL	SANTA FE, NM 87504

DETERMINATION AND NOTICE OF AFFECTED PARTIES – NEW MEXICO

If an operator or mineral lessee has legal acreage or leases within one mile of the proposed salt water disposal well, their contact information is collected for notification purposes. Legal acreage of offset operators is gathered from the New Mexico Oil Conservation District's Permitting website. Minerals leased from the federal government are determined by referencing the Bureau of Land Management's Land and Mineral System Reports database. Minerals leased from the state government are determined by referencing the New Mexico State Land Office's Data Access database. Contact information for the affected parties is then extracted from the reports that were filed with the appropriate regulatory agency. Should any private minerals that are not public information fall within the one-mile radius, a title search was performed to discover the current lessee of those minerals or identifying the mineral owner of the acreage.

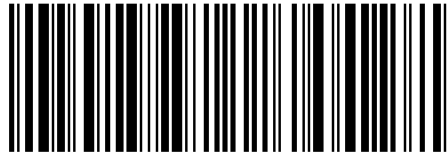
Notices were sent for the Bear Tracker SWD No. 1 application by mailing them a copy of Form C-108 on 10/25/2019. The individual tracking numbers are attached in the following pages of this application. Receipt of each application will be monitored and presented to the Oil Conservation Division upon request.



Tyler Moehlman
Petroleum Engineer

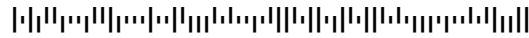
Project: 3Bear Field Services, LLC
Bear Tracker SWD No. 1

Ramona Hovey
Lonquist & CO LLC
1001 McKinney Street
Ste 1650
Houston, TX 77002



9314 8699 0430 0064 9280 23

RETURN RECEIPT (ELECTRONIC)

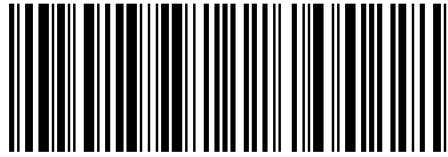


Total Postage: \$6.55

OIL CONSERVATION DIVISION
DISTRICT II
811 S. FIRST ST.
1784-BEAR TRACKER SWD #1
ARTESIA, NM 88210

Reference Number: 1784-BEAR TRACKER SWD #1

Ramona Hovey
Lonquist & CO LLC
1001 McKinney Street
Ste 1650
Houston, TX 77002



9314 8699 0430 0064 9280 30

RETURN RECEIPT (ELECTRONIC)

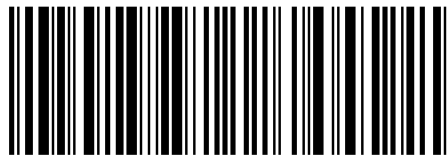


Total Postage: \$6.55

FAITH CROSBY OGMD
WATER NM STATE LAND OFFICE
310 OLD SANTA FE TRAIL
1784-BEAR TRACKER SWD #1
SANTA FE, NM 87501

Reference Number: 1784-BEAR TRACKER SWD #1

Ramona Hovey
Lonquist & CO LLC
1001 McKinney Street
Ste 1650
Houston, TX 77002



9314 8699 0430 0064 9280 47

RETURN RECEIPT (ELECTRONIC)

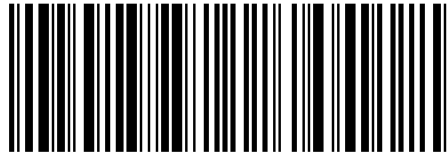


Total Postage: \$6.55

BUREAU OF LAND MGMT
301 DINOSAUR TRAIL
1784-BEAR TRACKER SWD #1
SANTA FE, NM 87508

Reference Number: 1784-BEAR TRACKER SWD #1

Ramona Hovey
Lonquist & CO LLC
1001 McKinney Street
Ste 1650
Houston, TX 77002



9314 8699 0430 0064 9280 54

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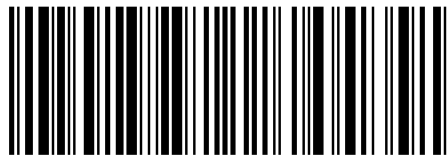


Total Postage: \$6.55

CHEVRON USA INC
6301 DEAUVILLE TRAIL
1784-BEAR TRACKER SWD #1
SANTA FE, NM 87508

Reference Number: 1784-BEAR TRACKER SWD #1

Ramona Hovey
Lonquist & CO LLC
1001 McKinney Street
Ste 1650
Houston, TX 77002



9314 8699 0430 0064 9280 61

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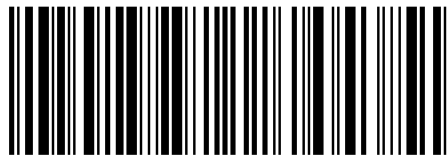


Total Postage: \$6.55

COG OPERATING LLC
600 W ILLINOIS AVE
1784-BEAR TRACKER SWD #1
MIDLAND, TX 79701

Reference Number: 1784-BEAR TRACKER SWD #1

Ramona Hovey
Lonquist & CO LLC
1001 McKinney Street
Ste 1650
Houston, TX 77002



9314 8699 0430 0064 9280 78

RETURN RECEIPT (ELECTRONIC)

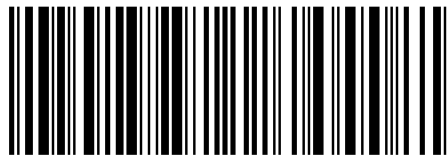


Total Postage: \$6.55

REGENERATION ENERGY CORP
PO BOX 210
1784-BEAR TRACKER SWD #1
ARTESIA, NM 88210

Reference Number: 1784-BEAR TRACKER SWD #1

Ramona Hovey
Lonquist & CO LLC
1001 McKinney Street
Ste 1650
Houston, TX 77002



9314 8699 0430 0064 9280 85

RETURN RECEIPT (ELECTRONIC)

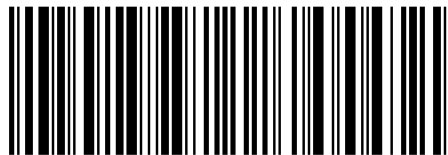


Total Postage: \$6.55

EOG RESOURCES
PO BOX 2267
1784-BEAR TRACKER SWD #1
MIDLAND, TX 79702

Reference Number: 1784-BEAR TRACKER SWD #1

Ramona Hovey
Lonquist & CO LLC
1001 McKinney Street
Ste 1650
Houston, TX 77002



9314 8699 0430 0064 9280 92

RETURN RECEIPT (ELECTRONIC)



Total Postage: \$6.55

NOVO OIL & GAS
1001 W WILSHIRE BLVD
SUITE 206
1784-BEAR TRACKER SWD #1
OKLAHOMA CITY, OK 73116

Reference Number: 1784-BEAR TRACKER SWD #1

October 25, 2019

State of New Mexico
310 Old Santa Fe Trail
Santa Fe, New Mexico 87504

Subject: Bear Tracker SWD No. 1 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 Energy LLC's Bear Tracker SWD No. 1 well. Section XIV of Form C-108 requires that the surface land owner on which the well is located and each leasehold operator within a one-half mile radius of the proposed well location be furnished with the application.

According to the New Mexico Oil Conservation Division, surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date in which this application was mailed to them.

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

Regards,



Stephen L. Pattee, P.G.
Vice President, Regulatory
Lonquist & Co., LLC

(512) 600-1774
steve@lonquist.com

October 25, 2019

Regeneration Energy Corporation
P.O. Box 210
Artesia, NM 88210

Subject: Bear Tracker SWD No. 1 Authorization to Inject

To Whom It May Concern:

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Regards,



Stephen L. Pattee, P.G.
Vice President, Regulatory
Lonquist & Co., LLC

(512) 600-1774
steve@lonquist.com

October 25, 2019

Novo Oil & Gas Northern Delaware, LLC
1001 W Wilshire Blvd Ste 206
Oklahoma City, OK 73116

Subject: Bear Tracker SWD No. 1 Authorization to Inject

To Whom It May Concern:

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Regards,



Stephen L. Pattee, P.G.
Vice President, Regulatory
Lonquist & Co., LLC

(512) 600-1774
steve@lonquist.com

October 25, 2019

EOG Resources, Inc
P.O. Box 2267
Midland, TX 79702

Subject: Bear Tracker SWD No. 1 Authorization to Inject

To Whom It May Concern:

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Regards,



Stephen L. Pattee, P.G.
Vice President, Regulatory
Lonquist & Co., LLC

(512) 600-1774
steve@lonquist.com

October 25, 2019

COG Operating LLC
600 W Illinois Ave
Midland, TX 79701

Subject: Bear Tracker SWD No. 1 Authorization to Inject

To Whom It May Concern:

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Regards,



Stephen L. Pattee, P.G.
Vice President, Regulatory
Lonquist & Co., LLC

(512) 600-1774
steve@lonquist.com

October 25, 2019

Chevron USA Inc.
6301 Deauville Blvd.
Midland, TX 79706

Subject: Bear Tracker SWD No. 1 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 Energy LLC's Bear Tracker SWD No. 1 well. Section XIV of Form C-108 requires that the surface land owner on which the well is located and each leasehold operator within a one-half mile radius of the proposed well location be furnished with the application.

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Regards,



Stephen L. Pattee, P.G.
Vice President, Regulatory
Lonquist & Co., LLC

(512) 600-1774
steve@lonquist.com

October 25, 2019

Bureau of Land Management
301 Dinosaur Trail
Santa Fe, New Mexico 87508

Subject: Bear Tracker SWD No. 1 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 Energy LLC's Bear Tracker SWD No. 1 well. Section XIV of Form C-108 requires that the surface land owner on which the well is located and each leasehold operator within a one-half mile radius of the proposed well location be furnished with the application.

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Regards,



Stephen L. Pattee, P.G.
Vice President, Regulatory
Lonquist & Co., LLC

(512) 600-1774
steve@lonquist.com

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: Mike Solomon PHONE: 303-862-3962
- 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: Ramona Hovey

TITLE: Consulting Engineer – Agent for 3Bear Field Service

SIGNATURE:  DATE: 10/25/18

E-MAIL ADDRESS: ramona@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: Bear Tracker SWD No. 1

WELL LOCATION: 1,099' FNL & 712' FWL
FOOTAGE LOCATION

D
UNIT LETTER

16
SECTION

26S
TOWNSHIP

27E
RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 26.000"

Casing Size: 20.00"

Cemented with: 5,146 sacks.

or ft³

Top of Cement: surface

Method Determined: circulation

1st Intermediate Casing

Hole Size: 17.500"

Casing Size: 13.375"

Cemented with: 2,597 sacks.

or ft³

Top of Cement: surface

Method Determined: circulation

2nd Intermediate Casing

Hole Size: 12.250"

Casing Size: 9.625"

Cemented with: 1,582 sacks.

or ft³

Top of Cement: surface

Method Determined: circulation

Production Liner

Hole Size: 8.500"

Casing Size: 7.625"

Cemented with: 465 sacks.

or ft³

Top of Cement: 8,700'

Method Determined: calculation

Total Depth: 15,150'

Injection Interval

13,650 feet to 15,150 feet

(Open Hole)

INJECTION WELL DATA SHEET

Tubing Size: 5.5", 17 lb/ft, HCL-80, BTC from 0' – 13,600'

Lining Material: Duoline

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

Packer Setting Depth: 13,600'

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, Fusselman

3. Name of Field or Pool (if applicable): SWD; Devonian-Silurian (Code: 97869)

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: 2,158'

Bone Spring: 5,752'

Wolfcamp: 8,881'

Strawn: 11,271'

Atoka: 11,557'

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**
☐ AMENDED REPORT
1220 South St. Francis Dr.**Santa Fe, NM 87505****APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

¹ Operator Name and Address 3BEAR FIELD SERVICES, LLC 415 W. WALL ST., STE 1212 MIDLAND, TEXAS 79701		² OGRID Number 372603
		³ API Number 30-015-TBD
⁴ Property Code	⁵ Property Name BEAR TRACKER SWD	⁶ Well No. 1

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
D	16	26S	27E		1,099	N	712	W	EDDY

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	Pool Code
SWD; Silurian-Devonian	97869

Additional Well Information

¹¹ Work Type N	¹² Well Type SWD	¹³ Cable/Rotary R	¹⁴ Lease Type Private	¹⁵ Ground Level Elevation 3,296.55
¹⁶ Multiple N	¹⁷ Proposed Depth 15,150'	¹⁸ Formation Devonian	¹⁹ Contractor TBD	²⁰ Spud Date ASAP
Depth to Ground water 28'		Distance from nearest fresh water well 3,938'		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"	133 lb/ft	2,170'	5,146	Surface
Surface	17-1/2"	13-3/8"	72 lb/ft	5,580'	2,597	Surface
Production	12-1/4"	9-5/8"	43.5 lb/ft	8,900'	1,582	Surface
SurfLiner	8-1/2"	7-5/8"	39 lb/ft	8,700'-13,650'	465	8,700
Tubing	-	5.5"	17 lb/ft	13,600'		

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 ☐ and/or 19.15.14.9 (B) NMAC ☒, if applicable.

Signature:



Printed name: Ramona Hovey

Title: Consulting Engineer

E-mail Address: ramona@lonquist.com

Date: October 25, 2018

Phone: 512-600-1777

OIL CONSERVATION DIVISION

Approved By:

Title:

Approved Date:

Expiration Date:

Conditions of Approval Attached

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazon Road, Artec, NM 87410
District IV
1220 S. St Francis Dr., NM 87505
Phone: (505) 476-3460 Fax (505) 476-3462

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 97869	³ Pool Name SWD; Silurian-Devonian
⁴ Property Code	⁵ Property Name BEAR TRACKER SWD	⁶ Well Number #1
⁷ OGRID No. 372603	⁸ Operator Name 3BEAR FIELD SERVICES, LLC	⁹ Elevation 3296.55'

¹⁰ Surface Location

UL or lot no. D	Section 16	Township 26 S	Range 27 E	Lot Idn	Feet from the 1099	North/South line NORTH	Feet from the 712	East/West line WEST	County EDDY
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¹¹ 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
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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>16</p> <p>① 1099.36' ②</p> <p>711.70'</p> <p>GEODETIC DATA NAD 83 GRID - NM EAST</p> <p>BEAR TRACKER SWD NO. 1 Y= 380744.78 N X= 582209.71 E LAT= 32.048679 N LONG= -104.201416 W</p> <p>1 - Y= 381856.16, X= 581487.45 2 - Y= 381768.72, X= 586805.84 3 - Y= 376471.11, X= 586837.32 4 - Y= 376532.13, X= 581537.79</p> <p>③ ④</p>	<p>¹⁷ OPERATOR CERTIFICATION</p> <p>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>Ramona K. Hovey</i> 11/2/10 Signature Date</p> <p>RAMONA K. HOVEY Printed Name Date</p> <p>ramona@longquist.com Email Address Date</p> <p>¹⁸ SURVEYOR CERTIFICATION</p> <p>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>29 OCT 2010 Date of Survey Date</p> <p><i>Jeffrey E. Hudson</i> Signature and Seal of Professional Surveyor</p> <p>JEFFREY E. HUDSON NEW MEXICO 20559 PROFESSIONAL SURVEYOR</p> <p>Certificate Number 20559</p>
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3Bear Field Services, LLC

Bear Tracker SWD No. 1

FORM C-108 Supplemental Information

III. Well Data

A. Wellbore Information

1.

Well information	
Lease Name	Bear Tracker SWD
Well No.	1
Location	S-16 T-26S R-27E
Footage Location	1,099' FNL & 712' FWL

2.

a. Wellbore Description

Casing Information				
Type	Surface	Intermediate	Production	Liner
OD	20"	13.375"	9.625"	7.625"
WT	0.635"	0.514"	0.435"	0.500"
ID	18.730"	12.347"	8.755"	6.625"
Drift ID	18.542"	12.259"	8.599"	6.500"
COD	21"	14.375"	10.625"	7.625"
Weight	133 lb/ft	72 lb/ft	43.5 lb/ft	39 lb/ft
Grade	J-55 STC	HCP-110	HCL-80 LTC	P-110 UFJ
Hole Size	26"	17-1/2"	12-1/4"	8-1/2"
Depth Set	2,170'	5,580'	8,900'	8,700'-13,650'

b. Cementing Program

Cement Information				
Casing String	Conductor	Intermediate 1	Intermediate 2	Liner
Lead Cement	HalCem	NeoCem	Stage 1: NeoCem Stage 2: VersaCem	VERSACEM w/ gas migration control additives
Lead Cement Volume	640 sks	2,129 sks	Stage 1: 312 sks Stage 2: 640 sks	465
Lead Cement Density	1.682 ft3/sk	2.767 ft3/sk	Stage 1: 2.731 ft3/sk Stage 2: 2.731 ft3/sk	1.223 f3/sk
Tail Cement	HalCem	HalCem	Stage 1: VersaCem Stage 2: VersaCem	
Tail Cement Volume	54 sks	468 sks	Stage 1: 577 sks Stage 2: 54 sks	
Tail Cement Density	1.347 ft3/sk	1.441 ft3/sk	Stage 1: 1.22 ft3/sk Stage 2: 1.334 ft3/sk	
Cement Excess	150%	75%	50%, 50%	50%
Total Sacks	5,146 sks	2,597 sks	1,582 sks	465 sks
TOC	Surface	Surface	Surface	8,700'
Method	Circulate to Surface	Circulate to Surface	Circulate to Surface	Logged

3. Tubing Description

Tubing Information	
OD	5.5"
WT	0.304"
ID	4.892"
Drift ID	4.767
COD	6.050"
Weight	17 lb/ft
Grade	HCL-80 BTC
Depth Set	0-13,600'

Tubing will be lined with Duoline.

4. Packer Description

7-5/8" x 5-1/2" TCPC Permanent Packer with High Temp Elastomer and Full Inconel 925 trim

B. Completion Information

1. Injection Formation: Devonian, Fusselman
2. Gross Injection Interval: 13,650'-15,150'

Completion Type: Open Hole

3. Drilled for injection.
4. See the attached wellbore schematic.
5. Oil and Gas Bearing Zones within area of well:

Formation	Depth
Delaware	2,158'
Bone Spring	5,752'
Wolfcamp	8,881'
Strawn	11,271'
Atoka	11,557'

VI. Area of Review

No wells within the area of review penetrate the proposed injection zone.

VII. Proposed Operation Data

1. Proposed Daily Rate of Fluids to be Injection:

Average Volume: 20,000 BPD
Maximum Volume: 25,000 BPD

2. Closed System
3. Anticipated Injection Pressure:

Average Injection Pressure: 2,048 PSI (surface pressure)
Maximum Injection Pressure: 2,730 PSI (surface pressure)

4. The injection fluid is to be locally produced water. It is expected that the source water will predominantly be from the Bone Spring and Wolfcamp formations. Attached are produced water sample analyses taken from the closest wells that feature samples from the Bone Spring, Delaware, Morrow, Pennsylvanian, and Wolfcamp formations.
5. The disposal interval is non-productive. No water samples are available from the surrounding area.

VIII. Geological Data

Devonian Formation Lithology:

The Devonian formation is a dolomitic ramp carbonate that occurs below the Woodford shale and above the Fusselman formation. Strata found in the Devonian formation include two major groups, the Wristen Buildups and the Thirtyone Deepwater Chert, with the Wristen being more abundant. The Wristen Groups is composed of mixed limestone and dolomites with mudstone to grainstone and boundstone textures. Porosity in the Wristen group is a result of both primary and secondary development. Present are moldic, vugular, karstic (including collapse breccia) features that allow for higher porosities and permeabilities. The Thirtyone Formation contains two end-member reservoir facies, skeletal packstones/grainstones and spiculitic chert, with most of the porosity and permeability found in the coarsely crystalline cherty dolomite. These particular characteristics allow for this formation to be a tremendous Salt Water Disposal horizon.

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 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.

A. Injection Zone: Devonian-Siliurian Formation

Formation	Depth
Salado	429'
Delaware	2,158'
Cherry Canyon	3,050'
Bone Spring	5,752'
Wolfcamp	8,881'
Strawn	11,271'
Atoka	11,557'
Morrow	12,016'
Mississippian Lime	13,297'
Woodford	13,521'
Devonian	13,650'
Fusselman	14,054'

B. Underground Sources of Drinking Water

Within 1-mile of the proposed Bear Tracker SWD #1 location, there is one water well. The water well has an unknown depth. Water wells in the surrounding area have an average depth of 98 ft and an average water depth of 28 ft. The upper Rustler may also be another USDW and will be protected.

IX. Proposed Stimulation Program

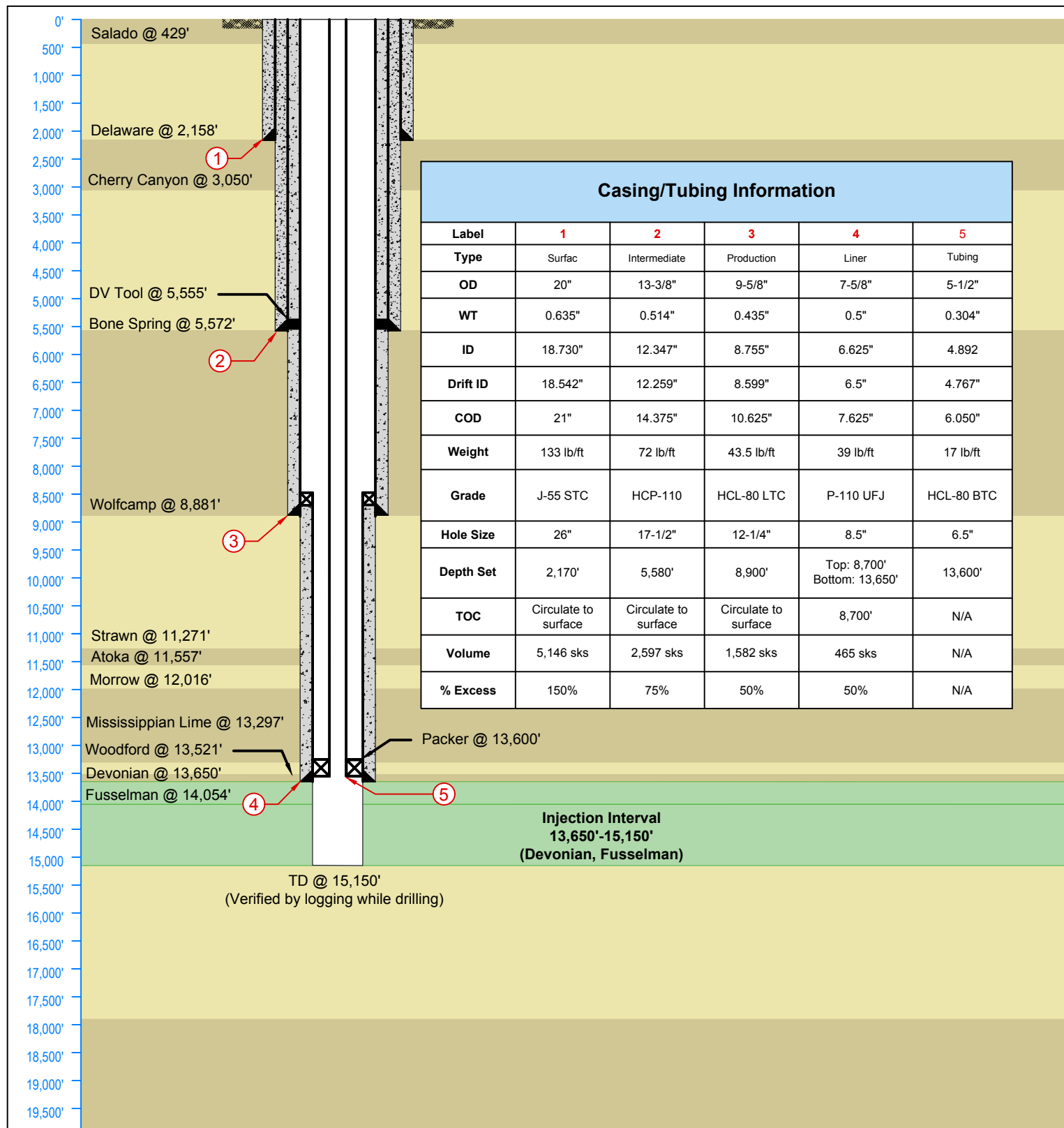
No stimulation program planned.

X. Logging and Test Data on the Well

There are no logs or test data on the well. During the process of drilling and completion resistivity, gamma ray, and density logs will be run.

XI. Chemical Analysis of Fresh Water Wells

Attached is a map of the one (1) water well that exist within one mile of the well location. Sampling from this well was attempted but the well was dry and no samples were able to be recovered. A Water Right Summary from the New Mexico Office of the State Engineer is attached for water well RA-03587.



<div>LONQUIST & CO. LLC</div> <div><div>PETROLEUM ENGINEERS</div><div>ENERGY ADVISORS</div></div> <div><div>HOUSTON CALGARY</div><div>AUSTIN WICHITA DENVER</div></div>	3Bear Field Services, LLC		Bear Tracker SWD #1	
	Country: USA		State/Province: New Mexico	County/Parish: Eddy
	Location:		Site: 1,099 FNL 712 FWL	Survey: S16-T26S-R33E
	API No: NA		Field: Devonian-Silurian	Well Type/Status: SWD
	Texas License F-9147		Project No: 1784	Date: 10/25/2019
12912 Hill Country Blvd. Ste F-200 Austin, Texas 78738 Tel: 512.732.9812 Fax: 512.732.9816	NMOCD District No: 2		Approved:	
	Drawn: TFM		Reviewed:	
	Rev No: 1		Notes:	

GEOLOGIC AFFIRMATION

I have examined available geologic and engineering data and have found no evidence of open faults or other hydrologic connection between the disposal interval and underground sources of drinking water.



Parker Jessee
Geologist

Project: 3Bear Field Services, LLC
Bear Tracker SWD No. 1