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|----------------------|-----------|-----------|------------------------|
| RECEIVED: 01/09/2018 | REVIEWER: | TYPE: SWD | APP NO: PMAM1800955942 |
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ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

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

**ADMINISTRATIVE APPLICATION CHECKLIST**

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

Applicant: Judah Oil LLC **OGRID Number:** 245872
Well Name: Doodle Bug Federal SWD #2 **API:** 30-025-26902
Pool: **Pool Code:**

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

- 1) **TYPE OF APPLICATION:** Check those which apply for [A]
 A. Location – Spacing Unit – Simultaneous Dedication
☐ NSL ☐ NSP (PROJECT AREA) ☐ NSP (PRORATION UNIT) ☐ SD
 B. Check one only for [I] or [II]
 [I] Commingling – Storage – Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM
 [II] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery
☐ WFX ☐ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR

2) **NOTIFICATION REQUIRED TO:** Check those which apply.

- A. ☒ Offset operators or lease holders
 B. ☐ Royalty, overriding royalty owners, revenue owners
 C. ☒ Application requires published notice
 D. ☐ Notification and/or concurrent approval by SLO
 E. ☒ Notification and/or concurrent approval by BLM
 F. ☒ Surface owner
 G. ☒ For all of the above, proof of notification or publication is attached, and/or,
 H. ☐ No notice required

FOR OCD ONLY

- ☒ Notice Complete
☐ Application
 Content
 Complete

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

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

John C Maxey

Print or Type Name

Signature

December 1, 2017

Date

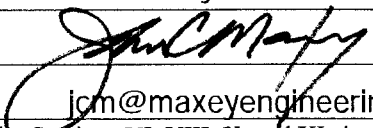
575-623-0438

Phone Number

jcm@maxeyengineering.com

e-mail Address

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage
Application qualifies for administrative approval? X Yes No
- II. OPERATOR: Judah Oil LLC
ADDRESS: PO Box 568, Artesia, NM 88211
CONTACT PARTY: John Maxey - Consulting Petroleum Engineer PHONE: 575-623-0438
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? Yes X No
If yes, give the Division order number authorizing the project: _____
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- *XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: John C Maxey TITLE: Consulting Petroleum Engineer
SIGNATURE:  DATE: December 1, 2017
E-MAIL ADDRESS: jcm@maxeyengineering.com
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted.
Please show the date and circumstances of the earlier submittal: _____

III. WELL DATA

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

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

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

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

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

XIV. PROOF OF NOTICE

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

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

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

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

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

INJECTION WELL DATA SHEET

OPERATOR: Judah Oil LLC

WELL NAME & NUMBER: Doodle Bug Federal SWD #2

WELL LOCATION: 1980' FNL & 1980' FWL

UNIT LETTER F

SECTION 35

TOWNSHIP 22S

RANGE 33E

FOOTAGE LOCATION

UNIT LETTER

SECTION

TOWNSHIP

RANGE

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface Casing

Hole Size: 20" Casing Size: 16"

Cemented with: 1060 sx. or ft³

Top of Cement: Surf Method Determined: Circ

Intermediate Casing

See Attached Schematic, Exhibit "B"

Hole Size: 14.75" Casing Size: 10.75"

Cemented with: 4700 sx. or ft³

Top of Cement: Surf Method Determined: Circ

Production Casing

Hole Size: 9.5" Casing Size: 7.625"

Cemented with: 2350 sx. or ft³

Top of Cement: 3795 Method Determined: TS

Total Depth: 15700

Injection Interval

5190' feet to 6530'

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 3.5" 9.3 ppf J55 EUE Lining Material: IPC

Type of Packer: Nickel plated Arrow Set

Packer Setting Depth: 5090'

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

Additional Data

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

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

2. Name of the Injection Formation: Delaware

3. Name of Field or Pool (if applicable): Most likely SWD (Bell Canyon - Cherry Canyon)

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

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

None above. The next lower zone would be lower Delaware oil production in the

Bell Lake Northeast field 2 miles east of the subject location, producing from below 7600'.

Maxey Engineering, LLC

P. O. Box 1361

400 North Pennsylvania Avenue • Suite 230A

Roswell, NM 88202-1361

Office: (575) 623-0438 • Email: jcm@maxeyengineering.com

www.maxeyengineering.com

- I. The plan is to reenter the P&A Federal BG #1 and convert to a produced water disposal well.
- II. Judah Oil LLC (OGRID: 245872)
P.O. Box 568, Artesia NM 88211
Contact for Application: John Maxey (Maxey Engineering, LLC), (575) 623-0438
- III.A.1 Lease: Bureau of Land Management lease NMNM113969 consisting of 600 acres more or less in all but the SW4SW4 of section 35 T22S R33E.. The well information: Doodle Bug Federal SWD #2, (formerly: Federal BG #1, API# 30-025-26902) 1980' FNL & 1980' FWL of section 35 T22S R33E, Lea County, NM. A C102 is attached as Exhibit "A".
- III.A.2 The current P&A wellbore schematic is attached as Exhibit "B" and the proposed wellbore schematic is attached as Exhibit "C". Below are the pertinent SWD well construction details.
 - a) Surface casing construction is 20" hole by 16" 65 ppf casing set at 878' cemented with 1,060 sx of cement to surface.
 - b) Intermediate casing construction is 14 3/4" by 10 3/4" 45.5 ppf casing set at 5,088' cemented with 4,700 sx of cement to surface.
 - c) Production casing construction is 9 1/2" by 7 5/8" 33.7 & 39 ppf casing set at 12,410' cemented with 2,350 sx of cement, TOC 3,795' by temperature survey. The 7 5/8" was cut and pulled from 2,883' when the well was P&A. A CIBP w/ a 35' dump bailed cement cap will be set at 6,650'. See attached well data sheets to see deeper P&A detail.
- III.A.3 Injection tubing will be 3 1/2" 9.6 ppf J55 EUE IPC set within 100' of the top of the permitted injection interval with a packer.
- III.A.4 The packer will be a 7 5/8" nickel plated Arrow Set (or equivalent) packer with a stainless steel profile nipple and on-off tool.

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- III.B.1 The disposal interval is upper Delaware, and the field name will most likely be SWD (Bell Canyon – Cherry Canyon).
- III.B.2 The injection interval is cased throughout, and will be perforated intermittently from 5,190' to 6,530'.
- III.B.3 This well was originally permitted and drilled as a Morrow test. Various deep intervals were tested with no success. The proposed Delaware injection interval was initially DST'd from 5,018' to 5,400' and recovered no hydrocarbons; the DST results were as follows:
- DST #1 LATERAL 5018-5400. 1 FLW 10 MIN 66#. 2 FLW 10 MIN 752#. 60 MIN
ISIP 2009#. 60 MIN FFP 914# X 1580#. 195 MIN FSIP 2009#. FHP 2533.
SAMPLE CHAMBER CONTAINED 48# X 0 GAS X 0 OIL X 1900 CC W. W HAD .07
RESISTIVITY AT 88 DEGREES X 141212 CHLORIDE.
- The proposed Delaware injection interval was also perforated from 6,328' to 6,334' and stimulated w/ 1,000 gallons of 7 ½% acid. The interval was swab tested 66 hours and recovered 111 barrels of water, no oil or gas.
- III.B.4 There will be no other perforated SWD intervals. See attached well data sheet for deeper P&A detail in the deeper part of the wellbore.
- III.B.5 There is no known next higher oil or gas producing zones in the area of the well. The next lower zone would be lower Delaware oil production in the Bell Lake Northeast field 2 miles east of the subject location, producing from below 7,600'.
- IV. This is not an expansion of an existing project.
- V. Exhibit "D" identifies all wells and leases within a 2 mile radius of the proposed SWD well, and also depicts the half mile radius Area of Review.
- VI. There are no wellbores that penetrate the proposed injection zone within the area of review.
- VII.1 The proposed daily operating rate is 5,000 BWPD with a proposed maximum of 8,000 BWPD.

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- VII.2 This system will be an open system.
- VII.3 The average daily surface operating pressure is anticipated to be 350 psi. The maximum surface pressure would be 0.2 psi/foot to the anticipated top of the injection (disposal) interval at 5,190', or 1,038 psi.
- VII.4 The source of the disposal fluid will be produced water from the lower Delaware and Bone Spring formations produced in the localized area. Delaware water analysis is discussed in paragraph VII.5 and attached as Exhibit "E".

The Bone Spring analysis is from a 1966 RGS symposium on the Bell Lake Bone Spring in 23S 24E. The cation concentrations in mg/l are Na 52,450, Ca 20,600 Mg 3,100. The anion concentrations are Cl 126,250, SO₄ 1,050, and HCO₃ 140.

The waters are similar in composition with no large contrast in cationic or anionic dissolved solids, and there are no scaling tendencies anticipated.

- VII.5 Injection will be into a zone not productive of oil or gas at or within 1 mile. Attached as Exhibit "E" is a water analysis of Delaware formation water in the Covington A #9.
- VIII. The Delaware sand is very fine grained, lime cement, light gray where clean, varying to medium to dark gray according to shale content. Tops are in the table below. The only source of drinking water in the area would be from the Santa Rosa formation down to a depth of 650' BGL. Formation tops are as follows:

| | |
|---------------|-------|
| Delaware Lime | 5071' |
| Bell Canyon | 5129' |
| Cherry Canyon | 6085' |
| Bone Spring | 8979' |

- IX. The well will be stimulated with acid, and possibly frac stimulated if needed.
- X. Well logs previously submitted to the Division. A small scale log cross section from the Diamond 34 State #1 SWD in 34N 22S 33E to the application well is attached as Exhibit "F" to illustrate the similar geologic section. The Diamond well was approved

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for SWD under permit SWD-640 in the same interval being requested in this application. The Diamond was placed on injection in 2002 and is currently active.

- XI. The wellsite is in a remote area and there were no obvious indications of underground fresh water sources in a grid search of the area on Google Earth. There were no Points of Diversion within 1 mile of the proposed SWD on a location search of the State Engineers website.
- XII. Available geologic and engineering data were examined and no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water were found.
- XIII. A legal ad was published in the Hobbs News-Sun, Lea County New Mexico, with proof of publication attached as Exhibit "G". A copy of this application has been mailed to the owner of the surface of the land on which the well is located (Bureau of Land Management), and all leasehold operators, leaseholders if no operator, and mineral owners if no leaseholder; per the attached USPS return receipt cards attached as Exhibit "H".

Exhibit "A"
Doodle Bug Federal SWD #2,
API# 30-025-26902
Sec 35 T22S R33E
Lea County, NM.

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

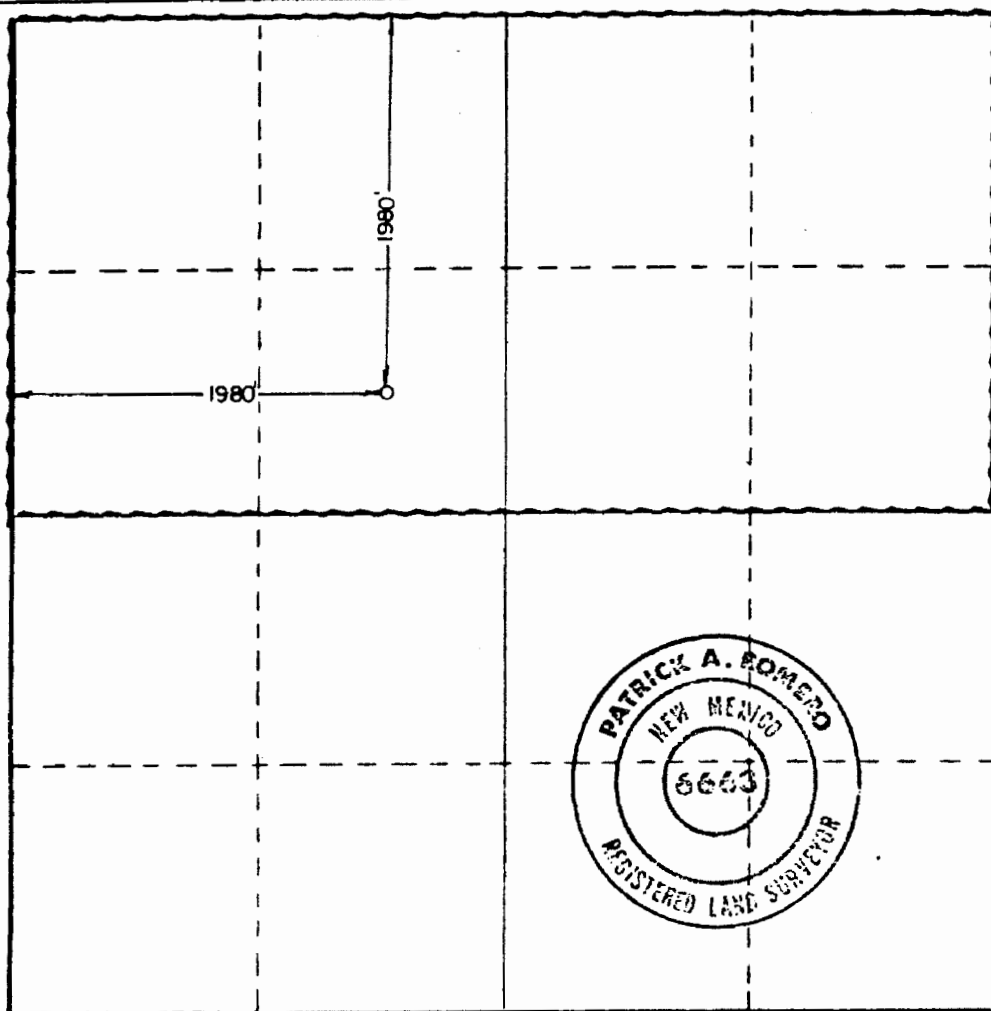
| | | | | |
|--|--------------------------------------|-------------------------------|--|----------------------|
| Operator AMOCO Production Co. | | Lease Federal B. G. | | Well No. 1 |
| Unit Letter F | Section 35 | Township 22 South | Range 33 East | County Lea |
| Actual Footage Location of Well: 1980 feet from the North line and 1980 feet from the West line | | | | |
| Ground Level Elev. 3526.4 | Producing Formation Morrow | Pool Und. Morrow | Dedicated Acreage: 320 Acres | |

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name **Bob Davis**

Position **Admin. Analyst**

Company **Amoco Production Company**

Date **6-5-80**

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed **May 28 & 29, 1980**

Registered Professional Engineer and/or Land Surveyor

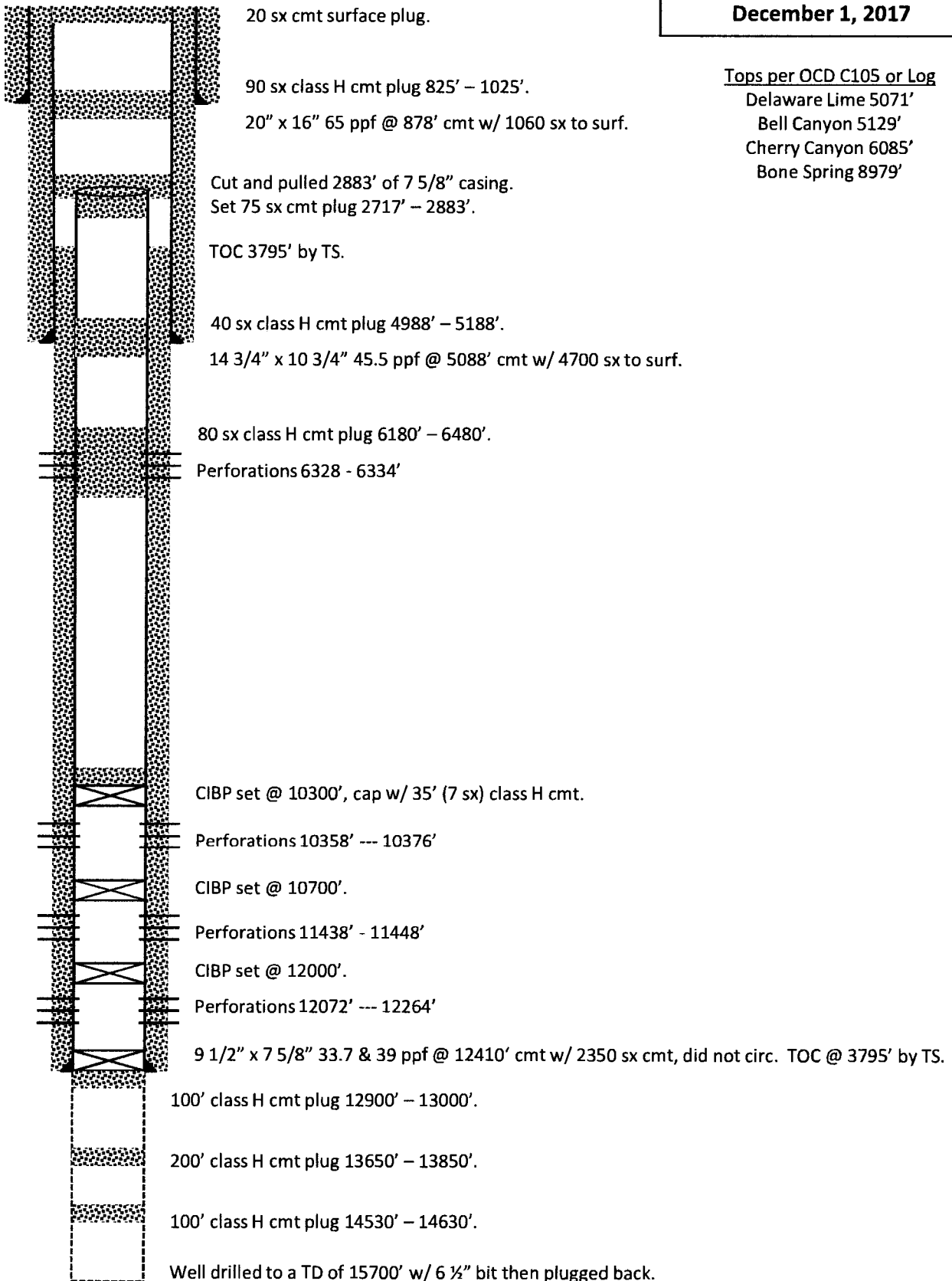
Patrick A. Romero

Certificate No. **JOHN W. WEST 678**
PATRICK A. ROMERO 6663
Ronald J. Eldson 3239

0 330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600

Federal BG #1 (P&A)
Surf 1980' FNL & 1980' FWL
Sec 35 T22S R33E, Lea, NM
API #30-025-26902
December 1, 2017

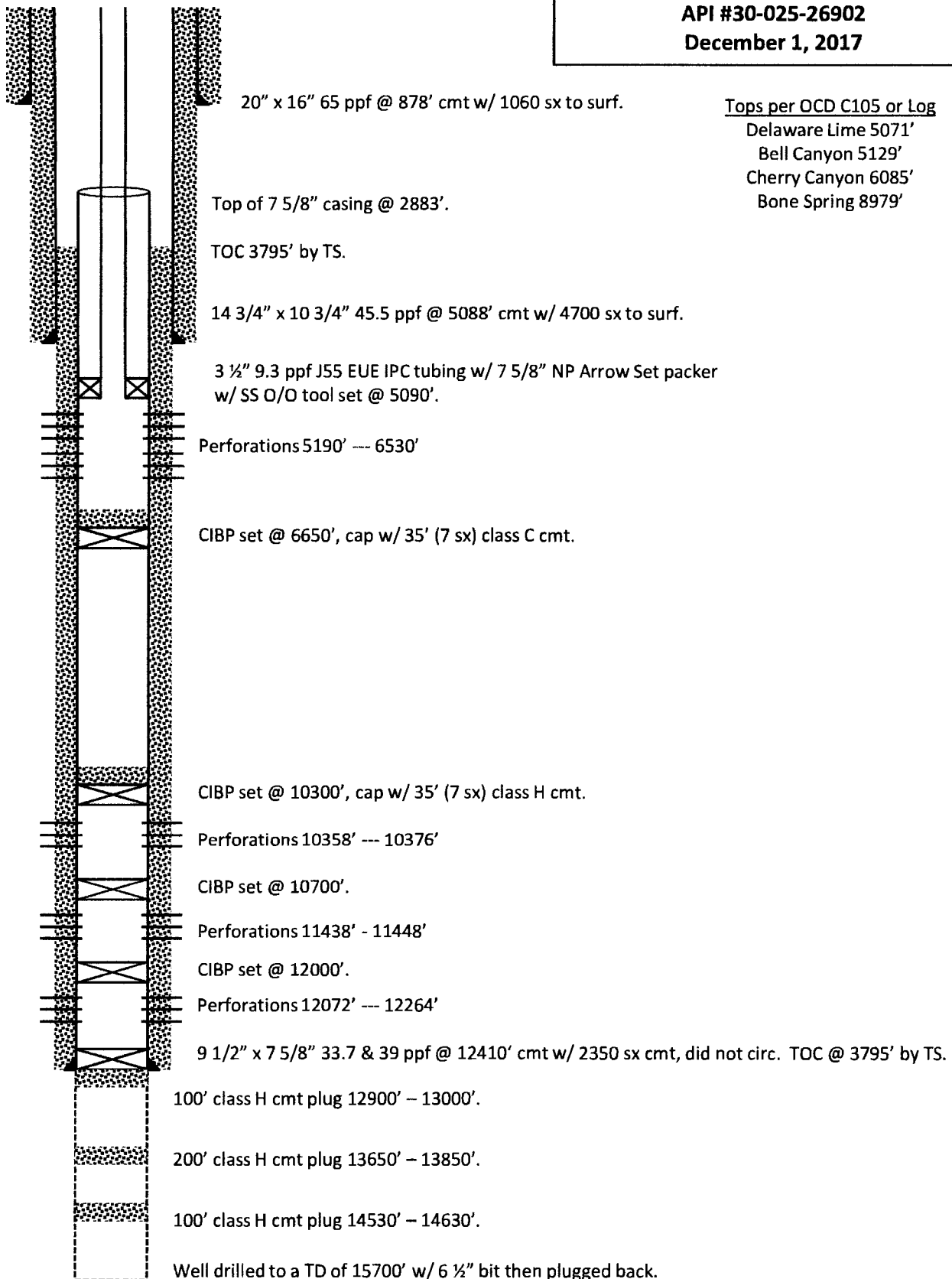
Current Wellbore



Tops per OCD C105 or Log
 Delaware Lime 5071'
 Bell Canyon 5129'
 Cherry Canyon 6085'
 Bone Spring 8979'

Doodle Bug Federal SWD #2 (Proposed)
Formerly Federal BG #1
Surf 1980' FNL & 1980' FWL
Sec 35 T22S R33E, Lea, NM
API #30-025-26902
December 1, 2017

Proposed Injection Wellbore



1 mile across
Area of Review

Nutro Products Co

P.O. Box 21187 Houston, Texas
Phone (713) 675-3421 • Fax (713)WATER ANALYSIS

Date 06/08/95 Nutro Rep TERRY SOLANSKY

Sampling Point

Company POGO PRODUCING

Field

Lease COVINGTON "A"

Well 9

Sec 25 22S 32E

Judah Oil LLC
Doodle Bug Federal SWD #2
Sec 35 22S 33E
Lea Co., NMItem VII.5
SWD Application
Delaware Water AnalysisDISSOLVED SOLIDS

| <u>CATIONS</u> | mg/l | me/l |
|------------------------------------|--------|-------|
| Sodium, Na ⁺ (Calc.) | 82,156 | 3,572 |
| Total Hardness as Ca ⁺⁺ | 26,560 | 0 |
| Calcium, Ca ⁺⁺ | 20,960 | 1,048 |
| Magnesium, Mg ⁺⁺ | 3,415 | 285 |
| Barium, Ba ⁺⁺ | 2 | 0 |
| Iron (Total) Fe ⁺⁺⁺ | 30 | 2 |

ANIONS

| | | |
|--|---------|-------|
| Chlorides, Cl ⁻ | 174,000 | 4,901 |
| Sulfate, SO ₄ ⁻ | 225 | 5 |
| Carbonate, CO ₃ ⁻ | 0 | 0 |
| Bicarbonate, HCO ₃ ⁻ | 49 | 1 |
| Sulfide, S ⁻ | 0 | 0 |
| Total Dissolved Solids (Calc.) | 280,837 | |

OTHER PROPERTIES

| | |
|----------------------------|-------|
| pH [*] | 5.200 |
| Specific Gravity, 60°/60 F | 1.179 |
| TURBIDITY | >500 |

Remarks SAMPLE TAKEN ON 05/02/95

SCALING INDICIES

| <u>TEMP, F</u> | <u>CA CO₃</u> | <u>CASO₄*2H₂O</u> | <u>CA SO₄</u> | <u>BA SO₄</u> |
|----------------|--------------------------|---|--------------------------|--------------------------|
| 80 | 0.1101 | -0.1998 | -0.5770 | 0.0270 |
| 120 | 0.6873 | -0.2122 | -0.4089 | -0.1128 |
| 160 | 1.5588 | -0.2267 | -0.2508 | -0.3171 |

Diamond 34 State 1 SWD
34N 22S 33E

Approved SWD-640

Doodle Bug Federal SWD 2-
35F 22S 33E

Proposed

Approved Injection
Interval 5100' to 6516'

T/Delaware Lime

Proposed Injection
Interval 5190' to 6530'

T/Cherry Canyon

Judah Oil LLC Application
Doodle Bug Federal SWD #2
Sec 35 T22S R33E
Lea Co., NM

Exhibit "F"

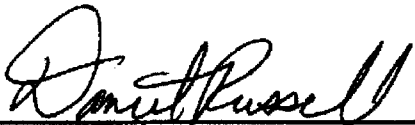
Affidavit of Publication

Exhibit "G"

STATE OF NEW MEXICO
COUNTY OF LEA

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

Beginning with the issue dated
December 08, 2017
and ending with the issue dated
December 08, 2017.



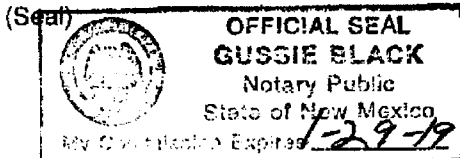
Publisher

Sworn and subscribed to before me this
8th day of December 2017.



Business Manager

My commission expires
January 29, 2019



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

LEGAL NOTICE December 8, 2017

Judah Oil, LLC, proposes to reenter the Federal BG #1 as a produced water disposal well. The well will be renamed the Doodle Bug Federal SWD #2. The well is located 1980' FNL & 1980' FWL, Section 35 T22S-R33E, Lea County, New Mexico.

The maximum proposed rate of injection is 8,000 barrels of water per day and the maximum proposed injection pressure is 1,038 psi. Water will be disposed of into the Delaware formation at an anticipated depth of 5,190' to 6,530'.

Contact for the application is Maxey Engineering, LLC, P. O. Box 1361, Roswell, New Mexico 88202, Attn: Mr. John Maxey, consulting Petroleum Engineer, Phone (575) 623-0436.

Interested parties must file objections or request a hearing with the New Mexico Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505 within 15 days.
#32319

67111181

00203893

JOHN MAXEY
MAXEY ENGINEERING, LLC
PO BOX 1361
ROSWELL, 88202-1361

Date: January 4, 2018

John Maxey:

The following is in response to your January 4, 2018 request for delivery information on your Certified Mail™/RRE item number 9514800018588001000053. The delivery record shows that this item was delivered on January 4, 2018 at 8:36 am in OKLAHOMA CITY, OK 73102. The scanned image of the recipient information is provided below.

Signature of Recipient :

Delivery or 800-ASA-USPS (275-8777)
Delivery Section
[Handwritten signature]
[Handwritten signature]

Address of Recipient :

[Handwritten address]
333 W Sheridan

Thank you for selecting the Postal Service for your mailing needs.

If you require additional assistance, please contact your local Post Office or postal representative.

Sincerely,
United States Postal Service

Devon
333 West Sheridan Ave
Oklahoma City, OK 73102-5015



Exhibit "H2"

Date: January 4, 2018

John Maxey:

The following is in response to your January 4, 2018 request for delivery information on your Certified Mail™/RRE item number 9514800018588001000046. The delivery record shows that this item was delivered on January 4, 2018 at 12:25 pm in CARLSBAD, NM 88220. The scanned image of the recipient information is provided below.

Signature of Recipient :

A handwritten signature in black ink, appearing to be "J. Maxey".

Address of Recipient :

A handwritten address in black ink, reading "620 E. Greene".

Thank you for selecting the Postal Service for your mailing needs.

If you require additional assistance, please contact your local Post Office or postal representative.

Sincerely,
United States Postal Service

Bureau of Land Management
620 E. Greene Street
Carlsbad, NM 88220-6292

Maxey Engineering, LLC

P. O. Box 1361

400 North Pennsylvania Avenue • Suite 230A

Roswell, NM 88202-1361

Office: (575) 623-0438 • Email: jcm@maxeyengineering.com

www.maxeyengineering.com 2010 JAN -8 P 2:57

December 31, 2017

David Catanach
Oil Conservation Division
New Mexico Dept of Energy
Minerals and Natural Resources
1220 South Saint Francis Drive
Santa Fe, NM 87505

Re: Application of Judah Oil, LLC., for administrative approval of a Salt Water Disposal Well Permit located in unit F of Section 35, T22S R33E, Lea County, New Mexico.

Dear Mr. Catanach

Judah Oil, LLC (OGRID No 245872) seeks administrative approval for a Salt Water Disposal Permit for an existing well to be named the Doodle Bug Federal SWD #2. The existing well is to be reentered at a location of 1980' FNL and 1980' FWL of Section 35, T22S R33E, Lea County, New Mexico. Enclosed is the complete administrative application.

If you have any questions concerning the completed application please do not hesitate to contact me. Your attention to this matter is appreciated.

Sincerely,

Maxey Engineering, LLC



John C. Maxey
Consulting Petroleum Engineer

McMillan, Michael, EMNRD

From: McMillan, Michael, EMNRD
Sent: Wednesday, September 27, 2017 8:36 AM
To: 'Mark Burkett'; Gallegos, Denise, EMNRD
Cc: Goetze, Phillip, EMNRD; Jones, William V, EMNRD; Brown, Maxey G, EMNRD; Bower, George, EMNRD; Sanchez, Daniel J., EMNRD
Subject: RE: Cancelled Administrative SWD Permit Consolidated Operating, LLC Consolidated State SWD Well No. 3

Mark:

Even though you have adequate bonding on the two wells in question, based on a conversation with Daniel Sanchez, Field Operation Bureau Manager your application cannot be approved at this time.

Please refer any questions relating to the SWD application to Daniel Sanchez in the Santa Fe Office.

Thank You

Mike

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

From: Mark Burkett [<mailto:mark@cobaltooperating.com>]
Sent: Wednesday, September 27, 2017 7:56 AM
To: Gallegos, Denise, EMNRD <Denise.Gallegos@state.nm.us>
Cc: McMillan, Michael, EMNRD <Michael.McMillan@state.nm.us>
Subject: FW: Cancelled Administrative SWD Permit Consolidated Operating, LLC Consolidated State SWD Well No. 3

Denise,

I received this yesterday. Can you advise what the additional bonding will be, and the reasons for such additional bonding. Also, since this keep changing, is there a website or some system that shows the changed requirements.

Thanks,

Mark Burkett

From: McMillan, Michael, EMNRD [<mailto:Michael.McMillan@state.nm.us>]
Sent: Monday, September 25, 2017 9:23 AM
To: mark@cobaltooperating.com
Cc: Jones, William V, EMNRD <WilliamV.Jones@state.nm.us>; Goetze, Phillip, EMNRD <Phillip.Goetze@state.nm.us>; Sanchez, Daniel J., EMNRD <daniel.sanchez@state.nm.us>; Sharp, Karen, EMNRD <Karen.Sharp@state.nm.us>; Brown,

Maxey G, EMNRD <MaxeyG.Brown@state.nm.us>

Subject: Cancelled Administrative SWD Permit Consolidated Operating, LLC Consolidated State SWD Well No. 3

Mark:

Your administrative SWD Permit for the Consolidated State SWD Well No. 3, API 30-025-29711 has been cancelled on September 25, 2017.

Cobalt Operating, LLC will need additional bonding for the following wells:

Angell Well No. 2, API 30-025-07136

Angell Well NO. 3, API 30-025-07133

Once Cobalt Operating, LLC gets the required bonding for these two wells, you may re-apply for the administrative application

Michael McMillan

1220 South St. Francis

Santa Fe, New Mexico

505-476-3448

Michael.mcmillan@state.nm.us



Virus-free. www.avast.com

McMillan, Michael, EMNRD

From: McMillan, Michael, EMNRD
Sent: Monday, September 25, 2017 8:23 AM
To: 'mark@cobaltoperating.com'
Cc: Jones, William V, EMNRD; Goetze, Phillip, EMNRD; Sanchez, Daniel J., EMNRD; Sharp, Karen, EMNRD; Brown, Maxey G, EMNRD
Subject: Cancelled Administrative SWD Permit Consolidated Operating, LLC Consolidated State SWD Well No. 3

Mark:
Your administrative SWD Permit for the Consolidated State SWD Well No. 3, API 30-025-29711 has been cancelled on September 25, 2017.

Cobalt Operating, LLC will need additional bonding for the following wells:
Angell Well No. 2, API 30-025-07136
Angell Well NO. 3, API 30-025-07133

Once Cobalt Operating, LLC gets the required bonding for these two wells, you may re-apply for the administrative application

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

| | | | |
|-------------------------------|-------------------------|---------------------|----------------------------------|
| RECEIVED: <u>9/22/2017</u> | REVIEWER: <u>PRC</u> | TYPE: <u>SWD</u> | APP NO: <u>PMAM1726559506</u> |
|-------------------------------|-------------------------|---------------------|----------------------------------|

ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

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



ADMINISTRATIVE APPLICATION CHECKLIST

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

Applicant: Cobalt Operating, LLC **OGRID Number:** 286255
Well Name: Consolidated State SWD Well No. 3 **API:** 30-025-29711
Pool: SWD; Devonian **Pool Code:** 96101

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

- 1) **TYPE OF APPLICATION:** Check those which apply for [A]
 A. Location – Spacing Unit – Simultaneous Dedication
☐ NSL ☐ NSP (PROJECT AREA) ☐ NSP (PRORATION UNIT) ☐ SD
- B. Check one only for [I] or [II]
 [I] Commingling – Storage – Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM
 [II] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery
☐ WFX ☐ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR

FOR OCD ONLY

- 2) **NOTIFICATION REQUIRED TO:** Check those which apply.
 A. ☐ Offset operators or lease holders
 B. ☐ Royalty, overriding royalty owners, revenue owners
 C. ☐ Application requires published notice
 D. ☐ Notification and/or concurrent approval by SLO
 E. ☐ Notification and/or concurrent approval by BLM
 F. ☐ Surface owner
 G. ☒ For all of the above, proof of notification or publication is attached, and/or,
 H. ☐ No notice required

| | |
|--------------------------|------------------------------------|
| <input type="checkbox"/> | Notice Complete |
| <input type="checkbox"/> | Application Content Complete |

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

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

Mark
 Mark Burkett

Print or Type Name

09-22-2017

Date

(432) 684-7145
 Phone Number

see Application
 Signature

mark@cobaltoperating.com
 e-mail Address

| | | | |
|-----------|-----------|-------|---------|
| RECEIVED: | REVIEWER: | TYPE: | APP NO: |
|-----------|-----------|-------|---------|

ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

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



ADMINISTRATIVE APPLICATION CHECKLIST

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

Applicant: Cobalt Operating, LLC **OGRID Number:** _____
Well Name: Consolidated State SWD Well No. 3 **API:** 30-025-29711
Pool: SWD; Devonian **Pool Code:** _____

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

- 1) **TYPE OF APPLICATION:** Check those which apply for [A]
 A. Location – Spacing Unit – Simultaneous Dedication
☐ NSL ☐ NSP (PROJECT AREA) ☐ NSP (PRORATION UNIT) ☐ SD
- B. Check one only for [I] or [II]
 [I] Commingling – Storage – Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM
 [II] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery
☐ WFX ☐ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR

2) **NOTIFICATION REQUIRED TO:** Check those which apply.

- A. ☐ Offset operators or lease holders
 B. ☐ Royalty, overriding royalty owners, revenue owners
 C. ☐ Application requires published notice
 D. ☐ Notification and/or concurrent approval by SLO
 E. ☐ Notification and/or concurrent approval by BLM
 F. ☐ Surface owner
 G. ☐ For all of the above, proof of notification or publication is attached, and/or,
 H. ☐ No notice required

FOR OCD ONLY

- ☐ Notice Complete
☐ Application
 Content
 Complete

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

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

Makr Burkett
 Print or Type Name

09-22-2017


Date

 Phone Number

 Signature

 e-mail Address

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage
Application qualifies for administrative approval? X Yes No
- II. OPERATOR: COBALT OPERATING, LLC
ADDRESS: P.O. BOX 51468, MIDLAND, TX 79710
CONTACT PARTY: Mark Burkett PHONE: 432-684-7145
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? Yes No (Re-Application)
If yes, give the Division order number authorizing the project: SWD-1438 Approved 9/23/2013
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- *XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: Mark Burkett TITLE: Engineer
SIGNATURE:  DATE: 9/19/2017
E-MAIL ADDRESS: mark@cobaltoperating.com
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

III. WELL DATA

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

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

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

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

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

XIV. PROOF OF NOTICE

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

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

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

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

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

INJECTION WELL DATA SHEET

OPERATOR: COBALT OPERATING, LLC

WELL NAME & NUMBER: CONSOLIDATED STATE 3 - PREVIOUSLY PERMITTED SWD SWD-1438 Approved 9/23/2013
 PERMIT WAS CANCELLED DUE TO INACTIVITY -- SUBMITTED C-115s HAD A "P" INSTEAD OF A "D" IN COLUMN 8 -- THE
 SYSTEM SHOWED THE VOLUMES TO BE ZERO -- THEY WERE NOT ZERO

WELL LOCATION: 660 FNL AND 2128 FWL,
 FOOTAGE LOCATION

Unit C,
 UNIT LETTER

Sec 9, SECTION T17S, TOWNSHIP R37E RANGE

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface Casing

Hole Size: 17-1/2" Casing Size: 13-3/8"

Cemented with: 350 sx. or ft³

Top of Cement: Surface Method Determined: 39 sx Excess

Intermediate Casing

Hole Size: 12-1/4" Casing Size: 8-5/8"

Cemented with: 1,650 sx. or ft³

Top of Cement: Surface Method Determined: 147 sx Excess

Production Casing

Hole Size: 7-7/8" (4-3/4" for liner section) Casing Size: 5-1/2" (4" Liner)

Cemented with: 1,535sx (Liner 50 sx) or ft³

Top of Cement: 4,600 (Liner 10,629 CBL) Method Determined: per OCD file

Total Depth: 12,700

Injection Interval

12,240 feet to 12,700 Open Hole

(Perforated or Open Hole; indicate which)

See attached

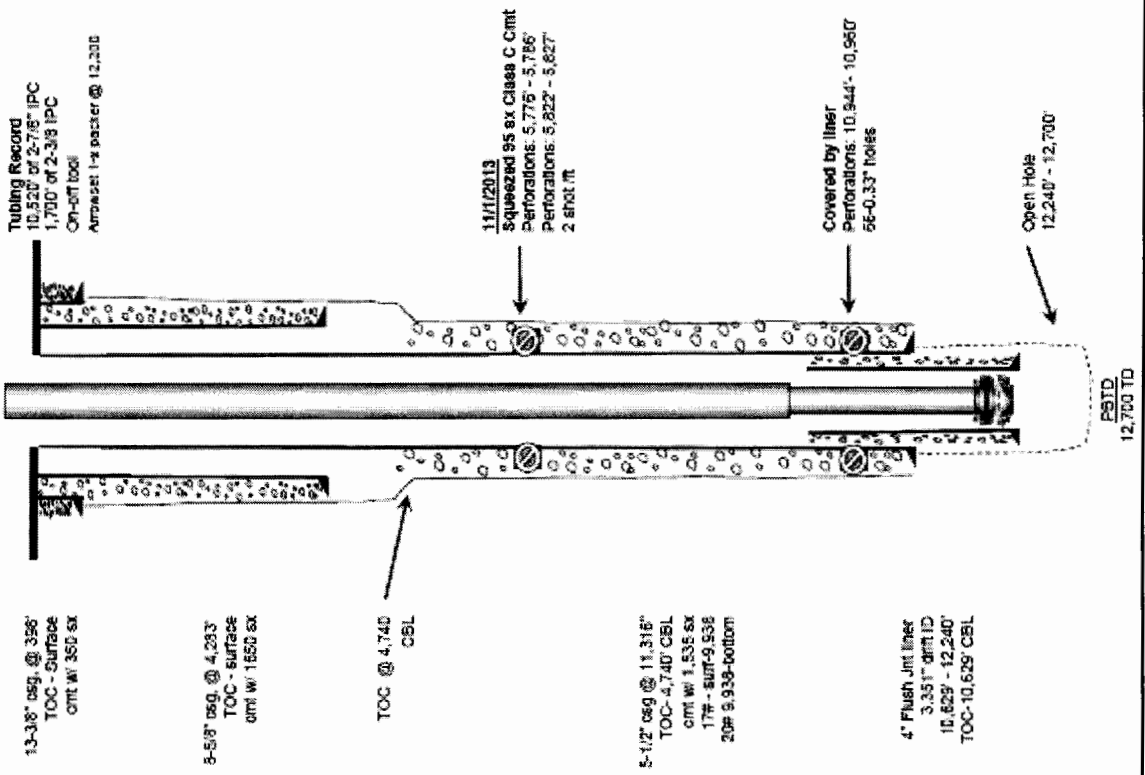
CURRENT
AND
PROPOSED
SCHEMATIC

Consolidated State #3

T17S R37E Sec. 9

660' FNL & 2128' FWL

Lea County NM



INJECTION WELL DATA SHEET

Tubing Size: 2-7/8" and 2-3/8" Lining Material: Fiberglass

Type of Packer: Arrowset ASIX

Packer Setting Depth: 12,200

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

Additional Data

1. Is this a new well drilled for injection? Yes ☒ No ☐
If no, for what purpose was the well originally drilled? Shipp: Strawn Oil Well

2. Name of the Injection Formation: SWD; Devonian

3. Name of Field or Pool (if applicable): Midway

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

Strawn 10,944-10,960 squeezed
San Andres 5,776-5,786 and 5,822-5,827 squeezed 35 sx

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

OVER: WOLFCAMP (8,733'), ABO (8,504'), TUBB (7,710'), SAN ANDRES (4,875') & YATES (3,172')
STRAWN (10,944')

UNDER: ATOKA (11,080')

COBALT OPERATING, LLC
CONSOLIDATED STATE 3
30-025-29711
660' FNL & 21 28' FWL SEC. 9, T. 17 S., R. 37 E.
LEA COUNTY, NEW MEXICO

I. Purpose is to re-apply for a cancelled permit for authorization to inject salt water. The previous Division order number authorizing the project is SWD-1438 Approved 9/23/2013. Disposal will be in the Devonian (12,240' - 12 ,700'). This is the SWD; SWD Pool (NMOCD pool code 96101 SWD DEVONIAN).

II. Operator: Cobalt Operating, LLC (OGRID #286255)
Operator phone number: (432) 684-7145
Operator address: PO Box 51468, Midland, TX 79710
Contact for Application: Mark Burkett

III.

A. (1) Lease: New Mexico State Land Office lease E0-8563-0004
Lease Size: 480 acres (see Exhibit A for C-1 02 and map)
Closest Lease Line: 512'
Lease: N2NE4 & N2SW4 Section 8 and WZ Section 9, T17S, R37E
Surface Owner: New Mexico State Land Office

A. (2) Surface casing (13-3/8", 48# & 61 #) was set in 1986 at 398' in a 17-1/2" hole. Casing was cemented to the surface with 250 sacks Pacesetter light with 2% CaCl followed by 100 sacks Class C with 2% CaCl. Circulated 39 sacks excess.

Intermediate casing (8-5/8", 24# & 32#) was set at 4,283' in an 1 2-1/4" hole. Casing was cemented to the surface with 1,450 sacks Pacesetter light with 15 pounds per sack salt and 1/4 pound per sack cello flake followed by 200 sacks Class C with 2% CaCl₂ • Circulated 147 sacks excess.

Production casing (5-1/2", N-80, L T & C, 17# & 20#) was set at 11,300' (TD) in a 7-7/8" hole and cemented to 4,600' with 1,535 sacks in 2 stages. Cement baskets were set at 10,352' and 10,359' and a DV tool was set at 8,423'.

First stage was cemented with 260 sacks Pacesetter® light Class H with 6% KCl + 0.6% CF-2 + 0.4% TF-4 + 1/ 4 pound per sack cello flake (12. 7 pounds per gallon & 2.0 cubic feet per sack) and 375 sacks Class H with 3% KCl + + 0.8% CF-2 + 0.4% TF-4 + 1/ 4 pound per sack cello flake (15.6 pounds per gallon & 1.18 cubic feet per sack).

Second stage was cemented with 800 sacks Pacesetter light Class C with 6% KCl + 0.6% CF-2 + 0.4% TF-4 + 1/ 4 pound per sack cello flake (12.7 pounds per gallon & 2.0 cubic feet per sack) and 100 sacks Class C (14.8 pounds per gallon & 1.32 cubic feet per sack).

Liner (4", N-80, LT&C 3.351" ID) was set from 10,629 to 12,240' in 4-3/4" hole and cemented with 50 sacks of Class H cement. The top of cement was determined to be 10,629 (whole liner cemented) by Cement Bond Log.

A. (3) Tubing will be 2-7/8" (10,520') N-80 6.5# and 2-3/8" (1,700'), N-80, 4.7#, and internally plastic coated. Setting depth will be 12,200'. (Disposal interval will be 12,240 to 12,700)

A. (4) An Arrow AS-1X packer will be set at 12,200' (40' above the highest portion of the open hole at 12,240).

B. (1) Injection zone will be the Devonian limestone, which is part of the SWD; Devonian Pool. Estimated fracture gradient is 0.7 psi per foot.

B. (2) Injection interval will be 12,240 to 12,700'. All of the well bore is cased.

B. (3) The well was spudded in 1986 and proposed for plugging and abandonment in 1999 and 2003. The well has produced 1,576 barrels of oil and 100,105 Mcf of gas from 10,944' - 10,960' in the Shipp; Strawn (#5569S) oil pool. However, there has been no oil production after 1998, an average of just 76 Mcf of gas per month in 2011, and only 5 Mcf for all of January, 2012.

B. (4) The well was perforated with 66 0.33" shots between 10,944' - 10,960. Shot diameter = 0.40".

B. (5) The next higher potential oil or gas zone is the Wolfcamp. Closest (1.5 miles southeast) Wolfcamp producer is in the Humble City; Wolfcamp Pool at the Bureaucrat AGV 1 (30-025-30767). Potential oil or gas zones above the Wolfcamp (from deep to shallow) include:

Bone Spring (4.1 miles SE at a now plugged wildcat in Section 25)

Abo (1 mile southwest in the Midway; Abo Pool in Section 17)

Tubb (1.5 miles north in the Lovington; Tubb Pool in 33-16s-37e)

Paddock (1 mile NW in the Lovington; Paddock Pool in Section 5)

San Andres (2.2 mi. west in Lovington; Grayburg-San Andres Pool in Sec. 7)

Yates (8 miles south in Eumont; Yates-& Rivers-Queen Pool in 28-18s-37e)

Closest (1,217' east) past Strawn producer is the New Mexico Ex State 2 (30-025-29440). It produced from the Strawn before being converted to a Strawn; SWD.

Closest (1,764' northwest) current Strawn producer is Chesapeake's Bubba 4 State Com 1 (30-025-37420). Lower potential oil or gas zones (from shallow to deep) are the Atoka (Shipp; Atoka Pool produced 5,504' northeast at the Simmons Estate 1 (30-025-30177) in Section 3) and Morrow (closest is 7 miles northwest in 17-16s-36e).

IV. This is not an expansion of an existing injection project. It is disposal only. It was originally permitted as a disposal SWD-1438 Approved 9/23/2013. The permit was cancelled due to inactivity. The submitted C-115s had a "P" instead of a "D" in Column 8. The system showed the volumes to be zero when in fact

they were not. While Cobalt submitted C-115s every month, Cobalt did not notice that the system was showing these as zeros.

V. Exhibit C shows 9 wells (2 producing oil + 5 plugged & abandoned oil + 1 water disposal + 1 plugged water supply well) within a half mile radius. State Engineer records indicate the water supply well was 137' west of the Consolidated State 3 well head. No evidence of the water well was found during a November 17, 2011 field inspection. State records indicate the 120' deep water well was drilled in 1953 and plugged in 1954.

Exhibit D shows 163 existing wells (36 producing oil or gas + 97 plugged & abandoned + 9 water injectors or disposals + 21 water wells) within a two-mile radius.

Exhibit E shows all leases and lessors (only State and fee) within a one-half mile radius. Exhibit F shows all leases and lessors (only State and fee) within a two-mile radius. Details on the leases within a one-half mile radius are:

| T. 17 S., R. 37 E. | Lessor | Lease Number | Lessee |
|------------------------|--------|----------------|----------------|
| W2SE4 & SESE Section 4 | fee | fee | Cimarex |
| SESW Section 4 | NMSLO | B0-2 51 7-0000 | ConocoPhillips |
| N2SW4 Section 4 | NMSLO | E0-8636-0001 | ConocoPhillips |
| SWSW Section 4 | NMSLO | VB-0665-0001 | Chesapeake |
| SESE Section 5 | fee | fee | Chesapeake |
| SENE Section 8 | fee | fee | Cobalt |
| NENE Section 8 | NMSLO | E0-8563-0004 | Roemer |
| NE4 Section 9 | NMSLO | VB-1 3 54-0001 | Chesapeake |
| NWSE Section 9 | NMSLO | VB-203 3-0001 | Texland |

VI. Seven of the nine wells that are within a half mile penetrated the Strawn. Five of those seven Strawn wells have been plugged and abandoned. Of the remaining two Strawn wells, one is an active SWD; Strawn well (1,228' east) and the other is an active Strawn oil well (1,768' northwest). See Exhibit G for a tabulation of the well histories and diagrams of the five plugged wells that penetrated the Strawn.

| OPERATOR | WELL | API 30-125- | T17S R37E | ZONE(S) | STATUS | TD | DISTANCE |
|-----------------|----------------|-----------------|----------------------------------|---|--------|-------|----------|
| Frisbie & Yancy | water supply | (NMSEO L 02327) | NENW Section 9 | Ogallala | P&A | 120' | 137' |
| Sinclair | State 335 | 05431 | 330FN & 2310FE Section 9 Paddock | Wildcat; | P & A | 6500 | 908' |
| Dakota | NM Ex State 2 | 29440 | 330FN & 1980FE Section 9 | SWD; Strawn | SWD | 11300 | 1228' |
| Tipperary | Jons 4 State | 28806 | 560 FS & 1 650 FW Section 4 | Shipp; Strawn | P&A | 11336 | 1312' |
| Pennzoil | Viersen 3 | 29829 | 150 FS & 2080 FE Section 4 | Shipp; Strawn | P&A | 11240 | 1344' |
| Chesapeake | Bubba 4 State | 37420 | 731 FS & 1043 FW Section 4 | Shipp; Strawn | Oil | 11195 | 1768' |
| Fasken | Consolidated 1 | 27183 | 2310 FN & 330 FW Section 9 | Midway; Devonian | P&A | 11073 | 2453' |
| Cimarex | Viersen 2 | 29445 | 1300 FS & 1 650 FE Section 4 | Shipp; Strawn | P&A | 11281 | 2469' |
| Exxon | NM EX State 1 | 29367 | 330 FN & 660 FE Section 9 | Midway; Abo Humble City; Wolfcamp Shipp; Strawn | P&A | 11412 | 2523' |
| Chevron | Lea State 1 | 29640 | 2086 FS & 2086 FW Section 4 | Shipp; Strawn | P&A | 11250 | 2750' |

VII.

1. Average injection rate will be 1,500 bwpd.

Maximum injection rate will be 2,000 bwpd.

2. System will be closed. Cobalt has an existing pipeline to the well.

3. Average injection pressure will be 1,000 psi

Maximum injection pressure will be 2,448 psi (= 0.2 psi/ foot x 12,240' (top of open hole)).

4. Water source will be produced water only from Cobalt wells. Cobalt currently has 3 producing wells, all are in 8-17s-37e. One well is a Strawn oil well (Hale State 1 Y is in the Midway; Strawn Pool). The other wells (Warren 2) was once a Midway; Strawn producer, but is now a Midway; Devonian oil well. The third well (Warren 1) is a Devonian oil well. A summary of closest analyses in the WAIDS data base from Strawn (Exhibit H) and Devonian (Exhibit I) wells follows.

No compatibility problems have been reported from Dakota's New Mexico Ex State 2 (30-025-29440). That Strawn disposal well is 1,228 east at 330 FNL & 1980 FEL Section 9. Over 270,624 barrels have been disposed into it since 2007.

| | Strawn | Devonian |
|------------------------|-----------|-----------|
| Barium | 0.679 | |
| Bicarbonate | 423.454 | 999 |
| Calcium | 2,175.33 | 1,097.00 |
| Carbonate | 0 | |
| Chloride | 43,455.70 | 15,643.00 |
| Hydrogen Sulfide | 2.092 | |
| Iron | 41.301 | |
| Magnesium | 458.969 | 1,077.00 |
| Potassium | 141.653 | |
| Sodium | 24,921.80 | |
| Strontium | 270.262 | |
| Sulfate | 430.723 | 2,337.00 |
| Total Dissolved Solids | 69,174.10 | 29,118.50 |

5. There has been Strawn production from 16 wells within one mile. Seven of the wells have since been plugged and abandoned, one (30-025-26953) had the Strawn squeezed and is now a Devonian producer, seven are Strawn producing oil wells, and one has been converted to a salt water disposal well. The Consolidated State 3 is 1,980' inside the Shipp; Strawn Pool and 2,128' west of the Midway; Strawn Pool (see Exhibit J).

VIII. The Strawn Formation consists of limestone with interbedded shale. It is 146' thick in this well. Closest possible underground source of drinking water above the proposed disposal interval is the Ogallala Formation at the surface. There are 2 salt zones and at least 10,309' of separation between the bottom of the Ogallala and the top of the Strawn. Exhibit K shows nearby water wells.

State engineer records indicate there was one well 137' west of the Consolidated State 3 and a second well is 5,300' northeast. Neither water well could be found during a November 17, 2013 field inspection. The closer well was drilled to 120' in 1953 and plugged in 1954. The other well was drilled to 90' in 1953.

A third well, not in the State Engineer's records, was found during the inspection. It is a windmill that is 3,264' east. A sample was collected. Its analysis is in Exhibit K.

No underground source of drinking water is below the proposed disposal interval. Produced water is currently being disposed into the Strawn at a well (30-025-29440) 1,228' east and was disposed into the Abo at a well (30-025- 20267) 8,383' southwest.

Formation tops are:

Ogallala = 0'
Salt = 625'
Anhydrite = 2,030'
Yates = 3,172'
San Andres = 4,875'
Glorieta = 6,366'
Tubb = 7, 710'
Abo = 8,504'
Wolfcamp = 8,733'
Strawn = 10,934'
Atoka = 11,080'
Total Depth: 12,700'

IX. The well will be stimulated with acid to clean out scale or fill.

X. Compensated neutron litho density, dual Induction/SFL, and dip meter logs were run and are on file NMOCD.

XI. Based on a field inspection and a review of the State Engineer's records, there is only one water well (see VIII. on PAGE 6) within a one mile radius.

XII. Cobalt is not aware of any geologic or engineering data which may indicate the Strawn is in hydrologic connection with any underground sources of water. Eight Strawn salt water disposal wells have been approved in New Mexico.

XIII. A legal ad (see Exhibit L) was published on June 21, 2017. Notice (this application) has been sent to the surface owner (NM State Land Office), all oil and gas operating right holders (see below) (Exhibit M).

EXHIBIT M

| <u>T17S, R37E</u> | <u>Lease Number</u> | <u>Lessee or Operating Right</u> |
|------------------------|---------------------|----------------------------------|
| W2SE4 & SESE Section 4 | fee | Cimarex |
| SESW Section 4 | B0-25 1 7-0000 | ConocoPhillips |
| N2SW4 Section 4 | E0-8636-0001 | ConocoPhillips, Chevron |
| SWSW Section 4 | VB-0665-0001 | Chesapeake |
| SESE Section 5 | fee | Chesapeake |
| SENE Section 8 | fee | Cobalt |
| NENE Section 8 | E0-8563-0004 | Roemer, Fasken |
| NE4 Section 9 | VB-1 3 54-0001 | Chesapeake |
| NWSE Section 9 | VB-203 3-0001 | Texland |

WGS84 103°15'00" W



11/201/11

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION

Form C-102
 Supersedes C-128
 Effective 1-1-85

All distances must be from the outer boundaries of the Section.

| | | | | | | | | |
|---|--------------------------------------|------------------------|------------------------------------|----------------------|---------------------------------------|----------------------|--|--|
| Operator BARBARA FASKEN | | | Lease CONSOLIDATED STATE | | | Well No. 3 | | |
| Unit Letter C | Section 9 | Township 17S | Range 37E | County LEA | | | | |
| Actual Footage Location of Well: 660 feet from the NORTH line and 2128 feet from the WEST line | | | | | | | | |
| Ground Level Elev. 3778.7 | Producing Formation Strawn | | Pool Shipp | | Dedicated Acreage: 80 Acres | | | |

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.

CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

James F. Groce
 Name _____

James F. Groce

Position

Agent

Company

Barbara Fasken

Date

July 1, 1986

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

EXHIBIT A

Date Surveyed

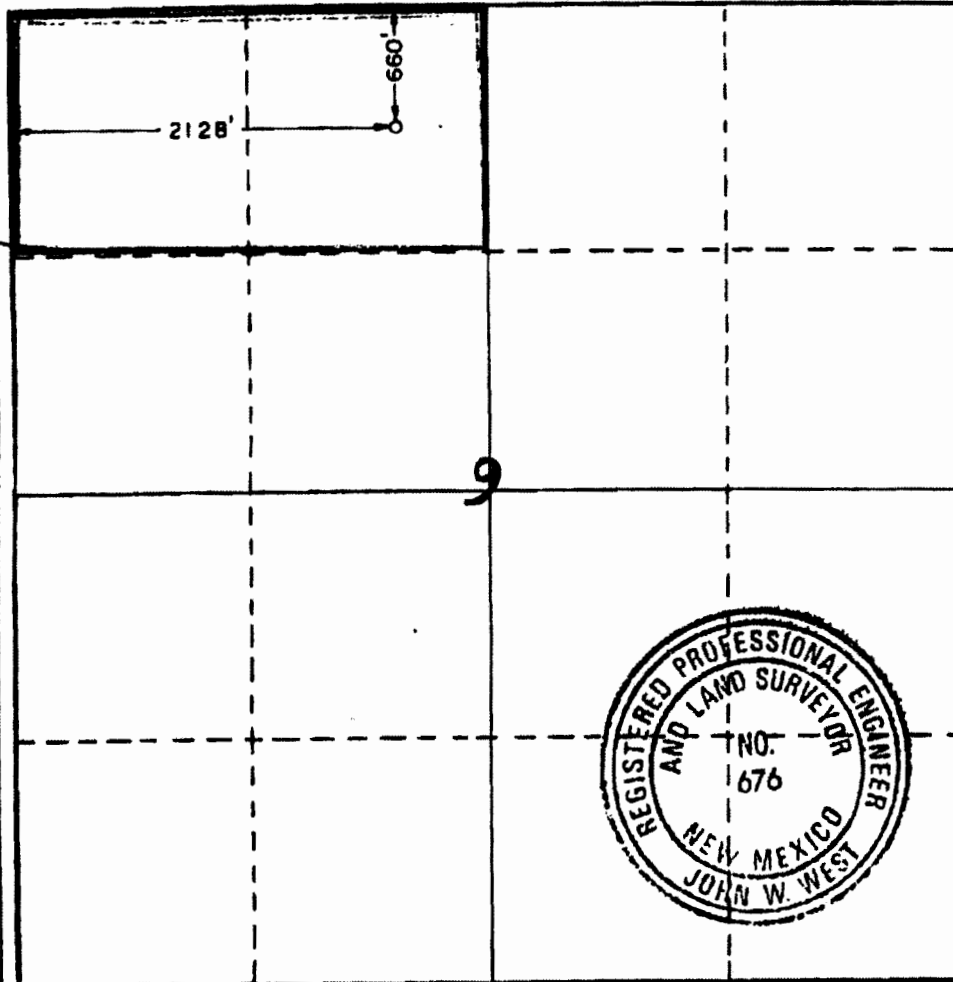
JUNE 27, 1986

Registered Professional Engineer and/or Land Surveyor

John W. West

Certificate No. **JOHN W. WEST, 578**

RONALD J. EIDSON, 3239



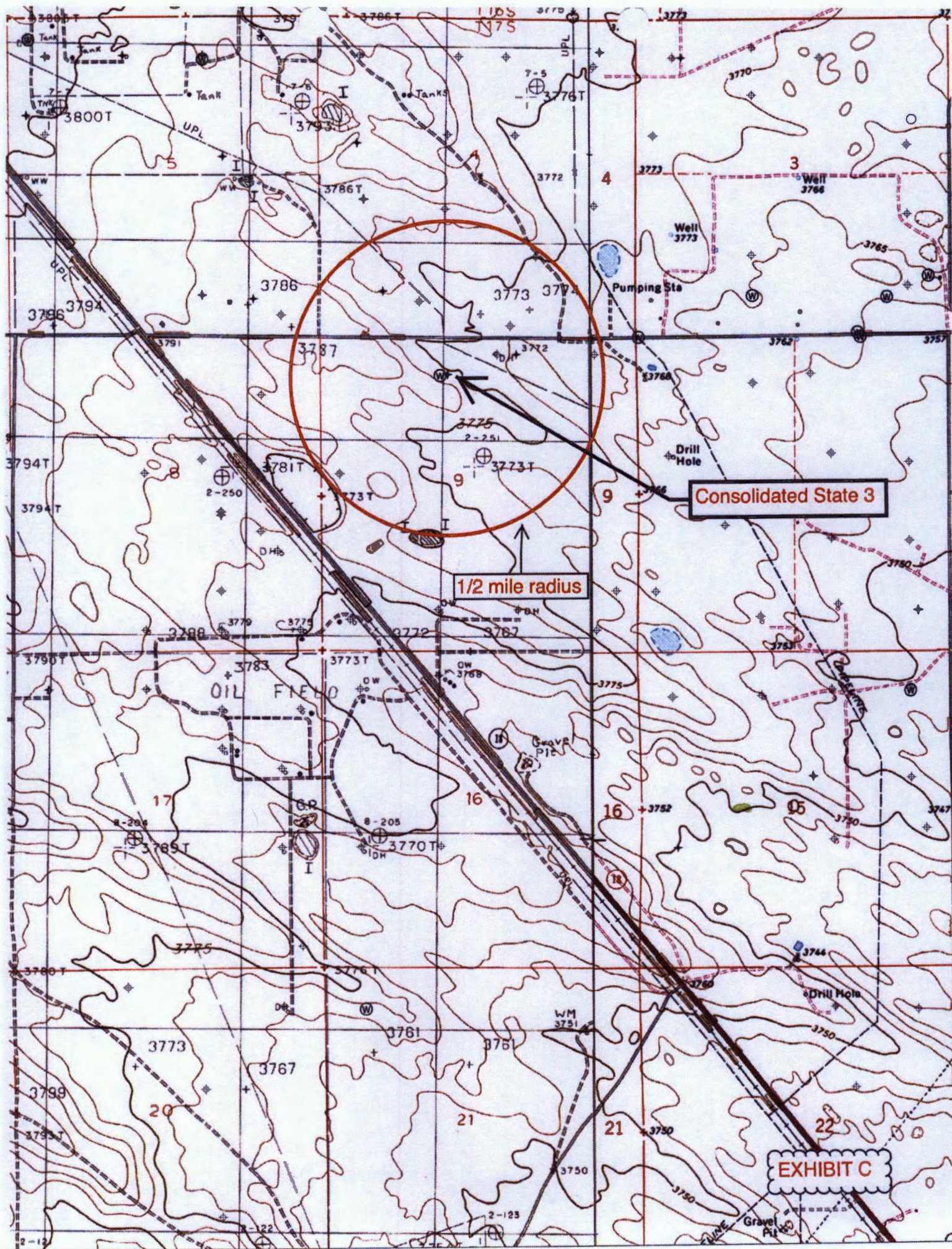
91746

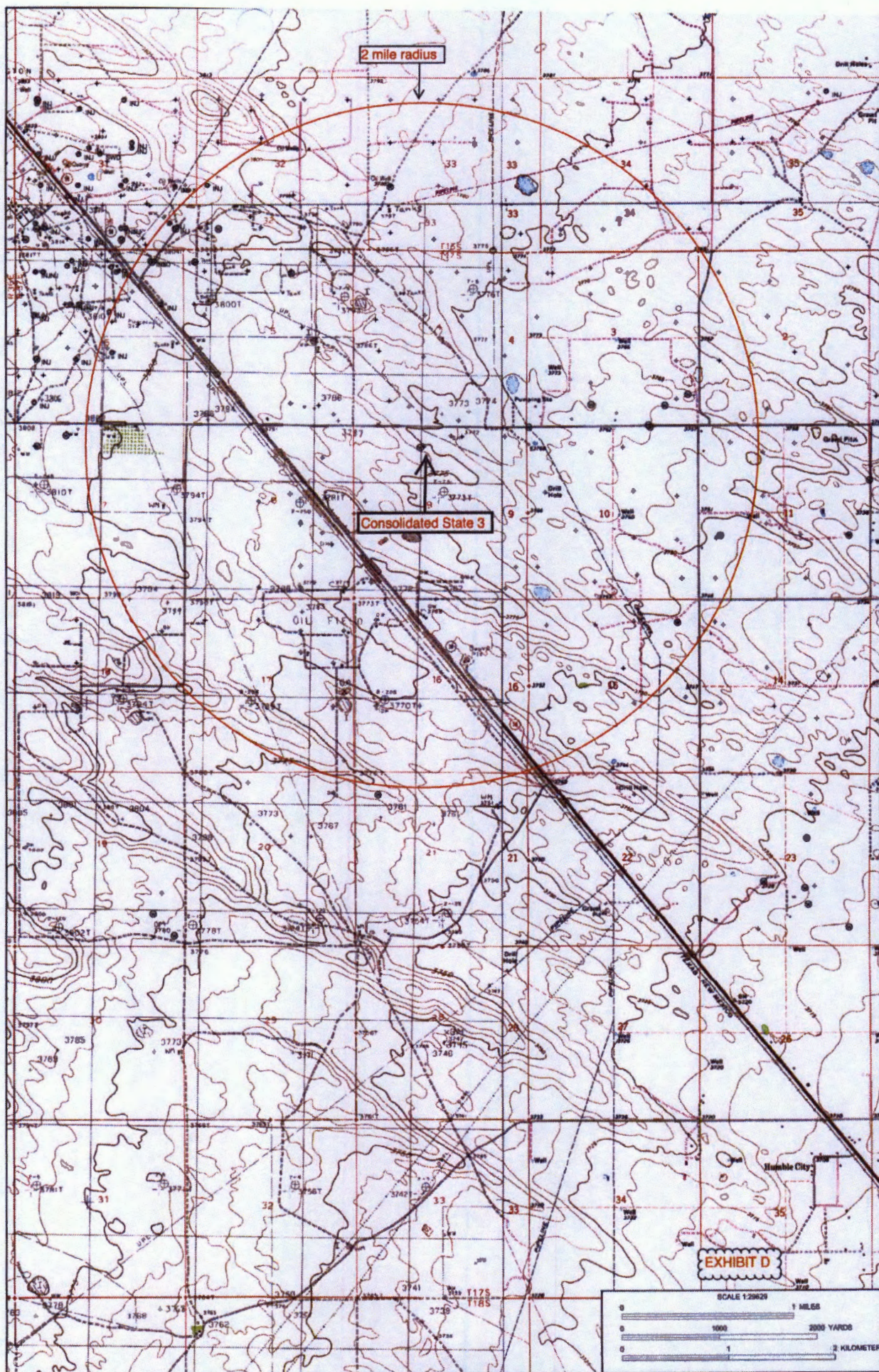
Production Summary of apl:3002529711 pool:SHir-P;STRAWN

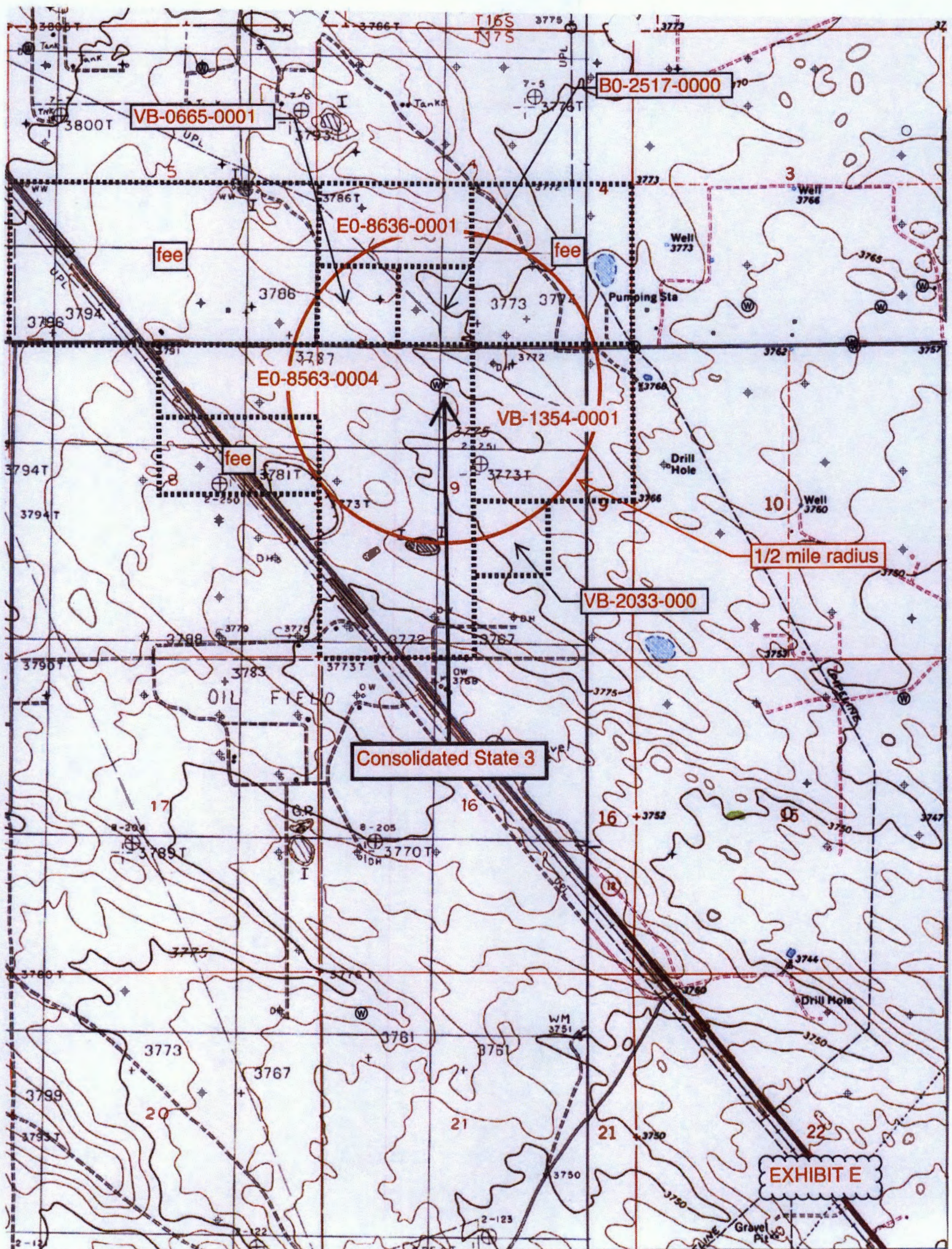
| producing year | Oil | Gas | Water | Co2 |
|----------------|------|-------|-------|-----|
| 1993 | 1069 | 14018 | 0 | 0 |
| 1994 | 479 | 12538 | 0 | 0 |
| 1995 | 25 | 10162 | 0 | 0 |
| 1996 | 0 | 8126 | 0 | 0 |
| 1997 | 1 | 7118 | 0 | 0 |
| 1998 | 2 | 6528 | 0 | 0 |
| 1999 | 0 | 5598 | 0 | 0 |
| 2000 | 0 | 4241 | 0 | 0 |
| 2001 | 0 | 4006 | 0 | 0 |
| 2002 | 0 | 3274 | 0 | 0 |
| 2003 | 0 | 2971 | 0 | 0 |
| 2004 | 0 | 4510 | 0 | 0 |
| 2005 | 0 | 5574 | 0 | 0 |
| 2006 | 0 | 4438 | 0 | 0 |
| 2007 | 0 | 2530 | 0 | 0 |
| 2008 | 0 | 1267 | 0 | 0 |
| 2009 | 0 | 1124 | 0 | 0 |
| 2010 | 0 | 1169 | 0 | 0 |
| 2011 | 0 | 908 | 0 | 0 |
| 2012 | 0 | 5 | 0 | 0 |

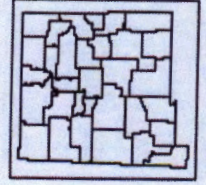
- This well and pool combination has no other pre-ongard data.

EXHIBIT B

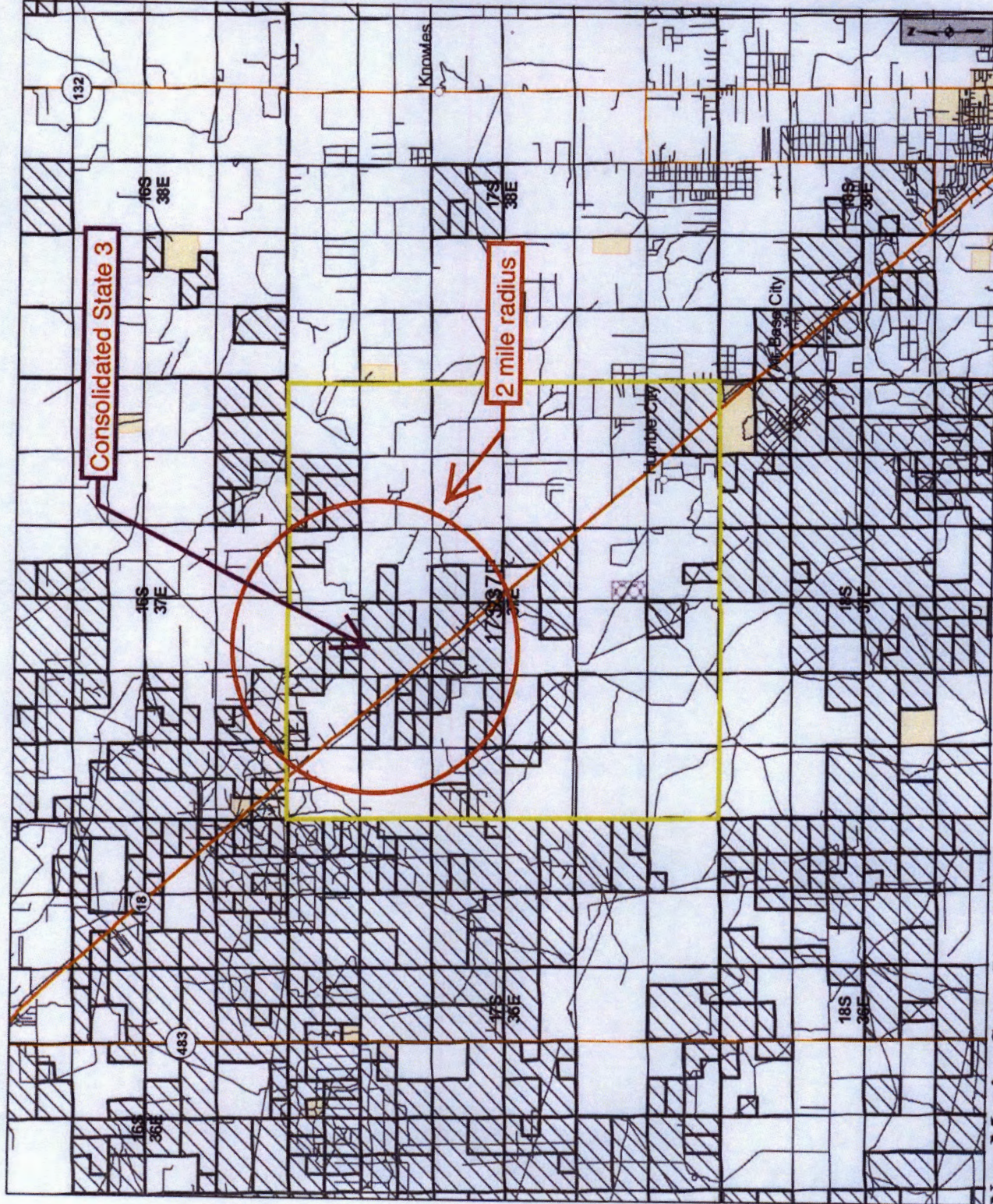








www.nmtstatelands.org



The New Mexico State Land Office assumes no responsibility or liability for, or in connection with, the accuracy, reliability or use of the information provided here, in State Land Office data layers or any other data layer.

Land Office Geographic Information Center
logc@do.state.nm.us

EXHIBIT F

**New Mexico State Land Office
Oil, Gas, and Minerals**

0 0.3750.75 1.5 2.25 3 Miles
Universal Transverse Mercator Projection, Zone 13
1983 North American Datum

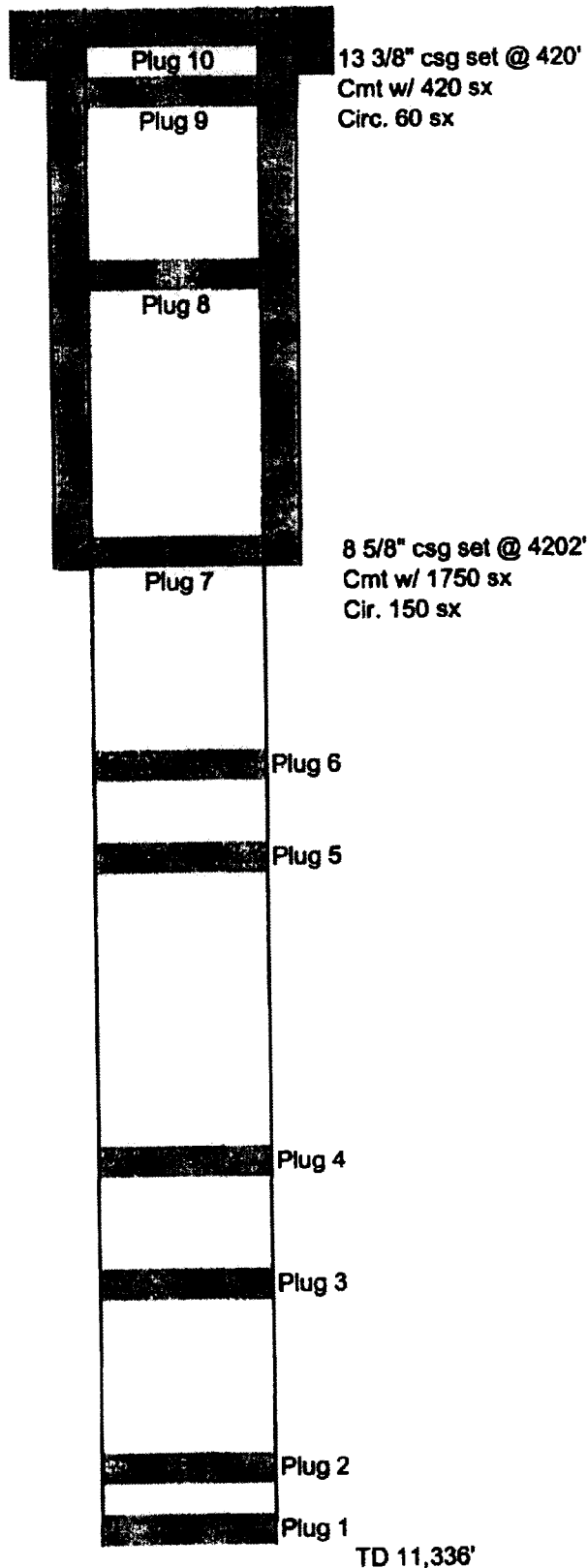
Created On: 1/11/2012 12:11:42 PM

| WELL | API 30-015- | SPUD | STATUS | TD | HOLE O. D. | CASING O. D. | SET @ | SX CEMENT | TYPE | TOC | HOW DETERMINED | POOL |
|----------------------------------|-------------|----------|----------|---------|------------|--------------|--------|-----------|--|-------|-----------------------------|-----------------|
| Dakota's New Mexico EX State 2 | 29440 | 12/22/85 | SWD | 11,300' | 17-1/2" | 13-3/8" | 444' | 500 | Class C | GL | circulated to surface | SWD; Strawn |
| | | | | | 11" | 8-5/8" | 4200' | 1500 | Class C | GL | circulated to surface | |
| | | | | | 7-7/8" | 5-1/2" | 11300' | 2082 | 950 sx Class H & 1132 sx Class C | 3700' | calculated | |
| Tipperary's Jons 4 State 1 | 28806 | 9/22/84 | P & A | 11,336' | 17-1/2" | 13-3/8" | 397' | 420 | Class C | GL | circulated 60 sx | Wildcat; Strawn |
| | | | | | 12-1/4" | 8-5/8" | 4202' | 1950 | 1750 sx light + 200 sx neat | GL | circulated 150 sx | |
| | | | | | 7-7/8" | not run | | | | | | |
| Pennzoil's Viersen 3 | 29829 | 1/1/87 | P & A | 11,240' | 17-1/2" | 13-3/8" | 405' | 630 | Class C | GL | circulated 180 sx | Shipp; Strawn |
| | | | | | 11" | 8-5/8" | 4189' | 1450 | 110 sx light + 350 sx Class C | 1600' | temperature survey | |
| | | | | | 7-7/8" | 5-1/2" | 11239' | 350 | Class H | 9900' | calculated | |
| Chesapeake's Bubba 4 State Com 1 | 37420 | 8/18/05 | oil well | 11,200' | 17-1/2" | 13-3/8" | 444' | 402 | 201 sx 35/65 poz Class C & 201 sx Class C | GL | circulated 3 bbl to surface | Shipp; Strawn |
| | | | | | 11" | 8-5/8" | 4208' | 960 | 150 sx 50:50 poz Class C & 600 sx 50:50 poz Class C & 210 sx Class C | 265' | (per Sundry) | |
| | | | | | 7-7/8" | 5-1/2" | 11195' | 1005 | 375 sx 50:50 poz Z & 130 sx oz H & 500 sx 50:50 poz Class H | 2590' | CBL | |

EXHIBIT G

1,312' from
Consolidated State 3

Jons 4 State
Sec. 4 (N), T-17-S, R-37-E
Lea County, New Mexico
560 FSL & 1650 FWL
30-025-28806



Plugging Detail

| | |
|---------|-------------------|
| Plug 1 | 35 sx @ 11,300' |
| Plug 2 | 35 sx @ 10,985 |
| Plug 3 | 35 sx @ 9,342 |
| Plug 4 | 35 sx @ 8,505 |
| Plug 5 | 35 sx @ 6,335 |
| Plug 6 | 35 sx @ 5,558 |
| Plug 7 | 35 sx @ 4150-4250 |
| Plug 8 | 35 sx @ 2000-2100 |
| Plug 9 | 35 sx @ 350-450 |
| Plug 10 | 10 sx @ surface |

EXHIBIT G

13 3/8" csg set @ 405'
Cmt w/ 630 sx
Circ. 180 sx

CIBP 4145'

8 5/8" csg set @ 4189'
Cmt w/ 1450 sx
TOC 1600'

Cut and pulled csg @ 7992'

5 1/2" csg set @ 11,239'
Cmt w/ 350 sx
Est. TOC 9900'
TD 11,240'

CIBP

**Sec. 4 (O), T-17-S, R-37-E
Lea County, New Mexico
150 FSL & 2080 FWL**

5 1/2" CIBP @ 10,992', Spot 35' cmt
Spot 25 sx @ 8206-8042
Cut csg @ 7992'
Set 50 sx 8042-7876
Set 50 sx 6349-6202
Set several plugs, but never tagged
Mixed LCM, no change
Set 8 5/8" CIBP @ 4145
Set 10 sx 4145-4110
Rest of report missing

EXHIBIT G

2,453' from
Consolidated State 3

Consolidated State No. 1

Sec. 9 (E), T-17-S, R-37-E
Lea County, New Mexico
2310 FSL & 330 FWL

30-025-27183

13 3/8" csg set @ 398'
Cmt w/ 350 sx
Circ.60 sx

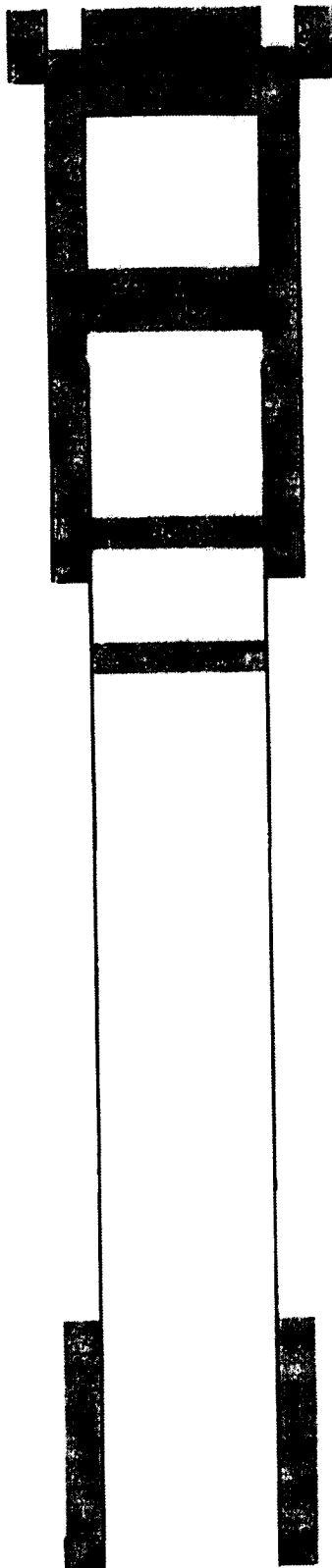
Plugging Detail

35 sx @ 10754-10654
40 sx @ 9140-9040
40 sx @ 8918-8818
50 sx @ 6404-6304
40 sx @ 4512-4412
30 sx @ 1400-1300
10 sx @ 35-0

8 5/8" csg set @ 4462'
Cmt w/ 1600 sx
Est TOC @ 550' (Temp Surv)

TD 11,073'

EXHIBIT G



13 3/8" csg set @ 406'
Cmt w/ 420 sx
Circ. 25 sx

Cut off and fish csg
@ 2340'

8 5/8" csg set @ 4200'
Cmt w/ 1340 sx
TOC 310'

5 1/2" csg set @ 11,280'
Cmt w/ 400 sx
TOC 9612' (Cement Bond Log)
TD 11,281

2,469' from
Consolidated State 3

Viersen #2

Sec. 4 (O), T-17-S, R-37-E
Lea County, New Mexico
1300 FSL & 1650 FEL

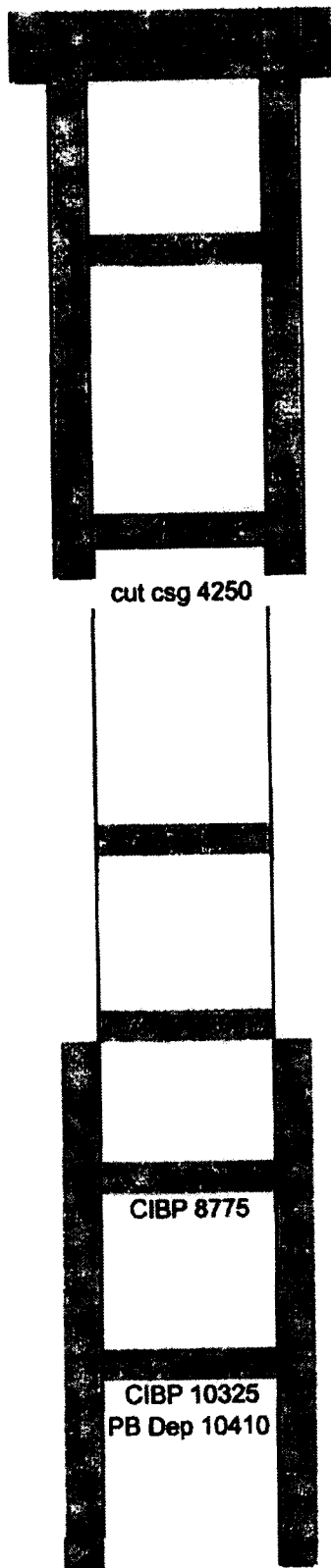
30-025-29945

Plugging Detail

Spot 50 sx @ 5068. No Tag.
Re-spot 50 sx & tag @ 4833'
Perf @ 4200. Squeez 50 sx & tag
@ 3850.

Spot 50 sx @ 2500. Tag @ 2300'
Spot 35 sx @ 2150-2050
Spot 35 sx @ 460-360
Perf @ 310, Squeeze 70 sx
Spot 20 sx @ 63' to surface

EXHIBIT G



13 3/8" csg set @ 462'
Cmt w/ 500 sx
Circ.90 sx

8 5/8" csg set @ 4198'
Cmt w/ 1700 sx
Circ 250 sx

cut csg 4250

CIBP 8775

CIBP 10325
PB Dep 10410

5 1/2" csg set @ 11412'
Cmt w/ 1050 sx
Est TOC @ 7705'
TD 11,412'

2,523' from
Consolidated State 3

New Mexico State EX #1

Sec. 9 (A), T-17-S, R-37-E
Lea County, New Mexico
330 FNL & 660 FEL

30-025-29367

Plugging Detail

PB to 10, 410 and completed in Wolfcamp
Set CIBP @ 10325', dump 35' cement
Attempted Abo completion 8810-8860
Set CIBP @ 8775', cap w/ 35' cement
Cut off 5 1/2" csg @ 4250'
50 sx @ 7700-7448
50 sx @ 6500-5997
50 sx @ 4250
Reset plub from 4240 to 4000; w/ 56 sx
50 sx @ 2150-1900
50 sx @ 550-300
10 sx 100' to surface

EXHIBIT G

NM WATERS

≈9 miles northwest of
Consolidated State 3

DATA

MAPS

HOME

SCALE

CORROSION

| General Information About: Sample 5876 | | | |
|--|-----------------------|--|-----------------------|
| SNYDER A COM 001 | | | |
| API | 3002534073 | Sample Number | |
| Unit/Section/ Township/Range | 18 / 06 / 16 S / 36 E | Field | SHOE BAR NORTHEAST |
| County | Lea | Formation | STRAWN |
| State | NM | Depth | |
| Lat/Long | 32.94607 / -103.39970 | Sample Source | |
| TDS (mg/L) | 72615.6 | Water Type | |
| Sample Date(MM/DD/YYYY) | 3/10/1998 | Analysis Date(MM/DD/YYYY) | 3/19/1998 |
| Remarks/Description | | | |
| Cation Information (mg/L) | | Anion Information (mg/L) | |
| Potassium (K) | 168.245 | Sulfate (SO) | 479.655 |
| Sodium (Na) | 26688.3 | Chloride (Cl) | 45588.1 |
| Calcium (Ca) | 1815.17 | Carbonate (CO ₃) | 0 |
| Magnesium (Mg) | 471.295 | Bicarbonate (HCO ₃) | 368.885 |
| Barium (Ba) | 0.3135 | Hydroxide (OH) | |
| Manganese (Mn) | | Hydrogen Sulfide (H ₂ S) | |
| Strontium (Sr) | 269.61 | Carbon Dioxide (CO ₂) | |
| Iron (Fe) | 33.44 | Oxygen (O) | |

EXHIBIT H

NM WATERS

≈9 miles northwest of
Consolidated State 3

DATA

MAPS

HOME

SCALE

CORROSION

| General Information About: Sample 5856 | | | |
|--|-----------------------|--|-----------------------|
| SNYDER A COM 001 | | | |
| API | 3002534073 | Sample Number | |
| Unit/Section/ Township/Range | 18 / 06 / 16 S / 36 E | Field | SHOE BAR NORTHEAST |
| County | Lea | Formation | STRAWN |
| State | NM | Depth | |
| Lat/Long | 32.94607 / -103.39970 | Sample Source | |
| TDS (mg/L) | 65732.6 | Water Type | |
| Sample Date(MM/DD/YYYY) | 4/2/1998 | Analysis Date(MM/DD/YYYY) | 4/15/1998 |
| Remarks/Description | | | |
| Cation Information (mg/L) | | Anion Information (mg/L) | |
| Potassium (K) | 115.06 | Sulfate (SO) | 381.79 |
| Sodium (Na) | 23155.3 | Chloride (Cl) | 41323.3 |
| Calcium (Ca) | 2535.5 | Carbonate (CO ₃) | 0 |
| Magnesium (Mg) | 446.642 | Bicarbonate (HCO ₃) | 478.022 |
| Barium (Ba) | 1.046 | Hydroxide (OH) | |
| Manganese (Mn) | | Hydrogen Sulfide (H ₂ S) | 2.092 |
| Strontium (Sr) | 270.914 | Carbon Dioxide (CO ₂) | |
| Iron (Fe) | 49.162 | Oxygen (O) | |

EXHIBIT H

NM WATERS

≈8 miles east of
Consolidated State 3

DATA

MAPS

HOME

SCALE

CORROSION

| General Information About: Sample 4524 | | | |
|--|-----------------------|--|---------------|
| L COOPER A 001 | | | |
| API | 3002507301 | Sample Number | |
| Unit/Section/ Township/Range | N / 12 / 17 S / 38 E | Field | KNOWLES SOUTH |
| County | Lea | Formation | DEV |
| State | NM | Depth | |
| Lat/Long | 32.84384 / -103.10365 | Sample Source | DST |
| TDS (mg/L) | 29115 | Water Type | |
| Sample Date(MM/DD/YYYY) | | Analysis Date(MM/DD/YYYY) | |
| Remarks/Description | | | |
| Cation Information (mg/L) | | Anion Information (mg/L) | |
| Potassium (K) | | Sulfate (SO) | 2337 |
| Sodium (Na) | | Chloride (Cl) | 15640 |
| Calcium (Ca) | | Carbonate (CO ₃) | |
| Magnesium (Mg) | | Bicarbonate (HCO ₃) | 999 |
| Barium (Ba) | | Hydroxide (OH) | |
| Manganese (Mn) | | Hydrogen Sulfide (H ₂ S) | |
| Strontium (Sr) | | Carbon Dioxide (CO ₂) | |
| Iron (Fe) | | Oxygen (O) | |

EXHIBIT I

NM WATERS

≈8 miles east of
Consolidated State 3

DATA

MAPS

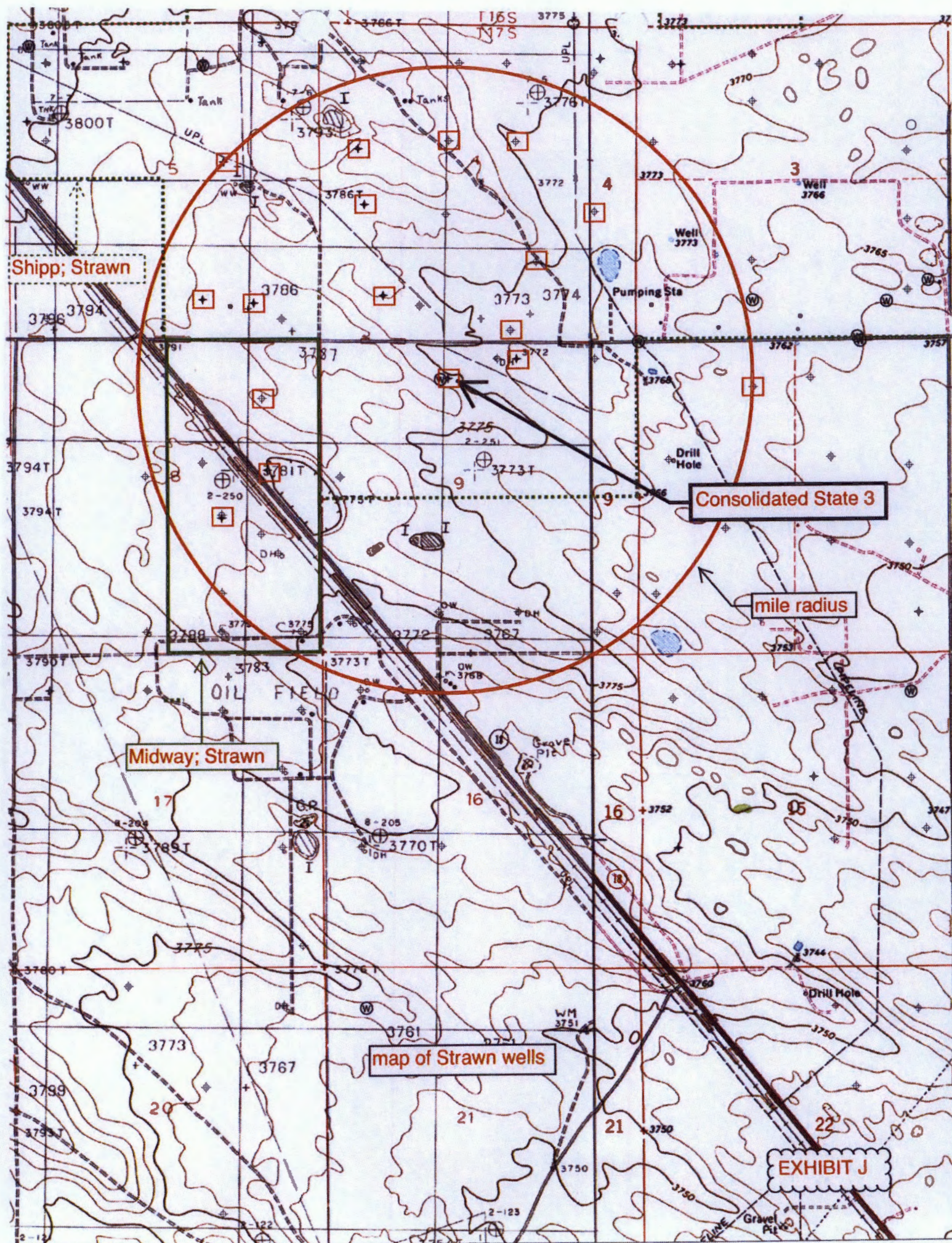
HOME

SCALE

CORROSION

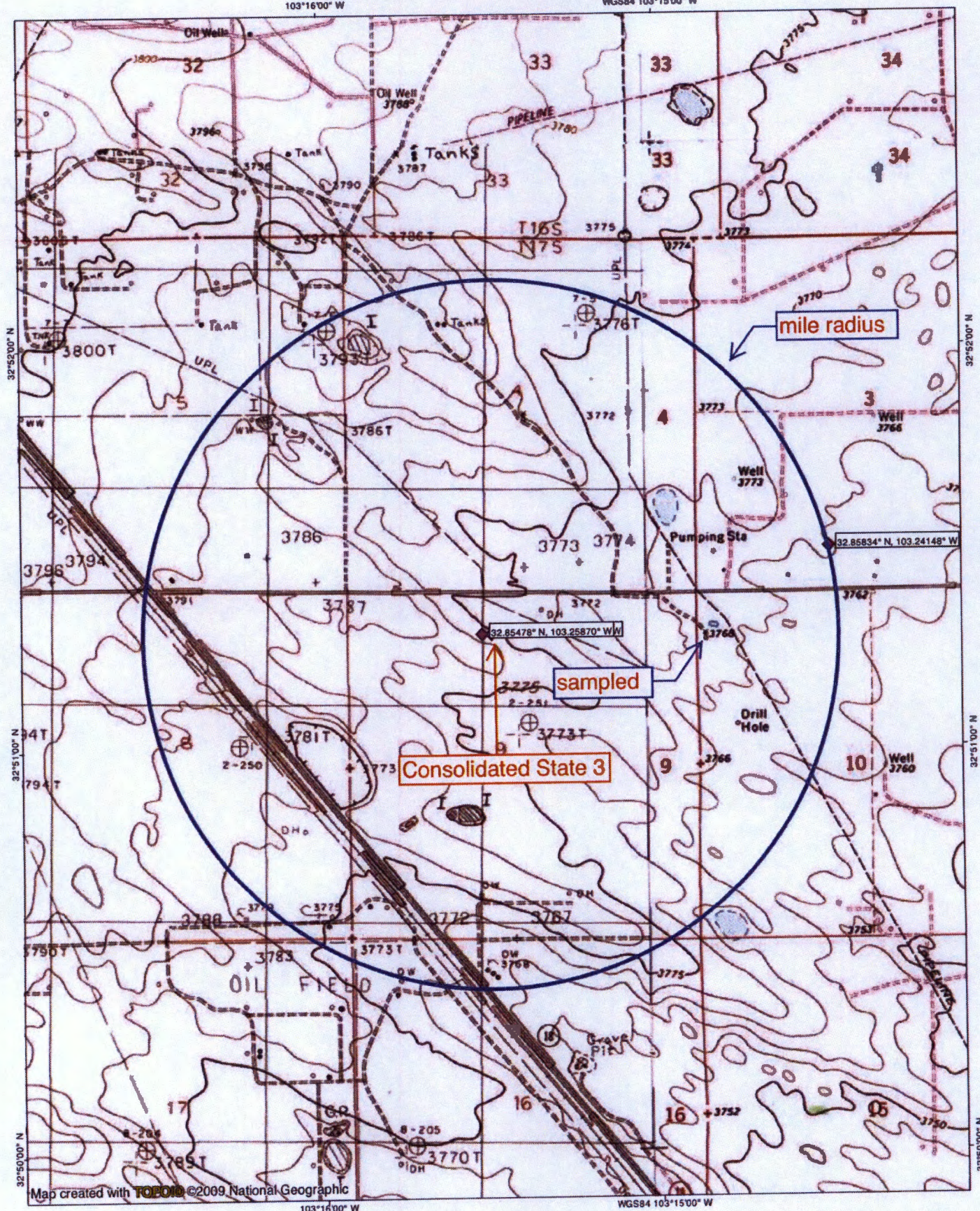
| General Information About: Sample 7538 | | | |
|--|-----------------------|--|---------------|
| L COOPER A001 | | | |
| API | 3002507301 | Sample Number | |
| Unit/Section/ Township/Range | N / 12 / 17 S / 38 E | Field | KNOWLES SOUTH |
| County | Lea | Formation | DEV |
| State | NM | Depth | 12263 |
| Lat/Long | 32.84384 / -103.10365 | Sample Source | DST |
| TDS (mg/L) | 29122 | Water Type | |
| Sample Date(MM/DD/YYYY) | | Analysis Date(MM/DD/YYYY) | |
| Remarks/Description | | | |
| Cation Information (mg/L) | | Anion Information (mg/L) | |
| Potassium (K) | | Sulfate (SO) | 2337 |
| Sodium (Na) | | Chloride (Cl) | 15646 |
| Calcium (Ca) | 1097 | Carbonate (CO ₃) | |
| Magnesium (Mg) | 1077 | Bicarbonate (HCO ₃) | 999 |
| Barium (Ba) | | Hydroxide (OH) | |
| Manganese (Mn) | | Hydrogen Sulfide (H ₂ S) | |
| Strontium (Sr) | | Carbon Dioxide (CO ₂) | |
| Iron (Fe) | 0 | Oxygen (O) | |

EXHIBIT I



103°16'00" W

WGS84 103°15'00" W



103°16'00" W

WGS84 103°15'00" W

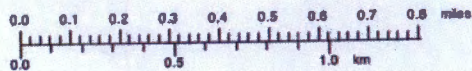


EXHIBIT K

TN+MN

7.5°

11/01/11

Hall Environmental Analysis Laboratory, Inc.

Date: 09-Dec-11

Analytical Report

| | | | |
|-------------------|-----------------------|--------------------------|------------------------|
| CLIENT: | Permits West | Client Sample ID: | Section 9 Water Well |
| Lab Order: | 1111998 | Collection Date: | 11/26/2011 11:50:00 AM |
| Project: | Cobalt Consolidated 3 | Date Received: | 11/29/2011 |
| Lab ID: | 1111998-01 | Matrix: | AQUEOUS |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|--|--------|------|------|-------|----|----------------------|
| EPA METHOD 1664 | | | | | | Analyst: MAW |
| N-Hexane Extractable Material | ND | 5.0 | | mg/L | 1 | 12/6/2011 |
| SM2540C MOD: TOTAL DISSOLVED SOLIDS | | | | | | Analyst: KS |
| Total Dissolved Solids | 394 | 20.0 | | mg/L | 1 | 12/2/2011 4:02:00 PM |

EXHIBIT K

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Estimated value
J Analyte detected below quantitation limits
NC Non-Chlorinated
PQL Practical Quantitation Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
MCL Maximum Contaminant Level
ND Not Detected at the Reporting Limit
S Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Permits West
Project: Cobalt Consolidated 3

Work Order: 1111998

| Analyte | Result | Units | PQL | SPK Va | SPK ref | %Rec | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|--------------------------------------|--------|-------|-----|--------|---------|------|----------|-----------|------|----------|------|
| Method: EPA Method 1664A | | | | | | | | | | | |
| Sample ID: MB-29608 | | MBLK | | | | | | | | | |
| N-Hexane Extractable Material | ND | mg/L | 5.0 | | | | | | | | |
| Sample ID: MB-29608 | | MBLK | | | | | | | | | |
| Silica Gel Treated N-Hexane Extracta | ND | mg/L | 5.0 | | | | | | | | |
| Sample ID: LCS-29608 | | LCS | | | | | | | | | |
| N-Hexane Extractable Material | 32.70 | mg/L | 5.0 | 40 | 0 | 81.8 | 78 | 114 | | | |
| Sample ID: LCS-29608 | | LCS | | | | | | | | | |
| Silica Gel Treated N-Hexane Extracta | 14.10 | mg/L | 5.0 | 20 | 0 | 70.5 | 64 | 132 | | | |

| | | | | | | | | | | | |
|---|------|------|------|------|----|-----|----|-----|--|--|--|
| Method: SM2540C MOD: Total Dissolved Solids | | | | | | | | | | | |
| Sample ID: MB-29576 | | MBLK | | | | | | | | | |
| Total Dissolved Solids | ND | mg/L | 20.0 | | | | | | | | |
| Sample ID: LCS-29576 | | LCS | | | | | | | | | |
| Total Dissolved Solids | 1029 | mg/L | 20.0 | 1000 | 16 | 101 | 80 | 120 | | | |

EXHIBIT K

Qualifiers:

| | | | |
|----|--|----|--|
| E | Estimated value | H | Holding times for preparation or analysis exceeded |
| J | Analyte detected below quantitation limits | NC | Non-Chlorinated |
| ND | Not Detected at the Reporting Limit | R | RPD outside accepted recovery limits |

Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA

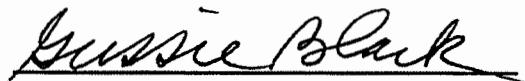
I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

Beginning with the issue dated
June 21, 2017
and ending with the issue dated
June 21, 2017.



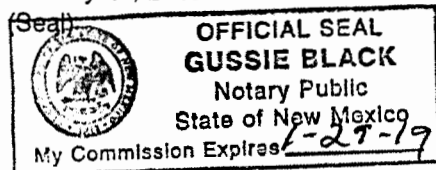
Publisher

Sworn and subscribed to before me this
21st day of June 2017.



Business Manager

My commission expires
January 29, 2019



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

LEGAL NOTICE June 21, 2017

PUBLIC NOTICE APPLICATION FOR WATER DISPOSAL

Notice is hereby given that Cobalt Operating, LLC (Texas) is applying to the New Mexico Oil Conservation Division for administrative approval and authority to inject salt water into the Consolidated State Well 3, Located 660' FNL 2128 FWL, Section 9-17S-37E, Lea County, New Mexico.

The purpose of the water injection well is to dispose of saltwater produced from the Midway Devonian Field and currently designated by the Oil Conservation Division and as may be extended by additional drilling.

Water will be injected into the Devonian Formation at an interval between 12,261' and 12,700'. The maximum injection rate and pressure are expected to be 5,000 BWPD and 2,360 psi, respectfully.

Any interested parties may file objections or request for hearing within 15 days to the Oil Conservation Division, 1220 S. St. Francis Dr., Santa Fe, NM 87505.

By: Mark Burkett
Cobalt Operating, LLC (Texas)
PO Box 51468
Midland, TX 79710
(432) 684-7145
#31872

67114194

00195229

MARK BURKETT
COBALT OPERATING, LLC (TEXAS)
PO BOX 51468
MIDLAND, TX 79710

Exhibit L



PO Box 51468
Midland, TX 79705
432-684-7145

September 19, 2017

Certified Mail: 7015 0640 0004 5740 1835

Sharon LaValley
Cimarex Energy Co.
15 East 5th St., Suite 1 000
Tulsa, OK 74103

Cobalt Operating, LLC is applying (application attached) to convert its Consolidated State 3 well to a salt water disposal well. This well was previously permitted Administrative Order SWD-1438 on September 23, 2013. As required by NM Oil Conservation Division Rules, we are notifying you of the following proposed salt water disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Well Name: Consolidated State 3 (state lease) TD = 11,300'
Proposed Injection Zone: Devonian (from 12,240' to 12,700')
Location: 660' FNL & 2128' FWL Sec. 9, T. 17 S., R. 37 E., Lea County, NM
Approximate Location: 8 miles southeast of Lovington, NM
Applicant Name: Cobalt Operating, LLC (432) 684-7145
Applicant's Address: PO Box 51468, Midland, TX 79710
Submittal Information: Application for a salt water disposal well will be filed with the NM Oil Conservation Division (NMOCD). If you have an objection, or wish to request a hearing, then it must be filed with the NMOCD within 15 days of receipt of this letter. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Thank you,

A handwritten signature in black ink, appearing to read 'Mark Burkett', is written over a horizontal line.

Mark Burkett



PO Box 51468
Midland, TX 79705
432-684-7145

September 19, 2017

Certified Mail: 7015 0640 0004 5740 1842

Chesapeake Exploration LP
P. O. Box 18496
Oklahoma City, OK 73154-0496

Cobalt Operating, LLC is applying (application attached) to convert its Consolidated State 3 well to a salt water disposal well. This well was previously permitted Administrative Order SWD-1438 on September 23, 2013. As required by NM Oil Conservation Division Rules, we are notifying you of the following proposed salt water disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

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Please call me if you have any questions.

Thank you,

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Mark Burkett



PO Box 51468
Midland, TX 79705
432-684-7145

September 19, 2017

Certified Mail: 7015 0640 0004 5740 1859

ConocoPhillips Company
P. O. Box 2197
Houston, TX 77252

Cobalt Operating, LLC is applying (application attached) to convert its Consolidated State 3 well to a salt water disposal well. This well was previously permitted Administrative Order SWD-1438 on September 23, 2013. As required by NM Oil Conservation Division Rules, we are notifying you of the following proposed salt water disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

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Approximate Location: 8 miles southeast of Lovington, NM
Applicant Name: Cobalt Operating, LLC (432) 684-7145
Applicant's Address: PO Box 51468, Midland, TX 79710
Submittal Information: Application for a salt water disposal well will be filed with the NM Oil Conservation Division (NMOCD). If you have an objection, or wish to request a hearing, then it must be filed with the NMOCD within 15 days of receipt of this letter. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Thank you,

A handwritten signature in black ink, appearing to read 'Mark Burkett', written over a horizontal line.

Mark Burkett



PO Box 51468
Midland, TX 79705
432-684-7145

September 19, 2017

Certified Mail: 7015 0640 0004 5740 1866

ConocoPhillips Company
P. O. Box 2197
Houston, TX 77252

Cobalt Operating, LLC is applying (application attached) to convert its Consolidated State 3 well to a salt water disposal well. This well was previously permitted Administrative Order SWD-1438 on September 23, 2013. As required by NM Oil Conservation Division Rules, we are notifying you of the following proposed salt water disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

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Applicant's Address: PO Box 51468, Midland, TX 79710
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Please call me if you have any questions.

Thank you,

A handwritten signature in black ink, appearing to read 'Mark Burkett', written over a horizontal line.

Mark Burkett



PO Box 51468
Midland, TX 79705
432-684-7145

September 19, 2017

Certified Mail: 7015 0640 0004 5740 1873

Nick Jaramillo
New Mexico State Land Office
PO Box 1148
Santa Fe, NM 87504 -1148

Cobalt Operating, LLC is applying (application attached) to convert its Consolidated State 3 well to a salt water disposal well. This well was previously permitted Administrative Order SWD-1438 on September 23, 2013 and has an existing easement. As required by NM Oil Conservation Division Rules, I am notifying you of the following proposed salt water disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Well Name: Consolidated State 3 (state lease) TD = 11,300'
Proposed Injection Zone: Devonian (from 12,240' to 12,700')
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Please call me if you have any questions.

Thank you,

A handwritten signature in black ink, appearing to read 'Mark Burkett', written over a horizontal line.

Mark Burkett

Inactive Well Additional Financial Assurance Report

286255 COBALT OPERATING, LLC

Total Well Count: 11

Printed On: Friday, September 22 2017

| Property | Well Name | Lease Type | ULSTR | OCD Unit Letter | API | Well Type | Last Prod/Inj | Inactive Additional Bond Due | Measured Depth | Required Bond Amount | Bond Required Now | Covered By Blanket TA Bond | Bond In Place | In Violation |
|----------|-------------------------|------------|--------------|-----------------|--------------|-----------|---------------|------------------------------|----------------|----------------------|-------------------|----------------------------|---------------|--------------|
| 312265 | ANGEL #001 | P | K-05-12S-38E | K | 30-025-07135 | O | | | 12108 | | | | 0 | |
| | ANGEL #002 | P | N-05-12S-38E | N | 30-025-07136 | O | 11/2006 | 12/01/2008 | 12030 | 17030 | Y | | 0 | Y |
| | ANGEL #003 | P | F-05-12S-38E | F | 30-025-07133 | O | 02/1991 | 03/01/1993 | 12016 | 17016 | Y | | 0 | Y |
| 309594 | CONSOLIDATED STATE #003 | S | C-09-17S-37E | C | 30-025-29711 | S | 01/2016 | 02/01/2018 | 12700 | 17700 | | | 0 | |
| 309595 | HALE STATE #001Y | S | J-08-17S-37E | J | 30-025-26773 | O | 07/2017 | 08/01/2019 | 11875 | 16875 | | | 0 | |
| 310420 | MIDWAY 5 #001 | P | O-05-17S-37E | O | 30-025-31033 | O | 05/2017 | 06/01/2019 | 11075 | 16075 | | | 0 | |
| 313636 | STATE 32 #001 | P | N-32-23S-38E | N | 30-025-21476 | S | 02/2017 | 03/01/2019 | 12235 | 17235 | | | 0 | |
| 313637 | STATE A #001 | S | H-05-24S-38E | H | 30-025-21230 | O | 05/2017 | 06/01/2019 | 12215 | 17215 | | | 0 | |
| | STATE A #002 | S | 3-05-24S-38E | C | 30-025-21231 | O | | | 12310 | | | | 0 | |
| 309596 | WARREN #001 | P | G-08-17S-37E | G | 30-025-26323 | O | 07/2017 | 08/01/2019 | 11980 | 16980 | | | 0 | |
| | WARREN #002 | P | H-08-17S-37E | H | 30-025-26953 | O | 06/2017 | 07/01/2019 | 11875 | 16875 | | | 0 | |

WHERE Ogrid:286255

Inactive Well List

Total Well Count: 11 Inactive Well Count: 3
Printed On: Friday, September 22 2017

| District | API | Well | ULSTR | OCD Unit | OGRID | Operator | Lease Type | Well Type | Last Production | Formation/Notes | Status | TA Exp Date |
|----------|--------------|-------------------------|--------------|----------|--------|-----------------------|------------|-----------|-----------------|-------------------------------|--------|-------------|
| 1 | 30-025-07136 | ANGEL #002 | N-05-12S-38E | N | 286255 | COBALT OPERATING, LLC | P | O | 11/2006 | WOODFORD INT TO PA 01/09/2013 | | |
| 1 | 30-025-07133 | ANGEL #003 | F-05-12S-38E | F | 286255 | COBALT OPERATING, LLC | P | O | 02/1991 | WOLFCAMP INT TO PA 01/19/2013 | T | 4/10/2013 |
| 1 | 30-025-29711 | CONSOLIDATED STATE #003 | C-09-17S-37E | C | 286255 | COBALT OPERATING, LLC | S | S | 01/2016 | SWD;DEVONIAN SWD-1438 | | |

WHERE Ogrid:286255, County:All, District:All, Township:All, Range:All, Section:All, Production(months):15, Excludes Wells Under ACOI, Excludes Wells in Approved TA Period