

Case 20409

March 5, 2019

Ms. Florene Davidson
Commission Clerk
New Mexico Oil Conservation Commission
1220 South St. Francis Dr.
Santa Fe, NM 87505

VIA FEDERAL EXPRESS

RE: SUBMITTAL OF C-108 APPLICATION FOR 3BEAR LLC LIBBY GAS PLANT PROPOSED
INJECTION WELLS LIBBY AGI #1 AND LIBBY AGI #2

Dear Ms. Davidson:

Enclosed are three copies of the above-referenced C-108 application, and an electronic copy will also be forwarded to you by email. Please let me know when a Case Number and hearing date can be assigned.

Please feel free to contact me at 505-842-8000 (O) or 505-239-8830 (cell) if you have any questions or require additional copies.

Sincerely,

Geolex, Inc.



James C. Hunter, RG
Senior Geologist

Enclosures

cc via Email: Mr. Kevin Burns, 3Bear Energy, LLC
Mr. Phillip Goetze, NMOCD

G:\18-025 (3 Bear AGIs)\Contracts & Budgets\Davidson.ltr001.docx

Case No.20409: Application of 3Bear Field Services, LLC for authority to inject, Lea County, New Mexico. 3Bear Field Services, LLC (3Bear) requests an order from the NM Oil Conservation Commission authorizing it to inject acid gas and carbon dioxide (CO₂) from the proposed 3Bear Libby Gas Processing Plant (the “Plant”) into its proposed 3Bear Libby AGI#1 and Libby AGI#2 wells. These two wells will be located on 3Bear’s proposed Plant in Lea County, New Mexico. The proposed AGI wells will be located in Section 26, Township 20 South, Range 36 East, NMPM, Lea County, New Mexico. 3Bear plans to inject a cumulative amount of up to 8 million standard cubic feet per day (MMSCFD) of treated acid gas from the Plant at a maximum pressure of 4,525 psig into these wells in the Devonian through Fusselman Formations, approximately 14,900 to 16,400 feet below the surface. The proposed wells will serve as the disposal wells for acid gas and CO₂ from the Plant. This application has been set for hearing before the New Mexico Oil Conservation Commission at 9:AM on April 11th, 2019, in Porter Hall at the New Mexico Oil Conservation Division’s Santa Fe office located at 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505.



GEOLEX
INCORPORATED

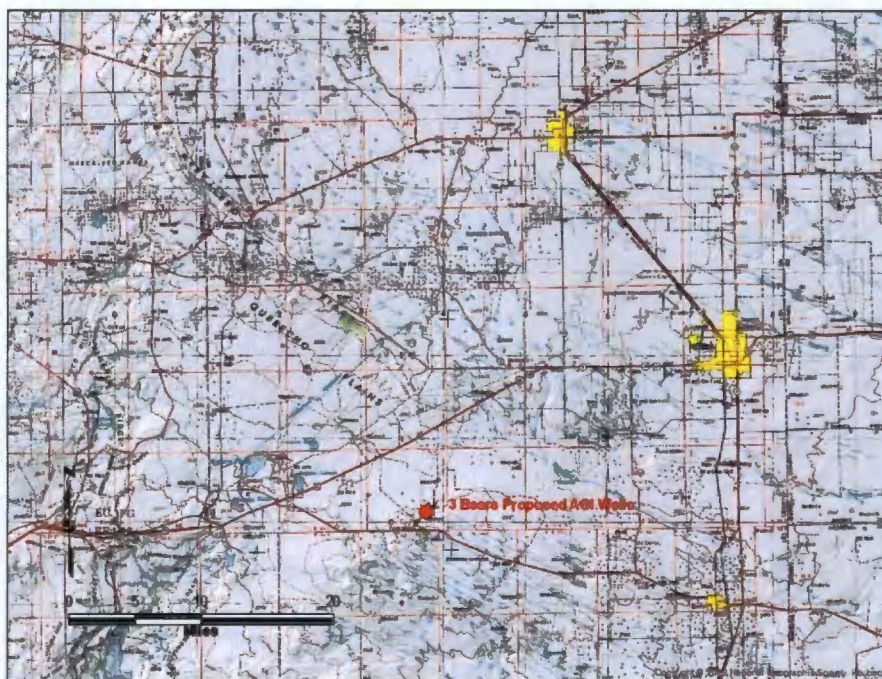
Application for Class II AGI Wells 3Bear Field Services, LLC

Libby AGI #1 and AGI #2

AGI #1 Surface Location: 1970' FWL, 1475' FSL Section 26, T20S, R34E
AGI #1 Bottom Location: 1970' FWL, 1475' FSL Section 26, T20S, R34E

AGI #2 Surface Location: 1970' FWL & 1910' FSL Section 26, T20S, R34E
AGI #2 Bottom Hole Location: 1320' FWL & 2275' FSL Section 26, T20S, R34E

Lea County, New Mexico



March 4, 2019


Prepared for:

**3Bear Field Services, LLC
500 Don Gaspar Ave.
Santa Fe, NM 87505**

Prepared by:

**Geolex, Inc.
500 Marquette Avenue, NW, Suite 1350
Albuquerque, New Mexico 87102
(505)-842-8000**

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage
Application qualifies for administrative approval? Yes X No
- II. OPERATOR: 3Bear Field Services, LLC.
ADDRESS: 500 Don Gaspar Ave., Santa Fe NM 87505
CONTACT PARTY: Alberto A. Gutierrez, R.G. - GEOLEX, INC. PHONE: (505)-842-8000
- 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. **A CROSS REFERENCE TO THE APPLICABLE SECTIONS OR APPENDICES IN THE ATTACHED C108 APPLICATION FOR EACH ROMAN NUMERAL BELOW IS SPECIFIED BY SECTION AND/OR APPENDIX NUMBERS.**
- IV. Is this an expansion of an existing project? Yes X No
If yes, give the Division order number authorizing the project: N/A
- 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. **SECTIONS 5 and 6; APPENDICES A and B.**
- 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.
SECTION 5; APPENDIX A.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected; **SECTIONS 1, 2, and 3**
 2. Whether the system is open or closed; **SECTIONS 1, 2, 4 and 7**
 3. Proposed average and maximum injection pressure; **SECTIONS 1 and 3**
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, **SECTIONS 3 and 4**
 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.). **SECTIONS 3 and 4**
- *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. **SECTIONS 4 and 5 and APPENDIX A**
- IX. Describe the proposed stimulation program, if any. N/A
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted). **WELLS ARE NOT YET DRILLED**
- *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. **SECTION 4.5**
- 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.
SECTION 7
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form. **APPENDIX B**
- 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: Alberto A. Gutierrez, C.P.G. TITLE: President, Geolex, Inc.®, Consultant to DCP Midstream LP
- SIGNATURE:  DATE: 03/04/2019
- E-MAIL ADDRESS: aag@geolex.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: **SEE ATTACHED APPLICATION**

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.

AGI #1 Surface: 1970' FWL, 1475' FSL Section 26, T20S, R34E, - SECTIONS 1, 3 and 4.

AGI #2 Surface: 1970' FWL, 1910' FSL Section 26, T20S, R34E, - SECTIONS 1, 3 and 4. (Inclined Well)

AGI #2 Bottom Hole: 1320' FWL, 2275' FSL Section 26, T20S, R34E, - SECTIONS 1, 3 and 4.

(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. **SEE SECTION 3 FOR PROPOSED WELL DESIGNS. FINAL DESIGNS WILL BE SUBMITTED WHEN PROPOSED WELLS ARE DRILLED AND COMPLETED.**

(3) A description of the tubing to be used including its size, lining material, and setting depth. **SECTION 3 AND FIGURES 4 and 5 FOR PROPOSED WELL DESIGNS**

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used. **SECTION 3**

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. **SECTIONS 1 and 4**

(2) The injection interval and whether it is perforated or open-hole. **SECTION 3**

(3) State if the well was drilled for injection or, if not, the original purpose of the well. **N/A- WELLS NOT YET DRILLED**

(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. **N/A**

(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. **SECTIONS 4 and 5; APPENDICES A and B**

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. **SECTION 5; APPENDIX B WE WILL NOTIFY OPERATORS AND LEASEHOLD OWNERS AND SURFACE OWNERS WITHIN THE AREA OF REVIEW PURSUANT TO NMCD REGULATIONS AND WE WILL SUBMIT AFFIDAVITS OF PUBLICATION OF NOTICE AND CERTIFIED MAIL RETURN RECEIPTS AT HEARING.**

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: **SEE APPENDIX B FOR DRAFT OF PUBLIC NOTICE – AFFIDAVIT OF PUBLICATION OF NOTICE FROM NEWSPAPER WILL BE SUBMITTED AT HEARING.**

- (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.

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1.0 EXECUTIVE SUMMARY

On the behalf of 3Bear Field Services, LLC ("3Bear") Geolex, Inc. (Geolex) has prepared and is hereby submitting a complete C-108 application for approval to drill, complete, and operate two acid gas injection (AGI) wells (Libby AGI#1 and Libby AGI #2) in Section 26, T20S, R34E in Lea County, New Mexico (Figure 1). These wells are intended as redundant wells to assure continuous operation of the plant should one well require repairs. Under normal operations both wells may be operated simultaneously, or 3Bear could use either independently.

3Bear operates the Libby Gas Plant facilities at this location, and the proposed wells are designed to accept a cumulative total of up to 8 MMSCFD of treated acid gases (TAG) from this facility. AGI #1 will be a vertical well, located at 1970' FWL, 1475' FSL in Section 26. AGI #2 will be a deviated well, and the surface location will be at 1970' FWL and 1910 FSL, with a bottom hole location of 1320 FWL and 2275 FWS, also in Section 26 (Figure 2).

The proposed injection zone will be in the Devonian and Upper Silurian Wristen and Fusselman Formations, at depths of approximately 14,900 to 16,400 feet. Analysis of the reservoir characteristics of these units confirms that they act as excellent closed-system reservoir that will accommodate 3Bear's TAG disposal needs.

The caprock above the injection zone consists of approximately 200 feet of the dense Woodford Shale, as well as a significant thickness of the tight Mississippian carbonates that overly the Woodford. These formations will contain the injected TAG, and prevent any up migration.

All casing segments will be cemented to the surface, and the disposal zone in the well will be completed as an open-hole interval, from approximately 14,900 to 16,400 feet. Specific casing setting and completion depths will be selected following analysis of geophysical logs, mud logs, and sidewall cores.

There are 69 completed wells within one mile of the proposed 3Bear AGI wells. Specific well data is summarized in Appendix A. Of these 39 are active, 29 are plugged and abandoned. This is also one approved location that have not been drilled (exclusive of the proposed AGI wells). Only two of these completed wells penetrate deeper than the top of the injection zone (14,950'). These are the 3Bear SWD #1, located 0.49 miles northeast of the proposed AGI wells, and the plugged and abandoned Arlen L. Edgar Federal 001, located 0.40 miles south of the project.

All mineral leases in the one-mile circle of the well location are owned by the United States Government, administrated by the Bureau of Land Management (BLM). Operators, surface owners, lessees, and other interested parties are identified in Appendix B.

Based on the New Mexico Water Rights Database from the New Mexico Office of the State Engineer, there are no freshwater wells within the one-mile area of review for the proposed AGI wells. The area surrounding the proposed injection site is arid and there are no natural bodies of surface water within one mile of the proposed well locations.

In preparing this C-108 application, Geolex conducted a detailed examination of all of the elements required to be evaluated in order to prepare and obtain approval for this application for injection. The elements of this evaluation include:

- Identification and characterization of all hydrocarbon-producing zones of wells that surround and are present on the plant site.
- The depths of perforated pay intervals in those wells relative to the depth of the target injection zones (Devonian/Silurian, Wristen and Fusselman).
- The past and current uses of the proposed intervals.
- The stratigraphic and structural setting of the targeted zones relative to any nearby active or plugged wells, and other wells penetrating the intervals.
- The identification of and sample notification letter that will be sent to all surface owners within a one-mile radius of the proposed injection well.
- Identification and characterization of all plugged and operating wells penetrating the proposed injection zone within a one-mile radius of the proposed injection well.
- The details of the proposed injection operation, including general well design and average and maximum daily rates of injection and injection pressures.
- Sources of injection fluid and compatibility with the formation fluid of the injection zone.
- Location and identification of any fresh water bearing zones in the area; the depth and quality of available groundwater in the vicinity of the proposed well, including a determination that there are no structures which could possibly communicate the disposal zone with any known sources of drinking water.

Based upon this detailed evaluation 3Bear has determined that the proposed AGI wells are a safe and environmentally-sound project for the disposal of TAG. Furthermore, our analyses demonstrate that the proposed injection wells will not negatively impact any waters of the State, nor have any actual or potential impacts to production in the area. This application is fully protective of correlative rights.

2.0 INTRODUCTION AND ORGANIZATION OF C-108 APPLICATION

The completed NMOCD Form C-108 is included before the Table of Contents of this document and references appropriate sections where data required to be submitted are included herein.

This application organizes and details all of the information required by NMOCD and NMOCC to evaluate and approve the submitted Form C-108 – Application for Authorization to Inject. This information is presented in the following categories:

- A detailed description of the location, construction, and operation of the proposed disposal well (Section 3.0)
- A summary of the regional and local geology, the hydrogeology, and the location of drinking water wells within the area of review (Section 4.0)
- The identification, location, status, production zones, and other relevant information on oil and gas wells within the area of review. (Section 5.0)
- The identification and required notification for operators and surface land owners that are located within the area of review (Section 6.0)
- An affirmative statement, based on analysis of geologic conditions at the site, that there is no hydraulic connection between the proposed injection zone and any known sources of drinking water (Section 7.0)

3.0 PROPOSED CONSTRUCTION AND OPERATION OF 3BEAR AGI #1 and #2 WELLS

TAG from the plant's sweeteners will be routed to a central compressor facility, located east of the well heads. Compressed TAG will then be routed to the wells via high-pressure rated lines. Design details are provided in Sections 3.1 and 3.2 below.

3.1 DESIGN OF 3BEAR LIBBY AGI #1

The locations of the two AGI wells, and adjacent other wells, are shown in Figure 2, and a schematic of the injection system is shown in Figure 3. The AGI #1 will be advanced vertically to its anticipated total depth of approximately 16,400 feet. The injection zone (approximately 14,900 to 16,400 feet) will be completed as an open hole interval. Libby AGI #2 will be deviated to a bottom-hole location approximately 1,000 feet northwest of its surface location.

The AGI facilities and wells will be integrated components of the Libby Plant design. The preliminary well design for the new injection well AGI #1 is shown on Figure 4, and Figure 5 shows a schematic of AGI #2. These wells are designed to accommodate injection of 8 MMSCFD of TAG. The tubing and cement details of the well design may be modified after review with BLM. Since the subsurface mineral rights are owned by the United States, all well designs and drilling operations and testing will be conducted in accordance with the regulations and guidance provided by the governing agency, the BLM.

Table 1 below summarizes the proposed casing schedule for the wells. The conductor casing (20") will be set in a competent bed above the salt, at approximately 300 feet. The surface casing (13 3/8") will be set through the salt to approximately 1,950 feet in the upper Delaware Group. The 9 5/8" intermediate casing will be advanced to approximately 12,300 feet below the base of the Wolfcamp.

Table 1: Summary of Proposed Casing Schedule

	Borehole (in)	OD (in)	PPF	Grade	Thread	Top (ft)	Bottom (ft)	Length (ft)
Conductor	26	20.000	94	J55	BTC	0	300	300
Surface	17.50	13.375	68	J55	BTC	0	1950	1950
Intermediate	12.25	9.625	40	L80-IC	BTC	0	12300	12300
Production_1	8.625	7.000	29	P110	LTC	0	14625	14625
Production_2	8.625	7.000	32	Vallourec	VAM	14625	14925	300
Tubing_1	na	3.500	9.3	L80-IC	BTS-8	0	14550	14550
Tubing_2	na	3.500	9.2	Inconel G3	VAM	14550	14850	300
Open Hole	5.875	na	na	na	na	14925	16400	1475

The 7" production casing will be set in the Woodford Formation at approximately 14,925 feet. Approximately 14,625 feet of conventional steel casing will be used, as well as 300 feet of Corrosive Resistant Alloy (CRA) to 14,925 feet. The final completion will be constructed as a 5 7/8" open hole interval, to a total depth of approximately 16,400 feet at the top of the Montoya Formation.

Both intermediate segments will be logged using Dual Induction and Density-Neutron-Gamma Ray Porosity. The proposed open hole logging suite for the TD run consists of a Dual Induction, Density-Neutron-Gamma Ray Porosity and Fracture Matrix Identification (FMI) log in the lower Woodford (cap rock) and the Devonian, Wristen and Fusselman units

Sidewall cores will be collected from the tight Woodford caprock above the Devonian and in the Devonian and target reservoir units. Representative core samples will be analyzed in the laboratory to determine caprock and reservoir permeabilities and porosity.

All casing segment will be cemented to the surface. A casing integrity test (pressure test) will be performed to test the casing. Full 360-degree cement-bond logs will be performed for each casing segment as well.

Once the integrity of the cement jobs has been determined a temporary string of removable packer and tubing will be run, and injection tests (step tests) will be performed to determine the final injection pressures and volumes. Once the reservoirs have been tested, the final tubing string will include a permanent packer, approximately 14,550 feet of 5 ½-inch premium thread tubing, and 300' of 3 ½" CRA tubing to extend to the packer at 14,850 feet.

3.2 DESIGN OF 3BEAR LIBBY AGI #2

Libby AGI #2 will be drilled, tested and completed as described above for Libby AGI #1, but will be deviated to a bottom-hole location approximately 1,000 feet northwest of the surface location.

Libby AGI #2 will be deviated to safely avoid the horizontal segment of the Cimarex Hanson 26 Federal Com 002 (3002540819), which runs north-south at a depth of approximately 11,100 feet along the western border of the 3Bear facility (Figure 2). The kick-off point of the well will be at an approximate depth of 12,300 feet below the bottom of the 9 5/8" casing, and deviated northwest at an angle of approximately 15 degrees. This track will intercept the target zone approximately 700 feet northwest of the surface location, and will reach the true vertical total depth approximately 1,000 feet away from the surface location. The estimated measured depth will be approximately 16,515 feet.

A schematic of the Libby AGI #2 is provided as Figure 5.

3.3 INJECTION VOLUME CALCULATIONS

Table 2 below summarizes the calculations used to determine the radius of injection after 30 years of operating at an average rate of 8.0 MMSCFD.

Review of available log data and other geological information indicates that there is approximately 1500 feet of reservoir rock in the proposed injection zone with an average porosity of 3.5 percent or more. Incorporating the calculated residual water (S_w) of 0.66, this yields a net available porosity of 17.85 feet.

Based on these values, the injection plume is calculated to cover approximately 296 acres, with a radius of 2,027 feet (0.38 miles). The calculated plume is shown in Figure 6. This figure shows that the calculated plume is well within the one-half mile area of review.

Figure 6 shows the calculated plumes as if the complete 8 MMSCFD was injected in each well for 30 years. Although the total amount of TAG will be distributed between the wells, this figure shows the most conservative scenario if one well was used exclusively. In reality, smaller plumes for each well will be created over the life of the plant.

Even in the most conservative model, the 0.38-mile TAG plume would not reach the 3Bear Libby SWD (3002544288) at 0.5 miles northeast from the nearest AGI well, nor would the TAG reach the plugged Arlen Edgar well (3002523578) located 0.40 miles south in Section 35.

Table 2: Calculated Injection Area and Radius

PROPOSED INJECTION STREAM CHARACTERISTICS

TAG	H ₂ S	CO ₂	H ₂ S	CO ₂	TAG
Gas vol MMSCFD	conc. mol %	conc. mol %	inject rate lb/day	inject rate lb/day	inject rate lb/day
8	20	80	151876	784489	936365

CONDITIONS AT WELL HEAD

Well Head Conditions		TAG							
Temp F	Pressure psi	Gas vol MMSCFD	Comp CO ₂ :H ₂ S	Inject Rate lb/day	Density ¹ kg/m ³	SG ²	density lb/gal	volume ft ³	volume bbl
90	1800	8	80:20	936365	787.00	787.00	6.57	19049	3393

CONDITIONS AT BOTTOM OF WELL

Injection Zone Conditions					TAG				
Temp F	Pressure ³ psi	Depth _{top} ft	Depth _{bottom} ft	Thickness ⁴ ft	Density ¹ kg/m ³	SG ²	density lb/gal	volume ft ³	volume bbl
210	6700	14900	16400	1500	814.00	814.00	6.80	18418	3280

CONDITIONS IN RESERVOIR AT EQUILIBRIUM

Injection Reservoir Conditions					TAG				
Temp ⁵ F	Pressure ³ psi	Ave. Porosity %	Sw ⁶	Porosity ft	Density ¹ kg/m ³	SG ²	density lb/gal	volume ft ³	volume bbl
210	6400	3.5	0.66	17.85	713.00	0.71	5.95	21027	3745

CONSTANTS

	SCF/mol	
Molar volume at STD	0.7915	
	g/mol	lb/mol
Molar weight of H ₂ S	34.0809	0.0751
Molar weight of CO ₂	44.0096	0.0970
Molar weight of H ₂ O	18.015	0.0397

¹ Density calculated using AQUALibrium software

² Specific gravity calculated assuming a constant density for water

³ PP is extrapolated using successful Drill Stem Tests at nearby wells

⁴ Thickness is the average total thickness of porous units in the reservoir zone

⁵ Reservoir temp. is extrapolated from bottomhole temp.

measured at nearby wells

⁶ Porosity is estimated using geophysical logs from nearby wells

CALCULATION OF MAXIMUM INJECTION PRESSURE LIMITATION

SG _{TAG}	0.8005
PG = 0.2 + 0.433 (1.04-SG _{TAG})	0.304 psi/ft
IP _{max} = PG * Depth	4525 psi

Where: SG_{TAG} is specific gravity of TAG; PG is calculated pressure gradient; and IP_{max} is calculated maximum injection pressure.

CALCULATION OF 30 YEAR AREA OF INJECTION

Cubic Feet/day (5.6146 ft ³ /bbl)	21027 ft ³ /day
Cubic Feet/30 years	230398136 ft ³ /30 years
Area = V/Net Porosity (ft)	12907459 ft ² /30 years
Area = V/Net Porosity (ft) (43560 ft ² /	296.3 acres/30 years
Radius =	2027 ft
Radius =	0.38 miles

3.4 CALCULATED MAXIMUM ALLOWABLE OPERATING PRESSURE (MAOP)

The total volume of TAG to be injected under this scenario will be approximately 6 MMSCFD. Pressure reduction valves will be incorporated to assure that maximum allowable operating pressure allowed by NMOCD will not be exceeded.

The MAOP for the 3Bear Libby AGI wells is calculated using the following method approved by NMOCD as shown below:

$$\text{IPmax} = \text{PG} (\text{Dtop}) \quad \text{where: } \begin{array}{l} \text{IPmax} = \text{maximum surface injection pressure (psig)} \\ \text{PG} = \text{pressure gradient of mixed injection fluid (psig/foot)} \\ \text{Dtop} = \text{depth at top of perforated interval of injection zone (feet)} \end{array}$$

and $\text{PG} = 0.2 + 0.433 (1.04 - \text{SG}_{\text{TAG}})$ where:

SG_{TAG} = specific gravity of the Treated Acid Gas (~0.8005)

Therefore:

$$\text{PG} = 0.2 + 0.433 (1.04 - 0.8005) = 0.304$$

$$\text{IPmax} = \text{PG} (\text{Dtop}) = 0.304 \times 14,900 = 4,525 \text{ psig}$$

3Bear requests a MAOP to 4,525 psig.

4.0 REGIONAL AND LOCAL GEOLOGY AND HYDROGEOLOGY

4.1 GENERAL GEOLOGIC SETTING/SURFICIAL GEOLOGY

The Libby Facility will be located in central area of Section 26, T20S, R34E in Lea County, New Mexico, about 30 miles west of Hobbs, New Mexico (Figure 1).

The Plant location is within a portion of the Pecos River basin referred to as the Querecho Plains reach (Nicholson & Clebsch, 1961). This area is relatively flat and largely covered by sand dunes underlain by a hard caliche surface. The dune sands are locally stabilized with shin oak, mesquite and some burr-grass. There are no natural surface bodies of water or groundwater discharge sites within one mile of the Plant and where drainages exist in interdunal areas, they are ephemeral, discontinuous, dry washes. The proposed well site is underlain by Quaternary alluvium overlying the Triassic redbeds of the Santa Rosa Formation (Dockum Group), both of which are local sources of groundwater. The thick sequences of Permian through Ordovician rocks that underlie these deposits are described generally below.

4.2 BEDROCK GEOLOGY

The 3Bear Facility and proposed wells are located in the northern portion of the Delaware Basin, a sub-basin of the larger, encompassing Permian Basin, which covers a large area of southeastern New Mexico and west Texas (Figure 7). The Permian Basin lies within the area of the larger, ancestral (pre-Mississippian) Tabosa Basin, which covered an area that included the entire present-day Permian Basin area and beyond. The Tabosa Basin was a shallow sub-tropical basin throughout the period between the Ordovician and early Mississippian (Osagean). The Permian Basin as we know it today began to take form during the Middle to Late Mississippian, with various segments (Delaware and Midland Basins, Central Basin Platform, North Platforms) arising from the ancestral Tabosa Basin. The Delaware Basin was subsequently deepened by periodic deformation during the Hercynian orogeny of the Pennsylvanian through Early Permian. Following the orogeny, the Delaware Basin was structurally stable and gradually was filled by large quantities of clastic sediments while carbonates were deposited on the surrounding shelves, and was further deepened by basin subsidence.

Figure 8 is based on a reference well showing the formations that underlie the proposed well site. Production in this area is found in the shallow Permian Yates and Seven Rivers Formations, and in the deeper Leonardian and Wolfcamp zones. Production is also found in the Pennsylvanian Morrow Formation, at depth to 13,240 feet. No deeper production occurs in this area in deeper units, and the proposed injection zone is separated by approximately 1,100 feet from the Morrow.

Figure 9 shows the structural geometry of the top of the Devonian. The Devonian dips southwest in this area, off the flank of the Central Basin Platform (Figure 7). Although control is limited for the Devonian in this area, there is little evidence for significant faulting at these depths.

Figure 10 is a North-South structural cross section of the area of interest, and the wells employed are shown in Figure 9. Zones with porosity in excess of 5% are shaded in yellow. Approximately 200 feet of the tight shales of the Woodford lie immediately above the proposed injection zone.

Figure 11 is another Devonian-top structure map, including other deep wells from the Lea Field. This also shows the southwesterly structure trends. A significant east-down normal fault trends north-south approximately 2 miles east of the proposed AGI wells, and poses no threat to the project.

Figure 12 is stratigraphic cross-section, with control wells shown in Figure 11. It shows in more detail the zones with porosity above 5%, and also indicates that the base of the proposed injection zone is approximately 730 feet above the Precambrian basement

4.3 LITHOLOGIC AND RESERVOIR CHARACTERISTICS OF THE SILURO-DEVONIAN FORMATIONS

The proposed injection interval includes the Devonian Thirty-one, and Silurian Wristen and Fusselman Formations, collectively referred to as the Siluro-Devonian. The injection interval also includes the Ordovician upper Montoya Formation. The proposed injection interval includes a number of intervals of dolomites and dolomitic limestones with moderate to high primary porosity, and secondary, solution-enlarged porosity that is related to karst events that periodically occurred throughout the section, most notably in the Fusselman Formation (see Figures 10 and 12). These karst events produced solution cavities and enlarged fractures throughout the section, which can be substantial enough to provide additional permeability that is not readily apparent on well logs. The porous zones are separated by tight limestones and dolomites.

There are no producing zones within or below the Siluro-Devonian in the area of the proposed well, and the injection interval is separated from the nearest producing zone (Morrow) by 200 feet of Woodford shale.

4.4 CHEMISTRY OF THE RESERVOIR FLUIDS

Reservoir fluids were collected and analyzed from the Devonian interval at the DCP Midstream Zia AGI #2 (3002542207), located in Section 19, T19S, R 32E, approximately 11 miles northeast of the proposed AGI wells. These analyses showed an average of TDS of 42,750 parts per million (ppm). The major ions were chloride (23,700 ppm) and sodium (15,140 ppm). The Devonian reservoir fluids will be compatible with produced waters from wells in this area.

4.5 GROUNDWATER HYDROLOGY IN THE VICINITY OF THE PROPOSED INJECTION WELL

A review of the State Engineer's files shows no reported water wells within one mile of the proposed 3Bear AGI well location. Total dissolved solids in the shallow groundwater in the project area is highly variable, ranging from 5,000 to over 125,000 parts per million (Hydrological Assessment, Figure 4-9, p. 4-15). As described in Section 3.1, the surface casing will be extended to approximately 1950 feet, effectively isolating the shallow ground water.

5.0 OIL AND GAS WELLS IN THE 3BEAR AGI WELL AREA OF REVIEW

Appendix A summarizes the recorded wells within one mile and two miles of the bottom-hole locations of the 3Bear proposed Libby AGI #1 and Libby AGI #2. Figure A-1 shows the locations of the one-mile wells, and Figure A-1 shows wells in the two-mile radius. Table A-1 identifies the wells within one mile of the bottom-hole location of proposed Libby AGI #1 (a vertical well), and Table A-2 identifies the wells within one mile of the bottom-hole location of the deviated proposed Libby AGI #2. Table A-3 identifies all recorded wells within two miles of the proposed 3Bear AGI wells

Within the one-mile radius area of review for the proposed bottom hole location of the 3Bear Libby AGI #1 well, NMOCD records identify a total of 65 completed wells. Of these 38 are active and 26 are plugged and abandoned. There is also one well application approved and awaiting drilling. Two of these completed wells penetrate deeper than the top of the injection zone (14,950'). These are the 3Bear SWD #1, located 0.40 miles northeast of the proposed AGI wells, and the plugged and abandoned Arlen L. Edgar Federal 001, located 0.50 miles south of the project.

Within the one-mile radius area of review for the proposed bottom hole location of the 3Bear Libby AGI #2 well, NMOCD records identify a total of 66 completed wells. Of these 38 are active and 27 are plugged and abandoned. There is also one well application approved and awaiting drilling. Two of these completed wells penetrate deeper than the top of the injection zone (14,950'). These are the 3Bear SWD #1, located 0.59 miles northeast of the proposed AGI wells, and the plugged and abandoned Arlen L. Edgar Federal 001, located 0.57 miles south of the project.

Appendix A also provides the plugging information for the Arlen L. Edgar Federal 001.

6.0 IDENTIFICATION AND REQUIRED NOTIFICATION OF OPERATORS, SUBSURFACE LESSEES, AND SURFACE OWNERS WITHIN THE AREA OF REVIEW

Geolex contracted with Elkhorn Land and Title of Roswell, New Mexico to research land records in Eddy Counties to obtain a listing of all operators, oil, gas and mineral lessees, and surface owners within a one-mile radius of the proposed AGI well. Appendix B includes the results from that search.

Table B-1 summarizes the surface owners, Table B-2 identifies the Operators, and Table B-3 lists working interest owners in the one-mile area of review. Table B-4 comprises the universe of persons that must be notified 20 days prior to the NMOCC hearing. Figure B-1 shows the locations of the surface owners, and Figure B-2 shows the Operators and the working interest owners

Appendix B also includes a copy of the notice letter text that will be provided to the parties. Individual notices will be sent and copies of the individual Notice Letters and Certified Mail Receipts, and Copies of the newspaper notice and affidavit of publication, will be provided to the Commission after the receipt of a Case Number and a date for the hearing.

7.0 AFFIRMATIVE STATEMENT OF LACK OF HYDRAULIC CONNECTION BETWEEN PROPOSED INJECTION ZONE AND KNOWN SOURCES OF DRINKING WATER

As part of the work performed to support this application, a detailed investigation of the structure, stratigraphy and hydrogeology of the area surrounding the proposed 3 Bear AGI wells has been performed. The investigation included the analysis of available geologic data and hydrogeologic data from wells and literature identified in Sections 3, 4 and 5 above including related appendices. Based on this investigation and analysis of these data, it is clear that there are no open fractures, faults or other structures which could potentially result in the communication of fluids between the proposed injection zone with any known sources of drinking water or oil or gas production in the vicinity as described above in Sections 4 and 5 of this application.

I have reviewed this information and affirm that is correct to the best of my knowledge.

James C. Hunter, R.G
Senior Geologist
Geolex, Inc.

_____ Date: _____

Figures

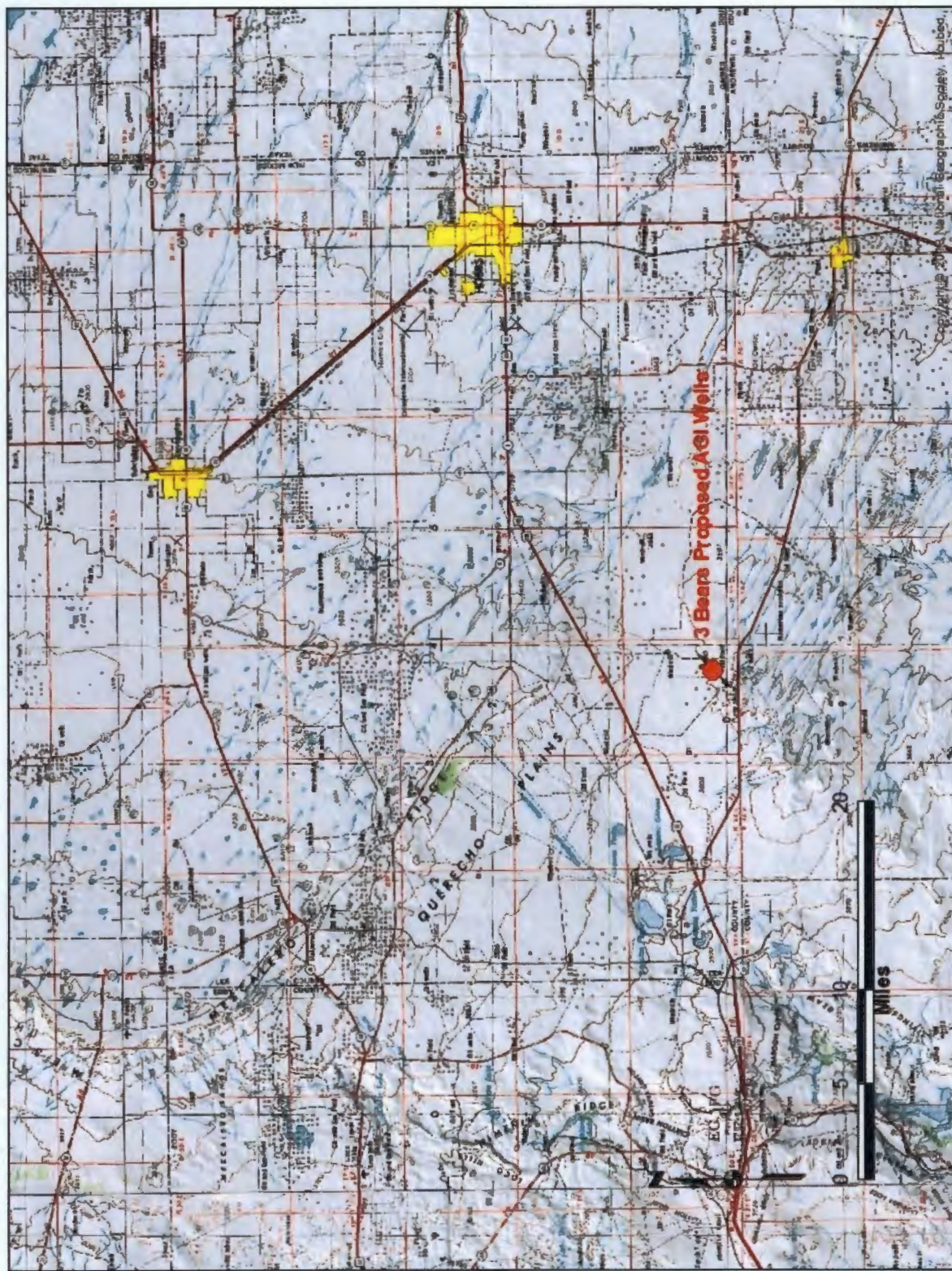


Figure 1: Location of Proposed 3Bear AGI Wells

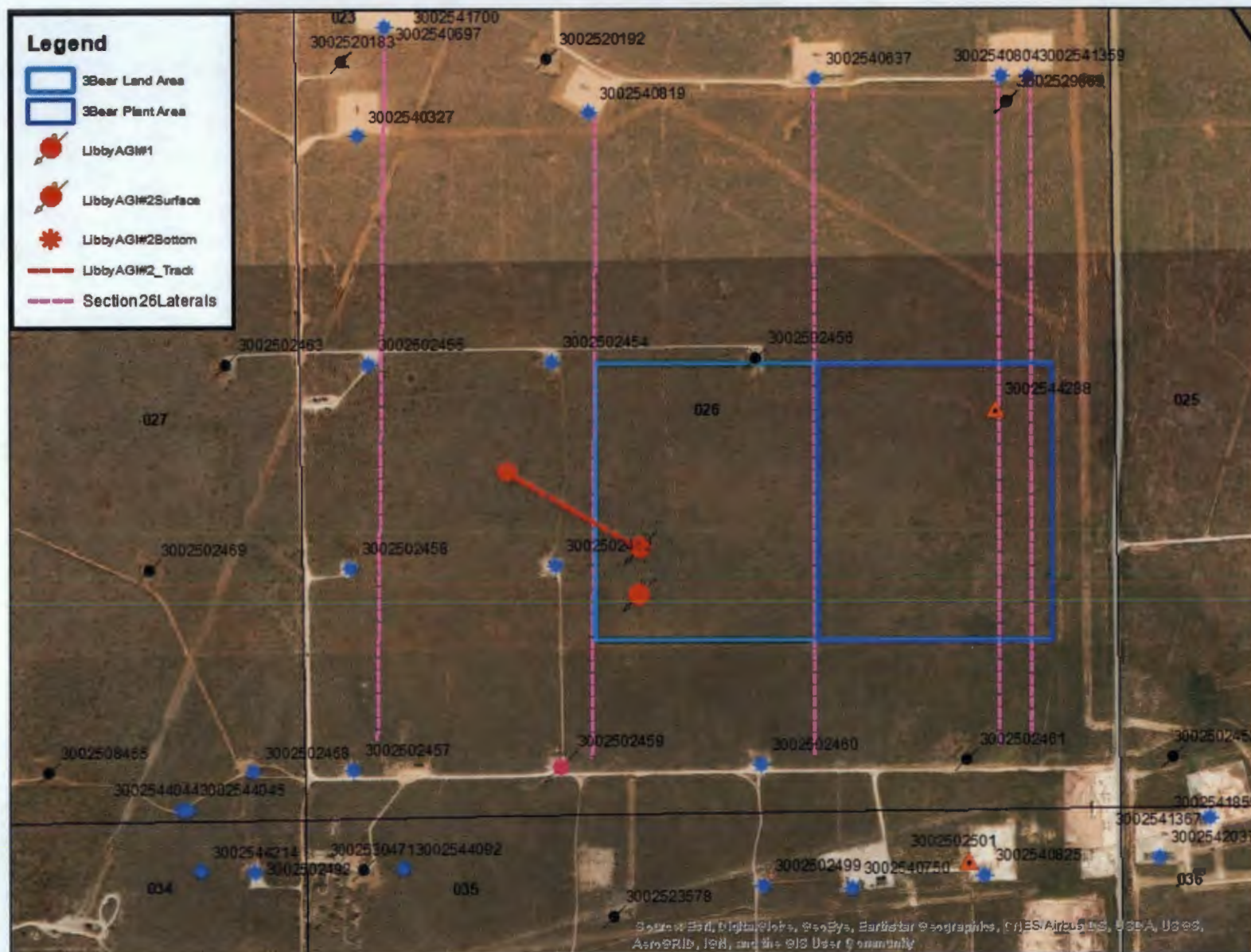


Figure 2: Detailed Location Map, 3Bear Plant Area and Proposed AGI Wells

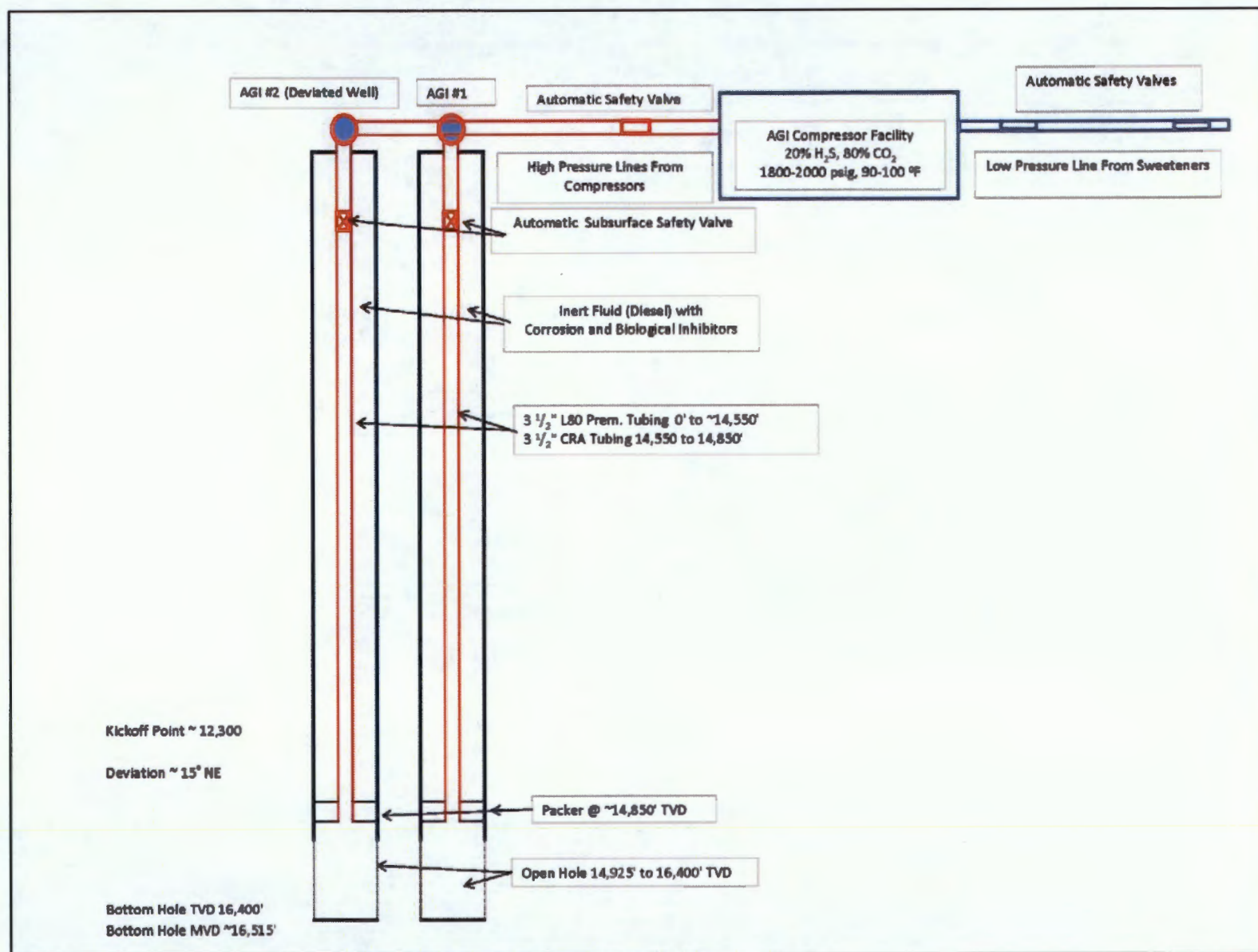


Figure 3: Schematic of 3Bear AGI System

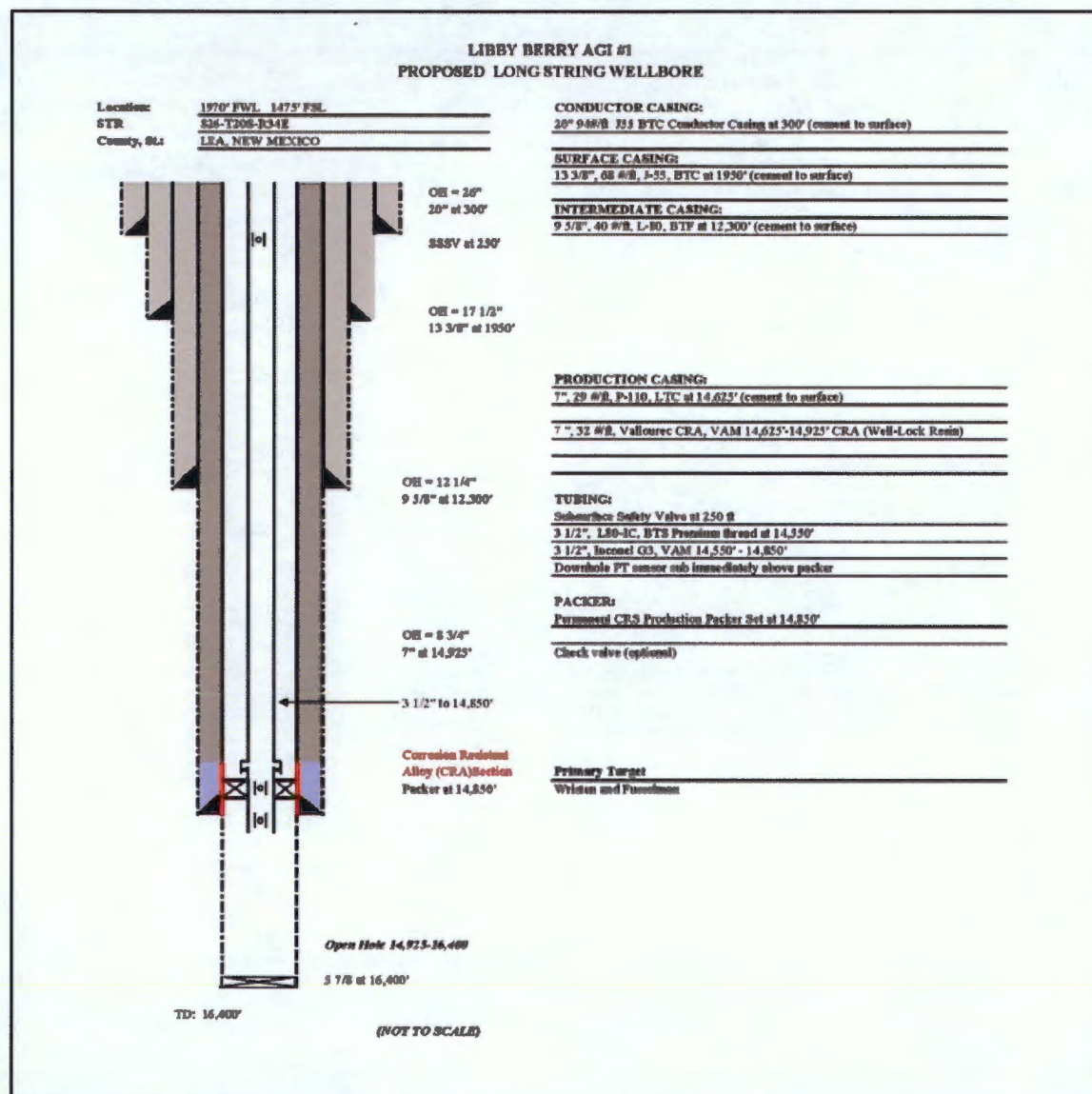


Figure 4: Schematic of Proposed AGI #1

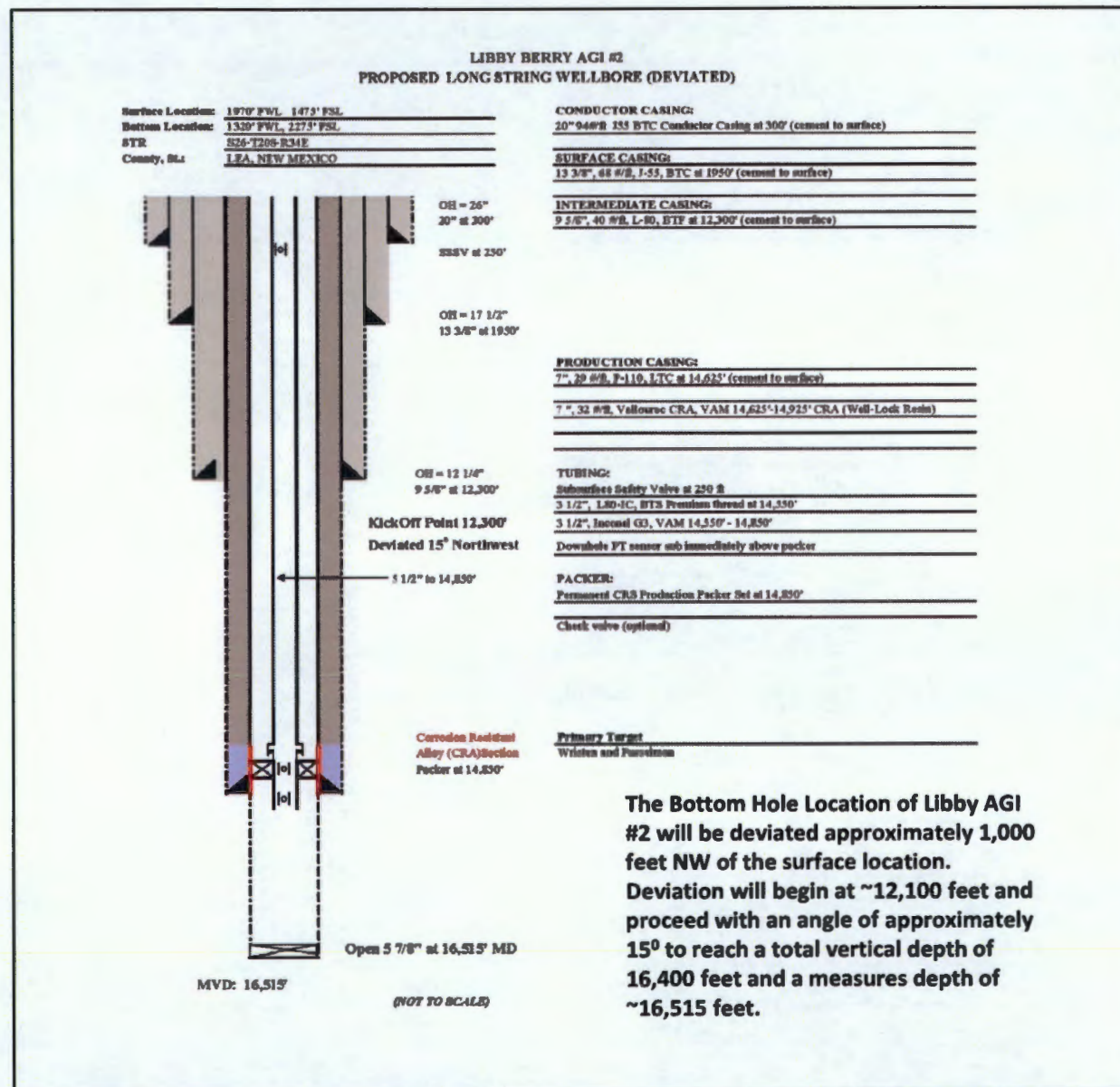
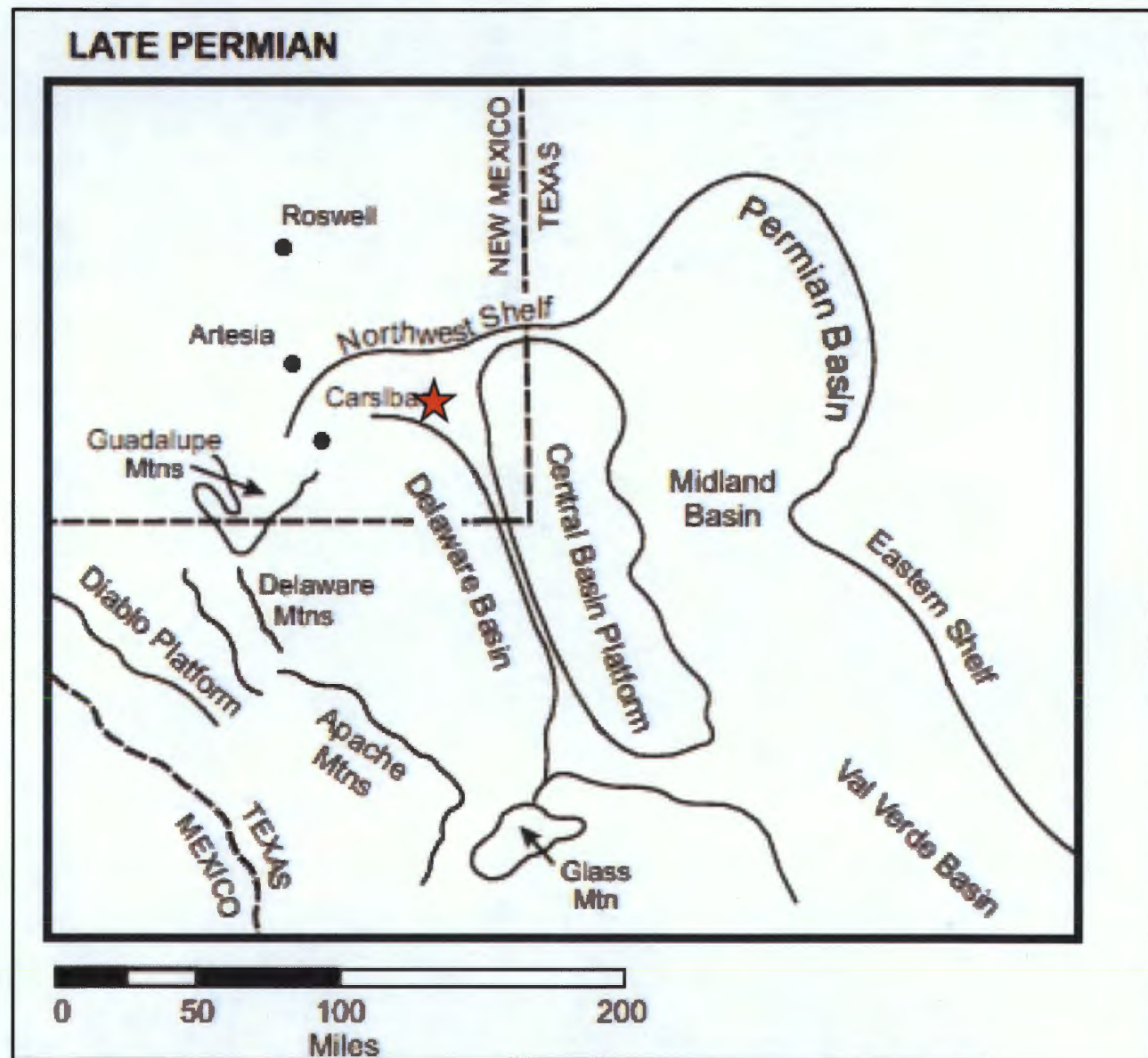


Figure 5: Schematic of Deviated Proposed AGI #2

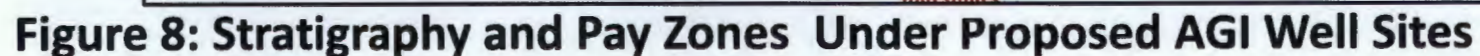


Location of the proposed
3Bear AGI wells is shown by
the red star.

Figure 7: General Structural Features of the Permian Basin

(Modified from Ward, et al 1968)

These formations are sufficiently isolated from the active pay zones by over 1,000 feet of tight, Mississippian (Chester through upper Woodford) limestones and shales.



Map showing the only wells that penetrated below the Woodford shale in the immediate area of the 3 Bear plant site.

Because of the sparsity of deep well control, the map was drawn from extension of the structural trend coming off the Lea Field to the northeast. These limited number of control wells seem to indicate steep dip to the south-southwest, but it is unknown whether any faults intersect the Siluro-Devonian section within this map area.

The line of cross-section shown on the next slide is indexed here. Two of the wells on this cross-section (circled in red) are active salt water disposal wells (SWDWs) completed in the Siluro-Devonian, one of which is the 3 Bear SWDW on their plant site.

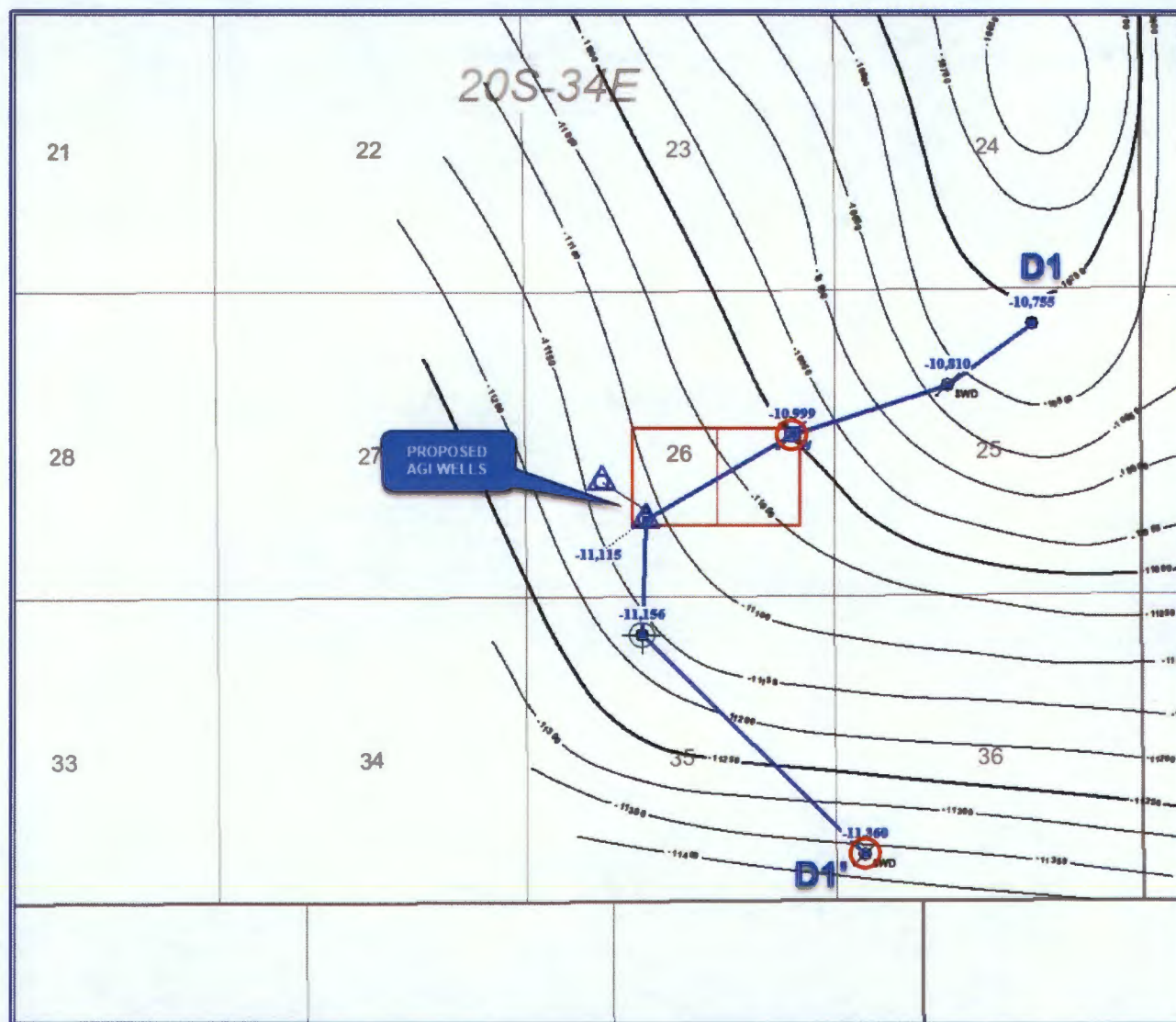


Figure 9: Structure on Top of the Devonian

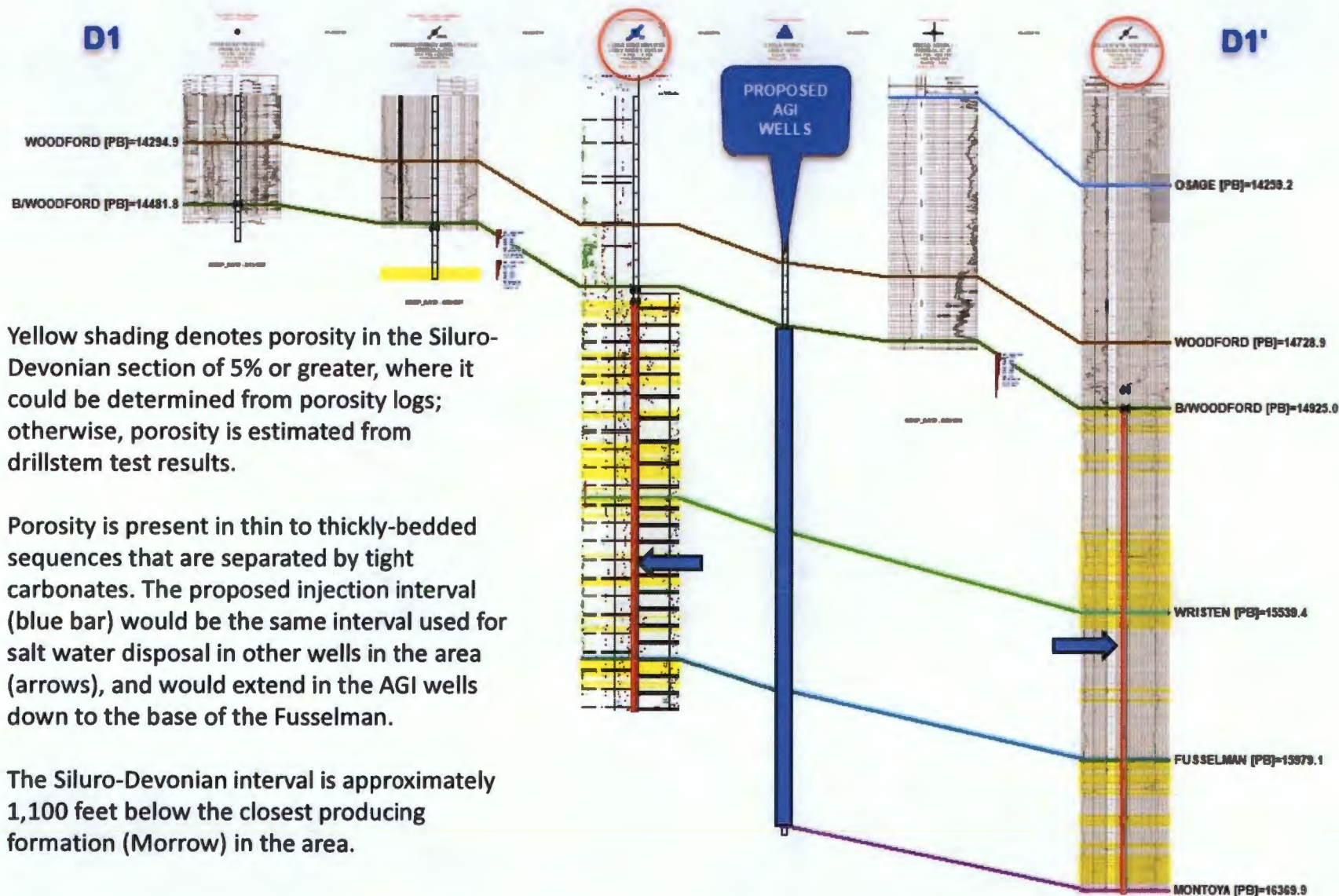


Figure 10: Cross-section Through The Deeper Horizons Across The 3Bear Plant Site

There are only three wells in this area that penetrated to at least the Fusselman Formation, and one (circled in red) that drilled to the basement.

Cross-section D2-D2', presented on the next slide, illustrates the porosity profile of the section from the Morrow to the basement.

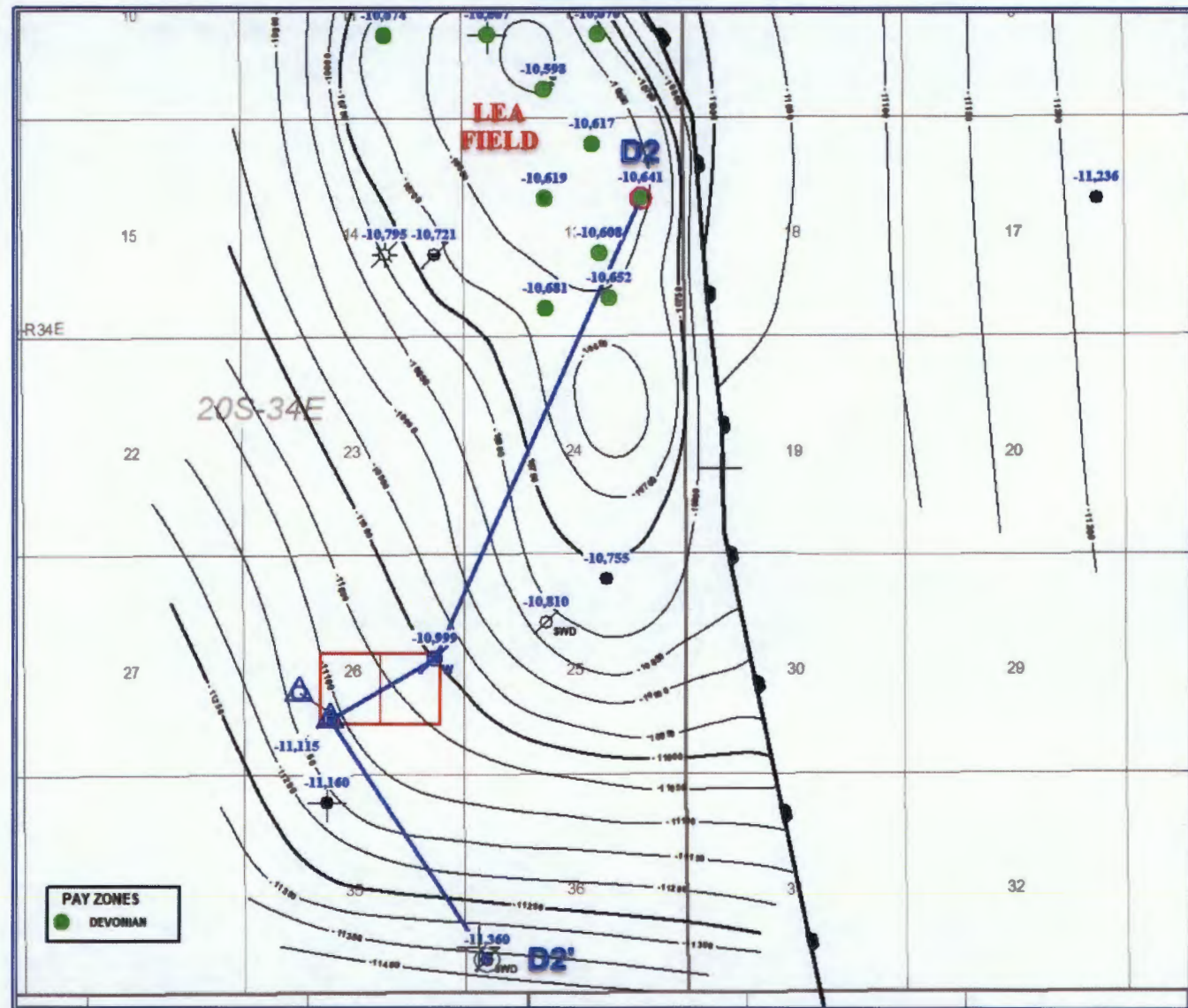


Figure 11: Structure on the Top of the Devonian, From Lea Field

This section is hung on top of the Woodford Shale. Yellow shading shows porosity; no shading indicates tight rock.

The closest producing zone to the injection target is over 1,000 feet above in the Morrow (arrow). Between the Devonian and Morrow is primarily tight limestones and shales.

The basement is approximately 730 feet below the base of the Fusselman, which is the deepest intended injection zone.

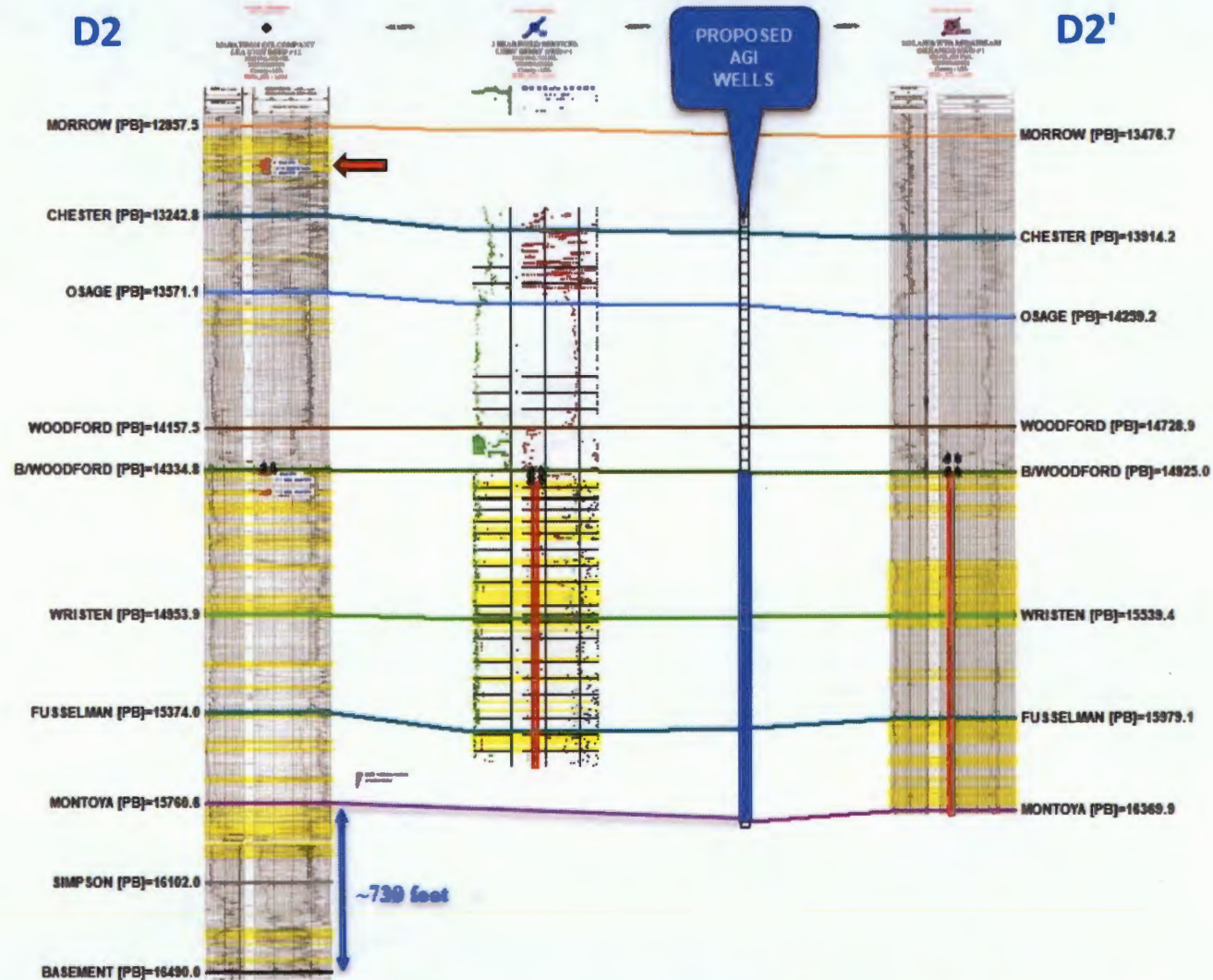


Figure 12: Porosity Profile Above and Below Injection Zone

Appendix A:

Information on Oil and Gas Wells within One Mile and Two Miles of Proposed 3Bear AGI Wells and Plugging Data for Plugged Well Within One Mile of Proposed 3Bear AGI Wells

Table A-1:	Wells within One Mile of Bottom Hole of Proposed 3Bear Libby AGI #1
Table A-2:	Wells within One Mile of Bottom Hole of Proposed 3Bear Libby AGI #2
Table A-3:	Wells within Two Miles of Proposed 3Bear Libby AGI Wells
Figure A-1:	Wells within One Mile of Proposed 3Bear AGI Wells
Figure A-2:	Wells within Two Miles of Proposed 3Bear AGI Wells
Attachment A:	Plugging Diagram of Arlen Edgar Federal C #1

Table A-1: Wells within One Mile of Bottom Hole of Proposed 3Bear Libby AGI #1												
API	OPERATOR	WELLNAME	TOWNSHIP	RANGE	SECTION	SUDDATE	PLUGDATE	COMPLSTAT	TVDDEPTH	WELLTYPE	LANDTYPE	Dist (Mi)
	3 BEAR DELAWARE OPERATING NM LLC	LIBBY AGI #1	20.05	34E	26			New (Not drilled or compl)	16370 AGI	P		0.00
	3 BEAR DELAWARE OPERATING NM LLC	LIBBY AGI #2 (BOTTOM)	20.05	34E	26			New (Not drilled or compl)	16370 AGI	P		0.21
3002502462	BURK ROYALTY CO., LTD.	CRUCES FEDERAL 006	20.05	34E	26	5/8/1960		Active	3700 O	F		0.10
3002502459	BURK ROYALTY CO., LTD.	CRUCES FEDERAL 003	20.05	34E	26	7/18/1957		Active	3730 O	F		0.23
3002502460	BURK ROYALTY CO., LTD.	CRUCES FEDERAL 004	20.05	34E	26	7/15/1957		Active	3750 O	F		0.26
3002502454	BURK ROYALTY CO., LTD.	HANSON B 002	20.05	34E	26	11/18/1959		Active	3744 O	F		0.30
3002502456	BURK ROYALTY CO., LTD.	HANSON B 003	20.05	34E	26	12/3/1959	12/14/1959	Plugged	3829 O	F		0.33
3002502458	BURK ROYALTY CO., LTD.	CRUCES FEDERAL 002	20.05	34E	26	5/24/1957		Active	3718 O	F		0.35
3002502499	BURK ROYALTY CO., LTD.	NEAL 001	20.05	34E	35	4/6/1959		Active	3743 O	P		0.40
3002523578	ARLEN L EDGAR	FEDERAL C 001	20.05	34E	35	8/25/1970	8/25/1980	Plugged	16939 O	F		0.40
3002502457	BURK ROYALTY CO., LTD.	CRUCES FEDERAL 001	20.05	34E	26	3/19/1957		Active	3705 O	F		0.41
3002502455	BURK ROYALTY CO., LTD.	HANSON B 001	20.05	34E	26	8/23/1959		Active	3767 O	F		0.43
3002544092	COG OPERATING LLC	MAS FEDERAL COM 001H	20.05	34E	35	12/20/2017		Active	11338 O	F		0.44
3002540750	CIMAREX ENERGY CO.	LYNCH 35 002H	20.05	34E	35	1/18/2013		Active	11316 O	P		0.45
3002502461	PHILLIPS PETROLEUM CO	CRUCES FEDERAL 005	20.05	34E	26	11/7/1959	12/7/1959	Plugged	3760 O	F		0.46
3002502507	BURK ROYALTY CO., LTD.	W H MILNER FEDERAL 004	20.05	34E	35	1/26/1954		Active	3850 S	F		0.47
3002530471	OLSEN ENERGY INC	FLETCHER A FED 001	20.05	34E	35	9/26/1988	11/19/1999	Plugged	3860 O	F		0.48
3002544288	3BEAR FIELD SERVICES, LLC	LIBBY BERRY FEE SWD 001	20.05	34E	26	8/23/2018		Active	16000 S	F		0.50
3002502503	ATLANTIC RICHFIELD	FLETCHER A DE FEDERAL 001	20.05	34E	35	9/17/1956	3/2/1972	Plugged	3715 O	F		0.51
3002502468	MARATHON OIL PERMIAN LLC	FLETCHER A DE FEDERAL 002	20.05	34E	27	11/12/1966		Active	3705 O	F		0.52
3002502501	BURK ROYALTY CO., LTD.	NEAL 003	20.05	34E	35	6/9/1959		Active	3805 S	P		0.53
3002540825	CIMAREX ENERGY CO.	LYNCH 35 001H	20.05	34E	35	6/6/2013		Active	11293 O	P		0.56
3002502463	BURK ROYALTY CO.	RIDER FEDERAL 001	20.05	34E	27	9/10/1959	6/11/1985	Plugged	3797 O	F		0.58
3002502492	MAS OPERATING CO.	B V LYNCH A FEDERAL 012	20.05	34E	34	8/16/1957		Active	3694 O	F		0.58
3002540819	CIMAREX ENERGY CO.	HANSON 26 FEDERAL COM 002	20.05	34E	26	1/19/2013		Active	11112 O	F		0.60
3002502469	ATLANTIC RICHFIELD	FLETCHER A DE FEDERAL 003	20.05	34E	27	1/23/1957	8/7/1972	Plugged	3690 O	F		0.60
3002502500	BURK ROYALTY CO., LTD.	NEAL 002	20.05	34E	35	7/15/1959	6/18/1986	Plugged	3780 O	P		0.61
3002544045	APACHE CORPORATION	BLACK & TAN 27 FEDERAL COM 308H	20.05	34E	27	1/30/2018		Active	11125 O	F		0.61
3002544044	APACHE CORPORATION	BLACK & TAN 27 FEDERAL COM 307H	20.05	34E	27	1/7/2018		Active	11086 O	F		0.62
3002544214	COG OPERATING LLC	MAS FEDERAL COM 002H	20.05	34E	34	12/21/2017		Active	11415 O	F		0.63
3002540327	CIMAREX ENERGY CO.	HANSON 26 FEDERAL 001H	20.05	34E	26	12/7/2013		Active	11186 O	F		0.66
3002520192	BURK ROYALTY CO.	HANSON D FEDERAL 002	20.05	34E	26	9/26/1963	10/2/1963	Plugged	3667 O	F		0.67
3002540637	CIMAREX ENERGY CO.	HANSON 26 FEDERAL COM 003H	20.05	34E	26	7/30/2012		Active	11141 O	F		0.68
3002502452	BURK ROYALTY CO., LTD.	HANSON FEDERAL 001	20.05	34E	25	6/23/1959	10/30/1959	Plugged	3864 O	F		0.69
3002502506	BURK ROYALTY CO., LTD.	W H MILNER FEDERAL 003	20.05	34E	35	11/12/1952		Active	3723 O	F		0.72
3002542037	COG OPERATING LLC	STRATOSPHERE 36 STATE COM 006H	20.05	34E	36	5/2/2015		Active	11393 O	S		0.72
3002502502	BURK ROYALTY CO., LTD.	NEAL 004	20.05	34E	35	7/29/1959		Active	3822 O	P		0.73
3002502510	HUDSON OIL COMPANY OF TEXAS	FEDERAL 001	20.05	34E	35	1/1/1953	8/22/1989	Plugged	3734 O	F		0.75
3002520183	BURK ROYALTY CO.	HANSON D FEDERAL 001	20.05	34E	26	8/25/1963	12/17/1987	Plugged	3730 O	F		0.75
3002508465	BURK ROYALTY CO., LTD.	KEOHANE A 001	20.05	34E	27	9/19/1957	7/23/2007	Plugged	3760 O	F		0.75
3002541946	CHISHOLM ENERGY OPERATING, LLC	LAGUNA 23 FEDERAL COM 003H	20.05	34E	23	9/19/2014		Active	9620 O	F		0.76
3002540742	CHISHOLM ENERGY OPERATING, LLC	LAGUNA 23 FEDERAL COM 001H	20.05	34E	23	8/18/2013		Active	10874 O	F		0.76
3002529669	NEARBURG PRODUCING	RITTSTER FEDERAL 001	20.05	34E	26	4/4/1986	5/29/1987	Plugged	288 O	F		0.76
3002541367	CHISHOLM ENERGY OPERATING, LLC	LEA SOUTH 25 FEDERAL COM 005H	20.05	34E	25	10/18/2013		Active	11251 O	F		0.76
3002540697	CHISHOLM ENERGY OPERATING, LLC	LAGUNA 23 FEDERAL COM 002H	20.05	34E	23	1/11/2014		Active	11079 O	F		0.76
3002540804	CIMAREX ENERGY CO.	HANSON 26 FEDERAL COM 004H	20.05	34E	26	12/11/2012		Active	11185 O	F		0.78
3002508459	ARCO PERMIAN	FLETCHER A DE FEDERAL 004	20.05	34E	27	10/4/1957	12/18/1984	Plugged	3682 S	F		0.79
3002520284	BURK ROYALTY CO., LTD.	HANSON C 003	20.05	34E	23	9/15/1963		Active	3702 O	F		0.79
3002502451	ERNEST A HANSON	D & E FEDERAL 001	20.05	34E	23	7/10/1961	8/1/1961	Plugged	3601 O	F		0.80
3002541359	CIMAREX ENERGY CO.	HANSON 26 FEDERAL COM 005H	20.05	34E	26	11/2/2013		Active	9692 O	F		0.80
3002508464	EDWARD E KINNEY	GULF FEDERAL 002	20.05	34E	27	10/1/1954	10/19/1954	Plugged	3341 O	F		0.81
3002502496	TEXAS CO	B V LYNCH A 004	20.05	34E	34	9/12/1934	12/31/1934	Plugged	3797 O	F		0.84
3002543988	APACHE CORPORATION	BLACK & TAN 27 FEDERAL COM 306H	20.05	34E	27			New (Not drilled or compl)	0 O	F		0.85
3002543940	APACHE CORPORATION	BLACK & TAN 27 FEDERAL COM 305H	20.05	34E	27	12/11/2017		Active	3743 O	F		0.85
3002502495	MAS OPERATING CO.	B V LYNCH A FEDERAL 003	20.05	34E	34	9/9/1957		Active	3745 O	F		0.88
3002502467	MARATHON OIL PERMIAN LLC	BALLARD DE FEDERAL 004	20.05	34E	27	8/8/1961	10/11/2018	Plugged	3690 O	F		0.89
3002542950	COG OPERATING LLC	MAS FEDERAL 003H	20.05	34E	34	11/29/2015		Active	11318 O	F		0.91
3002502488	OLEN F FEATHERSTONE	ROACH FEDERAL 001	20.05	34E	34	1/21/1958	12/3/1960	Plugged	3772 O	F		0.93
3002502512	PHILLIPS PETROLEUM CO	NEAL 002	20.05	34E	35	10/28/1959	11/30/1959	Plugged	3825 O	F		0.94
3002520349	BURK ROYALTY CO., LTD.	HANSON C 001	20.05	34E	23	7/9/1963	7/17/2006	Plugged	3700 O	F		0.95
3002529572	NEARBURG PRODUCING CO	RETT FEDERAL COM 001Y	20.05	34E	23	6/8/1985	9/6/2000	Plugged	13700 O	F		0.96
3002520818	CHAMA PETROLEUM CO	RETT FEDERAL COM 001	20.05	34E	23	4/25/1964	6/8/1964	Plugged	10500 O	F		0.97
3002502505	BURK ROYALTY CO., LTD.	W H MILNER FEDERAL 002	20.05	34E	35	8/21/1952		Active	3747 O	F		0.97
3002527496	GETTY OIL CO	LYNCH 36 STATE 001	20.05	34E	36	10/31/1981	11/24/1981	Plugged	3820 O	S		0.97
3002541898	CHISHOLM ENERGY OPERATING, LLC	LEA SOUTH 25 FEDERAL COM 006H	20.05	34E	25	8/15/2014		Active	11174 O	F		0.98
3002508462	MACK ENERGY CORP	PERRY FEDERAL 001	20.05	34E	22	2/13/1962	2/12/1996	Plugged	3669 O	F		0.99
3002543482	COG OPERATING LLC	MAS FEDERAL 004H	20.05	34E	34	12/1/2016		Active	11371 O	F		1.01

Table A-2: Wells within One Mile of Bottom Hole of Proposed 3Bear Libby AGI #2												
API	OPERATOR	WELLNAME	TOWNSHIP	RANGE	SECTION	SUDDATE	PLUGDATE	COMPLSTAT	TVDDEPTH	WELLTYPE	LANDTYPE	Dist (MI)
	3 BEAR DELAWARE OPERATING NM LLC	LIBBY AGI #2 (BOTTOM)	20.05	34E	26			New (Not drilled or compl)	16400	AGI	P	0.00
3002502462	BURK ROYALTY CO., LTD.	CRUCES FEDERAL 006	20.05	34E	26	5/8/1960		Active	3700	O	F	0.13
3002502454	BURK ROYALTY CO., LTD.	HANSON B 002	20.05	34E	26	11/18/1959		Active	3744	O	F	0.14
3002502455	BURK ROYALTY CO., LTD.	HANSON B 001	20.05	34E	26	8/23/1959		Active	3767	O	F	0.23
3002502458	BURK ROYALTY CO., LTD.	CRUCES FEDERAL 002	20.05	34E	26	5/24/1957		Active	3718	O	F	0.24
3002502456	BURK ROYALTY CO., LTD.	HANSON B 003	20.05	34E	26	12/3/1959	12/14/1959	Plugged	3829	O	F	0.32
3002502459	BURK ROYALTY CO., LTD.	CRUCES FEDERAL 003	20.05	34E	26	7/18/1957		Active	3730	I	F	0.37
3002502463	BURK ROYALTY CO	RIDER FEDERAL 001	20.05	34E	27	9/10/1959	6/11/1985	Plugged	3797	O	F	0.39
3002502457	BURK ROYALTY CO., LTD.	CRUCES FEDERAL 001	20.05	34E	26	3/19/1957		Active	3705	O	F	0.42
3002540819	CIMAREX ENERGY CO.	HANSON 26 FEDERAL COM 002	20.05	34E	26	1/19/2013		Active	11112	O	F	0.45
3002540327	CIMAREX ENERGY CO.	HANSON 26 FEDERAL 001H	20.05	34E	26	12/7/2013		Active	11186	O	F	0.46
3002502460	BURK ROYALTY CO., LTD.	CRUCES FEDERAL 004	20.05	34E	26	7/15/1957		Active	3750	O	F	0.47
3002502469	ATLANTIC RICHFIELD	FLETCHER A DE FEDERA 003	20.05	34E	27	1/23/1957	8/7/1972	Plugged	3690	O	F	0.48
3002502468	MARATHON OIL PERMIAN LLC	FLETCHER A DE FEDERAL 002	20.05	34E	27	11/12/1966		Active	3705	O	F	0.50
3002520192	BURK ROYALTY CO	HANSON D FEDERAL 002	20.05	34E	26	9/26/1963	10/2/1963	Plugged	3667	O	F	0.51
3002544092	COG OPERATING LLC	MAS FEDERAL COM 001H	20.05	34E	35	12/20/2017		Active	11338	O	F	0.51
3002530471	OLSEN ENERGY INC	FLETCHER A FED 001	20.05	34E	35	9/26/1988	11/19/1999	Plugged	3860	O	F	0.53
3002520183	BURK ROYALTY CO	HANSON D FEDERAL 001	20.05	34E	26	8/25/1963	12/17/1987	Plugged	3730	O	F	0.55
3002540697	CHISHOLM ENERGY OPERATING, LLC	LAGUNA 23 FEDERAL COM 002H	20.05	34E	23	1/11/2014		Active	11079	O	F	0.57
3002544045	APACHE CORPORATION	BLACK & TAN 27 FEDERAL COM 308H	20.05	34E	27	1/30/2018		Active	11125	O	F	0.59
3002544044	APACHE CORPORATION	BLACK & TAN 27 FEDERAL COM 307H	20.05	34E	27	1/7/2018		Active	11086	O	F	0.59
3002502499	BURK ROYALTY CO., LTD.	NEAL 001	20.05	34E	35	4/6/1959		Active	3743	O	P	0.59
3002502492	MAS OPERATING CO.	B V LYNCH A FEDERAL 012	20.05	34E	34	8/16/1957		Active	3694	O	F	0.60
3002540637	CIMAREX ENERGY CO.	HANSON 26 FEDERAL COM 003H	20.05	34E	26	7/30/2012		Active	11141	O	F	0.60
3002540742	CHISHOLM ENERGY OPERATING, LLC	LAGUNA 23 FEDERAL COM 001H	20.05	34E	23	8/18/2013		Active	10874	O	F	0.61
3002541946	CHISHOLM ENERGY OPERATING, LLC	LAGUNA 23 FEDERAL COM 003H	20.05	34E	23	9/19/2014		Active	9620	O	F	0.62
3002502507	BURK ROYALTY CO., LTD.	W H MILNER FEDERAL 004	20.05	34E	35	1/26/1954		Active	3850	S	F	0.62
3002502503	ATLANTIC RICHFIELD	FLETCHER A DE FEDERA 001	20.05	34E	35	9/17/1956	3/2/1972	Plugged	3715	O	F	0.62
3002520284	BURK ROYALTY CO., LTD.	HANSON C 003	20.05	34E	23	9/15/1963		Active	3702	O	F	0.63
3002544214	COG OPERATING LLC	MAS FEDERAL COM 002H	20.05	34E	34	12/21/2017		Active	11415	O	F	0.63
3002508459	ARCO PERMIAN	FLETCHER A DE FEDERAL 004	20.05	34E	27	10/4/1957	12/18/1984	Plugged	3682	S	F	0.65
3002502461	PHILLIPS PETROLEUM CO	CRUCES FEDERAL 005	20.05	34E	26	11/7/1959	12/7/1959	Plugged	3760	O	F	0.65
3002540750	CIMAREX ENERGY CO.	LYNCH 35 002H	20.05	34E	35	1/18/2013		Active	11316	O	P	0.66
3002502467	MARATHON OIL PERMIAN LLC	BALLARD DE FEDERAL 004	20.05	34E	27	8/8/1961	10/11/2018	Plugged	3690	O	F	0.69
3002508465	BURK ROYALTY CO., LTD.	KEOHANE A 001	20.05	34E	27	9/19/1957	7/23/2007	Plugged	3760	O	F	0.69
3002502451	ERNEST A HANSON	D & E FEDERAL 001	20.05	34E	23	7/10/1961	8/1/1961	Plugged	3601	O	F	0.69
3002502501	BURK ROYALTY CO., LTD.	NEAL 003	20.05	34E	35	6/9/1959		Active	3805	S	P	0.73
3002508464	EDWARD E KINNEY	GULF FEDERAL 002	20.05	34E	27	10/1/1954	10/19/1954	Plugged	3341	O	F	0.75
3002529669	NEARBURG PRODUCING	RITTSTER FEDERAL 001	20.05	34E	26	4/4/1986	5/29/1987	Plugged	288	O	F	0.75
3002540825	CIMAREX ENERGY CO.	LYNCH 35 001H	20.05	34E	35	6/6/2013		Active	11293	O	P	0.76
3002540804	CIMAREX ENERGY CO.	HANSON 26 FEDERAL COM 004H	20.05	34E	26	12/11/2012		Active	11185	O	F	0.76
3002508462	MACK ENERGY CORP	PERRY FEDERAL 001	20.05	34E	22	2/13/1962	2/12/1996	Plugged	3669	O	F	0.78
3002543988	APACHE CORPORATION	BLACK & TAN 27 FEDERAL COM 306H	20.05	34E	27			New (Not drilled or compl)	0	O	F	0.79
3002541359	CIMAREX ENERGY CO.	HANSON 26 FEDERAL COM 005H	20.05	34E	26	11/2/2013		Active	9692	O	F	0.79
3002543940	APACHE CORPORATION	BLACK & TAN 27 FEDERAL COM 305H	20.05	34E	27	12/11/2017		Active	3743	O	F	0.79
3002502500	BURK ROYALTY CO., LTD.	NEAL 002	20.05	34E	35	7/15/1959	6/18/1986	Plugged	3780	O	P	0.80
3002502495	MAS OPERATING CO.	B V LYNCH A FEDERAL 003	20.05	34E	34	9/9/1957		Active	3745	O	F	0.86
3002542950	COG OPERATING LLC	MAS FEDERAL 003H	20.05	34E	34	11/29/2015		Active	11318	O	F	0.87
3002502506	BURK ROYALTY CO., LTD.	W H MILNER FEDERAL 003	20.05	34E	35	11/12/1952		Active	3723	O	F	0.87
3002502510	HUDSON OIL COMPANY OF TEXAS	FEDERAL 001	20.05	34E	35	1/1/1953	8/22/1989	Plugged	3734	O	F	0.87
3002502452	BURK ROYALTY CO., LTD.	HANSON FEDERAL 001	20.05	34E	25	6/23/1959	10/30/1959	Plugged	3864	O	F	0.87
3002508460	CHESTNUT EXPLORATION AND PRODUCTION, INC.	D AND E FEDERAL 002	20.05	34E	27	9/14/1960		Active	3701	O	F	0.88
3002520559	BURK ROYALTY CO., LTD.	HANSON C 004	20.05	34E	23	1/9/1964	8/29/2012	Plugged	3642	S	F	0.88
3002502496	TEXAS CO	B V LYNCH A 004	20.05	34E	34	9/12/1934	12/31/1934	Plugged	3797	O	F	0.90
3002529572	NEARBURG PRODUCING CO	RETT FEDERAL COM 001Y	20.05	34E	23	6/8/1985	9/6/2000	Plugged	13700	O	F	0.91
3002520157	BURK ROYALTY CO., LTD.	HANSON C 002	20.05	34E	23	8/17/1963	8/24/1963	Plugged	3672	O	F	0.91
3002520349	BURK ROYALTY CO., LTD.	HANSON C 001	20.05	34E	23	7/9/1963	7/17/2006	Plugged	3700	O	F	0.92
3002542037	COG OPERATING LLC	STRATOSPHERE 36 STATE COM 006H	20.05	34E	36	5/2/2015		Active	11393	O	S	0.92
3002520818	CHAMA PETROLEUM CO	RETT FEDERAL COM 001	20.05	34E	23	4/25/1964	6/8/1964	Plugged	10500	O	F	0.92
3002502464	DRILLING & EXPLORATION CO INC	BALLARD 001	20.05	34E	27	1/2/1900	1/2/1900	Plugged	3683	O	F	0.92
3002502502	BURK ROYALTY CO., LTD.	NEAL 004	20.05	34E	35	7/29/1959		Active	3822	O	P	0.93
3002541367	CHISHOLM ENERGY OPERATING, LLC	LEA SOUTH 25 FEDERAL COM 005H	20.05	34E	25	10/18/2013		Active	11251	O	F	0.95
3002543482	COG OPERATING LLC	MAS FEDERAL 004H	20.05	34E	34	12/1/2016		Active	11371	O	F	0.95
3002502488	OLEN F FEATHERSTONE	ROACH FEDERAL 001	20.05	34E	34	1/21/1958	12/3/1960	Plugged	3772	O	F	0.98
3002502505	BURK ROYALTY CO., LTD.	W H MILNER FEDERAL 002	20.05	34E	35	8/21/1952		Active	3747	O	F	1.12

Table A-3: Wells within Two Miles of Proposed 3Bear Libby AGI Wells

API	OPERATOR	WELLNAME	SPUDDATE	PLUGDATE	TOWNSHIP	RANGE	SECTION	TVDDEPTH	WELLTYPE	COMPLSTATU	LANDTYPE	DISTANCE (Mi)
	3 BEAR DELAWARE OPERATING NM LLC	LIBBY AGI #1			20.05	34E	26	16370	AGI	New (Not drilled or compl)		0.00
3002502454	BURK ROYALTY CO., LTD.	HANSON B 002	18-Nov-59		20.05	34E	26	3744	O	Active	F	0.15
3002502456	BURK ROYALTY CO., LTD.	HANSON B 003	2-Jan-00	2-Jan-00	20.05	34E	26	3829	O	Plugged	F	0.18
3002502462	BURK ROYALTY CO., LTD.	CRUCES FEDERAL 006	8-May-60		20.05	34E	26	3700	O	Active	F	0.18
	3 BEAR DELAWARE OPERATING NM LLC	LIBBY AGI #2			20.05	34E	26	16370	AGI	New (Not drilled or compl)		0.21
3002502455	BURK ROYALTY CO., LTD.	HANSON B 001	23-Aug-59		20.05	34E	26	3767	O	Active	F	0.35
3002502458	BURK ROYALTY CO., LTD.	CRUCES FEDERAL 002	24-May-57		20.05	34E	26	3718	O	Active	F	0.39
3002502459	BURK ROYALTY CO., LTD.	CRUCES FEDERAL 003	18-Jul-57		20.05	34E	26	3730	I	Active	F	0.41
3002540819	CIMAREX ENERGY CO.	HANSON 26 FEDERAL COM 002	19-Jan-13		20.05	34E	26	11112	O	Active	F	0.41
3002502460	BURK ROYALTY CO., LTD.	CRUCES FEDERAL 004	15-Jul-59		20.05	34E	26	3750	O	Active	F	0.42
3002544288	3BEAR FIELD SERVICES, LLC	LIBBY BERRY FEE SWD 001	23-Mar-18		20.05	34E	26	16000	S	Active	F	0.44
3002520192	BURK ROYALTY CO	HANSON D FEDERAL 002	2-Jan-00	2-Jan-00	20.05	34E	26	3667	O	Plugged	F	0.49
3002540637	CIMAREX ENERGY CO.	HANSON 26 FEDERAL COM 003H	30-Jul-12		20.05	34E	26	11141	O	Active	F	0.50
3002540327	CIMAREX ENERGY CO.	HANSON 26 FEDERAL 001H	7-Dec-13		20.05	34E	26	11186	O	Active	F	0.51
3002502463	BURK ROYALTY CO	RIDER FEDERAL 001	2-Jan-00	2-Jan-00	20.05	34E	27	3797	O	Plugged	F	0.52
3002502457	BURK ROYALTY CO., LTD.	CRUCES FEDERAL 001	9-May-57		20.05	34E	26	3705	O	Active	F	0.53
3002502461	PHILLIPS PETROLEUM CO	CRUCES FEDERAL 005	2-Jan-00	2-Jan-00	20.05	34E	26	3760	O	Plugged	F	0.56
3002502499	BURK ROYALTY CO., LTD.	NEAL 001	6-Apr-59		20.05	34E	35	3743	O	Active	P	0.57
3002541946	CHISHOLM ENERGY OPERATING, LLC	LAGUNA 23 FEDERAL COM 003H	19-Sep-14		20.05	34E	23	9620	O	Active	F	0.57
3002540742	CHISHOLM ENERGY OPERATING, LLC	LAGUNA 23 FEDERAL COM 001H	18-Aug-13		20.05	34E	23	10874	O	Active	F	0.57
3002541700	NEARBURG PRODUCING CO	LAGUNA 23 FEDERAL COM 004C			20.05	34E	23	0	O	Expired Permit	F	0.59
3002523578	ARLEN L EDGAR	FEDERAL C 001	18-May-74	25-Aug-89	20.05	34E	35	15080	O	Plugged	F	0.59
3002520183	BURK ROYALTY CO	HANSON D FEDERAL 001	2-Jan-00	2-Jan-00	20.05	34E	26	3730	O	Plugged	F	0.60
3002544092	COG OPERATING LLC	MAS FEDERAL COM 001H	20-Dec-17		20.05	34E	35	11338	O	Active	F	0.60
3002540697	CHISHOLM ENERGY OPERATING, LLC	LAGUNA 23 FEDERAL COM 002H	11-Jan-14		20.05	34E	23	11079	O	Active	F	0.60
3002540750	CIMAREX ENERGY CO.	LYNCH 35 002H	18-Jan-13		20.05	34E	35	11316	O	Active	P	0.61
3002520284	BURK ROYALTY CO., LTD.	HANSON C 003	15-Sep-63		20.05	34E	23	3702	O	Active	F	0.61
3002529669	NEARBURG PRODUCING	RITTSTER FEDERAL 001	2-Jan-00	2-Jan-00	20.05	34E	26	288	O	Plugged	F	0.62
3002502451	ERNEST A HANSON	D & E FEDERAL 001	2-Jan-00	2-Jan-00	20.05	34E	23	3601	O	Plugged	F	0.62
3002502469	ATLANTIC RICHFIELD	FLETCHER A DE FEDERA 003	2-Jan-00	2-Jan-00	20.05	34E	27	3690	O	Plugged	F	0.62
3002502468	MARATHON OIL PERMIAN LLC	FLETCHER A DE FEDERAL 002	12-Nov-66		20.05	34E	27	3705	O	Active	F	0.62
3002530471	OLSEN ENERGY INC	FLETCHER A FED 001	26-Sep-88	19-Nov-99	20.05	34E	35	3860	O	Plugged	F	0.63
3002540804	CIMAREX ENERGY CO.	HANSON 26 FEDERAL COM 004H	11-Dec-12		20.05	34E	26	11185	O	Active	F	0.64
3002502501	BURK ROYALTY CO., LTD.	NEAL 003	9-Jun-59		20.05	34E	35	3805	S	Active	P	0.66
3002502507	BURK ROYALTY CO., LTD.	W H MILNER FEDERAL 004	26-Jan-54		20.05	34E	35	3850	S	Active	F	0.66
3002541359	CIMAREX ENERGY CO.	HANSON 26 FEDERAL COM 005H	2-Nov-13		20.05	34E	26	9692	O	Active	F	0.66
3002540825	CIMAREX ENERGY CO.	LYNCH 35 001H	6-Jun-13		20.05	34E	35	11293	O	Active	P	0.68
3002502503	ATLANTIC RICHFIELD	FLETCHER A DE FEDERA 001	2-Jan-00	2-Jan-00	20.05	34E	35	3715	O	Plugged	F	0.69
3002502492	MAS OPERATING CO.	B V LYNCH A FEDERAL 012	4-Nov-57		20.05	34E	34	3694	O	Active	F	0.71
3002544045	APACHE CORPORATION	BLACK & TAN 27 FEDERAL COM 308H	30-Jan-18		20.05	34E	27	11125	O	Active	F	0.72
3002544044	APACHE CORPORATION	BLACK & TAN 27 FEDERAL COM 307H	7-Jan-18		20.05	34E	27	11086	O	Active	F	0.72
3002544214	COG OPERATING LLC	MAS FEDERAL COM 002H	21-Dec-17		20.05	34E	34	11415	O	Active	F	0.76
3002502452	BURK ROYALTY CO., LTD.	HANSON FEDERAL 001	23-Jun-59	30-Oct-59	20.05	34E	25	3864	O	Plugged	F	0.76
3002502467	MARATHON OIL PERMIAN LLC	BALLARD DE FEDERAL 004		11-Oct-18	20.05	34E	27	3690	O	Plugged	F	0.77
3002502500	BURK ROYALTY CO., LTD.	NEAL 002	15-Jul-59	18-Jun-86	20.05	34E	35	3780	O	Plugged	P	0.79
3002520349	BURK ROYALTY CO., LTD.	HANSON C 001	9-Jul-63	17-Jul-06	20.05	34E	23	3700	O	Plugged	F	0.80
3002529572	NEARBURG PRODUCING CO	RETT FEDERAL COM 001Y	8-Jun-85	6-Sep-00	20.05	34E	23	13700	O	Plugged	F	0.80
3002508459	ARCO PERMIAN	FLETCHER A DE FEDERAL 004		18-Dec-84	20.05	34E	27	3682	S	Plugged	F	0.80
3002520818	CHAMA PETROLEUM CO	RETT FEDERAL COM 001	2-Jan-00	2-Jan-00	20.05	34E	23	10500	O	Plugged	F	0.81
3002542037	COG OPERATING LLC	STRATOSPHERE 36 STATE COM 006H	2-May-15		20.05	34E	36	11393	O	Active	S	0.82
3002508465	BURK ROYALTY CO., LTD.	KEOHANE A 001	19-Sep-57	23-Jul-07	20.05	34E	27	3760	O	Plugged	F	0.83
3002541367	CHISHOLM ENERGY OPERATING, LLC	LEA SOUTH 25 FEDERAL COM 005H	18-Oct-13		20.05	34E	25	11251	O	Active	F	0.84
3002508462	MACK ENERGY CORP	PERRY FEDERAL 001	13-Feb-62	12-Feb-96	20.05	34E	22	3669	O	Plugged	F	0.86
3002541859	NEARBURG PRODUCING CO	LEA SOUTH 25 FEDERAL COM 009C			20.05	34E	25	0	O	Expired Permit	F	0.86
3002502502	BURK ROYALTY CO., LTD.	NEAL 004	29-Jul-59		20.05	34E	35	3822	O	Active	P	0.88
3002508464	EDWARD E KINNEY	GULF FEDERAL 002	2-Jan-00	2-Jan-00	20.05	34E	27	3341	O	Plugged	F	0.89
3002502506	BURK ROYALTY CO., LTD.	W H MILNER FEDERAL 003	12-Nov-52		20.05	34E	35	3723	O	Active	F	0.91

3002502510	HUDSON OIL COMPANY OF TEXAS	FEDERAL 001	2-Jan-00	2-Jan-00	20.05	34E	35	3734	O	Plugged	F	0.93
3002543988	APACHE CORPORATION	BLACK & TAN 27 FEDERAL COM 306H			20.05	34E	27	0	O	New (Not drilled or compl)	F	0.93
3002543940	APACHE CORPORATION	BLACK & TAN 27 FEDERAL COM 305H	11-Dec-17		20.05	34E	27	3743	O	Active	F	0.94
3002508460	CHESTNUT EXPLORATION AND PRODUCTION, INC.	D AND E FEDERAL 002	14-Sep-60		20.05	34E	27	3701	O	Active	F	0.98
3002520811	CHISHOLM ENERGY OPERATING, LLC	FEDERAL L 001	21-Dec-84		20.05	34E	25	14700	S	Active	F	0.99
3002502495	MAS OPERATING CO.	B V LYNCH A FEDERAL 003	2-Jan-57		20.05	34E	34	3745	O	Active	F	0.99
3002502496	TEXAS CO	B V LYNCH A 004	2-Jan-00	2-Jan-00	20.05	34E	34	3797	O	Plugged	F	1.00
3002542950	COG OPERATING LLC	MAS FEDERAL 003H	29-Nov-15		20.05	34E	34	11318	O	Active	F	1.01
3002541898	CHISHOLM ENERGY OPERATING, LLC	LEA SOUTH 25 FEDERAL COM 006H	15-Aug-14		20.05	34E	25	11174	O	Active	F	1.04
3002502449	CHESTNUT EXPLORATION AND PRODUCTION, INC.	R AND 8 FEDERAL 001	3-Jun-60		20.05	34E	22	3625	O	Active	F	1.05
3002502464	DRILLING & EXPLORATION CO INC	BALLARD 001	2-Jan-00	2-Jan-00	20.05	34E	27	3683	O	Plugged	F	1.06
3002543409	CHISHOLM ENERGY OPERATING, LLC	LEA SOUTH 25 FEDERAL COM 2BS 010H	4-Jul-17		20.05	34E	25	10680	O	Active	F	1.06
3002502488	OLEN F FEATHERSTONE	ROACH FEDERAL 001	2-Jan-00	2-Jan-00	20.05	34E	34	3772	O	Plugged	F	1.08
3002502465	MARATHON OIL PERMIAN LLC	BALLARD DE FEDERAL 002	13-Dec-61		20.05	34E	27	3663	O	Active	F	1.09
3002543482	COG OPERATING LLC	MAS FEDERAL 004H	1-Dec-16		20.05	34E	34	11371	O	Active	F	1.09
3002508461	MAS OPERATING CO.	B V LYNCH B FEDERAL 002	1-Jan-59		20.05	34E	27	3805	O	Active	F	1.10
3002527496	GETTY OIL CO	LYNCH 36 STATE 001	2-Jan-00	2-Jan-00	20.05	34E	36	3820	O	Plugged	S	1.10
3002543996	APACHE CORPORATION	BLACK & TAN 27 FEDERAL COM 304H			20.05	34E	27	0	O	New (Not drilled or compl)	F	1.10
3002543921	APACHE CORPORATION	BLACK & TAN 27 FEDERAL COM 303H	22-Sep-17		20.05	34E	27	11145	O	Active	F	1.11
3002502512	PHILLIPS PETROLEUM CO	NEAL 002	28-Oct-59	7-Dec-59	20.05	34E	35	3825	O	Plugged	P	1.11
3002542036	COG OPERATING LLC	STRATOSPHERE 36 STATE COM 005H	27-May-15		20.05	34E	36	11443	O	Active	S	1.12
3002502491	OLSEN ENERGY INC	B V LYNCH A FEDERAL 011	10-Aug-53	9-Mar-93	20.05	34E	34	3720	S	Plugged	F	1.15
3002502505	BURK ROYALTY CO., LTD.	W H MILNER FEDERAL 002	29-Sep-52		20.05	34E	35	3747	O	Active	F	1.16
3002502511	PHILLIPS PETROLEUM CO	NEAL 001	23-Jun-53	23-Oct-61	20.05	34E	35	3775	O	Plugged	P	1.16
3002502509	MAS OPERATING CO.	B V LYNCH A FEDERAL 007	22-Dec-52		20.05	34E	35	3707	O	Active	F	1.17
3002512580	MAS OPERATING CO.	B V LYNCH A FEDERAL 010	1-Aug-53		20.05	34E	34	3734	S	Active	F	1.20
3002502448	CHESTNUT EXPLORATION AND PRODUCTION, INC.	D AND E FEDERAL 001	22-Jan-60		20.05	34E	22	3703	S	Active	F	1.24
3002502490	MAS OPERATING CO.	B V LYNCH A FEDERAL 009	18-Jun-53		20.05	34E	34	3690	O	Active	F	1.25
3002502489	OLSEN ENERGY INC	B V LYNCH A FEDERAL 008	15-Jan-53	16-Jul-03	20.05	34E	34	3759	S	Plugged	F	1.27
3002543029	CHISHOLM ENERGY OPERATING, LLC	LEA SOUTH 25 FEDERAL COM 3BS 007H	14-Aug-17		20.05	34E	25	11298	O	Active	F	1.27
3002502466	MARATHON OIL PERMIAN LLC	BALLARD DE FEDERAL 003	22-May-64	15-Oct-18	20.05	34E	27	4026	S	Plugged	F	1.28
3002541703	BC OPERATING, INC.	BERRY SWD 001	5-Mar-15		20.05	34E	35	7062	S	Active	P	1.30
3002543036	CHISHOLM ENERGY OPERATING, LLC	LEA SOUTH 25 FEDERAL COM 1BS 011H	14-Sep-17		20.05	34E	25	9702	O	Active	F	1.30
3002529518	CHISHOLM ENERGY OPERATING, LLC	FEDERAL LS 001	29-Nov-85		20.05	34E	25	14590	O	Active	F	1.30
3002525566	HARVARD PETROLEUM COMPANY, LLC	FLETCHER FEDERAL 001	7-Jun-77		20.05	34E	27	3718	O	Active	F	1.30
3002542035	COG OPERATING LLC	STRATOSPHERE 36 STATE COM 004H	27-May-15		20.05	34E	36	11484	O	Active	S	1.33
3002512550	MAS OPERATING CO.	B V LYNCH A FEDERAL 001	19-Sep-89		20.05	34E	34	3916	O	Active	F	1.34
3002520071	SUNDOWN ENERGY LP	GULF DE FEDERAL 001	18-Dec-62	10-Oct-06	20.05	34E	27	3720	O	Plugged	F	1.34
3002526164	WALLEN PRODUCTION CO	WALLEN KINNEY 001	2-Jan-00	2-Jan-00	20.05	34E	34	3765	O	Plugged	F	1.34
3002502487	FULFER OIL & CATTLE LLC	KINNEY 001	4-Apr-54		20.05	34E	34	3776	O	Active	F	1.36
3002544018	APACHE CORPORATION	BLACK & TAN 27 FEDERAL COM 302H	11-Dec-17		20.05	34E	27	11097	O	Active	F	1.37
3002502445	MARATHON OIL PERMIAN LLC	BALLARD DE FEDERAL 005	3-Dec-62		20.05	34E	22	3627	O	Active	F	1.37
3002544017	APACHE CORPORATION	BLACK & TAN 27 FEDERAL COM 301H	15-Nov-17		20.05	34E	27	11512	O	Active	F	1.37
3002502453	DRILLING & EXPLORATION CO INC	GORMAN 001	2-Jan-00	2-Jan-00	20.05	34E	25	3825	O	Plugged	F	1.47
3002531183	BTA OIL PRODUCERS, LLC	ALINE 9012 JVP 001	21-Mar-91		20.05	34E	36	13760	O	Active	S	1.47
3002541294	EOG RESOURCES INC	CHUKAR BTA FEDERAL COM 001C			20.05	34E	28	0	O	Expired Permit	F	1.49
3002540723	NEARBURG PRODUCING CO	LEA SOUTH 25 FEDERAL 001C			20.05	34E	25	0	O	Expired Permit	F	1.53
3002543895	CHISHOLM ENERGY OPERATING, LLC	LEA SOUTH 25 FEDERAL COM 001			20.05	34E	25	0	O	New (Not drilled or compl)	F	1.53
3002502472	MARLAND OIL CO	H H FLINT PERMIT 001	2-Jan-00	2-Jan-00	20.05	34E	28	3840	O	Plugged	F	1.54
3002502498	TEXACO EXPLORATION & PRODUCTION INC	LYNCH PERMIT B 001	2-Jan-00	2-Jan-00	20.05	34E	34	3808	O	Plugged	F	1.54
3002543057	CHISHOLM ENERGY OPERATING, LLC	LEA SOUTH 25 FEDERAL 008	29-Jun-16		20.05	34E	25	11652	O	Active	F	1.54
3002502473	HUDSON & HUDSON INC	HOVER FEDERAL 001	2-Jan-00	2-Jan-00	20.05	34E	28	3731	O	Plugged	F	1.55
3002542034	COG OPERATING LLC	STRATOSPHERE 36 STATE COM 003H	1-May-15		20.05	34E	36	11557	O	Active	S	1.56
3002543110	CHISHOLM ENERGY OPERATING, LLC	LEA SOUTH 25 FEDERAL COM WCA 012H	14-Dec-17		20.05	34E	25	11466	O	Active	F	1.57
3002541090	CHISHOLM ENERGY OPERATING, LLC	LEA SOUTH 25 FEDERAL 002H			20.05	34E	25	0	O	New (Not drilled or compl)	F	1.59
3002525904	RHCJ ENTERPRISES, LLC	WALLEN BASS 003	16-Oct-78		20.05	34E	21	3681	O	Active	F	1.63
3002502471	CARPER DRILLING CO	THRALKELD ETAL 001	17-Oct-62	26-Oct-62	20.05	34E	28	3775	O	Plugged	P	1.64
3002540694	CIMAREX ENERGY CO.	CHIEF 30 STATE 002H	11-Aug-12		20.05	35E	30	10796	O	Active	P	1.64
3002540872	CIMAREX ENERGY CO.	CHIEF 30 STATE 003H	8-Jan-13		20.05	35E	30	10897	O	Active	S	1.65

3002540406	CIMAREX ENERGY CO.	CHIEF 30 STATE 001H	21-Apr-12		20.05	35E	30	10845	O	Active	S	1.68
3002502493	WILSON OIL CO	MUSE FEDERAL 002	2-Jan-00	2-Jan-00	20.05	34E	21	3703	O	Plugged	F	1.68
3002542771	BTA OIL PRODUCERS, LLC	ALINE 9012 JVP 002	2-Feb-16		20.05	34E	36	11488	O	Active	S	1.69
3002541066	CIMAREX ENERGY CO.	CHIEF 30 STATE 004H	3-May-13		20.05	35E	30	10979	O	Active	S	1.69
3002543195	BTA OIL PRODUCERS, LLC	ALINE 9012 JVP 003	2-May-16		20.05	34E	36	11493	O	Active	P	1.71
3002540906	CIMAREX ENERGY CO.	CHIEF 30 STATE 005	29-Jan-13		20.05	35E	30	11395	O	Active	S	1.71
3002543292	CIMAREX ENERGY CO.	CHIEF 30 STATE 006	21-Jul-16		20.05	35E	30	11650	O	Active	S	1.73
3002531441	STEVEN D RUPPERT	SILVER FEDERAL 002	10-Nov-91		20.05	34E	28	3684	O	Active	F	1.73
3002540471	CAZA OPERATING, LLC	IGLOO BRR STATE 001C			20.05	35E	19	0	O	New (Not drilled or compl)	S	1.79
3002502474	STEVEN D RUPPERT	SILVER FEDERAL 001	8-Jan-59		20.05	34E	28	3719	O	Active	F	1.80
3002502470	CARPER DRILLING CO	CARPER SINGLETON 001	27-Feb-59	1-Jun-59	20.05	34E	28	3846	O	Plugged	P	1.80
3002542361	CAZA OPERATING, LLC	IGLOO 19 STATE 007C			20.05	35E	19	0	O	Expired Permit	S	1.81
3002502476	STEVEN D RUPPERT	SILVER FEDERAL 004	4-May-59		20.05	34E	28	3787	S	Active	F	1.83
3002542380	CAZA OPERATING, LLC	IGLOO 19 STATE 008C			20.05	35E	19	0	O	Expired Permit	S	1.84
3002526288	RHCJ ENTERPRISES, LLC	WALLEN BASS 004	1-Jun-79		20.05	34E	21	3669	O	Active	F	1.86
3002526952	EOG Y RESOURCES, INC.	WEST LYNCH DEEP UNIT 001		13-Jan-10	20.05	34E	28	13875	G	Plugged	F	1.89
3002540618	COG OPERATING LLC	STRATOSPHERE 36 STATE 001H	12-Dec-12		20.05	34E	36	10672	O	Active	S	1.93
3002502486	C L NORSWORTHY JR	PERRY FEDERAL 001	2-Jan-00	2-Jan-00	20.05	34E	33	3777	O	Plugged	F	1.93
3002534627	OGS OPERATING CO INC	GOB 33 FEDERAL 001	19-Jul-99	21-Jul-99	20.05	34E	33	3874	O	Plugged	F	1.97
3002502475	STEVEN D RUPPERT	SILVER FEDERAL 003	23-Oct-59		20.05	34E	28	3693	O	Active	F	2.07

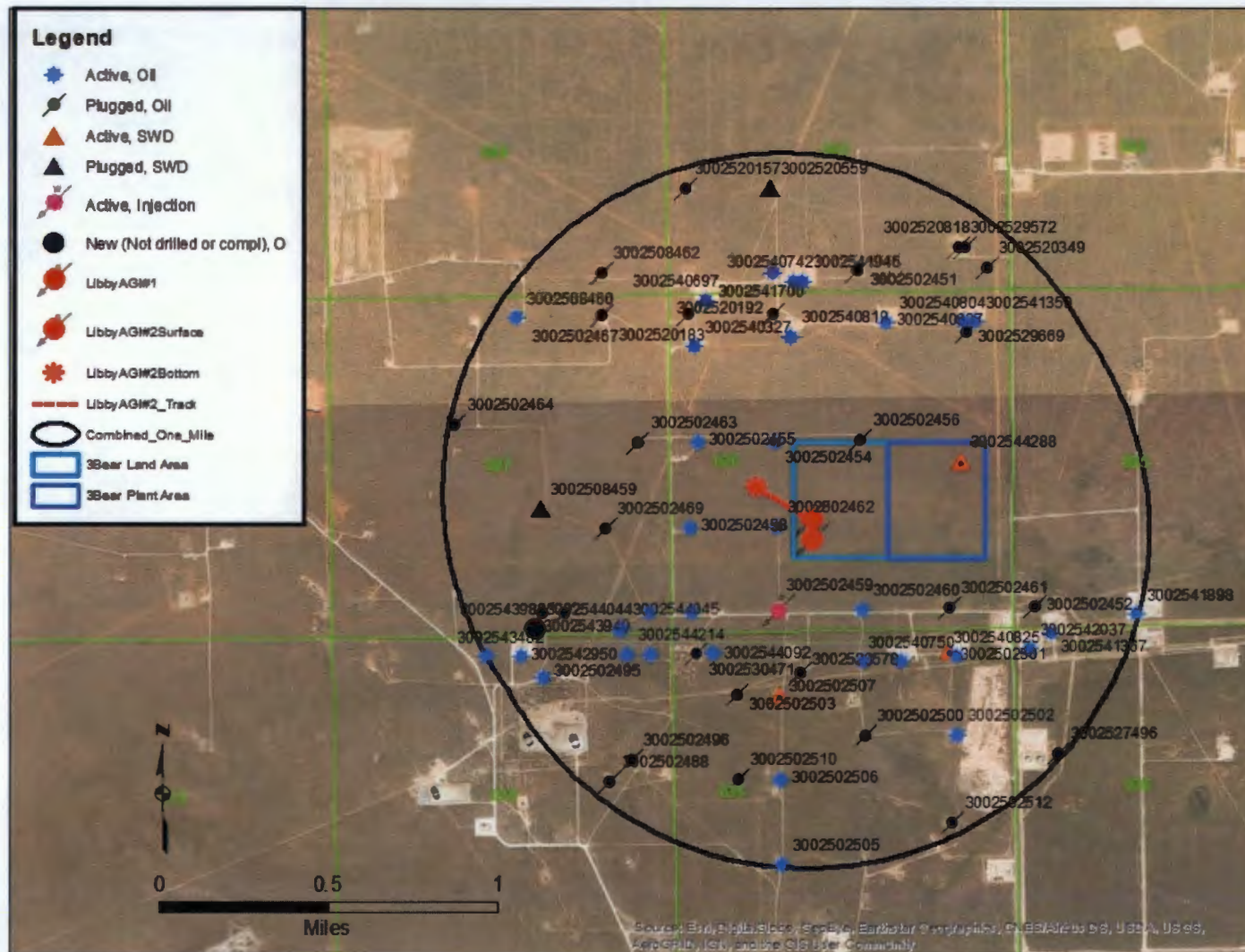
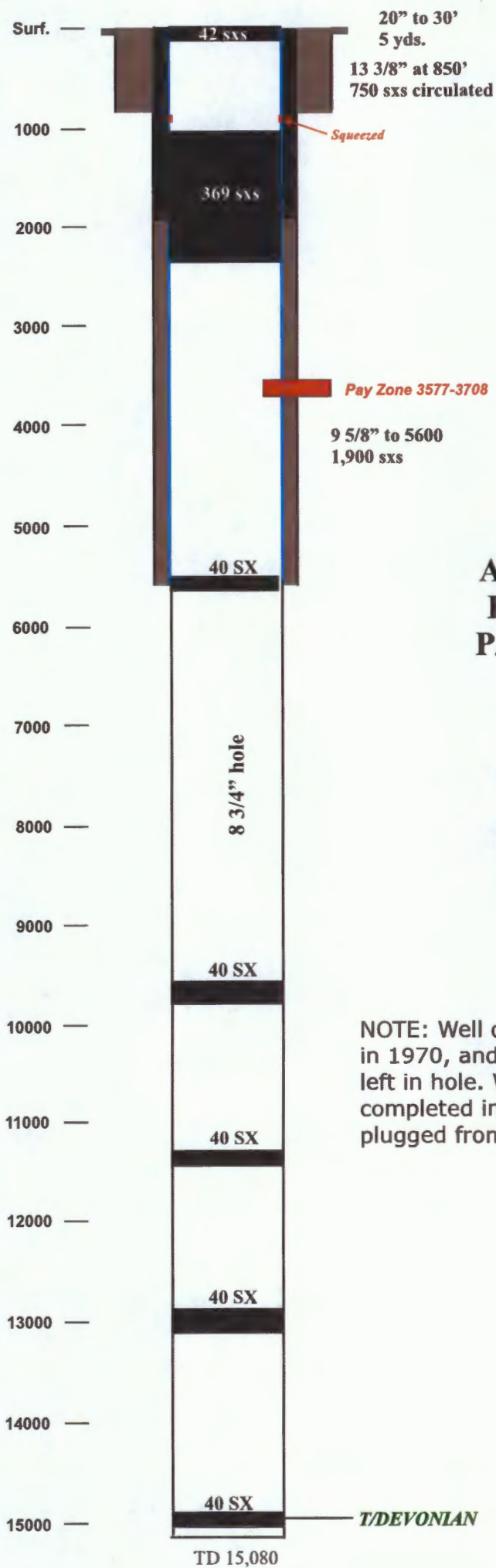


Figure A-1: Wells within One Mile of Proposed 3Bear AGI Wells



**30-025-23578
ARLEN EDGAR
FEDERAL C #1
P/A Yates-7Rivers
August, 1989**

CEMENT REPORTED
CEMENT PLUGS & SQUEEZE

NOTE: Well originally drilled to the Devonian in 1970, and P/A as a dry hole. 9 5/8" casing left in hole. Well was re-entered in 1974 and completed in the Yates-Seven Rivers. Well was plugged from the Yates-Seven Rivers in 1989.

Appendix B:

Identification of Operators, Surface Owners, Lessees, Working Interest Operators and other Interested Parties for Notices, Copies of Notice Letters and Certified Mail Receipts

Table B-1:	Surface Owners
Table B-2:	Operators
Table B-3	Working Interest Operators
Table B-4:	Parties to be Individually Notified
Figure B-1:	Operators Surface Owners within One Mile of Proposed 3Bear AGI Wells
Figure B-2:	Operators within One Mile of Proposed 3Bear AGI Wells
Attachment A:	Draft Notice Letter
Attachment B:	Land Data Supplied by Elkhorn Land & Title, LLC

**Table B-1
Surface Owners:**

Section 22, Township 20 South, Range 34 East

T Over V Ranch Land LLLP	S/2 SE/4
P.O. Box 160	
Eunice, New Mexico 88231	

Section 23, Township 20 South, Range 34 East

Bureau of Land Management	S/2
301 Dinosaur Trail	
Santa Fe, New Mexico 87508	

Section 24, Township 20 South, Range 34 East

S&S Inc.	SW/4 SW/4
P.O. Box 1046	
Eunice, New Mexico 88231	

Section 25, Township 20 South, Range 34 East

Martha W. Skeen	W/2
301 South Canyon	
Carlsbad, New Mexico 88220	

The Kelly Skeen Testamentary Trust,
Linda Ann Jurva & Curtis Kelly Skeen, Trustees
301 South Canyon
Carlsbad, New Mexico 88220

Curtis K. Skeen & Carole D. Skeen
1508 Riverside Drive
Carlsbad, New Mexico 88220

Linda Skeen Jurva
1134 Tracy Place
Carlsbad, New Mexico 88220

Section 26, Township 20 South, Range 34 East

T Over V Ranch Land LLLP	All
P.O. Box 160	
Eunice, New Mexico 88231	

3 Bear Delaware Operating-NM LLC
1512 Larimer Street, Suite 540
Denver, Colorado 80202

Section 27, Township 20 South, Range 34 East

T Over V Ranch Land LLLP
P.O. Box 160
Eunice, New Mexico 88231

E/2, E/2 W/2

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

Section 34, Township 20 South, Range 34 East

T Over V Ranch Land LLLP
P.O. Box 160
Eunice, New Mexico 88231

NE/4, NE/4 NW/4, NE/4 SE/4

Plains Pipeline LP
P.O. Box 4648
Houston, Texas 77210

Section 35, Township 20 South, Range 34 East

T Over V Ranch Land LLLP
P.O. Box 160
Eunice, New Mexico 88231

N/2, N/2 S/2

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

Section 36, Township 20 South, Range 34 East

S&S Inc.
P.O. Box 1046
Eunice, New Mexico 88231

**N/2 NW/4, SW/4 NW/4, NW/4
SW/4**

**Table B-2
Operators:**

Section 22, Township 20 South, Range 34 East

Chestnut Exploration & Production, Inc.
2201 N. Central Expressway, Suite 240
Richardson, Texas 75080
972-715-8807

S/2 SE/4

Cimarex Energy Company
600 N. Marienfeld Street, Suite 600
Midland, Texas 79701
432-620-1936

Section 23, Township 20 South, Range 34 East

Cimarex Energy Company
600 N. Marienfeld Street, Suite 600
Midland, Texas 79701
432-620-1936

S/2

Chisholm Energy Operating, LLC
801 Cherry Street
Fort Worth, Texas 76102
817-953-3728

Burk Royalty Co., Ltd.
P.O. Box 94903
Wichita Falls, Texas 76308
940-397-8650

Section 25, Township 20 South, Range 34 East

Chisholm Energy Operating, LLC
801 Cherry Street
Fort Worth, Texas 76102
817-953-3728

W/2

Section 26, Township 20 South, Range 34 East

Cimarex Energy Company
600 N. Marienfeld Street, Suite 600
Midland, Texas 79701
432-620-1936

All

Burk Royalty Co., Ltd.
P.O. Box 94903
Wichita Falls, Texas 76308
940-397-8650

3 Bear Field Services, LLC
500 Don Gaspar Avenue
Santa Fe, New Mexico 87505
575-626-7100

Section 27, Township 20 South, Range 34 East

Chestnut Exploration & Production, Inc.
2201 N. Central Expressway, Suite 240
Richardson, Texas 75080
972-715-8807

E/2, E/2 W/2

Marathon Oil Permian LLC
5555 San Felipe Street
Houston, Texas 77056
713-296-2500

Mas Operating Co.
P.O. Box 52167
Midland, Texas 79710
432-618-0678

Apache Corporation
303 Veterans Airpark Lane, Suite 1000
Midland, Texas 79705
432-818-1000

Section 34, Township 20 South, Range 34 East

Mas Operating Co.
P.O. Box 52167
Midland, Texas 79710
432-618-0678

NE/4, NE/4 NW/4, NE/4 SE/4

COG Operating LLC
600 W. Illinois Ave.
Midland, Texas 79701
432-683-7443

Section 35, Township 20 South, Range 34 East

Cimarex Energy Company
600 N. Marienfeld Street, Suite 600
Midland, Texas 79701
432-620-1936

Burk Royalty Co., Ltd.
P.O. Box 94903
Wichita Falls, Texas 76308
940-397-8650

N/2, N/2 S/2

COG Operating LLC
600 W. Illinois Avenue
Midland, Texas 79701
432-683-7443

BC Operating, Inc.
P.O. Box 50820
Midland, Texas 79710
432-684-9696

Mas Operating Co.
P.O. Box 52167
Midland, Texas 79710
432-616-0678

Section 36, Township 20 South, Range 34 East

COG Operating LLC
600 W. Illinois Avenue
Midland, Texas 79701
432-683-7443

**N/2 NW/4, SW/4 NW/4, NW/4
SW/4**

**Table B-3
Working Interest Owners:**

Section 24, Township 20 South, Range 34 East

COG Operating LLC
600 W. Illinois Ave.
Midland, Texas 79701
432-683-7443

SW/4 SW/4

TABLE B-4: PARTIES TO BE INDIVIDUALLY NOTIFIED

SURFACE OWNERS

3 Bear Delaware Operating-NM LLC
1512 Larimer Street, Suite 540
Denver, Colorado 80202

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

Plains Pipeline LP
P.O. Box 4648
Houston, Texas 77210

S&S Inc.
P.O. Box 1046
Eunice, New Mexico 88231

Martha W. Skeen
301 South Canyon
Carlsbad, New Mexico 88220

The Kelly Skeen Testamentary Trust, Linda Ann Jurva & Curtis Kelly Skeen, Trustees
301 South Canyon
Carlsbad, New Mexico 88220

Curtis K. Skeen & Carole D. Skeen
1508 Riverside Drive
Carlsbad, New Mexico 88220

Linda Skeen Jurva
1134 Tracy Place
Carlsbad, New Mexico 88220

T Over V Ranch Land LLLP
P.O. Box 160
Eunice, New Mexico 88231

OPERATORS

3 Bear Field Services, LLC
500 Don Gaspar Avenue
Santa Fe, New Mexico 87505
575-626-7100

Apache Corporation
303 Veterans Airpark Lane, Suite 1000
Midland, Texas 79705
432-818-1000

BC Operating, Inc.
P.O. Box 50820
Midland, Texas 79710
432-684-9696

Burk Royalty Co., Ltd.
P.O. Box 94903
Wichita Falls, Texas 76308
940-397-8650

Chestnut Exploration & Production, Inc.
2201 N. Central Expressway, Suite 240
Richardson, Texas 75080
972-715-8807

Chisholm Energy Operating, LLC
801 Cherry Street
Fort Worth, Texas 76102
817-953-3728

Cimarex Energy Company
600 N. Marienfeld Street, Suite 600
Midland, Texas 79701
432-620-1936

COG Operating LLC
600 W. Illinois Avenue
Midland, Texas 79701
432-683-7443

Marathon Oil Permian LLC
5555 San Felipe Street
Houston, Texas 77056
713-296-2500

Mas Operating Co.
P.O. Box 52167
Midland, Texas 79710
432-618-0678

March 4, 2019

Example notice letter
Party to be notified
Address

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

RE: CASE NUMBER XXXXX: 3BEAR FIELD SERVICES LLC PROPOSED LIBBY
AGI #1 AND #2

This letter is to advise you that 3Bear Field Services LLC ("3Bear") filed the enclosed C-108 application on XXXX, with the New Mexico Oil Conservation Commission seeking authorization to drill two Acid Gas Injection (AGI) wells at their Libby Gas Plant (the "Plant") in Lea County, New Mexico. AGI #1 will be a vertical well, located at 1970' FWL, 1475' FSL in Section 26, T20S, R34E. AGI #2 will be a deviated well, and the surface location will be at 1970' FWL and 1910 FSL, with a bottom hole location of 1320 FWL and 2275 FWS, also in Section 26, T20S, R34E, NMPM, Lea County, New Mexico. 3Bear plans to inject up to 8 million standard cubic feet per day (MMSCFD) of treated acid gas from the Plant at a maximum pressure of 4,525 psig into the Devonian and Upper Silurian Wristen and Fusselman Formations, approximately 14,900 to 16,400 feet below the surface. The proposed wells will serve as a disposal well for acid gas at this plant.

This application (Case Number XXXXX) has been set for hearing before the New Mexico Oil Conservation Commission at XXXam on YYY, 2019, in Wendell Chino Building at the New Mexico Oil Conservation Division's Santa Fe office located at 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505. You are not required to attend this hearing, but as an owner of an interest that may be affected by 3Bear's application, you may appear and present testimony. Failure to appear at that time and become a party of record will preclude you from challenging the application at a later date.

A party appearing at the hearing is required by Division Rule 19.15.4.13 NMAC to file a Pre-Hearing Statement at least four days in advance of a scheduled hearing, but in no event not later than 5:00 p.m. Mountain Time on the Thursday preceding the scheduled hearing date. This statement must be filed at the Division's Santa Fe office at the above-specified address and should include the names of the parties and their attorneys; a concise statement of the case; the names of all witnesses the party will call to testify at the hearing; the approximate time the party will need to present its case; and an identification of any procedural matters that need to be resolved prior to the hearing.

If you have any questions concerning this application, or to obtain an entire copy of the C-108, you may contact Mr. Alberto Gutierrez or Mr. James C. Hunter at (505) 842-8000 at Geolex, Inc.; 500 Marquette Avenue NW, Suite 1350; Albuquerque, New Mexico 87102.

Sincerely,
Geolex, Inc.

Alberto A. Gutiérrez, C.P.G.
President
Consultant to 3Bear Field Services LLP
Enclosure: C-108 Application for Authority to Inject



American Abstract
P.O. Box 23510
Santa Fe, NM 87502
(505) 780-4338

Township: 20 S. Range: 34 E. N.M.P.M.
County: Lea
Date: November 27, 2018

✓ Open Lands
X State Lands
X Fee Lands

MASTER PLAT

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
					1
30	29	28	27	26	25
31	32	33	34	35	36

1. NMNM 123525

1. Updated: 11/27/2018

Township: 20 S. **Range:** 34 E. **Section:** 24 **County:** Lea

Lease: NMNM 123525 **Lease Issued:** 09/01/2009 **Royalty Rate:** 12-1/2%

Status: This Lease is Due to Expire 08/31/2019

Lessee(s):

100% COG Operating LLC, 600 W. Illinois Ave., Midland, TX 79701

Operating Rights:

Section 24-SWSW, all depths

100% Lessee

Overriding Royalty:

None outstanding

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
CASE RECORDATION
(MASS) Serial Register Page

Run Date/Time: 11/27/2018 14:01 PM

Page 1 Of 2

01 12-22-1987;101STAT1330;30USC181 ET SEQ
Case Type 312021: O&G LSE COMP PD -1987
Commodity 459: OIL & GAS
Case Disposition: AUTHORIZED

Total Acres: 80.000
Serial Number NMNM 123525

Serial Number: NMNM-- 123525

Name & Address	Int Rel	% Interest
COG OPERATING LLC 600 W ILLINOIS AVE MIDLAND TX 797014882	LESSEE	100.00000000

Serial Number: NMNM-- 123525

Mer Twp Rng	Sec	S Type	Nr	Suff	Subdivision	District/ Field Office	County	Mgmt Agency
23	0200S 0340E	024	ALIQ		W2SW;	CARLSBAD FIELD OFFICE	LEA	BUREAU OF LAND MGMT

Relinquished/Withdrawn Lands

Serial Number: NMNM-- 123525

Serial Number: NMNM-- 123525

Act Date	Act Code	Action Txt	Action Remarks	Pending Off
06/05/2009	387	CASE ESTABLISHED	200907029;	
07/22/2009	143	BONUS BID PAYMENT RECD	\$160.00;	
07/22/2009	191	SALE HELD		
07/22/2009	267	BID RECEIVED	\$68000.00;	
08/03/2009	143	BONUS BID PAYMENT RECD	\$67840.00;	
08/13/2009	237	LEASE ISSUED		
09/01/2009	496	FUND CODE	05;145003	
09/01/2009	530	RLTY RATE - 12 1/2%		
09/01/2009	868	EFFECTIVE DATE		
09/13/2009	974	AUTOMATED RECORD VERIF	BCO	
11/16/2009	140	ASGN FILED	GONZALES/SAMSON RE;1	
03/09/2010	139	ASGN APPROVED	EFF 12/01/09;	
03/09/2010	974	AUTOMATED RECORD VERIF	RAYO/RAYO	
04/11/2011	140	ASGN FILED	SAMSON RE/THREE RIV;1	
06/30/2011	139	ASGN APPROVED	EFF 05/01/11;	
06/30/2011	974	AUTOMATED RECORD VERIF	LBO	
08/14/2012	140	ASGN FILED	THREE RIV/COG OPERA;1	
10/19/2012	139	ASGN APPROVED	EFF 09/01/12;	
10/19/2012	974	AUTOMATED RECORD VERIF	JA;	
08/31/2019	763	EXPIRES		

NO WARRANTY IS MADE BY BLM FOR USE OF THE DATA FOR PURPOSES NOT INTENDED BY BLM

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
CASE RECORDATION
(MASS) Serial Register Page

Run Date/Time: 11/27/2018 14:01 PM

Page 2 Of 2

Line Number	Remark Text	Serial Number: NMNM- 123525
0002	STIPULATIONS ATTACHED TO LEASE:	
0003	NM-11-LN SPECIAL CULTURAL RESOURCE	
0004	SENM-S-1 POTASH STIPULATION	
0005	SENM-S-22 PRAIRIE CHICKENS	
0006	10/19/12 - RENT PAID 09/01/2012	

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Serial Number
NMNM 123525

OFFER TO LEASE AND LEASE FOR OIL AND GAS

The undersigned (page 2) offers to lease all or any of the lands in item 2 that are available for lease pursuant to the Mineral Lands Leasing Act of 1920, as amended and supplemented (30 U.S.C. 181 et seq.), the Mineral Leasing Act for Acquired Lands of 1947, as amended (30 U.S.C. 351-359), the Attorney General's Opinion of April 2, 1941 (40 Op. Atty. Gen 41), or the Combined Hydrocarbon Leasing Act of 1981 (95 Stat 1070).

READ INSTRUCTIONS BEFORE COMPLETING

1. Name GONZALES DANIEL E
Street PO BOX 2288
City, State, Zip Code SANTA FE, NM 87504

2. This application/offer/lease is for: (Check Only One) ☒ PUBLIC DOMAIN LANDS ☐ ACQUIRED LANDS (percent U.S. interest _____)

Surface managing agency if other than Bureau of Land Management (BLM): _____ Unit/Project _____

Legal description of land requested: *Parcel No.: _____ *Sale Date (mm/dd/yyyy): _____

*See Item 2 in Instructions below prior to completing Parcel Number and Sale Date.

T. _____ R. _____ Meridian _____ State _____ County _____

Amount remitted: Filing fee \$ _____ Rental fee \$ _____ Total acres applied for _____
Total \$ _____

DO NOT WRITE BELOW THIS LINE

3. Land included in lease:

T. 0200S R. 0340E
Sec. 024 W2SW;

Meridian NMPM State NM County Lea



Total acres in lease 80.000
Rental retained \$ 120.00

This lease is issued granting the exclusive right to drill for, mine, extract, remove and dispose of all the oil and gas (except helium) in the lands described in Item 3 together with the right to build and maintain necessary improvements thereupon for the term indicated below, subject to renewal or extension in accordance with the appropriate leasing authority. Rights granted are subject to applicable laws, the terms, conditions, and attached stipulations of this lease, the Secretary of the Interior's regulations and formal orders in effect as of lease issuance, and to regulations and formal orders hereafter promulgated when not inconsistent with lease rights granted or specific provisions of this lease.

NOTE: This lease is issued to the high bidder pursuant to his/her duly executed bid or nomination form submitted under 43 CFR 3120 and is subject to the provisions of that bid or nomination and those specified on this form.

Type and primary term:

☐ Noncompetitive lease (ten years)

☒ Competitive lease (ten years)

☐ Other _____ EFFECTIVE DATE OF LEASE

THE UNITED STATES OF AMERICA

by Becky A. Davis

(BLM)
LAND LAW EXAMINER, FLUIDS ADJUDICATION TEAM AUG 13 2009
(Title) (Date)

SEP - 1 2009

4. (a) Undersigned certifies that (1) offeror is a citizen of the United States; an association of such citizens; a municipality; or a corporation organized under the laws of the United States or of any State or Territory thereof; (2) all parties holding an interest in the offer are in compliance with 43 CFR 3100 and the leasing authorities; (3) offeror's chargeable interests, direct and indirect, in each public domain and acquired lands separately in the same State, do not exceed 246,080 acres in oil and gas leases (of which up to 200,000 acres may be in oil and gas options or 300,000 acres in leases in each leasing District in Alaska of which up to 200,000 acres may be in options); (4) offeror is not considered a minor under the laws of the State in which the lands covered by this offer are located; (5) offeror is in compliance with qualifications concerning Federal coal lease holdings provided in sec. 2(a)(2)(A) of the Mineral Leasing Act; (6) offeror is in compliance with reclamation requirements for all Federal oil and gas lease holdings as required by sec. 17(g) of the Mineral Leasing Act; and (7) offeror is not in violation of sec. 41 of the Act. (b) Undersigned agrees that signature to this offer constitutes acceptance of this lease, including all terms conditions, and stipulations of which offeror has been given notice, and any amendment or separate lease that may include any land described in this offer open to leasing at the time this offer was filed but omitted for any reason from this lease. The offeror further agrees that this offer cannot be withdrawn, either in whole or in part unless the withdrawal is received by the proper BLM State Office before this lease, an amendment to this lease, or a separate lease, whichever covers the land described in the withdrawal, has been signed on behalf of the United States.

This offer will be rejected and will afford offeror no priority if it is not properly completed and executed in accordance with the regulations, or if it is not accompanied by the required payments.

Duly executed this _____ day of _____, 20_____
(Signature of Lessee or Attorney-in-fact)

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212 make it a crime for any person knowingly and willfully to make to any department or Agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction

LEASE TERMS

Sec. 1. Rentals--Rentals must be paid to proper office of lessor in advance of each lease year. Annual rental rates per acre or fraction thereof are:

- (a) Noncompetitive lease, \$1.50 for the first 5 years; thereafter \$2.00;
- (b) Competitive lease, \$1.50; for the first 5 years; thereafter \$2.00;
- (c) Other, see attachment, or

as specified in regulations at the time this lease is issued.

If this lease or a portion thereof is committed to an approved cooperative or unit plan which includes a well capable of producing leased resources, and the plan contains a provision for allocation of production, royalties must be paid on the production allocated to this lease. However, annual rentals must continue to be due at the rate specified in (a), (b), or (c) rentals for those lands not within a participating area.

Failure to pay annual rental, if due, on or before the anniversary date of this lease (or next official working day if office is closed) must automatically terminate this lease by operation of law. Rentals may be waived, reduced, or suspended by the Secretary upon a sufficient showing by lessee.

Sec. 2. Royalties--Royalties must be paid to proper office of lessor. Royalties must be computed in accordance with regulations on production removed or sold. Royalty rates are:

- (a) Noncompetitive lease, 12 1/2%;
- (b) Competitive lease, 12 1/2 %;
- (c) Other, see attachment; or

as specified in regulations at the time this lease is issued.

Lessor reserves the right to specify whether royalty is to be paid in value or in kind, and the right to establish reasonable minimum values on products after giving lessee notice and an opportunity to be heard. When paid in value, royalties must be due and payable on the last day of the month following the month in which production occurred. When paid in kind, production must be delivered, unless otherwise agreed to by lessor, in merchantable condition on the premises where produced without cost to lessor. Lessee must not be required to hold such production in storage beyond the last day of the month following the month in which production occurred, nor must lessee be held liable for loss or destruction of royalty oil or other products in storage from causes beyond the reasonable control of lessee.

Minimum royalty in lieu of rental of not less than the rental which otherwise would be required for that lease year must be payable at the end of each lease year beginning on or after a discovery in paying quantities. This minimum royalty may be waived, suspended, or reduced, and the above royalty rates may be reduced, for all or portions of this lease if the Secretary determines that such action is necessary to encourage the greatest ultimate recovery of the leased resources, or is otherwise justified.

An interest charge will be assessed on late royalty payments or underpayments in accordance with the Federal Oil and Gas Royalty Management Act of 1982 (FOGRMA) (30 U.S.C. 1701). Lessee must be liable for royalty payments on oil and gas lost or wasted from a lease site when such loss or waste is due to negligence on the part of the operator, or due to the failure to comply with any rule, regulation, order, or citation issued under FOGRMA or the leasing authority.

Sec. 3. Bonds-A bond must be filed and maintained for lease operations as required under regulations.

Sec. 4. Diligence, rate of development, utilization, and drainage-Lessee must exercise reasonable diligence in developing and producing, and must prevent unnecessary damage to, loss of, or waste of leased resources. Lessor reserves right to specify rates of development and production in the public interest and to require lessee to subscribe to a cooperative or unit plan, within 30 days of notice, if deemed necessary for proper development and operation of area, field, or pool embracing these leased lands. Lessee must drill and produce wells necessary to protect leased lands from drainage or pay compensatory royalty for drainage in amount determined by lessor.

Sec. 5. Documents, evidence, and inspection-Lessee must file with proper office of lessor, not later than 30 days after effective date thereof, any contract or evidence of other arrangement for sale or disposal of production. At such times and in such form as lessor may prescribe, lessee must furnish detailed statements showing amounts and quality of all products removed and sold, proceeds therefrom, and amount used for production purposes or unavoidably lost. Lessee may be required to provide plats and schematic diagrams showing development work and improvements, and reports with respect to parties in interest, expenditures, and depreciation costs. In the form prescribed by lessor, lessee must keep a daily drilling record, a log, information on well surveys and tests, and a record of subsurface investigations and furnish copies to lessor when required. Lessee must keep open at all reasonable times for inspection by any authorized officer of lessor, the leased premises and all wells, improvements, machinery, and fixtures thereon, and all books, accounts, maps, and records relative to operations, surveys, or investigations on or in the leased lands. Lessee must maintain copies of all contracts, sales agreements, accounting records, and documentation such as billings, invoices, or similar documentation that supports costs claimed as manufacturing, preparation, and/or transportation costs. All such records must be maintained in lessee's accounting offices for future audit by lessor. Lessee must maintain required records for 6 years after they are generated or, if an audit or investigation is underway, until released of the obligation to maintain such records by lessor.

During existence of this lease, information obtained under this section will be closed to inspection by the public in accordance with the Freedom of Information Act (5 U.S.C. 552).

Sec. 6. Conduct of operations-Lessee must conduct operations in a manner that minimizes adverse impacts to the land, air, and water, to cultural, biological, visual, and other resources, and to other land uses or users. Lessee must take reasonable measures deemed necessary by lessor to accomplish the intent of this section. To the extent consistent with lease rights granted, such measures may include, but are not limited to, modification to siting or design of facilities, timing of operations, and specification of interim and final reclamation measures. Lessor reserves the right to continue existing uses and to authorize future uses upon or in the leased lands, including the approval of easements or rights-of-way. Such uses must be conditioned so as to prevent unnecessary or unreasonable interference with rights of lessee.

Prior to disturbing the surface of the leased lands, lessee must contact lessor to be apprised of procedures to be followed and modifications or reclamation measures that may be necessary. Areas to be disturbed may require inventories or special studies to determine the extent of impacts to other resources. Lessee may be required to complete minor inventories or short term special studies under guidelines provided by lessor. If in the conduct of operations, threatened or endangered species, objects of historic or scientific interest or substantial unanticipated environmental effects are observed, lessee must immediately contact lessor. Lessee must cease any operations that would result in the destruction of such species or objects.

Sec. 7. Mining operations-To the extent that impacts from mining operations would be substantially different or greater than those associated with normal drilling operations, lessor reserves the right to deny approval of such operations.

Sec. 8. Extraction of helium-Lessor reserves the option of extracting or having extracted helium from gas production in a manner specified and by means provided by lessor at no expense or loss to lessee or owner of the gas. Lessee must include in any contract of sale of gas the provisions of this section.

Sec. 9. Damages to property-Lessee must pay lessor for damage to lessor's improvements, and must save and hold lessor harmless from all claims for damage or harm to persons or property as a result of lease operations.

Sec. 10. Protection of diverse interests and equal opportunity- Lessee must pay when due all taxes legally assessed and levied under laws of the State or the United States; accord all employees complete freedom of purchase; pay all wages at least twice each month in lawful money of the United States; maintain a safe working environment in accordance with standard industry practices and take measures necessary to protect the health and safety of the public.

Lessor reserves the right to ensure that production is sold at reasonable prices and to prevent monopoly. If lessee operates a pipeline, or owns controlling interest in a pipeline or a company operating a pipeline, which may be operated accessible to oil derived from these leased lands, lessee must comply with section 28 of the Mineral Leasing Act of 1920.

Lessee must comply with Executive Order No. 11246 of September 24, 1965, as amended, and regulations and relevant orders of the Secretary of Labor issued pursuant thereto. Neither lessee nor lessee's subcontractors must maintain segregated facilities.

Sec. 11. Transfer of lease interests and relinquishment of lease-As required by regulations, lessee must file with lessor any assignment or other transfer of an interest in this lease. Lessee may relinquish this lease or any legal subdivision by filing in the proper office a written relinquishment, which will be effective as of the date of filing, subject to the continued obligation of the lessee and surety to pay all accrued rentals and royalties.

Sec. 12. Delivery of premises-At such time as all or portions of this lease are returned to lessor, lessee must place affected wells in condition for suspension or abandonment, reclaim the land as specified by lessor and, within a reasonable period of time, remove equipment and improvements not deemed necessary by lessor for preservation of producible wells.

Sec. 13. Proceedings in case of default-If lessee fails to comply with any provisions of this lease, and the noncompliance continues for 30 days after written notice thereof, this lease will be subject to cancellation unless or until the leasehold contains a well capable of production of oil or gas in paying quantities, or the lease is committed to an approved cooperative or unit plan or communitization agreement which contains a well capable of production of unitized substances in paying quantities. This provision will not be construed to prevent the exercise by lessor of any other legal and equitable remedy, including waiver of the default. Any such remedy or waiver will not prevent later cancellation for the same default occurring at any other time. Lessee will be subject to applicable provisions and penalties of FOGPMA (30 U.S.C. 1701).

Sec. 14. Heirs and successors-in-interest-Each obligation of this lease will extend to and be binding upon, and every benefit hereof will inure to the heirs, executors, administrators, successors, beneficiaries, or assignees of the respective parties hereto.

A. General:

1. Page 1 of this form is to be completed only by parties filing for a noncompetitive lease. The BLM will complete page 1 of the form for all other types of leases.
2. Entries must be typed or printed plainly in ink. Offeror must sign Item 4 in ink.
3. An original and two copies of this offer must be prepared and filed in the proper BLM State Office. See regulations at 43 CFR 1821.2-1 for office locations.
4. If more space is needed, additional sheets must be attached to each copy of the form submitted.

B. Special:

Item 1-Enter offeror's name and billing address.

Item 2-Identify the mineral status and, if acquired lands, percentage of Federal ownership of applied for minerals. Indicate the agency controlling the surface of the land and the name of the unit or Project which the land is a part. The same offer may not include both Public

Domain and Acquired lands. Offeror also may provide other information that will assist in establishing title for minerals. The description of land must conform to 43 CFR 3110. A single parcel number and Sale Date will be the only acceptable description during the period from the first day following the end of a competitive process until the end of that same month, using the parcel number on the List of Lands Available for Competitive Nominations or the Notice of Competitive Lease Sale, whichever is appropriate.

Payments: The amount remitted must include the filing fee and the first year's rental at the rate of \$1.50 per acre or fraction thereof. The full rental based on the total acreage applied for must accompany an offer even if the mineral interest of the United States is less than 100 percent. The filing fee will be retained as a service charge even if the offer is completely rejected or withdrawn. To protect priority, it is important that the rental submitted be sufficient to cover all the land requested. If the land requested includes lots or irregular quarter-quarter sections, the exact area of which is not known to the offeror, rental should be submitted on the basis of each such lot or quarter-quarter section containing 40 acres. If the offer is withdrawn or rejected in whole or in part before a lease issues, the rental remitted for the parts withdrawn or rejected will be returned.

Item 3-This space will be completed by the United States.

NOTICES

The Privacy Act of 1974 and the regulations in 43 CFR 2.48(d) provide that you be furnished with the following information in connection with information required by this oil and gas lease offer.

AUTHORITY: 30 U.S.C. 181 et seq.; 30 U.S.C 351-359

PRINCIPAL PURPOSE: The information is to be used to process oil and gas offers and leases.

ROUTINE USES: (1) The adjudication of the lessee's rights to the land or resources. (2) Documentation for public information in support of notations made on land status records for the management, disposal, and use of public lands and resources. (3) Transfer to appropriate Federal agencies when consent or concurrence is required prior to granting a right in public lands or resources. (4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions.

EFFECT OF NOT PROVIDING INFORMATION: If all the information is not provided, the offer may be rejected. See regulations at 43 CFR 3100.

The Paperwork Reduction Act of 1995 requires us to inform you that:

This information is being collected pursuant to the law.

This information will be used to create and maintain a record of oil and gas lease activity.

Response to this request is required to obtain a benefit.

BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 1 hour per response including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0145), Bureau Information Collection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop, 401LS, Washington, D.C. 20240

NM-11 LN

SPECIAL CULTURAL RESOURCE
LEASE NOTICE

All development activities proposed under the authority of this lease are subject to compliance with Section 106 of the NHPA and Executive Order 13007. The lease area may contain historic properties, traditional cultural properties (TCP's), and/or sacred sites currently unknown to the BLM that were not identified in the Resource Management Plan or during the lease parcel review process. Depending on the nature of the lease developments being proposed and the cultural resources potentially affected, compliance with Section 106 of the National Historic Preservation Act and Executive Order 13007 could require intensive cultural resource inventories, Native American consultation, and mitigation measures to avoid adverse effects—the costs for which will be borne by the lessee. The BLM may require modifications to or disapprove proposed activities that are likely to adversely affect TCP's or sacred sites for which no mitigation measures are possible. This could result in extended time frames for processing authorizations for development activities, as well as changes in the ways in which developments are implemented.

SENM-S-1

POTASH STIPULATION

Stipulations to be made part of any oil and gas lease involving lands described in Secretarial Order, 51 Federal Register 39425 (October 28, 1986).

The lessee further agrees that:

- (1) Drilling for oil and gas shall be permitted only in the event that the lessee establishes to the satisfaction of the Authorized Officer, Bureau of Land Management, that such drilling will not interfere with the mining and recovery of potash deposits, or the interest of the United States will best be served by permitting such drilling.
- (2) No wells shall be drilled for oil or gas at a location which, in the opinion of the Authorized Officer, would result in undue waste of potash deposits or constitute a hazard to or unduly interfere with mining operations being conducted for the extraction of potash deposits.
- (3) When it is determined by the Authorized Officer, that unitization is necessary for orderly oil and gas development and proper protection of potash deposits, no well shall be drilled for oil or gas except pursuant to a unit plan approved by the Authorized Officer.
- (4) The drilling or the abandonment of any well on said lease shall be done in accordance with applicable oil and gas operating regulations (43 CFR 3160), including such requirements as the Authorized Officer may prescribe as necessary to prevent the infiltration of oil, gas or water into formations containing potash deposits or into mines or workings being utilized in the extraction of such deposits.

On the land(s) described below:

All Lands in Lease.

CONTROLLED SURFACE USE
PRAIRIE CHICKENS

No surface use is allowed during the following time periods; unless otherwise specified, this stipulation does not apply to the operation and maintenance of production facilities.

Drilling for oil and gas, and 3-D geophysical exploration operations will not be allowed in Lesser Prairie Chicken Habitat during the period of March 1 through June 15, each year. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 a.m. and 9:00 a.m. The 3:00 a.m. and 9:00 a.m. restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during the period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise. Exceptions to these requirements will be considered for areas of no or low prairie chicken booming activity, or unoccupied habitat, including leks, as determined at the time of permitting, or in emergency situations.

For the purpose of: Protecting Prairie Chickens

Form 3000-2
(January 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
COMPETITIVE OIL AND GAS OR
GEOTHERMAL RESOURCES LEASE BID
30 U.S.C. 181 et seq.; 30 U.S.C. 351-35f
30 U.S.C. 1001-1025; 42 U.S.C. 6508

NMNM 123525

FORM APPROVED
OMB NO. 1004-0074
Expires: December 31, 2009

State

NM

Date of Sale

7-22-09

PARCEL NUMBER	AMOUNT OF BID (see instructions below)	
	TOTAL BID	PAYMENT SUBMITTED WITH BID
THE BID IS FOR (check one): <input checked="" type="checkbox"/> Oil and Gas Parcel Number <u>200907 029</u>	<u>65,000.00</u>	<u>420.00</u>
<input type="checkbox"/> Geothermal Parcel Number _____ Name of Known Geothermal Resource Area (KGRA) _____		

The appropriate regulations applicable to this bid are: (1) for oil and gas leases--43 CFR 3120; (2) for National Petroleum Reserve-Alaska (NPR-A) leases--43 CFR 3132; and (3) for Geothermal resources leases--43 CFR 3220. (See details concerning lease qualifications on next page.)

I CERTIFY THAT I have read and am in compliance with; and not in violation of the lessee qualification requirements under the applicable regulations for this bid.

I CERTIFY THAT this bid is not in violation of 18 U.S.C. 1860 which prohibits unlawful combination or intimidation of bidders. I further certify that this bid was arrived at independently and is tendered without collusion with any other bidder for the purpose of restricting competition.

IMPORTANT NOTICE: Execution of this form where the offer is the high bid, constitutes a binding lease offer including all applicable terms and conditions. Failure to comply with the applicable laws and regulations under which this bid is made will result in rejection of the bid and forfeiture of all monies submitted.

Daniel E. Gonzales
Print or Type Name of Lessee

[Signature]
Signature of Lessee or Bidder

P.O. Box 2475
Address of Lessee

Santa Fe NM 87504
City State Zip

INSTRUCTIONS FOR OIL AND GAS BID
(Except NPR-A)

1. Separate bid for each parcel is required. Identify parcel by the parcel number assigned in the *Notice of Competitive Lease Sale*.
2. Bid must be accompanied by the national minimum acceptable bid, the first year's rental and the administrative fee. The remittance must be in the form specified in 43 CFR 3103.1-1. The remainder of the bonus bid, if any, must be submitted to the proper Bureau of Land Management (BLM) office within 10 working days after the last day of the oral auction. Failure to submit the remainder of the bonus bid within 10 working days will result in rejection of the bid offer and forfeiture of all monies paid.
3. If the bidder is not the sole party in interest in the lease for which the bid is submitted, all other parties in interest may be required to furnish evidence of their qualifications upon written request by the BLM.
4. This bid may be executed (signed) before the oral auction. If signed before the oral auction, this form cannot be modified without being executed again.
5. In view of the above requirement (4), the bidder may wish to leave the AMOUNT OF BID section blank so that final bid amount may be either completed by the bidder or the BLM at the oral auction.

INSTRUCTIONS

INSTRUCTIONS FOR GEOTHERMAL OR
NPR-A OIL AND GAS BID

1. Separate bid for each parcel is required. Identify the parcel by the number assigned to a tract.
2. Bid must be accompanied by one-fifth of the total amount of the bid. The remittance must be in the form specified in 43 CFR 3220.4 for a Geothermal Resources bid and 3132.2 for a NPR-A lease bid.
3. Mark the envelope "Bid for Geothermal Resources Lease" in (Name of KGRA) or "Bid for NPR-A Lease," as appropriate. Be sure correct parcel number of tract on which the bid is submitted and date of bid opening are noted plainly on envelope. No bid may be modified or withdrawn unless such modification or withdrawal is received prior to time fixed for opening of bids.
4. Mail or deliver bid to the proper BLM office or place indicated in the *Notice of Competitive Lease Sale*.
5. If the bidder is not the sole party in interest in the lease for which bid is submitted, all other parties in interest may be required to furnish evidence of their qualifications upon written request by the BLM.

FORM 1004-MSO
(May 2009)
SAFE
RECEIVED

NOV 16 2009

PAID
RECEIPT# 2035611

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

ASSIGNMENT OF RECORD TITLE INTEREST IN A
LEASE FOR OIL AND GAS OR GEOTHERMAL RESOURCES

Mineral Leasing Act of 1920 (30 U.S.C. 181 et seq.)

Act for Acquired Lands of 1947 (30 U.S.C. 351 - 359)

Geothermal Steam Act of 1970 (30 U.S.C. 1001 - 1025)

Department of the Interior Appropriations Act, Fiscal Year 1981 (42 U.S.C. 6508)

FORM APPROVED
OMB NO. 1004-0034
Expires: April 30, 2009

Lease Serial No.
NMNM 123525

Lease Effective Date
(Anniversary Date)

New Serial No.

Type or print plainly in ink and sign in ink.

PART A: ASSIGNMENT

1. Assignee* Samson Resources Company
Street 200 N. Lorraine, Ste. 1010
City, State, Zip Code Midland, TX 79702

1a. Assignor Daniel E. Gonzales & Ilana S. Gonzales

*If more than one assignee, check here ☐ and list the name(s) and address(es) of all additional assignees on page 2 of this form or on a separate attached sheet of paper.

This record title assignment is for: (Check one) ☒ Oil and Gas Lease, or ☐ Geothermal Lease

Interest conveyed: (Check one or both, as appropriate) ☒ Record Title, ☐ Overriding Royalty, payment out of production or other similar interests or payments

2. This assignment conveys the following interest:

Land Description Additional space on page 2, if needed. Do not submit documents or agreements other than this form; such documents or agreements shall only be referenced herein.	Percent of Interest			Percent of Overriding Royalty Similar Interests	
	Owned	Conveyed	Retained	Reserved	Previously reserved or conveyed
a	b	c	d	e	f
Lea County, New Mexico T. 20 S. - R. 34 E., N.M.P.M. Sec. 24 - W2SW 80.000 Acres	100%	100%	-0-	-0-	-0-

FOR BLM USE ONLY - DO NOT WRITE BELOW THIS LINE

UNITED STATES OF AMERICA

This assignment is approved solely for administrative purposes. Approval does not warrant that either party to this assignment holds legal or equitable title to this lease.

☒ Assignment approved for above described lands;

☐ Assignment approved for attached land description

Assignment approved effective

DEC 1 2009

☐ Assignment approved for land description indicated on reverse of this form

By

/s/ Rose Ann Ortiz

Bureau of Land Management (BLM)

LAND LAW EXAMINER
FLUIDS ADJUDICATION TEAM

MAR 9 2010

(Title)

(Date)

(Continued on page 2)

Part A (Continued) ADDITIONAL SPACE for names and addresses of additional assignees in Item No. 1, if needed, or for Land Description in Item No. 2, if needed.

STATE OF NEW MEXICO } ss.
COUNTY OF SANTA FE

On this 10th day of October, 2009, before me appeared
Daniel E. Gonzales and Iliana S. Gonzales, husband & wife
to me personally know to be the persons... described in and who executed the foregoing instru-
ment and acknowledge that... they... executed the same as their free act
and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day
and year in this certificate above written.



OFFICIAL SEAL
Teynan Ayala
NOTARY PUBLIC-STATE OF NEW MEXICO

My commission expires: 1-30-2011

Teynan Ayala
Notary Public

January 30, 2011

requirements for all Federal oil and gas lease holdings as required by sec. 17(g) of the Mineral Leasing Act; and (f) Assignee is not in violation of sec. 41 of the Mineral Leasing Act.

3. Assignee's signature to this assignment constitutes acceptance of all applicable terms, conditions, stipulations and restrictions pertaining to the lease described herein.

For geothermal assignments, an overriding royalty may not be less than one-fourth (1/4) of one percent of the value of output, nor greater than 50 percent of the rate of royalty due to the United States when this assignment is added to all previously created overriding royalties (43 CFR 3241).

I certify that the statements made herein by me are true, complete, and correct to the best of my knowledge and belief and are made in good faith.

Executed this 10th day of October 20 09 Executed this 27th day of October 20 09

Name of Assignor as shown on current lease Daniel E. Gonzales

Assignor
or
Attorney-in-fact

Daniel E. Gonzales
(Signature)
(Signature)

P.O. Box 2475

(Assignor's Address)

Santa Fe

(City)

NM

(State)

87504

(Zip Code)

(Please type or print)

Assignee
or
Attorney-in-fact

Samson Resources Company
(Signature)
Etarey Dupriest
Vice President

Title 18 U.S.C. Sec. 1001 makes it a crime for any person knowingly and willfully to make to any Department or agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 3)

(Form 3000-3, page 2)

Form 3006-3
(January 2010)

BLM NMSO
SANTA FE
RECEIVED

APR 11 2011

PAID
RECEIPT# 225599

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

ASSIGNMENT OF RECORD TITLE INTEREST IN A
LEASE FOR OIL AND GAS OR GEOTHERMAL RESOURCES

Mineral Leasing Act of 1920 (30 U.S.C. 181 et seq.)
Act for Acquired Lands of 1947 (30 U.S.C. 351-359)
Geothermal Stream Act of 1970 (30 U.S.C. 1001-1025)
Department of the Interior Appropriations Act, Fiscal Year 1981 (42 U.S.C. 6508)

FORM APPROVED
OMB NO. 1004-0034
Expires: July 31, 2012

Lease Serial No. **NM 123525**
Blanket Assignment
Lease Effective Date
(Anniversary Date)
New Serial No.

Type or print plainly in ink and sign in ink.

PART A: ASSIGNMENT

1. Assignee* Three Rivers Acquisition LLC 1a. Assignor Samson Resources Company
Street 1122 S. Capital of Texas Highway, Suite 325 Two West Second Street
City, State, Zip Code Austin, Texas 78746 Tulsa, Oklahoma 74103

*If more than one assignee, check here ☐ and list the name(s) and address(es) of all additional assignees on Page 2 of this form or on a separate attached sheet of paper.

This record title assignment is for: (Check one) ☒ Oil and Gas Lease, or ☐ Geothermal Lease

Interest conveyed: (Check one or both, as appropriate) ☒ Record Title, ☐ Overriding Royalty, payment out of production or other similar interests or payments

2. This assignment conveys the following interest:

Land Description Additional space on Page 2, if needed. Do not submit documents or agreements other than this form; such documents or agreements shall only be referenced herein.	Percent of Interest			Percent of Overriding Royalty or Similar Interests	
	Owned	Conveyed	Retained	Reserved	Previously reserved or conveyed
a	b	c	d	e	f
Blanket Assignment. See Exhibit "A" attached hereto and made a part hereof.					
NM 114351					

FOR BLM USE ONLY—DO NOT WRITE BELOW THIS LINE
UNITED STATES OF AMERICA

This assignment is approved solely for administrative purposes. Approval does not warrant that either party to this assignment holds legal or equitable title to this lease.

☐ Assignment approved for above described lands:

☒ Assignment approved for attached land description

Assignment approved effective

MAY 01 2011

☐ Assignment approved for land description indicated on this form.

By Gourdes B. Ortiz
Bureau of Land Management (BLM)

LAND LAW EXAMINER
FLUIDS ADJUDICATION TEAM

(Title)

JUN 30 2011

(Date)

Part A (Continued): ADDITIONAL SPACE for names and addresses of additional assignees in Item 1, if needed, or for Land Description in Item No. 2, if needed.

PART B: CERTIFICATION AND REQUEST FOR APPROVAL

1. The Assignor certifies as owner of an interest in the above designated lease that he/she hereby assigns to the above assignee(s) the rights specified above.
2. Assignee certifies as follows: (a) Assignee is a citizen of the United States; an association of such citizens; a municipality; or a corporation organized under the laws of the United States or of any State or territory thereof. For the assignment of NPR-A leases, assignee is a citizen, national, or resident alien of the United States or association of such citizens, nationals, resident aliens or private, public or municipal corporations; (b) Assignee is not considered a minor under the laws of the State in which the lands covered by this assignment are located; (c) Assignee's chargeable interests, direct and indirect, in each public domain and acquired lands separately in the same State, do not exceed 246,080 acres in oil and gas leases (of which up to 200,000 acres may be in oil and gas options), or 300,000 acres in leases in each leasing District in Alaska of which up to 200,000 acres may be in options, if this is an oil and gas lease issued in accordance with the Mineral Leasing Act of 1920, or 51,200 acres in any one State if this is a geothermal lease; (d) All parties holding an interest in the assignment are otherwise in compliance with the regulations (43 CFR Group 3100 or 3200) and the authorizing Acts; (e) Assignee is in compliance with reclamation requirements for all Federal oil and gas lease holdings as required by sec. 17(g) of the Mineral Leasing Act; and (f) Assignee is not in violation of sec. 41 of the Mineral Leasing Act.
3. Assignee's signature to this assignment constitutes acceptance of all applicable terms, conditions, stipulations and restrictions pertaining to the lease described herein.

For geothermal assignments, an overriding royalty may not be less than one-fourth (1/4) of one percent of the value of output, nor greater than 50 percent of the rate of royalty due to the United States when this assignment is added to all previously created overriding royalties (43 CFR 3241).

I certify that the statements made herein by me are true, complete, and correct to the best of my knowledge and belief and are made in good faith.

Executed this 29th day of December, 2010
To be effective as of October 1, 2010

Executed this 6 day of January, 2011
To be effective as of October 1, 2010

Name of Assignor as shown on current lease Sarnson Resources Company
Please type or print

Three Rivers Acquisition LLC

Assignor _____ (Signature)

Assignee Michael Wichterich (Signature)

or
Attorney-in-fact Michael G. Dargiel (Signature)

or
Attorney-in-fact _____ (Signature)

Two West Second Street
(Assignor's Address)

Tulsa Oklahoma 74103
(City) (State) (Zip Code)

Title 18 U.S.C. Sec. 1001 makes it a crime for any person knowingly and willfully to make to any Department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

SRC LEASE NO.	BLM LEASE SERIAL NO.	LEASE DATE	LEGAL DESCRIPTION	Percent of Interest			Percent of Overriding Royalty or Similar Interests	
				OWNED	CONVEYED	RETAINED	RESERVED	PREVIOUSLY RESERVED
113360001	NMLC-066147A	12/01/1948	<u>Township 20 South, Range 35 East, N.M.P.M.</u> Sec. 18: Lot 2 Containing 39.910 acres, more or less	50%	50%	-0-	-0-	Those of Record
113380001	NMNM-080262	04/01/1960	<u>Township 20 South, Range 34 East, N.M.P.M.</u> Sec. 14: NW/4 NE/4, S/2 NE/4 Containing 120.00 acres, more or less	2.5948%	2.5948%	-0-	-0-	Those of Record
114035001	NMLC-066147D	12/01/1948	<u>Township 20 South, Range 35 East, N.M.P.M.</u> Sec. 18: SE/4 NW/4 Containing 40.00 acres, more or less	50%	50%	-0-	-0-	Those of Record
112510000	NMNM-116045	06/01/2006	<u>Township 21 South, Range 32 East, N.M.P.M.</u> Sec. 22: All Containing 640.00 acres, more or less	62.5%	62.5%	-0-	-0-	Those of Record
120577000	NMNM-123520	09/01/2009	<u>Township 19 South, Range 33 East, N.M.P.M.</u> Sec. 22: E/2 SE/4, SW/4 SE/4 Containing 120.00 acres, more or less	100%	100%	-0-	-0-	Those of Record
124540000	NMNM-121478	01/01/2009	<u>Township 11 South, Range 32 East, N.M.P.M.</u> Sec. 21: W/2 Containing 320.00 acres, more or less	50%	50%	-0-	-0-	Those of Record
129874000	NMNM-123525		<u>Township 20 South, Range 34 East, N.M.P.M.</u> Sec. 24: W/2 SW/4 Containing 80.00 acres, more or less	100%	100%	-0-	-0-	Those of Record

END OF EXHIBIT "A"

Form 3000-3
(January 2009)
BLM NMSO
SANTA FE
RECEIVED

AUG 14 2012

PAID
RECEIPT# 2630155

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
ASSIGNMENT OF RECORD TITLE INTEREST IN A
LEASE FOR OIL AND GAS OR GEOTHERMAL RESOURCES

Mineral Leasing Act of 1920 (30 U.S.C. 181 et seq.)
Act for Acquired Lands of 1947 (30 U.S.C. 351-359)
Geothermal Steam Act of 1970 (30 U.S.C. 1001-1025)
Department of the Interior Appropriations Act, Fiscal Year 1981 (42 U.S.C. 6508)

FORM APPROVED
OMB NO. 1004-0034
Expires: July 31, 2012

Lease Serial No.
NMNM-123525

Lease Effective Date
(Anniversary Date)
9/1/2009

New Serial No.

Type or print plainly in ink and sign in ink.

PART A: ASSIGNMENT

1. Assignee* COG Operating LLC
Street 550 W. Texas Avenue Suite 100
City, State, Zip Code Midland, TX 79701

1a. Assignor Three Rivers Acquisition, L.L.C.
1122 S. Capital of Texas Hwy Suite 325
Austin, TX 78746

*If more than one assignee, check here ☐ and list the name(s) and address(es) of all additional assignees on page 2 of this form or on a separate attached sheet of paper.

This record title assignment is for: (Check one) ☒ Oil and Gas Lease, or ☐ Geothermal Lease

Interest conveyed: (Check one or both, as appropriate) ☒ Record Title. ☐ Overriding Royalty, payment out of production or other similar interests or payments

2. This assignment conveys the following interest:

Land Description Additional space on reverse, if needed. Do not submit documents or agreements other than this form; such documents or agreements shall only be referenced herein.	Percent of Interest			Percent of Overriding Royalty Similar Interests	
	Owned	Conveyed	Retained	Reserved	Previously Reserved or conveyed
	b	c	d	e	f
a TOWNSHIP 20 SOUTH - RANGE 34 EAST SECTION 24: W/2 SW/4 80.00 acres <i>ca</i>	OF RECORD	OF RECORD	0	0	OF RECORD

FOR BLM USE ONLY - DO NOT WRITE BELOW THIS LINE
UNITED STATES OF AMERICA

This assignment is approved solely for administrative purposes. Approval does not warrant that either party to this transfer holds legal or equitable title to this lease.

☒ Assignment approved for above described details

☐ Assignment approved for attached land description

Assignment approved effective

SEP 01 2012

☐ Assignment approved for land description indicated on page 2 of this form

By:

[Signature]
(Authorized Officer)

LAND LAW EXAMINER

FLUIDS ADJUDICATION TEAM

(Title)

OCT 19 2012
(Date)

Part A (Continued) ADDITIONAL SPACE for Names and addresses of additional assignees in Item No. 1, if needed, or for Land Description in Item No. 2, if needed.

PART B – CERTIFICATION AND REQUEST FOR APPROVAL

1. The Assignor certifies as owner if an interest in the above designated lease that he/she hereby transfers to the above assignee(s) the rights specified above.
2. Assignee certifies as follows: (a) Assignee is a citizen of the United States; an association of such citizens; a municipality; or a corporation organized under the laws of the United States or of any State or territory thereof. For the transfer of NPR-A leases, assignee is a citizen, national, or resident alien of the United States or association of such citizens, nationals, resident aliens or private, public or municipal corporations; (b) Assignee is not considered a minor under the laws of the State in which the lands covered by this assignment are located; (c) Assignee's chargeable interests, direct and indirect, in each public domain and acquired lands separately in the same State, do not exceed 246,080 acres in oil and gas leases (of which up to 200,000 acres may be in oil and gas options), or 300,000 acres in leases in each leasing District in Alaska of which up to 200,000 acres may be in options, if this is oil and gas lease issued in accordance with the Mineral Leasing Act of 1920, or 51,200 acres in any one State if this is a geothermal lease; (d) All parties holding an interest in the transfer are otherwise in compliance with the regulations (43 CFR Group 3100 or 3200) and the authorizing Acts; (e) Assignee is in compliance with reclamation requirements for all Federal oil and gas lease holdings as required by sec. 17 (g) of the Mineral Leasing Act, and (f) Assignee is not in violation of sec. 41 of the Mineral Leasing Act.

3. Assignee's signature to this assignment constitutes acceptance of all applicable terms, conditions, stipulations, and restrictions pertaining to the lease described herein.

For geothermal assignments, an overriding royalty may not be less than one-for-the (1/4) of one percent of the value of output, nor greater than 50 percent of the rate of royalty due to the United States when this assignment is added to all previously created overriding royalties (43 CFR 3241).

I certify that the statements made herein by me are true, complete, and correct to the best of my knowledge and belief and are made in good faith.

Executed this 1st day of July 20 12

Executed this 29th day of June 20 12

Effective April 1, 2012

Name of Assignor as shown on current lease Three Rivers Accretion, L.L.C.

COG Operating LLC

Assignor

Or

Attorney-in-fact

(Signature)

1122 S. Capital of Texas Hwy, Suite 325

(Assignor's Address)

Austin

(City)

TX

(State)

78746

(Zip Code)

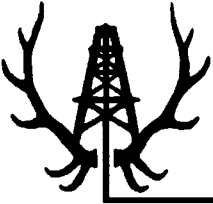
Assignee

(Please type or print)

J. Steve Guthrie, Vice President of Texas

Public reporting burden for this form is estimated to average 30 minutes per response including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0034), Bureau Information Collection Clearance Officer, (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

Title 18 U.S.C. Sec. 1001 makes it a crime for any person knowingly and willfully to make to any Department or agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.



ELKHORN LAND & TITLE, LLC

400 N. Pennsylvania Ave., Suite 1220
P.O. Box 38
Roswell, New Mexico 88202

Office: (575) 627-3477

www.elkhornlandandtitle.com

Fax: (866) 912-8990

NAMES LIST

W2 Section 25-T20S-R34E, N.M.P.M., Lea County, New Mexico

Prospect: #18-025, 3Bear LLC, AGI

Posting Date: N/A

Surface Owners:

Martha W. Skeen
301 South Canyon
Carlsbad, New Mexico 88220

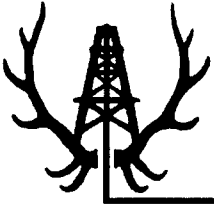
The Kelly Skeen Testamentary Trust, Linda Ann Jurva & Curtis Kelly Skeen, Trustees
301 South Canyon
Carlsbad, New Mexico 88220

Curtis K. Skeen & Carole D. Skeen
1508 Riverside Drive
Carlsbad, New Mexico 88220

Linda Skeen Jurva
1134 Tracy Place
Carlsbad, New Mexico 88220

Operator:

Chisholm Energy Operating, LLC
801 Cherry Street
Fort Worth, Texas 76102
817-953-3728



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P.O. Box 38
Roswell, New Mexico 88202

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Fax: (866) 912-8990

NAMES LIST

S2SE4, NE4SE4 Section 22-T20S-R34E, N.M.P.M., Lea County, New Mexico

Prospect: #18-025, 3Bear LLC, AGI

Posting Date: N/A

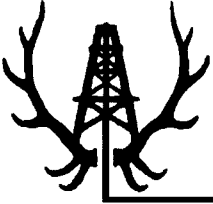
Surface Owner:

T Over V Ranch Land LLLP
P.O. Box 160
Eunice, New Mexico 88231

Operators:

Chestnut Exploration & Production, Inc.
2201 N. Central Expressway, Suite 240
Richardson, Texas 75080
972-715-8807

Cimarex Energy Company
600 N. Marienfeld Street, Suite 600
Midland, Texas 79701
432-620-1936



ELKHORN LAND & TITLE, LLC

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P.O. Box 38
Roswell, New Mexico 88202

Office: (575) 627-3477

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Fax: (866) 912-8990

NAMES LIST

S2 Section 23-T20S-R34E, N.M.P.M., Lea County, New Mexico
Prospect: #18-025, 3Bear LLC, AGI
Posting Date: N/A

Surface Owner:

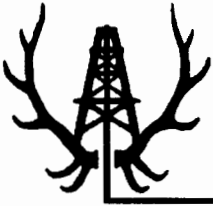
Bureau of Land Management
301 Dinosaur Trail
Santa Fe, New Mexico 87508

Operators:

Cimarex Energy Company
600 N. Marienfeld Street, Suite 600
Midland, Texas 79701
432-620-1936

Chisholm Energy Operating, LLC
801 Cherry Street
Fort Worth, Texas 76102
817-953-3728

Burk Royalty Co., Ltd.
P.O. Box 94903
Wichita Falls, Texas 76308
940-397-8650



ELKHORN LAND & TITLE, LLC

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P.O. Box 38
Roswell, New Mexico 88202

Office: (575) 627-3477

www.elkhornlandandtitle.com

Fax: (866) 912-8990

NAMES LIST

SW4SW4 Section 24-T20S-R34E, N.M.P.M., Lea County, New Mexico

Federal Lease No.: NMNM-123525

Prospect: #18-025, 3Bear LLC, AGI

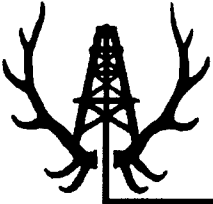
Posting Date: 11/10/2018 at 5:00 P.M. (County); 11/27/2018 (Federal)

Surface Owner:

S&S Inc.
P.O. Box 1046
Eunice, New Mexico 88231

Working Interest Owner:

COG Operating LLC
600 W. Illinois Ave.
Midland, Texas 79701
432-683-7443



ELKHORN LAND & TITLE, LLC

400 N. Pennsylvania Ave., Suite 1220
P.O. Box 38
Roswell, New Mexico 88202

Office: (575) 627-3477

www.elkhornlandandtitle.com

Fax: (866) 912-8990

NAMES LIST

NE4, NE4NW4, NE4SE4 Section 34-T20S-R34E, N.M.P.M., Lea County, New Mexico
Prospect: #18-025, 3Bear LLC, AGI
Posting Date: N/A

Surface Owners:

T Over V Ranch Land LLLP
P.O. Box 160
Eunice, New Mexico 88231

Plains Pipeline LP
P.O. Box 4648
Houston, Texas 77210

Operators:

Mas Operating Co.
P.O. Box 52167
Midland, Texas 79710
432-618-0678

COG Operating LLC
600 W. Illinois Ave.
Midland, Texas 79701
432-683-7443



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Roswell, New Mexico 88202

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Fax: (866) 912-8990

NAMES LIST

N2NW4, SW4NW4, NW4SW4 Section 36-T20S-R34E, N.M.P.M., Lea County, New Mexico

Prospect: #18-025, 3Bear LLC, AGI

Posting Date: N/A

Surface Owner:

S&S Inc.
P.O. Box 1046
Eunice, New Mexico 88231

Operator:

COG Operating LLC
600 W. Illinois Avenue
Midland, Texas 79701
432-683-7443



ELKHORN LAND & TITLE, LLC

400 N. Pennsylvania Ave., Suite 1220

P.O. Box 38

Roswell, New Mexico 88202

Office: (575) 627-3477

www.elkhornlandandtitle.com

Fax: (866) 912-8990

NAMES LIST

N2, N2S2 Section 35-T20S-R34E, N.M.P.M., Lea County, New Mexico

Prospect: #18-025, 3Bear LLC, AGI

Posting Date: N/A

Surface Owners:

T Over V Ranch Land LLLP

P.O. Box 160

Eunice, New Mexico 88231

Bureau of Land Management

301 Dinosaur Trail

Santa Fe, New Mexico 87508

Operators:

Cimarex Energy Company

600 N. Marienfeld Street, Suite 600

Midland, Texas 79701

432-620-1936

Burk Royalty Co., Ltd.

P.O. Box 94903

Wichita Falls, Texas 76308

940-397-8650

COG Operating LLC

600 W. Illinois Avenue

Midland, Texas 79701

432-683-7443

BC Operating, Inc.

P.O. Box 50820

Midland, Texas 79710

432-684-9696

Mas Operating Co.

P.O. Box 52167

Midland, Texas 79710

432-616-0678



ELKHORN LAND & TITLE, LLC

400 N. Pennsylvania Ave., Suite 1220
P.O. Box 38
Roswell, New Mexico 88202

Office: (575) 627-3477

www.elkhornlandandtitle.com

Fax: (866) 912-8990

NAMES LIST

E2, E2W2 Section 27-T20S-R34E, N.M.P.M., Lea County, New Mexico

Prospect: #18-025, 3Bear LLC, AGI

Posting Date: N/A

Surface Owners:

T Over V Ranch Land LLLP
P.O. Box 160
Eunice, New Mexico 88231

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

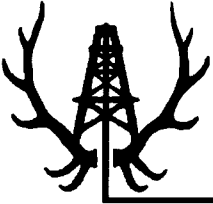
Operators:

Chestnut Exploration & Production, Inc.
2201 N. Central Expressway, Suite 240
Richardson, Texas 75080
972-715-8807

Marathon Oil Permian LLC
5555 San Felipe Street
Houston, Texas 77056
713-296-2500

Mas Operating Co.
P.O. Box 52167
Midland, Texas 79710
432-618-0678

Apache Corporation
303 Veterans Airpark Lane, Suite 1000
Midland, Texas 79705
432-818-1000



ELKHORN LAND & TITLE, LLC

400 N. Pennsylvania Ave., Suite 1220
P.O. Box 38
Roswell, New Mexico 88202

Office: (575) 627-3477

www.elkhornlandandtitle.com

Fax: (866) 912-8990

NAMES LIST

All Section 26-T20S-R34E, N.M.P.M., Lea County, New Mexico
Prospect: #18-025, 3Bear LLC, AGI
Posting Date: N/A

Surface Owners:

T Over V Ranch Land LLLP
P.O. Box 160
Eunice, New Mexico 88231

3 Bear Delaware Operating-NM LLC
1512 Larimer Street, Suite 540
Denver, Colorado 80202

Operators:

Cimarex Energy Company
600 N. Marienfeld Street, Suite 600
Midland, Texas 79701
432-620-1936

Burk Royalty Co., Ltd.
P.O. Box 94903
Wichita Falls, Texas 76308
940-397-8650

3 Bear Field Services, LLC
500 Don Gaspar Avenue
Santa Fe, New Mexico 87505
575-626-7100