Initial Application Part I

Received: **07/23/2019**

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

Revised March 23, 2017

RECEIVED:	REVIEWER:	TYPE:	APP NO:
07/23/2019		SWD	pMAM1920436108

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: AWR Disposal LLC **OGRID Number:** 328805
Well Name: Leonard SWD #1 **API:**
Pool: Proposed: SWD, Silurian, Fusselman, Montoya **Pool Code:** 97869

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

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

SWD-2203

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
☐ Notice Complete
☐ Application Content Complete

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

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.

July 23, 2019
Date

Randall Hicks (agent)
Print or Type Name

505 238 9515
Phone Number

Signature

r@rthicksconsult.com
e-mail Address

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

☐ **AMENDED REPORT**

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1]API Number	[2]Pool Code	[3]Pool Name

[4]Property Code	[5]Property Name	[6]Well Number
	LEONARD SWD	1

[7]OGRID No.	[8]Operator Name	[9]Elevation
328805	AWR DISPOSAL, LLC	3370'

[10]Surface Location

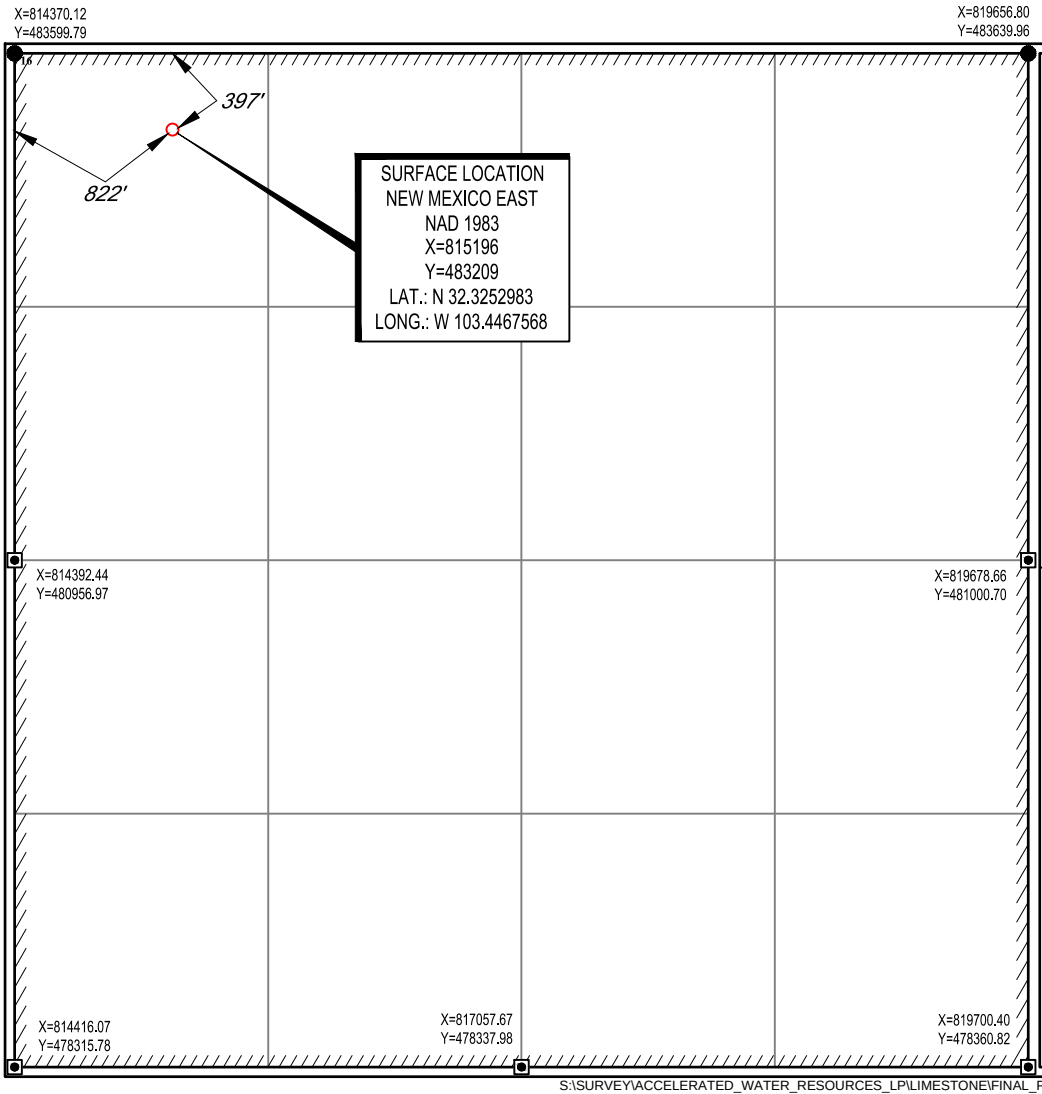
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	11	23-S	34-E	-	397'	NORTH	822'	WEST	LEA

[11]Bottom Hole Location If Different From Surface

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

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

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



[17]OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature Date

Printed Name

E-mail Address

[18]SURVEYOR CERTIFICATION

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

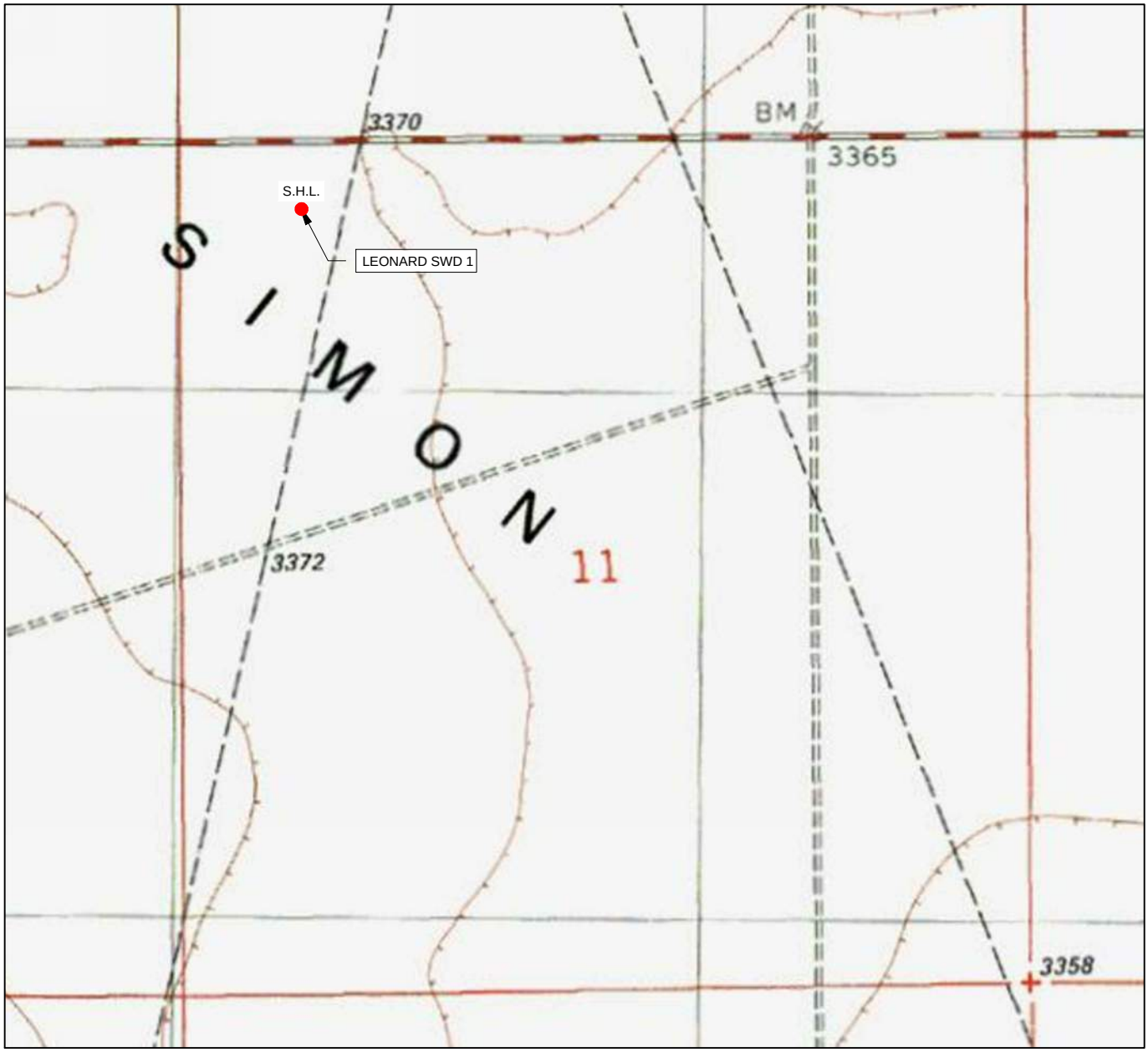
06/14/2019
Date of Survey
Signature and Seal of Professional Surveyor

JOHN KARNEGIE NEW MEXICO 11401 REGISTERED PROFESSIONAL SURVEYOR

Certificate Number

S:\SURVEY\ACCELERATED_WATER_RESOURCES_LP\LIMESTONE\FINAL_PRODUCTS\LO_LEONARD_SWD_1.DWG 6/14/2019 2:51:33 PM kmatheny

LOCATION & ELEVATION VERIFICATION MAP



AWR DISPOSAL, LLC

LEASE NAME & WELL NO.: LEONARD SWD 1

SECTION 11 TWP 23-S RGE 34-E SURVEY N.M.P.M.
COUNTY LEA STATE NM ELEVATION 3370'
DESCRIPTION 397' FNL & 822' FWL

LATITUDE N 32.3252983 LONGITUDE W 103.4467568

–N–

SCALE: 1" = 1000'

0' 500' 1000'

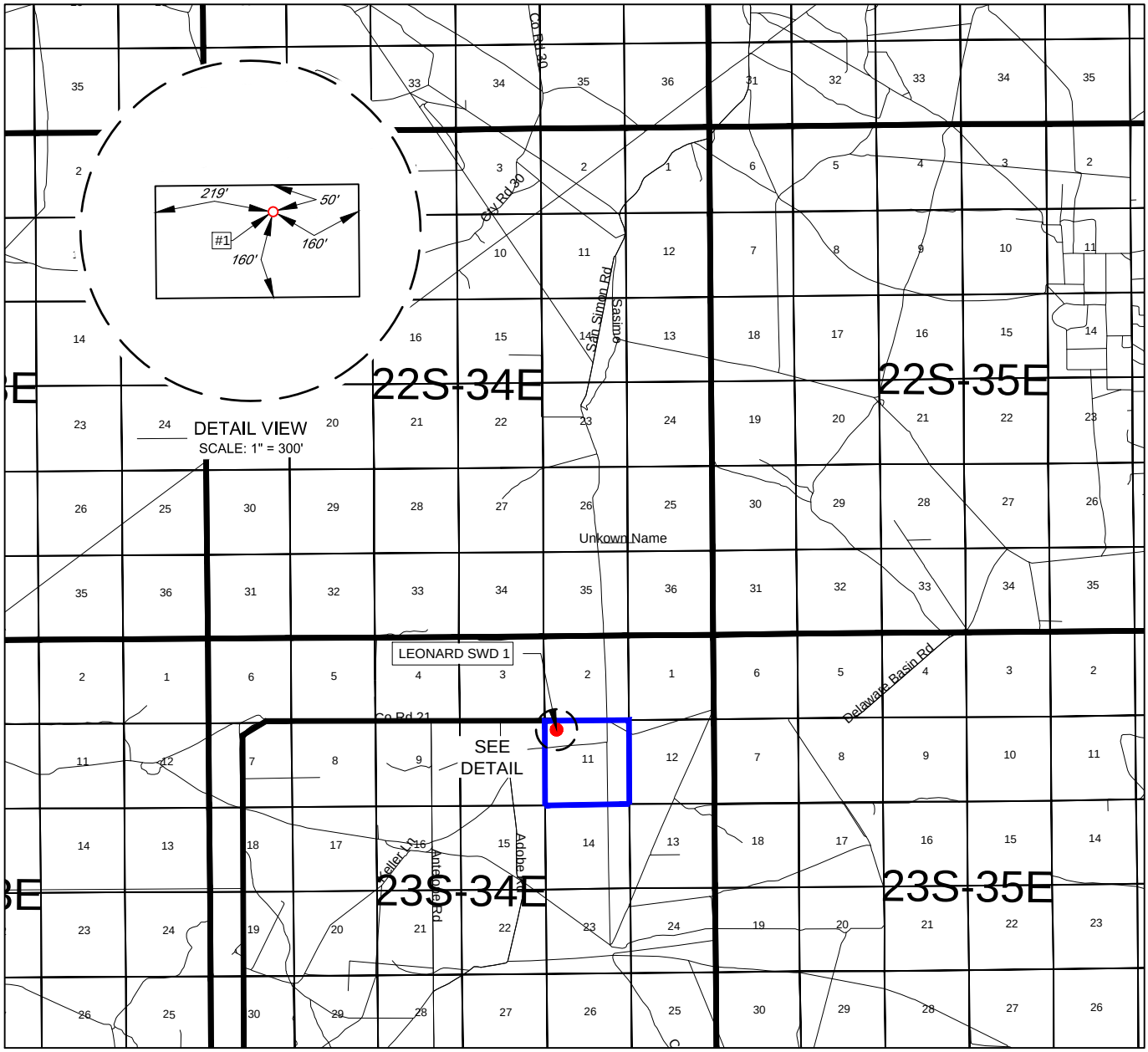
THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY AWR DISPOSAL, LLC. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM, EAST ZONE OF THE NORTH AMERICAN DATUM 1983, U.S. SURVEY FEET.

TOPOGRAPHIC
LOYALTY INNOVATION LEGACY
1400 EVERMAN PARKWAY, Ste. 146 • FT. WORTH, TEXAS 76140
TELEPHONE: (817) 744-7512 • FAX (817) 744-7554
2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
WWW.TOPOGRAPHIC.COM

EXHIBIT 2

VICINITY MAP

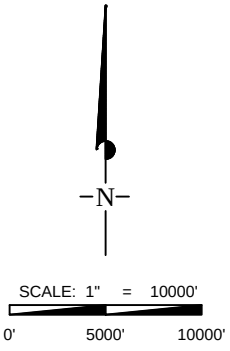


AWR DISPOSAL, LLC

LEASE NAME & WELL NO.: LEONARD SWD 1

SECTION 11 TWP 23-S RGE 34-E SURVEY N.M.P.M.
COUNTY LEA STATE NM
DESCRIPTION 397' FNL & 822' FWL

DISTANCE & DIRECTION
FROM INT. OF NM-128 & DELAWARE BASIN RD., GO NORTH ON DELAWARE BASIN RD. ±11.6 MILES, TO A POINT ±383 FEET NORTH OF THE LOCATION.



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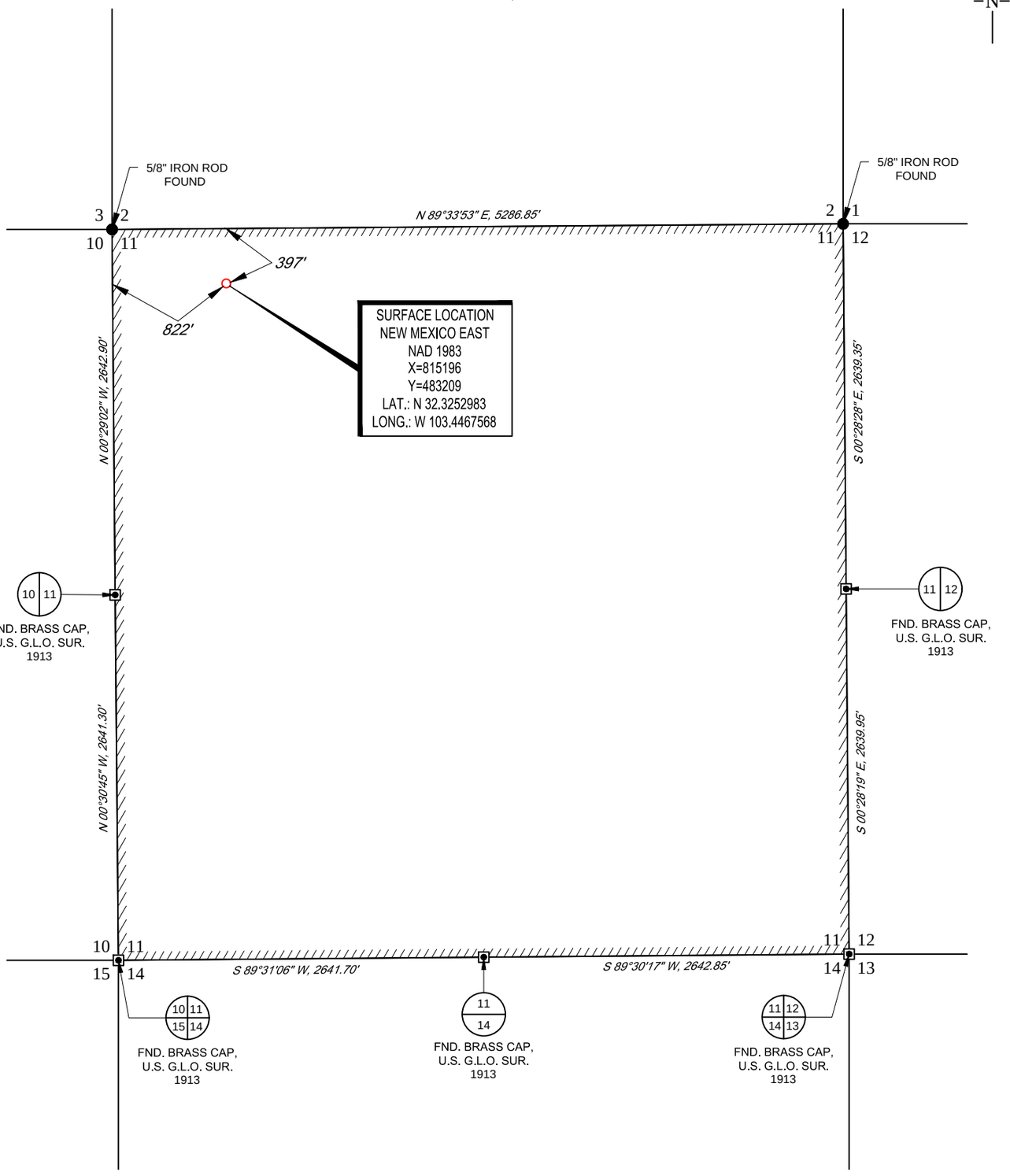
TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
WWW.TOPOGRAPHIC.COM

EXHIBIT 2A
AWR DISPOSAL, LLC

SCALE: 1" = 1000'
0' 500' 1000'

SECTION 11, TOWNSHIP 23-S, RANGE 34-E, N.M.P.M.
LEA COUNTY, NEW MEXICO



LEASE NAME & WELL NO.: LEONARD SWD 1

SECTION 11 TWP 23-S RGE 34-E SURVEY N.M.P.M.
COUNTY LEA STATE NM
DESCRIPTION 397' FNL & 822' FWL

DISTANCE & DIRECTION
FROM INT. OF NM-128 & DELAWARE BASIN RD., GO NORTH ON DELAWARE BASIN RD. ±11.6 MILES, TO A POINT ±383 FEET NORTH OF THE LOCATION.

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM, EAST ZONE OF THE NORTH AMERICAN DATUM 1983, U.S. SURVEY FEET

THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY AWR DISPOSAL, LLC. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

JOHN TREVOR CARNEGIE
NEW MEXICO
11401
REGISTERED PROFESSIONAL SURVEYOR

John Trevor Carnegie, P.S. No. 11401
JUNE 14, 2019

TOPOGRAPHIC
LOYALTY INNOVATION LEGACY
1400 EVERMAN PARKWAY, Ste. 146 • FT. WORTH, TEXAS 76140
TELEPHONE: (817) 744-7512 • FAX (817) 744-7554
2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
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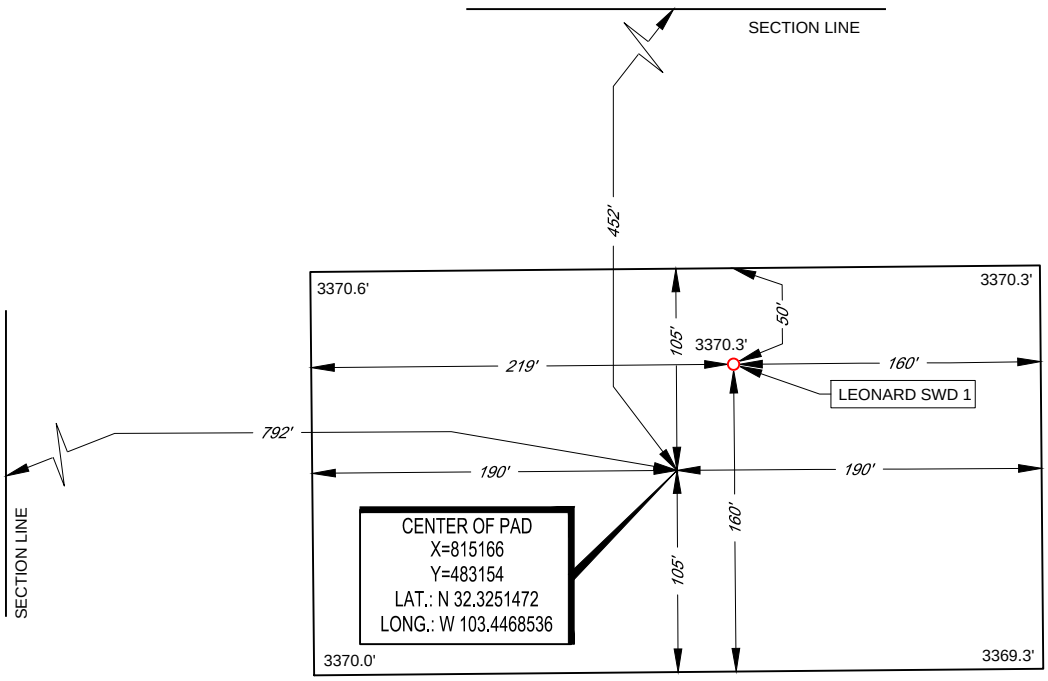
WWW.TOPOGRAPHIC.COM

EXHIBIT 2B

AWR DISPOSAL, LLC

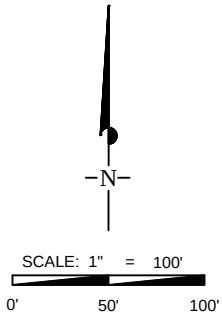
SECTION 11, TOWNSHIP 23-S, RANGE 34-E, N.M.P.M.
LEA COUNTY, NEW MEXICO



LEASE NAME & WELL NO.: LEONARD SWD 1

1 LATITUDE N 32.3252983 1 LONGITUDE W 103.4467568

CENTER OF PAD IS 452' FNL & 792' FWL



ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM, EAST ZONE OF THE NORTH AMERICAN DATUM 1983, U.S. SURVEY FEET

THIS PROPOSED PAD SITE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY AWR DISPOSAL, LLC. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

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LOYALTY INNOVATION LEGACY
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2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
WWW.TOPOGRAPHIC.COM

ORIGINAL DOCUMENT SIZE: 8.5" X 11"

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: _____Secondary Recovery _____Pressure Maintenance ___X__Disposal _____Storage
Application qualifies for administrative approval? ____X_____Yes _____No

II. OPERATOR: _AWR Disposal, LLC._____

ADDRESS: __3300 N. A Street, Ste 220, Midland, TX 79705_____

CONTACT PARTY: __Randall Hicks (Agent)_____PHONE: __505 238 9515_____

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: _ __Randall Hicks TITLE: _Agent_____

SIGNATURE: ___  _____DATE: __7/17/2019_____

E-MAIL ADDRESS: ____R@rthicksconsult.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: _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

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: _____AWR Disposal, LLC._____

WELL NAME & NUMBER: _Leonard SWD #1_____

WELL LOCATION: _____397’ FNL & 822’ FWL_____D_____11_____23S_____34E_____
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATIC ***SEE ATTACHMENTS*** ***WELL CONSTRUCTION DATA***

Surface Casing

Hole Size: ___See attachments_____ Casing Size:_____

Cemented with: _____ sx. ***or*** _____ ft^3

Top of Cement: _____ Method Determined: _____

Intermediate Casing

Hole Size: _____ Casing Size:_____

Cemented with: _____ sx. ***or*** _____ ft^3

Top of Cement: _____ Method Determined: _____

Production Casing

Hole Size: _____ Casing Size:_____

Cemented with: _____ sx. ***or*** _____ ft^3

Top of Cement: _____ Method Determined: _____

Total Depth: _____

Injection Interval

_____feet to_____

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: _____See attachments_____Lining Material: _____

Type of Packer: _____

Packer Setting Depth: _____

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

Additional Data

1. Is this a new well drilled for injection? __X_____Yes _____No

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

   _____

2. Name of the Injection Formation: _____

3. Name of Field or Pool (if applicable): _Proposed: SWD, Devonian, Fusselman, Montoya_____

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

   _____

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

   _____

   _____

   _____

Attachments to C-108

Copy of well bore diagram

Section III-XII Written descriptions to supplement C-108

Plates referenced in written descriptions

Tables referenced in written descriptions

OSE well logs referenced in written descriptions

Section XIII Proof of Notice

Directions

Date Spudded: TBD

From Carlsbad:

AWR Disposal LLC

Leonard SWD #1

Unit Letter D, Sec. 11, T23S R34E
397' FNL, 822' FEL
Lea County, NM

Latitude + 32°19'31.074"N, Longitude 103°26'48.324"W

20", 133#, J-55 casing @ 1,050'.

Cmt w/ 450 sks, 13.7 lead and 450 sks, 14.8 tail

24" Hole

13-3/8", 68# L-80 EZ-GO FJ3 casing @ 4,550'.
DV Tool w/ 10' pkr at 4,000'

1st Stg Cmt w/ 1000 sks 11.8 ppg lead & 400 sks 13.2 ppg tail.

2nd Stg Cmt w/ 1000 sks 11.8 ppg lead & 380 sks 13.2 ppg tail.

17.5" Hole

9-5/8", 35.5#, HCP-110 BTC casing @ 11,000'.

Upper DV Tool w/ 10' pkr at 7,000'
Lower DV Tool w/ 10' pkr at 9,000'

1st Stg Cmt w/ 600 sks 11.8 ppg lead & 400 sks 13.2 ppg tail.

2nd Stg Cmt w/ 600 sks 11.8 ppg lead & 380 sks 13.2 ppg tail.

3rd Stg Cmt w/ 600 sks 11.8 ppg lead & 380 sks 13.2 ppg tail.

12.25" Hole

5.5" Tubing

5" Tubing

Maximum Proposed Injection Rate: 40,000 BBLS PER DAY

Maximum Proposed Injections Pressure: 3,000 psi

7-5/8" Liner, 39#, P-110 casing @ 14,700'.

Cmt w/ 230 sks 11.9 ppg Class C

Injection Interval: 8.5" Hole

14,700	-	16,020	SLRN
16,020	-	16,331	FSLM
16,331	-	16,652	MNTY

Packer set @ 14,620

6.5" Openhole

TD: 16,652

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

Lease Name: Leonard SWD #1
Unit Letter D, Section 11, T23S R34E, 397' FNL, 822' FWL

Limestone Basin Prop Ranch LLC is the surface owner of the location upon which the proposed SWD will be drilled.

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

The attached Wellbore Data Sheet provides the design specifics required.

The formation tops for the Leonard SWD #1 were established by Geologist Herb Wacker TBPG license #4517. Nearby deep wells Amoco Production Federal BB 1 (30 025 26902) and Santa Fe Energy Gaucho Unit 1 (30 025 33440)

The Woodford formation top and deeper formations were correlated with open hole logs and picked using the two nearest wells drilled below the Simpson formation. GeoMaps were also employed to select tops.

Deeper tops were picked by using the Devon Energy, Cotton Draw Unit 32 State SWD #2 open hole logs located in section 32 of T24S-R32E API 30-025-41524 (TD 18,449).

.

AWR Disposal Leonard SWD #1 Sec 11, T23S R34E		
Geologist	GL	3400
H. Wacker	KB	3430
	MD	SS
Quaternary	70	3360
Bolson Fill	289	3141
Dockum	1649	1781
Chinle	1719	1711
Santa Rosa	1897	1533
Dewey Lake	2446	984
Rustler	2838	593
Yates	4099	-669
Capitan Reef	4197	-767
Delaware	5334	-1904
Bell Canyon	5380	-1950
Cherry Canyon	5944	-2514
Brushy Canyon	7190	-3760
Bone Spring	8458	-5028
1st BS Sand	9704	-6274
2nd BS Sand	10141	-6711
3rd BS Sand	11038	-7608
Wolfcamp	11339	-7909
Strawn	11780	-8350
Atoka	12027	-8597
Morrow	12875	-9445
Middle Morrow	13097	-9667
Barnett	13522	-10092
Miss Lime	14061	-10631
Woodford	14439	-11009
Silurian	14670	-11240
Fusselman	16020	-12590
Montoya	16331	-12901
Simpson	16682	-13252

Top of Interval	14700	Siluro-Devonian + 30'
Bottom of Interval	16652	Simpson -30'
TD	16652	Simpson -30'
Injection Interval	1952	

3. A description of the tubing to be used including its size, lining material, and setting depth

5.5-inch (20#) internal plastic coated tubing swaged down to 5" (18#) with setting depth of 14,620'

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

Tryton Tools, 7" Arrow Set 1-X Nickel Plated Injection Packer will be set at 14,620'.

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

The proposed injection intervals include both the Silurian, Fusselman and Montoya in an open-hole interval.

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

The depth interval of the open-hole injection interval is 14,700-16,652 (1,952 feet).

(3) State if the well was drilled for injection or, if not, the original purpose of the well.

The well will be drilled for disposal.

(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

There are no perforated intervals, only the open-hole completion described above.

(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.

Overlying Oil & Gas Zone (Using KB of 3430'):

Delaware (5334')
1st BS Sand (9704')
2nd BS Sand (10,141')
3rd BS Sand (11,038')
Wolfcamp (11,339')
Strawn (11,780')
Atoka (12,027')
Morrow (12,875')
Mississippian Limestone (14,061')

Underlying Oil & Gas Zones:

Inactive Ellenburger (TD 17,540 PF 17,195'-17,236')
API 30-025-33077-0000 Distance 2.7 miles SW

Active Siluro-Devonian (TD 17,540 PF 14,574'-14,580')
API 30-025-33077-0001 Distance 2.7 miles SW

The proposed injection intervals in the Pre-Mississippian Carbonates are well cemented and will provide the necessary open hole integrity while allowing salt water to be injected. Because of the competency of the rock, the open hole section has very little chance of collapsing.

IV. Is this an expansion of an existing project

No.

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

Plate 1a identifies all OCD listed wells and API numbers and shows circles with radii of 0.5, 1.0, and 2.0 miles. Note that where numerous wells are closely-spaced, the API number may not be labeled for clarity. New wells, active wells, plugged wells, and canceled wells have color-coded symbols. Plate 1b shows only new and active wells and circles with radii of 0.5 and 1.0 miles.

Table 1 lists all of the wells shown on Plate 1a within the circle having a 2.0 mile radius.

Plate 2 shows the leases and the lease number within the 2-mile area of review. Tabular listing of all mapped leases and the name of the leaseholders are presented in
Table 2a BLM leases and leaseholder name
Table 2b State of NM leases and leaseholder name

Limestone Basin Prop Ranch LLC is the surface owner of the location upon which the proposed SWD will be drilled.

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

As shown in the table below, six wells penetrate the injection zone.

The Devon Mad Dog is temporarily abandoned and Devon has requested to convert this well into a Devonian SWD. See OCD Well Data Appendix

The plugging record for the Devon Rio Blanco 9 State 001 is presented in the OCD Well Data Appendix

The Devon RIO BLANCO 4 FEDERAL COM #003 listed as and SWD but examination of OCD Online data does not show any evidence that this well was converted from a gas well to an SWD. This well penetrates the Devonian and information from OCD files is presented in the Appendix. This well is approximately 1.5 miles from the proposed Leonard SWD #1.

The Devon well RIO BLANCA 4 FEDERAL COM #001 is an active gas well completed into the Devonian. The well is more than 1.5 miles from the proposed Leonard SWD 1. Information on the casing record for this well is provided in the Appendix.

The BTA Oil Producers well HUDSON STATE 8006 JV-P #001Y is listed as an active oil well producing from the Atoka. Data from OCD files (see Appendix) show the well was drilled into the Devonian.

The Caza Ridge 14 State 001 (SWD) was never drilled, but OCD issued an APD and Order for the proposed SWD to a depth of 13,543.

API	OGRID	OGRID Name	Status	Well Type	Well Name	UL-S-T-R	Depth	Associated Pools
30-025-36778	6137	DEVON ENERGY PRODUCTION COMPANY, LP	E	O	MAD DOG 15 FEDERAL COM #001	P-15-23S-34E	14832	[97436] ANTELOPE RIDGE, DEVONIAN, NORTH (GAS)
30-025-36302	6137	DEVON ENERGY PRODUCTION COMPANY, LP	P	G	RIO BLANCO 9 STATE #001	B-09-23S-34E	14654	[97328] BELL LAKE, DEVONIAN, NE (GAS)
30-025-36425	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	S	RIO BLANCO 4 FEDERAL COM #003	J-04-23S-34E	14653	[96101] SWD, DEVONIAN; [97328] BELL LAKE, DEVONIAN, NE (GAS)
30-025-34515	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	G	RIO BLANCA 4 FEDERAL COM #001	F-04-23S-34E	14597	[70440] ANTELOPE RIDGE, MORROW (GAS); [71920] BELL LAKE, MORROW, NORTH (GAS); [97328] BELL LAKE, DEVONIAN, NE (GAS)
30-025-27364	260297	BTA OIL PRODUCERS, LLC	A	O	HUDSON STATE 8006 JV-P #001Y	C-11-23S-34E	13410	[70360] ANTELOPE RIDGE, ATOKA (GAS); [70400] ANTELOPE RIDGE, DEVONIAN (GAS)
30-025-26692	249099	CAZA OPERATING, LLC	P	S	CAZA RIDGE 14 STATE #001	J-14-23S-34E	13543	[2205] ANTELOPE RIDGE, BONE SPRING, NORTH; [70360] ANTELOPE RIDGE, ATOKA (GAS); [97869] SWD, DEVONIAN-SILURIAN

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected

Proposed Maximum Injection Rate: 40,000 bbl/day
Proposed Average Injection Rate: 30,000 bbl/day

2. Whether the system is open or closed

This is will be an open system. All AWR Disposal, LLC SWDs may receive produced water from recycling storage facilities, such as in-ground containments or above-ground steel-walled containments, which are registered or permitted under Rule 34.

3. Proposed average and maximum injection pressure

Proposed Maximum Injection Pressure: 3000 psi
Proposed Average Injection Rate: 1800 psi

4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water

The attached Table 3 "Produced Water Chemistry of Nearby Wells" provides the requisite analyses. The Delaware and Bone Springs Formations are the subjects of the analyses. The Bone Springs will provide most of the produced water to the proposed SWD. At the time of writing, we are unaware of any problems associated with disposal of produced water derived from the Delaware, Bone Springs, Wolfcamp or other Formations into the Silurian, Fusselman, and Montoya injection zone.

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.).

Table 4 presents formational water quality data from the Go-Tech site for Devonian-Fusselman-Montoya producing wells. As stated above, we are unaware of any problems associated with disposal of produced water derived from the Delaware, Avalon, Bone Springs, and Wolfcamp Formations into the Silurian, Fusselman and Montoya injection zone.

***VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth.**

The proposed injection intervals include the Silurian/Devonian, Fusselman and Montoya in an open-hole interval. The proposed injection intervals in the Pre-Mississippian Carbonates are well cemented and will provide the necessary open hole integrity while allowing salt water to be injected. Because of the competency of the rock, the open hole section has very little chance of collapsing.

As indicated in Section III.A.2, the approximate depths to the top of the Silurian and the base of the Montoya are 14,670 and 16,682 respectively. The depth interval of the injection interval is 14,700 - 16,652 (1,952 feet), within the Silurian, Fusselman and Montoya Formations.

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.

The Rustler Formation and the Chinle Formation yield water to supply wells in southeastern Eddy County and southwestern Lea County. In the immediate area of the Leonard SWD #1, the closest water wells are about 2 miles distant. Well USGS-15275/1585 and Misc-34 are the same well and are associated with a corral to the east of

the proposed SWD (Plate 3a). In March of 1986, a depth to water of 135.44.69 feet was reported by the USGS. The log of Well CP-637, southwest of the proposed SWD shows the uppermost water-bearing unit is at a depth of about 400 feet. Well CP-637 may draw water from the Chinle/Dockum or from a thick section of bolson fill associated with the structural sag of the San Simon Swale.

In this area of Lea County, the Chinle yields water to wells from 100-200 feet below the ground surface (bgs) to an estimated depth of about 2000 feet in the area of the San Simon Swale. The upper portion of the Rustler Formation yields fresh water to wells in Eddy County and in the area of the Leonard SWD #1, the depth interval of this potential source of fresh water is almost 3000 feet. The Capitan Reef, which lies at an estimated depth of 4197-5334 is saline in this area.

The locations of all water supply wells listed in public databases are shown in Plate 3b. As stated above, there are no active water supply wells within 1.5 miles of the proposed location. The location of nearby mapped surface water bodies are shown in Plate 4. No mapped surface water exists within the Area of Review.

In the area of the Leonard SWD #1, the depth interval of the Rustler is about 2838-4099 feet. The bottom of the Rustler Formation is characterized by evaporates (anhydrite) and is not considered an underground source of drinking water. Thus, in this area, surface casing required by OCD to prevent impairment of fresh water runs from ground surface to a depth of 4552 feet at the proposed Leonard SWD #1 to provide protection to the Capitan Reef as well as sources of known potable water.

IX. Describe the proposed stimulation program, if any

A cleanup acid job may be used to remove mud and drill cuttings from the formation. However, no other formation stimulation is currently planned.

*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted)

Logs will be submitted to OCD upon completion of the well.

*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

No active water supply wells were identified within one mile of the proposed SWD. Data from various sources permit a conclusion that groundwater within the Chinle Formation is potable. In this area, groundwater in the underlying Rustler formation may be relatively brackish.

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

Randall T. Hicks, a Professional Geologist with decades of experience in hydrogeology, affirms, on behalf of AWR Disposal, LLC, that

- The USGS has mapped quaternary faults in New Mexico and no such faults are mapped in the area of the proposed Leonard SWD #1[1]
- The Texas Bureau of Economic Geology has mapped older faults (e.g. basement and Woodford) in New Mexico and the closest mapped fault that was active since Woodford time is about 4 miles to the west[2]. A Pre-Cambrian fault is mapped very close the proposed SWD.
- With respect to migration of produced water from the injection zone to underground sources of drinking water via faults or other natural conduits, the following conditions were considered
    - The lowest underground source of drinking water is the middle and upper Rustler Formation.
    - More than 10,000 feet of sedimentary rock separates the bottom of the Rustler Formation and the top of the injection zone. Many of the formations that lie between the injection zone and the lowermost aquifer are permeable and contain oil, gas or water at various pressures. Any excursion of injected fluids from the Devonian disposal zone would undoubtedly enter these permeable formations prior to moving into the Rustler Formation.
    - There is no evidence that the pressure regime in the oil and gas reservoirs is sufficient to cause the upward migration of formation water through the bedded salt and into the Rustler or Chinle aquifers.
- There is no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water

[1] https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf88412fcf

[2] Bureau of Economic Geology (Accessed April 2019). University of Texas at Austin. Basement Faults (Ewing 1990, Tectonic Map of Texas); Precambrian Faults (Frenzel et al. 1988, Figure 6); Woodford Faults (Comer 1991, plate 1). Http://www.beg.utexas.edu/resprog/permianbasin/gis.htm

Appendix
Plugging and Completion Data from OCD Online

The Devon Mad Dog is temporarily abandoned and Devon has requested to convert this well into a Devonian SWD. See OCD Well Data

OCD-HOBBS

Form 3160-5
(June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on page 2

HOBBS OCD
MAY 16 2017
RECEIVED

5. Lease Serial No.
NMNM13641

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
NMNM112758

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
MAD DOG 15 FED COM 1

2. Name of Operator
DEVON ENERGY PRODUCTION COM LP
Contact: REBECCA DEAL
E-Mail: REBECCA.DEAL@DVN.COM

9. API Well No.
30-025-36778-00-S1

3a. Address
6488 SEVEN RIVERS HIGHWAY
ARTESIA, NM 88211

3b. Phone No. (include area code)
Ph: 405-228-8429

10. Field and Pool or Exploratory Area
ANTELOPE RIDGE

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 15 T23S R34E SESE 660FSL 660FEL

11. County or Parish, State
LEA COUNTY, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☒ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☒ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

Temporary Abandonment Preparations actual procedures as follows:

10/26/16 - 11/8/2016: Set bridge plug at 14660?. Dumped and tagged 35? cement on top of plug. Tested casing with chart recorder and BLM witness. See attached MIT and current wellbore schematic.

Devon Energy Production Co., L.P. respectfully requests temporary abandonment status for the Mad Dog Fed Com 1 for the purpose of planning for SWD conversion or offering the wellbore to partners on the well who have shallow mineral rights. Devon expects to have the well returned to beneficial use within 2 years (11/2018), or sooner depending on development activity and interest from other operators.

Last Recorded Production 02/2016
TA status accepted until 11/08/2017 ~~2017~~

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #363911 verified by the BLM Well Information System
For DEVON ENERGY PRODUCTION COM LP, sent to the Hobbs
Committed to AFMSS for processing by PRISCILLA PEREZ on 02/01/2017 (16PP0626SE)

Name *(Printed/Typed)* REBECCA DEAL — Title REGULATORY ANALYST

Signature (Electronic Submission) — Date 01/16/2017

ACCEPTED FOR RECORD

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By _____ Title _____ Date APR 28, 2017

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Office

BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

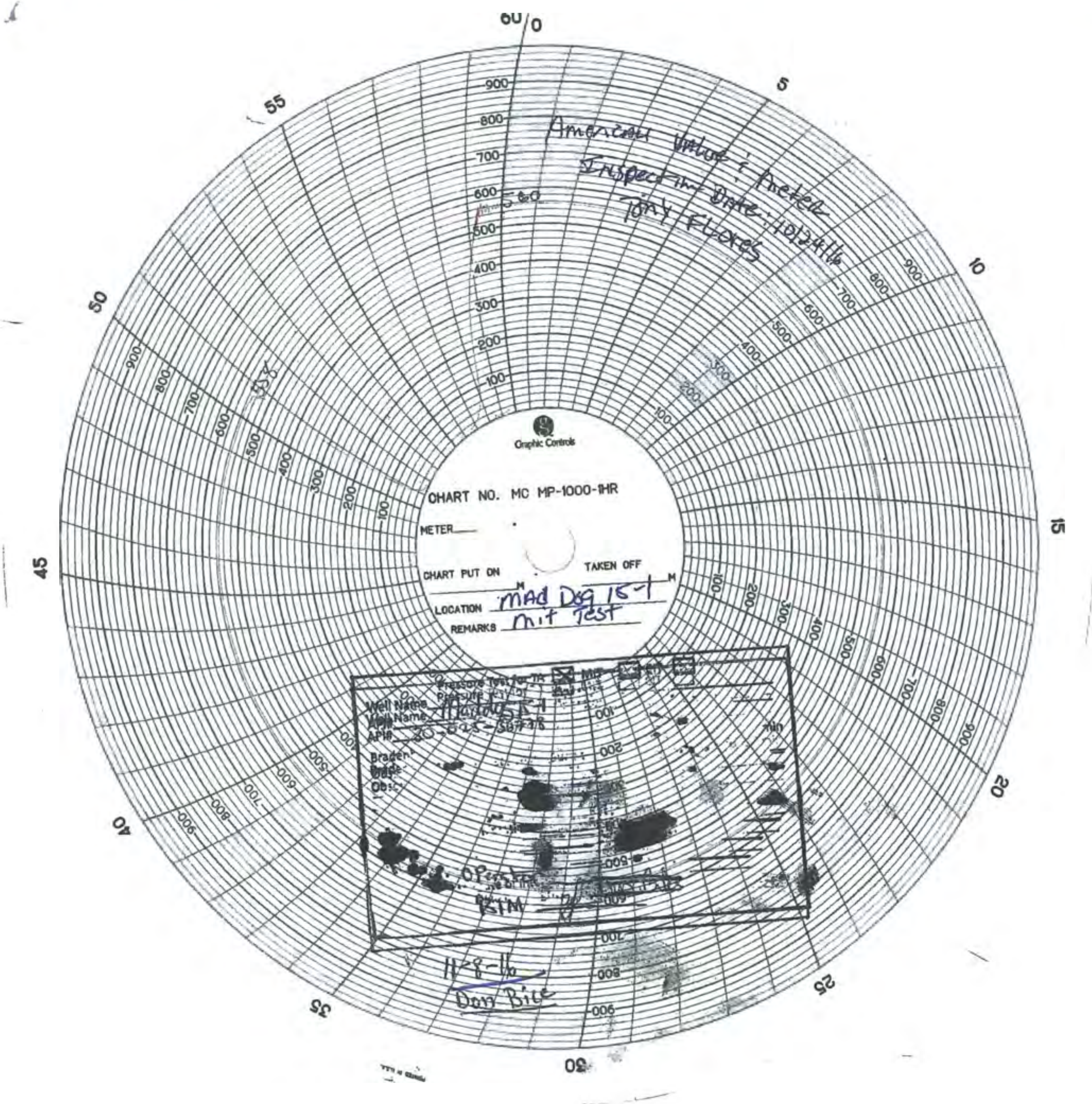
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **

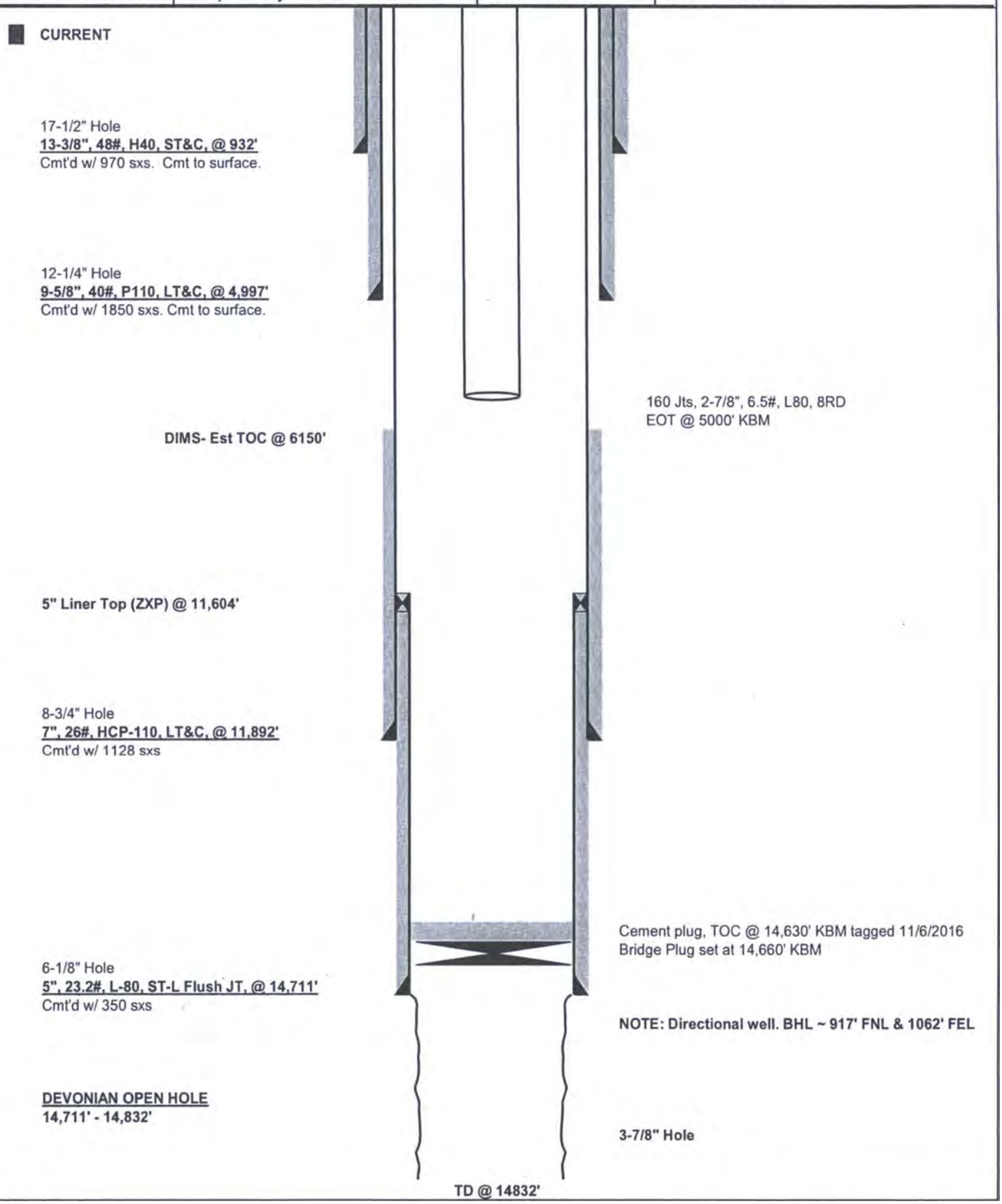
Accepted for Record Only

MAB/OCD RBDMS - CHART - ✓


Graphic Controls
CHART NO. MC MP-1000-1HR
METER
CHART PUT ON
TAKEN OFF
LOCATION Mad Dog 15-1
REMARKS MIT Test
American Valve & Meter
Inspection Date: 10/24/16
Tony Flores
Well Name
API#
11-8-16
Don Bice

DEVON ENERGY PRODUCTION COMPANY LP

Well Name: Mad Dog 15 Fed Com 1		Field: Wildcat	
Location: Sec 15-T23S-R34E, 660' FSL & 660' FEL		County: Lea	State: NM
Elevation: 3431' KB	BHL ~ 917 FSL & 1062' FEL	Spud Date: 8/5/04	Compl Date:
API#: 30-025-36778	Prepared by: Lorenzo Wilborn	Date: 10/28/04	Rev: 11/10/16



Form 3160-5
(June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on page 2

5. Lease Serial No.
NMNM13641

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
NMNM112758

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
MAD DOG 15 FED COM 1

2. Name of Operator
DEVON ENERGY PRODUCTION COM LP
Contact: REBECCA DEAL
E-Mail: Rebecca.Deal@dvn.com

9. API Well No.
30-025-36778-00-S1

3a. Address
6488 SEVEN RIVERS HIGHWAY
ARTESIA, NM 88211

3b. Phone No. (include area code)
Ph: 405-228-8429

10. Field and Pool or Exploratory Area
ANTELOPE RIDGE-BONE SPRING, W

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 15 T23S R34E SESE 660FSL 660FEL

11. County or Parish, State
LEA COUNTY, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☒ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

Devon Energy Production Co. respectfully requests to convert the Mad Dog 15 Fed Com 1 to a SWD. Proposed SWD conversion is in the Devonian formation. Please see attached detailed procedure and wellbore schematic.

REQUIRES ADMINISTRATIVE SWD ORDER

HOBBS OCD
OCT 11 2018
RECEIVED

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #419170 verified by the BLM Well Information System
For DEVON ENERGY PRODUCTION COM LP, sent to the Hobbs
Committed to AFMSS for processing by PRISCILLA PEREZ on 05/08/2018 (18PP0997SE)

Name *(Printed/Typed)* REBECCA DEAL — Title REGULATORY COMPLIANCE PROFESSI

Signature (Electronic Submission) — Date 05/07/2018

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By MUSTAFA HAQUE — Title PETROLEUM ENGINEER — Date 09/20/2018

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office Hobbs

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.

(Instructions on page 2)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

Revisions to Operator-Submitted EC Data for Sundry Notice #419170

	Operator Submitted	BLM Revised (AFMSS)
Sundry Type:	INJ NOI	INJ NOI
Lease:	NMNM13641	NMNM13641
Agreement:		NMNM112758 (NMNM112758)
Operator:	DEVON ENERGY PRODUCTION COMPAN 333 WEST SHERIDAN AVENUE OKLAHOMA CITY, OK 73102 Ph: 405-228-8429	DEVON ENERGY PRODUCTION COM LP 6488 SEVEN RIVERS HIGHWAY ARTESIA, NM 88211 Ph: 575-748-1854
Admin Contact:	REBECCA DEAL REGULATORY COMPLIANCE PROFESSI E-Mail: Rebecca.Deal@dvn.com Ph: 405-228-8429	REBECCA DEAL REGULATORY COMPLIANCE PROFESSI E-Mail: Rebecca.Deal@dvn.com Ph: 405-228-8429
Tech Contact:	REBECCA DEAL REGULATORY COMPLIANCE PROFESSI E-Mail: Rebecca.Deal@dvn.com Ph: 405-228-8429	REBECCA DEAL REGULATORY COMPLIANCE PROFESSI E-Mail: Rebecca.Deal@dvn.com Ph: 405-228-8429
Location: State: County:	 NM LEA	 NM LEA
Field/Pool:	ANTELOPE RIDGE	ANTELOPE RIDGE-BONE SPRING, W
Well/Facility:	MAD DOG 15 FED COM 1 Sec 15 T23S R34E Mer NMP SESE 600FSL 660FEL	MAD DOG 15 FED COM 1 Sec 15 T23S R34E SESE 660FSL 660FEL

BUREAU OF LAND MANAGEMENT
Carlsbad Field Office
620 East Greene Street
Carlsbad, New Mexico 88220
575-234-5972

Devon Energy
Mad Dog 15 Fed Com 1
NMNM13641
30-025-36778

09/20/2018

All previous COAs still apply except for the following:

Notification: Contact the appropriate BLM office at least 24 hours prior to the commencing of any plug back operations. For wells in Eddy County, call 575-361-2822. For wells in Lea County, call 575-393-3612.

1. Must conduct a MIT before commencing operation. Submit results to BLM. Notify BLM if test fails.

A. WELL COMPLETION

Special Requirements:

The operator shall supply the BLM with a copy of a mudlog over the permitted disposal interval and estimated insitu water salinity based on open-hole logs. If hydrocarbon shows occur while drilling, the operator shall notify the BLM. The operator shall provide to the BLM a summary of formation depth picks based on mudlog and geophysical logs along with a copy of the mudlog and open hole logs from TD to top of Devonian

A NOI sundry with the completion procedure for this well shall be submitted and approved prior to commencing completion work. The procedure will be reviewed to verify that the completion proposal will allow the operator to:

1. **Properly evaluate the injection zone utilizing open hole logs, swab testing and/or any other method to confirm that hydrocarbons cannot be produced in paying quantities. This evaluation shall be reviewed by the BLM prior to injection commencing.**
2. **Restrict the injection fluid to the approved formation.**
3. **If a step rate test will be run an NOI sundry shall be submitted to the BLM for approval**

If off-lease water will be disposed in this well, the operator shall provide proof of right-of-way approval.

MHH 09202018

devon

Mad Dog 15 Federal Com 1 – SWD Conversion

5/3/2018

WELL NAME: Mad Dog 15 Federal Com 1 **API:** 30-025-36778

WBS: MM-XXXXXX Lea County, NM

WELLBORE DATA

KB: 3,431'; GL: 3,408'; KB: 23'

Size	Weight	Grade	Interval	Collapse	Burst	Drift	Capacity
13-3/8"	48	H-40	0-929'	-	-	-	-
9-5/8"	53.5	P-110	0-4,996'	7,930	10,900	-	-
7"	26	P-110	0-11,892'	6,210	9,960	6.151"	0.03826
5"	23.2	L-80	11,604'-14,711'	13,830	13,380	3.919"	0.01589
3-7/8" (OH)	-	-	14,711'-14,832'	-	-	-	0.01459

IMPORTANT NOTES

1) TA'd with Schlumberger (copper) CIBP & 35' cmt in Oct. 2016 – beware trapped pressure below.

2) NMOCD requires packer to be set within 100' of injection interval – current CIBP & cement are within this depth, so pre-job MIT would satisfy regulation, providing go-forward or abandon decision point.

3) Well was loaded with 2% KCl and corrosion inhibitor, any pressure seen on wellhead gauges *should* be thermal effects, use caution in the case any H_2S laden gas migrated post TA/SI.

4) Wellbore is build-hold-drop with 20° hold. Beware of many < 3.0°/100' DLS in hold portion – most recent well service & wireline did not report any issues with tortuosity.

RELEVANT CONCERNS

1) Flowed ESP with high H_2S production. Acknowledge & manage safety risk. DVN will need to WL verify casing integrity.

2) The clearance between the 5" liner and the BHA will be very tight, increasing our stuck pipe risk. Do not stack too heavy on the plug/cement, it is better to be slower and generate small "cuttings" than to end up fighting stuck pipe or fishing. After drilling a stand, circulate at a minimum enough strokes to move "cuttings" half way up 7" production casing before shutting down pumps. "Cuttings" are most likely to fall out above the Drill Collars and above the 5" liner hanger where annular volume increases (causing fluid velocity to drop). Avoid shutting down pumps without circulating off bottom if at all possible. If significant over pull (3,000 lbs or greater) is seen, stop, RIH, rotate and circulate before attempting to pick back up. Do not proceed deeper than 5" shoe until returns are clear of solids.

PROCEDURE

SAFETY: All personnel will wear hard hats, safety glasses with side shields, steel toed boots, H_2S monitor and fire retardant clothing while on location. Any personnel arriving on location after the pre-job safety meeting will check in with the Devon PIC and review hazards before proceeding. All personnel have the obligation and full authority to stop the job if any action may be perceived as harmful to people or the environment. H_2S safety personnel and monitoring equipment are to be on location at all times during workover operations.

PRE-JOB

1) Check tubing & casing pressures, open valves to SCADA transducers.

2) Check well head for flange/sizing abnormalities – communicate to PIC.

3) Hold PJSM. Historic production contained H_2S.

4) Record SITP & SICP.

5) MIRU blow down tank & safety equipment.

6) Blow down/bleed off any gas/thermal pressure.

**Any pressure should be thermal, take necessary precaution given history of H_2S production. Wellbore was CIRC/loaded with 2% KCl & corrosion inhibitor after dump bailing cement.*

7) Rig up hot oiler to production casing, ensure valves are open to tbg and csg gauges.

8) Perform preliminary MIT, monitor both tbg and csg gauges throughout MIT – report any discrepancy in tbg/csg pressures to DVN engineer (gauges should read similar pressures).

9) Pressure up to 500 psi and hold for 30 min. If pressure loss exceeds 10% (50 psi) over 30 min, contact DVN engineer and WOO.

WL CSG INTEGRITY LOGS & CCL

1) RU WL & 5K WL BOP/LUBE. Check LUBE length can house required tools. PTEST per DVN protocol.

2) PU 3.625" GR/JB and necessary weight bars, fill LUBE & equalize over WHP.

3) OWH & RIH to 14,660'. Be sure to slow down above 5" liner hanger @ 11,604'.

4) POH maintaining a reasonable speed until clear of 5" liner hanger.

5) PU 40 ARM CALIPER, USIT, CCL & necessary weight bars, fill LUBE & equalize over WHP.

6) OWH & RIH to 14,660'. Be sure to slow down above 5" liner hanger @ 11,604'.

7) POH maintaining a reasonable speed until clear of 5" liner hanger.

8) RDMO WL. Report results of CSG integrity logs to DVN engineer.

MIRU WSU & TOH KILL STRING

1) Hold PJSM. Historic production contained H_2S.

2) Record SITP & SICP.

3) Install and/or test anchors. MIRU WSU & reverse unit, necessary flow back iron/equipment, flare stack, safety equipment & rental equipment.

4) Blow down/kill well if necessary.

5) ND tree.

6) NU 7-1/16" 10K BOPE with annular, tbg rams, blind rams. Previous well service could not remove 10K flange, removed 3K x 5K flange and rigged up spooler. Same may be required.

7) PTEST BOPE according to Devon protocol.

**Job scope involves several sizes of pipe to be run in hole, usually multiple sizes in same string – if spooler and additional rams are necessary, take additional height into account when setting rig floor. PIC should use own discretion regarding most efficient call out/rental of different rams.*

8) TOH laying down 5,000' 2-7/8" L-80 tbg.

D/O 35' CMT & CIBP

1) MU CMT + CIBP D/O BHA:

-3-7/8" full open right mill (consult with tool hand to determine ideal mill type)

-5" 23.2# Casing scraper

-3-1/8" bumper jars

-3-1/8" oil jars

-4 x 3-1/8" DC's

-126 jts 2-3/8" PH-6 **want to keep 2-7/8" out of 5" liner. OH + liner + 20 jts = ~3,840' = ~126 jts*

-FIH x 2-7/8" L-80 tbg

2) Strap in hole with D/O assembly to 11,478' (4 jts above TOL), RU power swivel.

3) Continue TIH, D/O 35' cmt & CIBP. Monitor return tank for cmt & plug parts. If possible, catch cmt & plug parts using the smallest reasonable screen mesh.

**Beware of trapped pressure beneath plug – take necessary precautions.*

***Once solids show up at surface, regularly take pictures, note "cuttings" size & submit to DVN engineer while continuing to drill out cmt.*

****If all solids were able to be caught, cmt + plug would be about five, 5 gallon buckets worth of solids to surface. Expect to see less, some solids will be too small to catch with screen.*

4) Wash & scrape csg to 5" liner shoe (14,711'). Do not exit 5" liner shoe.

5) CIRC, rotate & work last stand until returns come back clean – avoid shutting down pumps until returns are clean.

6) TOH scraping liner & racking back tubing until above 5" liner hanger (11,604'). RD power swivel & continue TOH racking back tbg.

7) MU OH D/O BHA:

-3-5/8" junk mill or bit (consult with tool hand to determine ideal mill/bit & gauge)

-3-1/8" bumper jars

-3-1/8" oil jars

-4 x 3-1/8" DC's

-126 jts 2-3/8" PH-6 **want to keep 2-7/8" out of 5" liner. OH + liner + 20 jts = ~3,840' = ~126 jts*

-FIH x 2-7/8" L-80 tbg

8) Strap in hole with D/O assembly to 11,478' (4 jts above TOL), RU power swivel.

9) Continue TIH to 5" liner shoe @ 14,711'. Wash to bottom if necessary.

10) Wash 1 stand into OH, PU to 14,711' (inside 5"), CIRC 1.5 BU & monitor for solids in returns.

**If taking significant weight when entering top of OH, immediately TOH to 5" shoe & CIRC while contacting DVN engineer. Record & report stacked weight.*

11) If solids return from OH, CIRC inside 5" liner shoe until returns are clean.

12) Wash ~2 stands into OH to PBTD (14,832'), rotate & work pipe while CIRC until no solids return.

**DO NOT LET PIPE SIT STILL IN OPEN HOLE EXCEPT IF NECESSARY FOR CONNECTIONS. REDUCE CONNECTION TIME & PUMP SHUT DOWN TIME AS MUCH AS POSSIBLE.*

13) TOH to above 5" liner hanger (11,604') racking back 2-7/8" work string. RD power swivel.

14) TOH racking back 2-7/8" work string. Lay down 2-3/8" PH-6 & BHA.

RIH TREATMENT STRING & ACIDIZE WELL

1) MIRU tubing testers.

2) MU treating/injection string:

-2-7/8" Muleshoe

-2-7/8" x 1.87" "R" landing nipple (internal Ni coated)

-2-7/8" x 8' 6.5# L-80 tubing sub (internal Ni coated)

-5" x 2-7/8" Arrowset AS1-X 10K Injection Packer (internal Ni coated)

-2-7/8" x 1.87" "F" seal nipple (internal Ni coated)

-5" x 2-7/8" T2 On/Off Tool (internal Ni coated)

-FIH x 2-7/8" L-80 tbg

3) RIH to ~14,630'. Hydro-test tbg below slips to 4,000 psi.

4) Load & CIRC hole with ~385 bbls 2% KCl. Set packer @ 14,620'. Use 10# Nadine Brine if necessary. Be sure to maintain CIRC rate below max provided by packer hand to prevent fluid cutting packer elements.

Per NMOCD, packer must be set within 100' of injection zone (OH @ 14,711'). Move packer set depth deeper or shallower to avoid collars indicated by CCL, **while staying below 14,611'. Avoid setting packer deeper than old plug TOC (14,625') if possible.*

5) Perform MIT. Pressure test 2-7/8" annulus to 500 psi for 30 min. If pressure drops more than 10% (50 psi) in 30 min, unseat packer & TOH to 5" liner top (11,604'). Set packer & test 7" casing above liner. Notify DVN office of both test results & WOO.

6) MIRU pumping services & PTEST lines to 4,000 psi. **Max injection pressure is 2,923 psi.**

7) Spot 110 gal PAA trickled into 5 bbl water. Let soak 4 hours. (See attached Nalco Procedure).

8) Pump 10,000 gal 15% HCl over 3 stages using treated brine + rock salt as diverter. Flush acid with 96 bbl treated brine. Record 5, 10, 15 min ISIP. (See attached Halliburton Procedure).

9) Let acid soak a minimum of 3 hours. It is acceptable to let acid soak overnight if required to leave a kill string in the hole.

10) Bleed off pressure, if any. Back off On/Off tool & TOH laying down 2-7/8" work string.

RIH INJECTION STRING & SPACE OUT

1) Once production casing & liner PTEST good & all tubulars have been removed, NU 10K rams necessary for running injection assembly & PTEST per DVN protocol.

2) MU with injection string:

-5" x 2-7/8" T2 On/Off Tool (internal Ni coated)

-2-7/8" x 3,060' 6.5# L-80 DuoLine tbg

-2-7/8" x 4-1/2" DuoLine XO

-4-1/2" x 11,560' 12.75# L-80 DuoLine tbg

3) RIH to On/Off tool (~14,615').

4) RU pumping services & PTEST lines to 4,000 psi. **Max injection pressure is 2,923 psi.**

5) Reverse CIRC ~385 bbls 2% KCl + Corrosion inhibitor (CI ppm per chemical vendor recommendation). Use 10 ppg Nadine Brine if necessary.

6) MU to On/Off tool and space out. **Changes to tree/wellhead are required to accommodate 4-1/2" tbg.*

devon

Mad Dog 15 Federal Com 1 – SWD Conversion

5/3/2018

PERFORM PRELIMINARY MIT & STEP RATE TESTS. RDMO.

1) Run preliminary MIT on csg – tbg annulus using chart recorder. Test to 500 psi for 30 min with less than 10% (50 psi) bleed off over 30 min. If PTEST fails notify DVN engineer & WOO.

2) RU pumping services. PTEST lines to 4,000 psi. Using clean produced water from area, load tubing and perform step rate test to establish injection rate. Start at 2 bpm, holding each rate for 5 min before increasing injection rate in 1 bpm increments. Chart & record step rate test. **Max injection pressure is 2,923 psi (0.2 psi/ft * 14,619 ftTVD).**

3) SI well & record 5, 10, & 15 min SITP & SICP. RDMO pumping services.

4) ND BOP & NU 10K tree with sour trim. PTEST tree to rating.

5) RDMO WSU & all rental equipment. Install surface facilities for disposal.

PERFORM OFFICIAL MIT W/ REGULATORY REPRESENTATIVES

1) Notify & set up NMOCD & BLM for official MIT with chart recorder. Once MIT is approved & NMOCD OK's injection, initiate disposal into Devonian. **Do not exceed max pressure of 2,923 psi per NMOCD.**

**Any future slickline tools will require a smooth surface to prevent tbg coating damage.*

***Per NMOCD, any unseating of injection packer will require an additional witnessed MIT prior to commencing injection.*

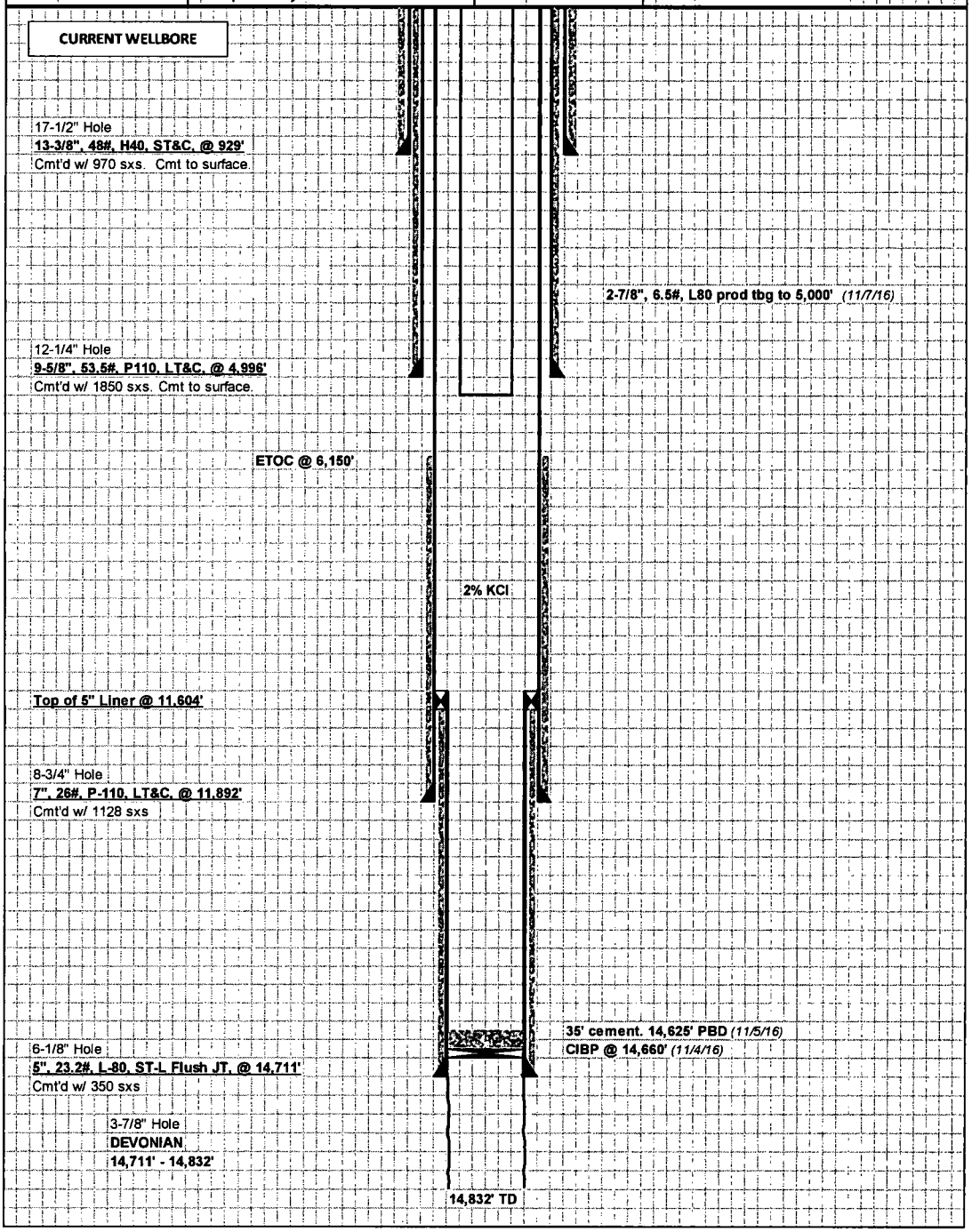
devon

Mad Dog 15 Federal Com 1 – SWD Conversion

5/3/2018

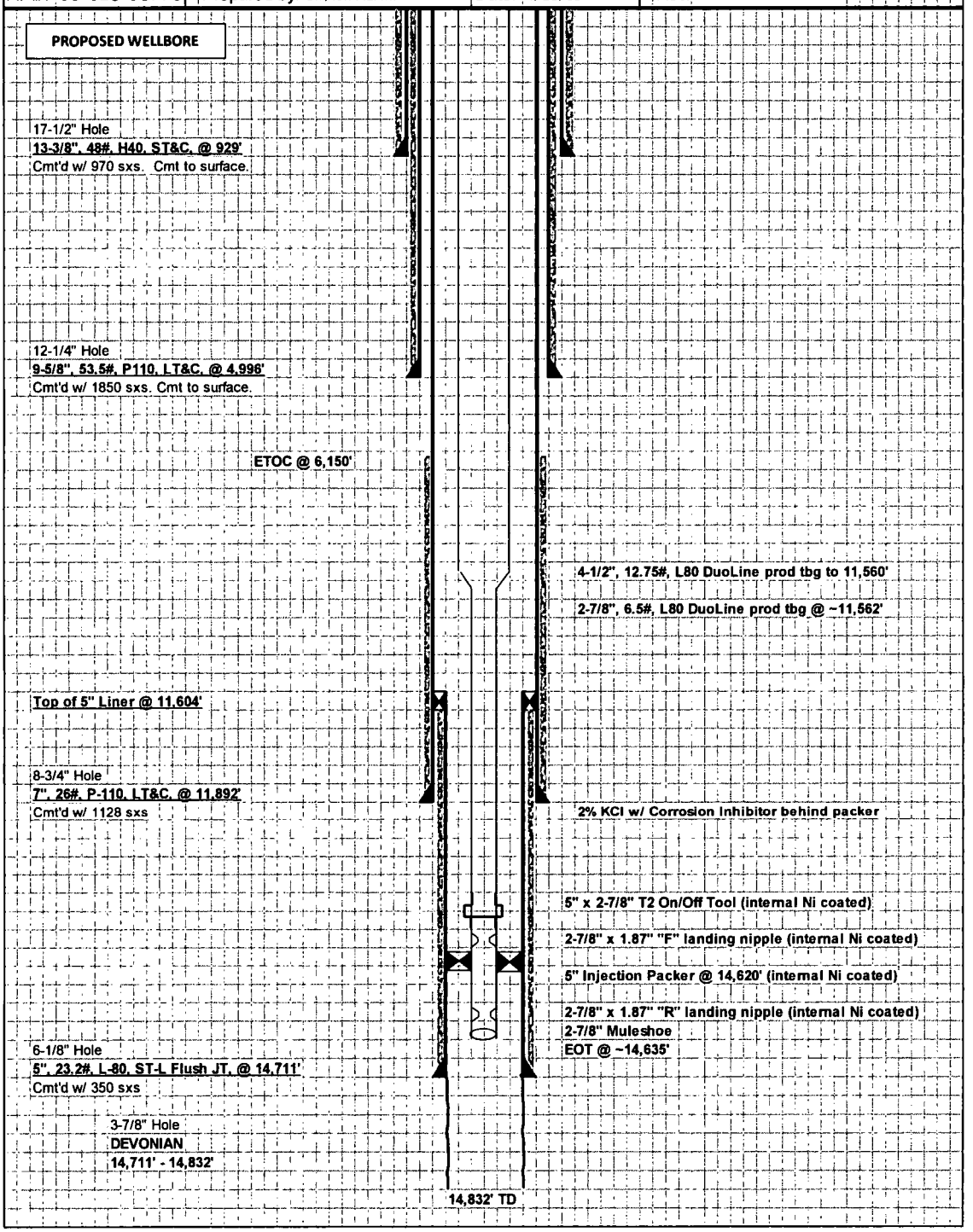
CURRENT WELLBORE SCHEMATIC

DEVON ENERGY PRODUCTION COMPANY LP			
Well Name: MAD DOG 15 FEDERAL COM 1	Field: GAUCHO/RED BULL		
Location: 660' FSL & 660' FEL; SEC 15-T23S-R34E	County: LEA	State: NM	
Elevation: 3431' KB; 3408' GL; 23' KB to GL	Spud Date: 8/4/04	Compl Date: 11/17/04	
API#: 30-025-36778	Prepared by: Ronnie Slack	Date: 4/25/18	Rev:



PROPOSED WELLBORE SCHEMATIC

DEVON ENERGY PRODUCTION COMPANY LP			
Well Name: MAD DOG 15 FEDERAL COM 1	Field: GAUCHO/RED BULL		
Location: 660' FSL & 660' FEL; SEC 15-T23S-R34E	County: LEA	State: NM	
Elevation: 3431' KB; 3408' GL; 23' KB to GL	Spud Date: 8/4/04	Compl Date: 11/17/04	
API#: 30-025-36778 Prepared by: Clifton Harlin	Date: 4/25/18	Rev:	



Appendix
Plugging and Completion Data from OCD Online

The plugging record for the Devon Rio Blanco 9 State 001 is presented in the OCD Well Data Appendix

Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

HOBBS OCD
JUL 27 2017
RECEIVED

Form C-103
Revised July 18, 2013

WELL API NO. 30-025-36302	
5. Indicate Type of Lease STATE ☒ FEE ☐	
6. State Oil & Gas Lease No.	
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.) 1. Type of Well: Oil Well ☐ Gas Well ☒ Other	7. Lease Name or Unit Agreement Name RIO BLANCO 9 STATE
	8. Well Number 1
2. Name of Operator Devon Energy Production Company, LP	9. OGRID Number 6137
3. Address of Operator 333 W. Sheridan Avenue, Oklahoma City, OK 73102	10. Pool name or Wildcat BELL LAKE;DEVONIAN,NE GAS
4. Well Location Unit Letter B : 660 feet from the North line and 2129 feet from the East line Section 9 Township 23S Range 33E NMPM Lea County, NM	
	11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 3422' KB; 3405' GL; 17' KB to GL

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐		REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	INT TO PA _____	COMMENCE DRILLING OPNS. ☐	P AND A ☒
PULL OR ALTER CASING ☐	P&A NR PM X	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐	P&A R _____		
CLOSED-LOOP SYSTEM ☐			
OTHER:		OTHER:	☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

1. 7/10/17—MIRU, spot P&A equipment.
2. Retrieved 2-3/8" production tubing and AS1X packer from 12,519'.
3. Set 5" CIBP @ 14,500'. Tagged plug. Circulated brine water. Spot 25 sx Cl H @ 14,500'. Tagged TOC @ 14,179'.
4. Circulate 10# salt gel mud. Spot 55 sx Cl H @ 11,905'. Tagged TOC @ 11,387'.
5. Spot 30 sx Cl H @ 11,190'. Tagged TOC @ 11,013'.
6. Spot 30 sx Cl H @ 8,464'. Tagged TOC @ 8,276'.
7. Spot 90 sx Cl C @ 5,325'. Tagged TOC @ 4,758'.
8. Perfed @ 1,940'.
9. Spot 200 sx Cl C @ 1,948'. Tagged TOC @ 1,597'.
10. Spot 240 sx Cl C @ 1,470'. Tagged TOC @ 1,026.
11. Perfed @ 170'. Pumped 60 sx Cl C in/out to surface.
12. 7/24/17--Cut wellhead off, 3' BGL. Set above ground dry hole marker. Wellbore plugged & abandoned.

Approved for Plugging of wellbore only. Liability under bond is retained pending restoration and completion of the C-103, Specific for Subsequent Report of Well Plugging, which may be found on the OCD web page under forms.
Restoration Due By 7-25-2018

Spud Date: _____ Rig Release Date: _____

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

SIGNATURE Ronnie Slack TITLE Production Technologist DATE 7-24-17

Type or print name Ronnie Slack E-mail address: Ronnie.Slack@dvn.com PHONE: 405-552-4615

For State Use Only

APPROVED BY: Mark Whitaker TITLE P.E.S. DATE 07/31/2017
Conditions of Approval (if any):

DEVON ENERGY PRODUCTION COMPANY LP			
Well Name: RIO BLANCO 9 STATE 1	Field: BELL LAKE NORTHEAST		
Location: 660' FNL & 2129' FEL; SEC 9-T23S-R34E	County: LEA	State: NM	
Elevation: 3422' KB; 3405' GL; 17' KB to GL	Spud Date: 7/9/04	Compl Date: 10/12/04	
API#: 30-025-36302 Prepared by: Ronnie Slack	Date: 7/24/17	Rev:	

WELLBORE PLUGGED & ABANDONED 7/24/17

Csg caliper log shows 7" casing parted @ 1,403' - 1,407'. 40% loss of wall thickness. (3/22/17)

17-1/2" hole
13-3/8", 54.5#, J55, @ 1,660'
Cmt'd w/1625 sx to surface

DV Tool @ 3,224'

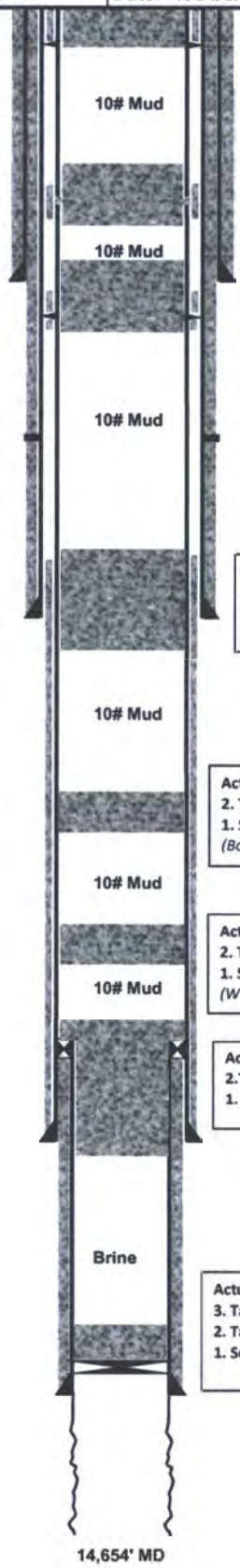
12-1/4" hole
9-5/8", 40#, P110, @ 5,142'
Cmt'd Stg 1 w/725 sx. Stg 2 w/1100 sx to surface

5" Liner top @ 11,530'

8-3/4" Hole
7", 26#, P110, @ 11,855'
Cmt'd w/1525 sx. TOC @ 4,947' -TS

6-1/8" Hole
5", 23#, L80, STL, liner @ 11,530' - 14,546'
Cmt'd w/400 sx

3-7/8" Open hole
DEVONIAN
Open Hole 14,546' - 14,654'



Actual:
3. Cut wellhead off. Set AGL dry hole marker. *(7/24/17)*
2. Pmp 60 sx Cl C in/out to surface . *(7/21/17)*
1. Perfed @ 170'. *(7/21/17)*

Actual:
2. Tagged TOC @ 1,026'. *(7/21/17)*
1. Spot 240 sx Cl C @ 1,470' . *(7/21/17)*
(casing parted @ 1,407' - 1,403')

Actual:
3. Tagged TOC @ 1,597' *(7/21/17)*
2. Spot 200 sx Cl C @ 1,948'. *(7/20/17)*
1. Perfed @ 1,940'. *(7/20/17)*
(T.Salt @ 1,936')

Actual:
2. Tagged TOC @ 4,758'. *(7/19/17)*
1. Spot 90 sx Cl C @ 5,325' .(7/19/17)
(3,000' spacer; T.Delaware @ 5,136'; B.Salt @ 4,895')

Actual:
2. Tagged TOC @ 8,276'. *(7/19/17)*
1. Spot 30 sx Cl H @ 8,464'. *(7/19/17)*
(Bone Spring @ 8,464')

Actual:
2. Tagged TOC @ 11,013'. *(7/18/17)*
1. Spot 30 sx Cl H @ 11,190'. *(7/18/17)*
(Wolfcamp @ 11,190')

Actual:
2.Tagged TOC @ 11,387'. *(7/18/17)*
1. Spot 55 sx Cl H @ 11,905'. *(7/17/17)*

Actual:
3. Tagged TOC @ 14,179'. *(7/17/17)*
2. Tagged CIBP. Spot 25 sx Cl H @ 14,500'. *(7/14/17)*
1. Set CIBP @ 14,500'. *(7/13/17)*

Appendix
Plugging and Completion Data from OCD Online

The Devon RIO BLANCO 4 FEDERAL COM #003 listed as and SWD but examination of OCD Online data does not show any evidence that this well was converted from a gas well to an SWD. This well penetrates the Devonian and information from OCD files is presented in the Appendix. This well is approximately 1.5 miles from the proposed Leonard SWD #1.

Form 3160-5
(February 2005)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
FEB 14 2011
HOBBSOCD

FORM APPROVED
OMB NO. 1004-0137
EXPIRES: March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well ☐ Oil Well ☑ Gas Well ☐ Other	5. Lease Serial No. **NM 19143**
2. Name of Operator **DEVON ENERGY PRODUCTION COMPANY, LP**	6. If Indian, Allottee or Tribe Name
3a. Address **20 North Broadway, Ste 1500, Oklahoma City, OK 73102**	3b. Phone No. (include area code) **405-552-4615**
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) **1650 FSL 1650 FEL J 4 T23S R34E**	7. Unit or CA Agreement Name and No. NM112730
	8. Well Name and No. **RIO BLANCO 4 FED COM 3**
	9. API Well No. **30-025-36425**
	10. Field and Pool, or Exploratory Area **NE BELL LAKE; DEVONIAN**
	11. County or Parish, State **LEA NM**

12. CHECK APPROPRIATE BOX(es) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OS SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☑ Convert to Injection	☐ Plug Back	☑ Water Disposal	

13. . Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work and approximate duration thereof. If the proposal deepen directionally or recomplete horizontally, give subsurface location and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirement, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection)

Note: Devon Energy is filing Form C-108 (Application for Authorization to Inject) with the Oil Conservation Division in Santa Fe, NM. Proposed SWD conversion is in the existing Devonian formaiton (open hole from 14500' to 14653'.) The BLM will be furnished a copy of Form C-108 when filed.

SEE ATTACHED FOR CONDITIONS OF APPROVAL

PROPOSED SWD CONVERSION

1. Wait on OCD C108 and BLM sundry approval.
2. MIRU. Establish injecton in existing Devonian open hole formation interval from 14500' to 14653', not to exceed maximum authorized surface injection pressure per C108.
3. Stimulate Devonian formation if necessary.
4. Run MIT test and chart. File MIT w/ OCD office.
5. Initiate and evaluate injection in Devonian formation using existing 2-7/8", L80 production tubulars and Arrowset packer @ 14338'.
6. Replace as warranted current 2-7/8" production tubulars with mixed string of 3-1/2" X 2-7/8" IPC injection tubing and 5" nickel coated packer at +/- 14300'.
7. Run MIT test and chart. File MIT w/OCD office.
8. Return well to injection service.

SUBJECT TO LIKE APPROVAL BY STATE

14. I hereby certify that the foregoing is true and correct Name: **Ronnie Slack**	Title **Operations Technician**
Signature Ronnie Slack	Date 11-18-10

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Title / Date
Conditions of approval, if any are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct or operations thereon.	Office

APPROVED
FEB 10 2011
/s/ Dustin Winkler
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

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.

FGC-15-2011

DEVON ENERGY PRODUCTION COMPANY LP

Well Name: Rio Blanco 4 Fed Com 3	Field: Bell Lake North	
Location: 1650' FSL & 1650' FEL; Sec 4, T23S, R34E	County: LEA	State: NM
Elevation: 3424' KB; 3400' GL	Spud Date: 5/11/04	Compl Date: 8/26/04 (orig. cmpl)
API#: 30-025-36425 Prepared by: Ronnie Slack	Date: 11/02/10	Rev:

PROPOSED DEVONIAN SWD

17-1/2" Hole
13-3/8", 61#, J55, STC, 8RD @ 2,090'
Cmt'd w/ 1845 sxs. Cmt to surf.

ETOC on 7-5/8" @ 4570' *(calculated)*

12-1/4" Hole
9-5/8", 43.5#, P110, @ 5,070'
Cmt'd w/ 1265 sx

Proposed:
3-1/2", 9.3#, L80, IPC tubing to +/- 11,000'
2-7/8", 6.5#, L80, IPC tubing to +/- 11,000' - 14,300'

5", Liner Top @ 11,564'

8-1/2" Hole
7-3/4", 46#, T95, F/ 0' - 6,788'
7-3/4", 46#, N80, F/ 6,788' - 6,911'
7-5/8" X 7-3/4" X-Over F/ 6,911' - 6,953'
7-5/8", 39#, C90, F/ 6,953' - 8,286'
7-5/8", 39#, T95 F/ 8,286' - 11,885'
Cmt'd w/ 1100 sxs

Proposed:
T2 On / Off tool
5", Nickel coated Arrowset 1 XX packer @ +/-14,300'

6-1/2" Hole
5", 18#, P110, Ultra FJ @ 14,500'
Cmt'd w/ 70 bbl slurry of 13.7 ppg cmt

Proposed:
Acidize w/ +/-10,000 gal 15% HCl

Proposed
Devonian SWD Interval
Open Hole 14,500' - 14,653'

4-1/8" Open hole

TD @ 14,653'

DEVON ENERGY PRODUCTION COMPANY LP

Well Name: Rio Blanco 4 Fed Com 3	Field: Bell Lake North		
Location: 1650' FSL & 1650' FEL; Sec 4, T23S, R34E	County: LEA	State: NM	
Elevation: 3424' KB; 3400' GL	Spud Date: 5/11/04	Compl Date: 08/26/04	
API#: 30-025-36425	Prepared by: Ronnie Slack	Date: 10/27/04	Rev:

CURRENT WELLBORE

17-1/2" Hole
13-3/8", 61#, J55, STC, 8RD @ 2,090'
Cmt'd w/ 1845 sxs. Cmt to surf.

ETOC on 7-5/8" @ 4570' *(calculated)*

12-1/4" Hole
9-5/8", 43.5#, P110, @ 5,070'
Cmt'd w/ 1265 sx

PRODUCTION TUBING
359 Jts, 2-7/8", 6.5#, L80, 8RD
93 Jts, 2-7/8", 6.5#, L80, TSHP (on bottom)

5", Liner Top @ 11,564'

8-1/2" Hole
7-3/4", 46#, T95, F/ 0' - 6,788'
7-3/4", 46#, N80, F/ 6,788' - 6,911'
7-5/8" X 7-3/4" X-Over F/ 6,911' - 6,953'
7-5/8", 39#, C90, F/ 6,953' - 8,286'
7-5/8", 39#, T95 F/ 8,286' - 11,885'
Cmt'd w/ 1100 sxs

T2 On / Off Tool
2-3/8", 1.875" F Nipple @ 14,336'
Arrowset 1-X Packer @ 14,338'
6' x 2-3/8" sub
2-3/8", 1.875" R Nipple (1.822" ID NG) @ 14350'
4' x 2-3/8" pup @ 14,351'
W/L Re-entry guide (w/ pump out plug) bottom @ 14,355'

6-1/2" Hole
5", 18#, P110, Ultra FJ @ 14,500'
Cmt'd w/ 70 bbl slurry of 13.7 ppg cmt

DEVONIAN
Open Hole 14,500' - 14,653'
9/14/04: 9935 Mcfd, 33 BO, 3 BW, 1430# TP

4-1/8" Open hole

TD @ 14,653'

Devon Energy Production Company, LP
NM-19143: Rio Blanco 4 Federal Com #3
API: 30-025-36425
Lea County, New Mexico

RE: Conversion to SWD – Conditions of Approval

There is to be no surface disturbance beyond the originally approved pad. A closed loop system is to be used. H2S monitoring and protection equipment is to be on site.

10,000 (10M) BOP to be used. All blowout preventer (BOP) and related equipment (BOPE) shall comply with reasonable well control requirements. A two ram system with a blind ram and a pipe ram designed for the size of the work string shall be adequate. Tapered work strings will require an additional pipe ram. The manifold shall comply with Onshore Oil and Gas Order #2 Attachment I (2M Diagrams of Choke Manifold Equipment). The accumulator system shall have an immediately available power source to close the rams and retain 200 psi above pre-charge. The pre-charge test shall follow requirements in Onshore Order #2.

10M systems shall require two independent power sources, one of which may be nitrogen bottles (three minimum) maintaining a charge equal to the manufacturer's recommendations.

A NOI sundry with the procedure to complete this well shall be submitted and approved prior to commencing completion work. The procedure will be reviewed to verify that the completion will allow the operator to restrict the injection fluid to the approved formation.

Contact the BLM (575-393-3612) a minimum of 4 hours prior to witness the MIT. MIT performed on this wellbore shall be to the approved injection pressure.

Submit subsequent report with a copy of the MIT chart once work is completed.

Approval is good for 6 months after approval for injection.

DHW 021011

Form 3160-5
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0135
Expires: November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

5. Lease Serial No.
NMNM19143

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
RIO BLANCO 4 FED COM 03

2. Name of Operator
DEVON ENERGY OPERATING CO LP
Contact: LINDA GUTHRIE
E-Mail: linda.guthrie@dvn.com

9. API Well No.
30-025-36425-00-X1

3a. Address
20 N BROADWAY, SUITE 1500
OKLAHOMA CITY, OK 73102-8260

3b. Phone No. (include area code)
Ph: 405.228.8209
Fx: 405.552.4621

10. Field and Pool, or Exploratory
N BELL LAKE

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 4 T23S R34E NWSE 1650FSL 1650FEL

11. County or Parish, and State
LEA COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☒ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Drilling Operations
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

05/11/04 Spud 17 1/2" hole
05/16/04 TD 17 1/2" hole @ 2090'. Ran 51 jts 13 3/8" 61# J55 ST&C csg @ 2090'. Cmtd lead w/ 1560 sx Class C, tail w/ 285 sx Class C. Circ 890 sx to surface. WOC 24 hrs.
05/18/04 Tested csg to 3000 psi - held.
06/01/04 TD 12 1/4" hole @ 5081'. Ran 116 jts 9 5/8" 43.5# P110 LT&C csg @ 5070'. Cmt stg 1 lead w/ 315 sx Pozmix, tail w/200 sx Pozmix. Open DV tool @ 3906'. Cmt stg 2 lead w/ 550 sx Pozmix, tail w/ 200 sx Class C. WOC 24 hrs.
06/03/04 Test csg to 1000 psi- held.
06/17/04 TD 8 1/2" hole @ 11885'. Circ & cond hole for logs.
06/19/04 Ran 169 jts 7 3/4" 46# T95 & N80 csg and 124 jts 7 5/8" 39# C90 & T95 csg @ 11885'. Cmt lead w/ 400 sx Class H & tail w/ 700 sx Class H.
06/20/04 WOC 24+ hrs. Tested csg to 5000 psi-held.

RECEIVED
Hobbs
OCD

14. I hereby certify that the foregoing is true and correct.
Electronic Submission #35408 verified by the BLM Well Information System
For DEVON ENERGY OPERATING CO LP, sent to the Hobbs
Committed to AFMSS for processing by LINDA ASKWIG on 08/31/2004 (04LA0328SE)

Name *(Printed/Typed)* LINDA GUTHRIE — Title REGULATORY SPECIALIST

Signature (Electronic Submission) — Date 08/30/2004

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By ACCEPTED — Title DAVID R GLASS PETROLEUM ENGINEER — Date 09/01/2004

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. — Office Hobbs

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.

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

Additional data for EC transaction #35408 that would not fit on the form

32. Additional remarks, continued

08/01/04 TD 6 1/2" hole @ 14,501'. Circ & cond hole for logs.
08/03/04 Ran 63 jts 5" 18# P110 liner. Top of liner @ 11564', bottom at 14,500'. Cmt w/ 275 sx Class H.
08/07/04 Pressure test liner top to 1500 psi - held.
08/12/04 TD 4 1/8" hole @ 14,653'. TIH for DST.
08/14/04 TOH w/ DST tools.
08/15/04 TIH for logs.
08/16/04 LDDP.
08/17/04 Released rig.

Appendix
Plugging and Completion Data from OCD Online

The Devon well RIO BLANCA 4 FEDERAL COM #001 is an active gas well completed into the Devonian. The well is more than 1.5 miles from the proposed Leonard SWD 1. Information on the casing record for this well is provided in the Appendix.

Form 3160-4
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires: November 30, 2000

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.: NM - 92199

1a. Type of Well ☐ Oil Well ☒ Gas Well ☐ Dry Other
b. Type of Completion: ☐ New Well ☐ Work Over ☒ Deepen ☐ Plug Back ☐ Diff. Resvr,.
Other

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.

2. Name of Operator: EGL Resources Inc.

8. Lease Name and Well No.: Rio Blanco "4" Fed #1

3. Address: P.O. Box 10886, Midland, Texas 79702

3a. Phone No. *(include area code)*: (432) 687-6560

9. API Well No.: 30-025-34515

4. Location of Well *(Report location clearly and in accordance with Federal requirements)**

At surface 1980' FNL & 1980' FWL

At top prod. interval reported below

At total depth

10. Field and Pool, or Exploratory: Bell Lake;Devonian, North (Gas)

11. Sec., T., R., M., on Block and Survey or Area: 4, T23S, R34E

12. County or Parish: Lea

13. State: NM

14. Date Spudded: 7/09/03

15. Date T.D. Reached: 9/09/03

16. Date Completed ☐ D & A ☒ Ready to Prod. 9/19/03

17. Elevations (DF, RKB, RT, GL)*: 3404'GL & 3426'RKB*

18. Total Depth: MD TVD 14,597'

19. Plug Back T.D.: MD TVD 14,597'

20. Depth Bridge Plug Set: MD TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
Slim LDT/Slim DNL/GR
Medium DLL/GR

22. Was well cored? ☒ No ☐ Yes (Submit analysis)
Was DST run? ☐ No ☒ Yes (Submit report)
Directional Survey? ☐ No ☒ Yes (Submit copy)

23. Casing and Liner Record *(Report all strings set in well)*

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
26"	20"/J55	94.0	0	735'	-	1025 HLC&C	-	Sur. (Cir)	None
17 1/2"	13 3/8"/J55	61.0	0	2236'	-	1075 INT C&C	-	Sur. (Cir)	None
12 3/4"	9 5/8"/S95	40.0	0	5168'	3417'	1725 INT C&C	-	Sur. (Cir)	None
8 3/4"	7"/P110	26.0	0	11718'	-	1258 PozP	-	UNK	None
6 1/8"	5"/S95	18.0	10,540'	14488'	-	210 H	44.5	10,540' (Cal)	None

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2 7/8"/ 2 3/8"	10,587'	10,587'						

25. Producing Intervals

Formation	Top	Bottom
A) Devonian	14,497'	14,597'
B)		
C)		
D)		

26. Perforation Record

Perforated Interval	Size	No. Holes	Perf. Status
Open Hole			

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
	None (Natural Completion)

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
9/19/03	9/19/03	5	→	0.7	365	0.4	56.2	.612	Flowing
Choke Size	**Tbg. Press. Flwg. SI**	**Csg. Press.**	**24 Hr. Rate →**	**Oil BBL**	**Gas MCF**	**Water BBL**	**Gas : Oil Ratio**	**Well Status**	
Various	4255	50	→	3.7	1870	2	500	Shut-in waiting on pipeline connection.	

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	**Tbg. Press. Flwg. SI**	**Csg. Press.**	**24 Hr. Rate →**	**Oil BBL**	**Gas MCF**	**Water BBL**	**Gas : Oil Ratio**	**Well Status**	
			→						

(See instructions and spaces for additional data on reverse side)

KZ

Appendix
Plugging and Completion Data from OCD Online

The BTA Oil Producers well HUDSON STATE 8006 JV-P #001Y is listed as an active oil well producing from the Atoka. Data from OCD files (see Appendix) show the well was drilled into the Devonian.

RE-ISSUED COMPLETION

COUNTY LEA — Antelope Ridge — ST NM

OPR BTA OIL PRODUCERS — API 30-025-27363

NO 1-Y LEASE Hudson State 8006 JV-P — MAP

Sec 11, T23S, R34E — CO-ORD

860 FNL, 1980 FWL of Sec — 1-2-48 NM

24 mi SE/Halfway — SPD 4-14-81 — CMP 3-2-82

CSG 30-70-40 sx
20-1500-2300 sx
13 3/8-4800-3900 sx
9 5/8-11,700-3400 sx
7 5/8 liner-11,362-12,748-300sx
5-liner-12,436-13, 410-225 sx
2 7/8-12,400

WELL CLASS: INIT D FIN DG LSE. CODE

FORMATION	DATUM	FORMATION	DATUM

TD 13,410 (MRRW) PBD 13,380

IP (Morrow) Perfs 13,290-296 CAOF 5545 MCFGPD. GOR 52,670; gty (Gas) .594; (Cond) 48.2; SIWHP 5504; SIBHP 5577

P.L.C. Llano, Inc.

OWNER Parker #85 — OPRSTN 3370 GL — sub-s

F.R. 4-13-81
PD 13,500 RT (Morrow)
(Replacement well for the #1)

4-21-81	Drlg 1495
5-4-81	Drlg 2721
5-12-81	Drlg 3490
5-26-81	Drlg 4113
6-2-81	TD 4815; Rng csg
6-9-81	Drlg 10,087
6-16-81	Drlg 11,700
6-23-81	TD 11,705; DOC
6-30-81	Drlg 12,014
7-7-81	Drlg 12,389
7-14-81	Drlg 12,720
7-21-81	Drlg 12,762

1-2-48 NM

7-28-81 Drlg 12,951
8-4-81 Drlg 13,302
8-11-81 TD 13,410; DOC @ 13,362
8-18-81 TD 13,410; PBD 13,380; SI
Perf (Morrow) 13,290-292, 13,294-296
DST (Morrow) 13,290-296 "Tight"
8-25-81 TD 13,410; PBD 13,380; Prep test
Acid (13,290-296) 4000 gals
9-1-81 TD 13,410; PBD 13,380; SI
10-12-81 TD 13,410; PBD 13,380; WOSP
Flwd 144 hrs + 4600 MCFGPD in 24 hrs thru 20/64
Chk, TP 6985 (13,290-296) 1-2-48 NM

1-4-82 TD 13,410; PBD 13,380; Complete
(Morrow) FOUR POINT GAUGES:
Flwd 389 MCFGPD, chk (NR), 60 mins, TP 5354
Flwd 1030 MCFGPD, chk (NR), 60 mins, TP 5076
Flwd 2215 MCFGPD, chk (NR), 60 mins, TP 4353
Flwd 4093 MCFGPD, chk (NR), 60 mins, TP 2882
LOG TOPS: Rustler 1884, Delaware 5293, Bone Spring 8392, Wolfcamp 10,529, Strawn 11,718, Atoka 12,100, Morrow 12,372
BHT 165 deg @ 13,296
1-4-82 COMPLETION ISSUED
3-17-82 RE-ISSUE TO ADD CAOF, FOUR POINT GAUGES, BHT & P.L.C.

1-2-48 NM
IC 30-025-70188-81

Petroleum Information.

COUNTY LEA FIELD Antelope Ridge STATE NM

OPR BTA OIL PRODUCERS API 30-025-27363

NO 1-Y LEASE Hudson State 8006-JV-P MAP

Sec 11, T23S, R34E CO-ORD

860 FNL, 1980 FWL of Sec 1-2-48 NM

24 mi SE/Halfway SPD 4-14-81 CMP 9-5-81

CSG.

30-70-40 sx
20-1500-2300 sx
13 3/8-4800-3900 sx
9 5/8-11,700-3400 sx
7 5/8-lnr-11,362-12,748-300 sx
5-lnr-12,436-13,410-225 sx
2 7/8-12,400

WELL CLASS: INIT D FIN DG LSE. CODE

FORMATION	DATUM	FORMATION	DATUM

TD 13,410 (MRRW) PBD 13,380

IP (Morrow) Perfs 13,290-296 F 4600 MCFGPD. Pot based on 24 hr test thru 20/64 chk. GOR 31,944; gty (Gas) (NR); COND (NR) CP Pkr; TP 6985

CONTR Parker #85 OPR'S ELEV. 3370 GL sub-s

F.R. 4-13-81
PD 13,500 RT (Morrow)
(Replacement well for the #1)

4-21-81 Drlg 1495
5-4-81 Drlg 2721
5-12-81 Drlg 3490
5-26-81 Drlg 4113
6-2-81 TD 4815; Rng csg
6-9-81 Drlg 10,082
6-16-81 Drlg 11,300
6-23-81 [illegible]
6-30-81 Drlg 12,0[illegible]
7-[illegible] Drlg 12,[illegible]
Drlg 12,720
[illegible] Drlg 12,762
7-28-81 Drlg 12,991
8-4-81 Drlg 13,302
8-11-81 TD 13,410; [illegible] @ 13,362

1-2-48 NM

8-18-81	TD 13,410; PBD 13,380; SI Perf (Morrow) 13,290-292, 13,294-296 DST (Morrow) 13,290-296 "Tight"
8-25-81	TD 13,410; PBD 13,380; Prep test Acid (13,290-296) 4000 gals
9-1-81	TD 13,410; PBD 13,380; SI
10-12-81	TD 13,410; PBD 13,380; WOSP Flwd 144 BO + 4600 MCFGPD in 24 hrs thru 20/64 chk, TP 6985 (13,290-296)
1-4-82	TD 13,410; PBD 13,380; Complete [illegible] Bottler 1884, Delaware 5293, Bone Spring [illegible] Wolfcamp 10,529, Strawn [illegible],718, 1-2-48 NM

1-4-82	Continued Atoka 12,100, Morrow 12,372 Will [illegible] additional information is released
1-9-82	COMPLETION ISSUED

1-2-48 NM
IC 30-025-70188-81

NO. OF COPIES RECEIVED		
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LAND OFFICE		
TRANSPORTER	OIL	
	GAS	
OPERATOR		
PRORATION OFFICE		

NEW MEXICO OIL CONSERVATION COMMISSION
REQUEST FOR ALLOWABLE
AND
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Form C-104
Supersedes Old C-104 and C-110
Effective 1-1-65

I.

Operator: BTA OIL PRODUCERS

Address: 104 South Pecos Midland, Texas 79701

Reason(s) for filing *(Check proper box)*: New Well [X]; Recompletion [ ]; Change in Ownership [ ]; Change in Transporter of: Oil [ ], Dry Gas [ ], Casinghead Gas [ ], Condensate [ ]

Other *(Please explain)*

If change of ownership give name and address of previous owner _____

II. DESCRIPTION OF WELL AND LEASE

12-1-81

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease	Lease No.
Hudson-State, 8006 JV-P	1-Y	R-6838 Antelope Ridge (Morrow)	State, Federal or Fee State	LG1126 L5394

Location: Unit Letter 'C' ; 1980 Feet From The West Line and 860 Feet From The North

Line of Section 11 Township 23-S Range 34-E , NMPM, Lea County

II. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil [ ] or Condensate [X]	Address *(Give address to which approved copy of this form is to be sent)*
PHILLIPS PETROLEUM COMPANY - Trucks	4001 Penbrook, Odessa, TX 79762
Name of Authorized Transporter of Casinghead Gas [ ] or Dry Gas [ ]	Address *(Give address to which approved copy of this form is to be sent)*
Llano, Inc.	P. O. Box 1320 Hobbs, New Mexico 88240

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When
	'C'	11	23-S	34-E		

If this production is commingled with that from any other lease or pool, give commingling order number: -

V. COMPLETION DATA

Designate Type of Completion – (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v.	Diff. Res'v.
		X	X					

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
4/18/81	8/19/81	13,410'	13,380'
Elevations *(DF, RKB, RT, GR, etc.)*	**Name of Producing Formation**	**Top Oil/Gas Pay**	**Tubing Depth**
3370' GR	Morrow	13,240'	12,400'
Perforations			**Depth Casing Shoe**
13,240' - 13,296'			13,410'

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
26"	20"	1500'	2300
17-1/2"	13-3/8"	4800'	3900
12-1/4"	9-5/8"	11700' DV@5483'	3400
8-1/2"	7-5/8" liner	11362' - 12748'	300 (See back of form)

V. TEST DATA AND REQUEST FOR ALLOWABLE *(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)*

OIL WELL

Date First New Oil Run To Tanks	Date of Test	Producing Method *(Flow, pump, gas lift, etc.)*	
Length of Test	**Tubing Pressure**	**Casing Pressure**	**Choke Size**
Actual Prod. During Test	**Oil-Bbls.**	**Water-Bbls.**	**Gas-MCF**

GAS WELL

Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
4600	24 hrs.	31.3	56
Testing Method *(pitot, back pr.)*	**Tubing Pressure (Shut-in)**	**Casing Pressure (Shut-in)**	**Choke Size**
Venting	6985	Pkr.	20/64"

VI. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Bob K. Newland BOB K. NEWLAND
(Signature)
Regulatory Administrator
(Title)
9/16/81
(Date)

OIL CONSERVATION COMMISSION

APPROVED FEB 1 1982, 19 ____
Orig. Signed by
BY _____
TITLE _____

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter, or other such change of condition.

Separate Forms C-104 must be filed for each pool in multiply completed wells.

TUBING, CASING, AND CEMENTING RECORD

Hole Size	Casing & Tubing Size	Depth Set	Sacks Cement
6-1/2"	5" Liner	12436' - 13410'	225
6-1/2"	2-7/8" Tubing	12400'	- -

DISTRIBUTION		
SANTA FE		
FILE		
U.S.G.S.		
LAND OFFICE		
OPERATOR		

NEW MEXICO OIL CONSERVATION COMMISSION

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

Correction

State [X] Fee [ ]

5. State Oil & Gas Lease No.: L 5394 & LG 1126

7. Unit Agreement Name:

8. Farm or Lease Name: Hudson-State, 8006 JV-P

9. Well No.: 1-Y

10. Field and Pool, or Wildcat: Antelope Ridge (Morrow)

a. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] DRY [ ] OTHER

b. TYPE OF COMPLETION: NEW WELL [X] WORK OVER [ ] DEEPEN [ ] PLUG BACK [ ] DIFF. RESVR. [ ] OTHER

2. Name of Operator: BTA OIL PRODUCERS

3. Address of Operator: 104 South Pecos Midland, Texas 79701

4. Location of Well: UNIT LETTER 'C' LOCATED 1980 FEET FROM THE West LINE AND 860 FEET FROM THE North LINE OF SEC. 11 TWP. 23-S RGE. 34-E NMPM

12. County: Lea

15. Date Spudded	16. Date T.D. Reached	17. Date Compl. (Ready to Prod.)	18. Elevations (DF, RKB, RT, GR, etc.)	19. Elev. Cashinghead
4/18/81	8/5/81	8/19/81	3370' GR	3380' GR

20. Total Depth	21. Plug Back T.D.	22. If Multiple Compl., How Many	23. Intervals Drilled By	Rotary Tools	Cable Tools
13410'	13380'	- -	→	X	

24. Producing Interval(s), of this completion — Top, Bottom, Name: 13,240' - 13,296' (Morrow)

25. Was Directional Survey Made: No

26. Type Electric and Other Logs Run: GR-CNL- FEC & DI-SFL

27. Was Well Cored: No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
20"	94#	1500'	26"	2300 SX	Circ.
13-3/8"	64.5,61,68&72#	4800'	17½"	3900 SX	TOC @ 130'
9-5/8"	47 & 53.5#	11700'	12¼"	3400 SX	- -
	DV Tool @ 5483'				

29. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN
7-5/8"	11362'	12748'	300	
5"	12436'	13410'	225	

30. TUBING RECORD

SIZE	DEPTH SET	PACKER SET
2-7/8"	12400'	12400'

31. Perforation Record (Interval, size and number): 13,240' - 13,296' (2" 13 holes)

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
13,240' - 13,296'	A/4000 gal. 15% MS Type HCL

PRODUCTION

33.

Date First Production	Production Method (Flowing, gas lift, pumping — Size and type pump)	Well Status (Prod. or Shut-in)
8/19/81	Flowing	Shut-In

Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period →	Oil — Bbl.	Gas — MCF	Water — Bbl.	Gas — Oil Ratio
9/5/81	24	20/64"		144	4600		31.94

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate →	Oil — Bbl.	Gas — MCF	Water — Bbl.	Oil Gravity — API (Corr.)
1800	Pkr		144	4600		56.0

34. Disposition of Gas (Sold, used for fuel, vented, etc.): SI Pending Connection (Vented for Test)

Test Witnessed By:

35. List of Attachments: Log, C-103, Inclination Survey, & C-104 (C-122 & C-122D will be filed upon connection)

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

SIGNED Bob K. Newland BOB K. NEWLAND TITLE Regulatory Administrator DATE 9/16/81

This form is to be filed with the appr[opriate] District Office of the Commission not later than 20 days after the completion of any newly-drilled, deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 30 through 34 shall be reported for each zone. The form is to be filed in quintuplicate except for state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico				Northwestern New Mexico			
T. Anhy	1884	T. Canyon		T. Ojo Alamo		T. Penn. "B"	
T. Salt		T. Strawn	11718	T. Kirtland-Fruitland		T. Penn. "C"	
B. Salt		T. Atoka	12100	T. Pictured Cliffs		T. Penn. "D"	
T. Yates		T. Miss		T. Cliff House		T. Leadville	
T. 7 Rivers		T. Devonian		T. Menefee		T. Madison	
T. Queen		T. Silurian		T. Point Lookout		T. Elbert	
T. Grayburg		T. Montoya		T. Mancos		T. McCracken	
T. San Andres		T. Simpson		T. Gallup		T. Ignacio Qtzte	
T. Glorieta		T. McKee		Base Greenhorn		T. Granite	
T. Paddock		T. Ellenburger		T. Dakota		T.	
T. Blinebry		T. Gr. Wash		T. Morrison		T.	
T. Tubb		T. Granite		T. Todilto		T.	
T. Drinkard		T. Delaware Sand	5293'	T. Entrada		T.	
T. Abo		T. Bone Springs	8392'	T. Wingate		T.	
T. Wolfcamp	10529' Lm	T. Morrow LS	12372	T. Chinle		T.	
T. ~~Penn~~ Wolfcamp	10683' SH	T. Morrow SH	12868'	T. Permian		T.	
T Cisco (Bough C)		T. Morrow "A"	13038'	T. Penn. "A"		T.	
		Morrow "C"	13228'				

OIL OR GAS SANDS OR ZONES

No. 1, from 12100' to 12190' No. 4, from ____ to ____

No. 2, from 12812' to 13296' No. 5, from ____ to ____

No. 3, from ____ to ____ No. 6, from ____ to ____

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from ____ to ____ feet. ____

No. 2, from ____ to ____ feet. ____

No. 3, from ____ to ____ feet. ____

No. 4, from ____ to ____ feet. ____

FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
1884	5293		Anhydrite, Salt, Red Shale				
5293	8392		Del. Sand, Limestone, Sandstone, Shale Dolomite				
8392	10529		Bone Springs, Limestone, Shale, Sandstone, Chert				
10529	10683		Wolfcamp Shale, Sandstone shale, Limestone,				
10683	11718		Strawn, Limestone, Sand, Trace Chert				
11718	12100		Atoka, Shale, Limestone, Chert				
12100			Morrow, Limestone, Shale, Chert, Sand.				

RECEIVED
OCT 6 1981
CONSERVATION DIV

Appendix
Plugging and Completion Data from OCD Online

The Caza Ridge 14 State 001 (SWD) was never drilled, but OCD issued an APD and Order for the proposed SWD to a depth of 13,543.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

HOBBS OCD
JAN 17 2012
RECEIVED

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-101
June 16, 2008

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1 Operator Name and Address	2 OGRID Number
CAZA OPERATING, LLC. 200 NORTH LORAINE SUITE 1550 MIDLAND, TEXAS 79701	249099
	3 API Number 30 - 025-26692

4 Property Code	5 Property Name	6 Well No.
39020	CAZA RIDGE "14" STATE	1H

9 Proposed Pool 1	10 Proposed Pool 2
Antelope ~~WILDCAT~~ Ridge Bone Spring N 22057	

7 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	14	23S	34E		1980'	SOUTH	1980'	EAST	LEA

8 Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	14	23S	34E		330'	NORTH	1980'	EAST	LEA

Additional Well Information

11 Work Type Code	12 Well Type Code	13 Cable/Rotary	14 Lease Type Code	15 Ground Level Elevation
E	O	ROTARY	S	3366'
16 Multiple	**17 Proposed Depth**	**18 Formation**	**19 Contractor**	**20 Spud Date**
NO	TVD-11,227 MD-14,033			WHEN APPROVED

21 Proposed Casing and Cement Program

(Casing set originally)

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
26"	20"	94	677'	450 Sx.	Surface
17½"	13 3/8"	68 & 72#	4900'	5400 Sx.	Surface
12¼"	9 5/8"	47 & 53.5#	11,713'	3300 Sx.	
8½"	7 5/8" Liner	39#	11,298-13,542'	350 Sx	

22 Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

SEE ATTACHED SHEETS FOR DETAIL

Permit Expires 2 Years From Approval Date Unless Drilling Underway

Re-Entry

23 I hereby certify that the information given above is true and complete to the best of my knowledge and belief.	OIL CONSERVATION DIVISION
Signature: Joe T. Janica	Approved by:
Printed name: Joe T. Janica	Title: PETROLEUM ENGINEER
Title: Permit Eng.	Approval Date: / Expiration Date:
E-mail Address: joejanica@valornet.com	JAN 19 2012
Date: 01/16/12 / Phone: 575-391-8503	Conditions of Approval Attached ☐

JAN 23 2012

District I
1625 N French Dr , Hobbs, NM 88240
Phone (575) 393-6161 Fax (575) 393-0720
District II
811 S First St , Artesia, NM 88210
Phone (575) 748-1283 Fax (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone (505) 334-6178 Fax (505) 334-6170
District IV
1220 S St Francis Dr , Santa Fe, NM 87505
Phone (505) 476-3460 Fax (505) 476-3462

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-025-26692	2205	Antelope Ridge; ~~WILDCAT~~ BONE SPRING ; North

[4] Property Code	[5] Property Name	[6] Well Number
39020	CAZA RIDGE "14" STATE	1H

[7] OGRID No.	[8] Operator Name	[9] Elevation
249099		3366' GL

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	14	23S	34E		1980'	SOUTH	1980'	EAST	LEA

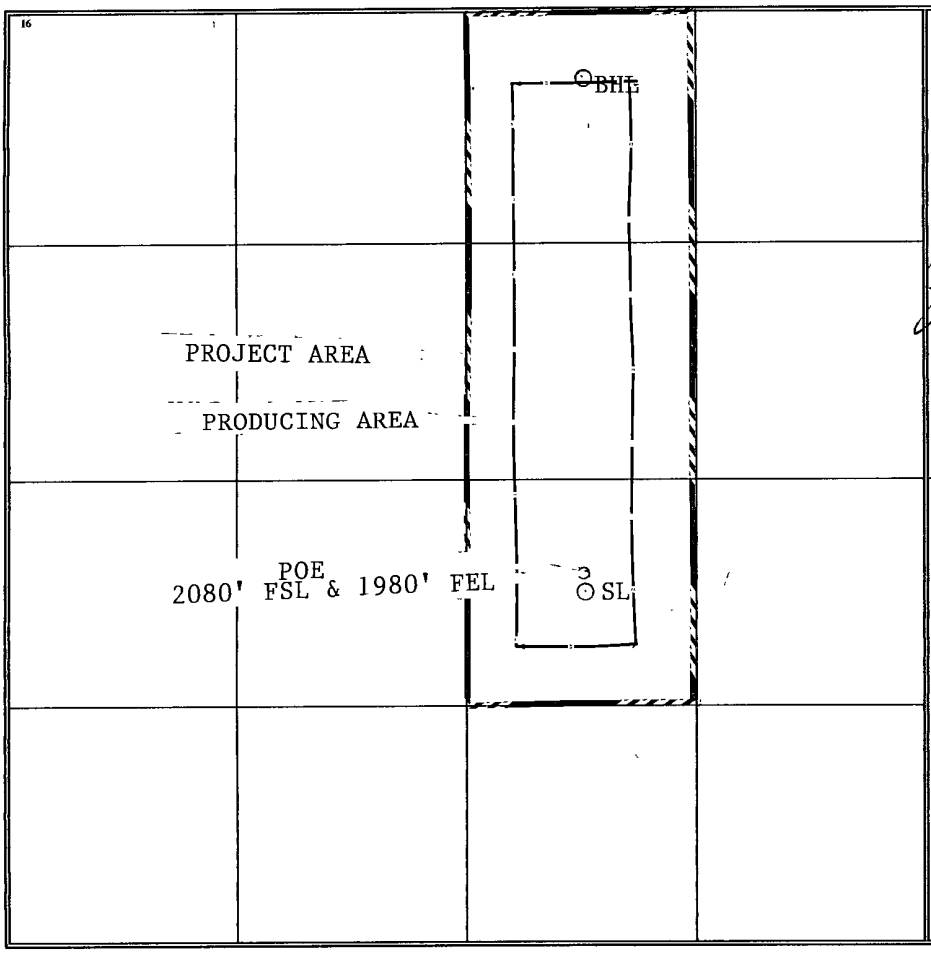
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	14	23S	34E		330'	NORTH	1980'	EAST	LEA

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
120			

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

[16]



[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Joe T Janica
Signature Date

Joe T. Janica 01/16/12
Printed Name

joejanica@valornet.com
E-mail Address

[18] SURVEYOR CERTIFICATION

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

Date of Survey

Signature and Seal of Professional Surveyor:

Certificate Number

CAZA OPERATING, LLC.

CAZA RIDGE "14" STARW #1H

"Formerly" BTA - Ridge 8006 JV-P # 1H-ReEntry

Original API 30 025 26692

1980 FSL & 1980 FEL, Sec 14, T-23-S, R-34-E

Lea County, New Mexico

Field = Antelope Ridge, Bone Springs #(2200)

Bone Spring Test

ReEntry Job summary:

Locate Dry Hole Marker. Improve location. Closed Loop system planned. Install Head 13 5/8" 5M Head. Clean out 9.625" casing to Wolfcamp interval. Set wireline CIBP @ 11,450 ft. Run CBL in 9.625" casing to locate Cement Top. Squeeze if necessary. Run Neutron/GR Correlation log. Run Gyro. Run 7" Casing from Surface to PBTD ± 11,450 ft. Cement Casing. Do Directional plan. Assume North KOP. Set Whipstock on positioned above CIBP. Cut window & drill curve w/ 6.125" bit. Drill Lateral with 6.125" bit to limits of section. Run 4 ½" production liner & cement to top of liner @ ± 10,500ft. Do Sleeve/Acid soluble cement job on lateral. 10-15 stage Frac. Put well on Rod Pump. Build Facility.

WELL HEAD:

TUBING SPOOL 13.375 INCH SOW Hd X 13.625 5M Flange.

CASING DETAIL SUMMARY: See Attached Schematic.

ReEntry Procedure

Locate Low Pressure Gas Processing Gathering Line

1. Locate Dry hole marker. Prepare location for Small Drilling Rig. Set cellar. Install well head on 13.375" (13.375 SOW X 13.625" 5M) casing.
2. MIRU Drilling tools. Install 13.625" 5K BOPE. Test Well head & BOPE to 2500 psi.
3. No pits allowed in NM. Use circulating steel tanks for storage of cuttings & fluids.
4. P/U 12.25" Bit & BHA. Clean out 13.375" Csg to 9.625" casing stub @ 1380 ft. Circulate clean & POH.
5. Test 9.625" casing stub/13.375" casing for integrity. Assuming okay.
6. P/U 8.5" bit & BHA. TIH to 9.625" stub. Work into stub & Clean out cement plugs to 7 5/8" liner top @ 11,289 ft. POH.

CAZA OPERATING, LLC.

CAZA RIDGE "14" STATE #1H

"Formerly" BTA - Ridge 8006 JV-P # 1H-ReEntry

Original API 30 025 26692

1980 FSL & 1980 FEL, Sec 14, T-23-S, R-34-E

Lea County, New Mexico

Field = Antelope Ridge, Bone Springs #(2200)

Bone Spring Test

7. RIH w/ Cement Retainer & set @ ± 11, 250 ft. POH L/D 4 ½" DP.
8. RIH P/U 7" 26# P-110 Casing to Retainer @ 11,250 ft
9. Cement Casing in place with cement top estimated @ ± 6500 ft.
10. N/D BOPE. Install "B" Section (13.625"5M x 7.0625" 10M) Spool: Test Spool.
11. RIH to cement w/ 3 ½" rental DP & BHA to cement. Clean out to PBTD "Float collar"of ± 11,200 ft.
12. R/U and run wireline gyro from PBTD to surface.
13. POH w/ 3 ½" DP & BHA. Run Correlation Neutron/Gamma/CCL log. Set wireline CIBP @ KOP ± 10850 ft.
14. RIH w/ Drill String & Confirm good set of CIBP. POH w/ Drill String.
15. RIH w/ Knight Window Whipstock and orient to a Northerly Direction. Cut Window in 7" & 9.625" casing. POH w/ mill. May take several mills to get good clean window.
16. RIH w/ 6.125" bit & BHA "Directional" . Drill Curve from ± KOP 10,845 in Northerly Direction to TVD of 11,227 ft. BHL should be 330 FNL & 1980 FEL same section. MD should be ± 14,033 ft.
17. POH L/D Drill string. Return Rental pipe.
18. RIH w/ 4 ½" 11.6 # P-110 Production Liner. With sleeve hardware & packer type hanger. Run BTC couplings through curve & lateral.
19. Cement 4 ½" liner with acid soluble cement to 200 ft above hanger. Circulate out cement above hanger.
20. POH w/ hanger setting tool.
21. RIH w/ clean out tool and clean out Top of Liner.
22. Test Liner top.

CAZA OPERATING, LLC.
CAZA RIDGE "14" STATE #1H

"Formerly" BTA - Ridge 8006 JV-P # 1H-ReEntry
Original API 30 025 26692
1980 FSL & 1980 FEL, Sec 14, T-23-S, R-34-E
Lea County, New Mexico
Field = Antelope Ridge, Bone Springs #(2200)
Bone Spring Test

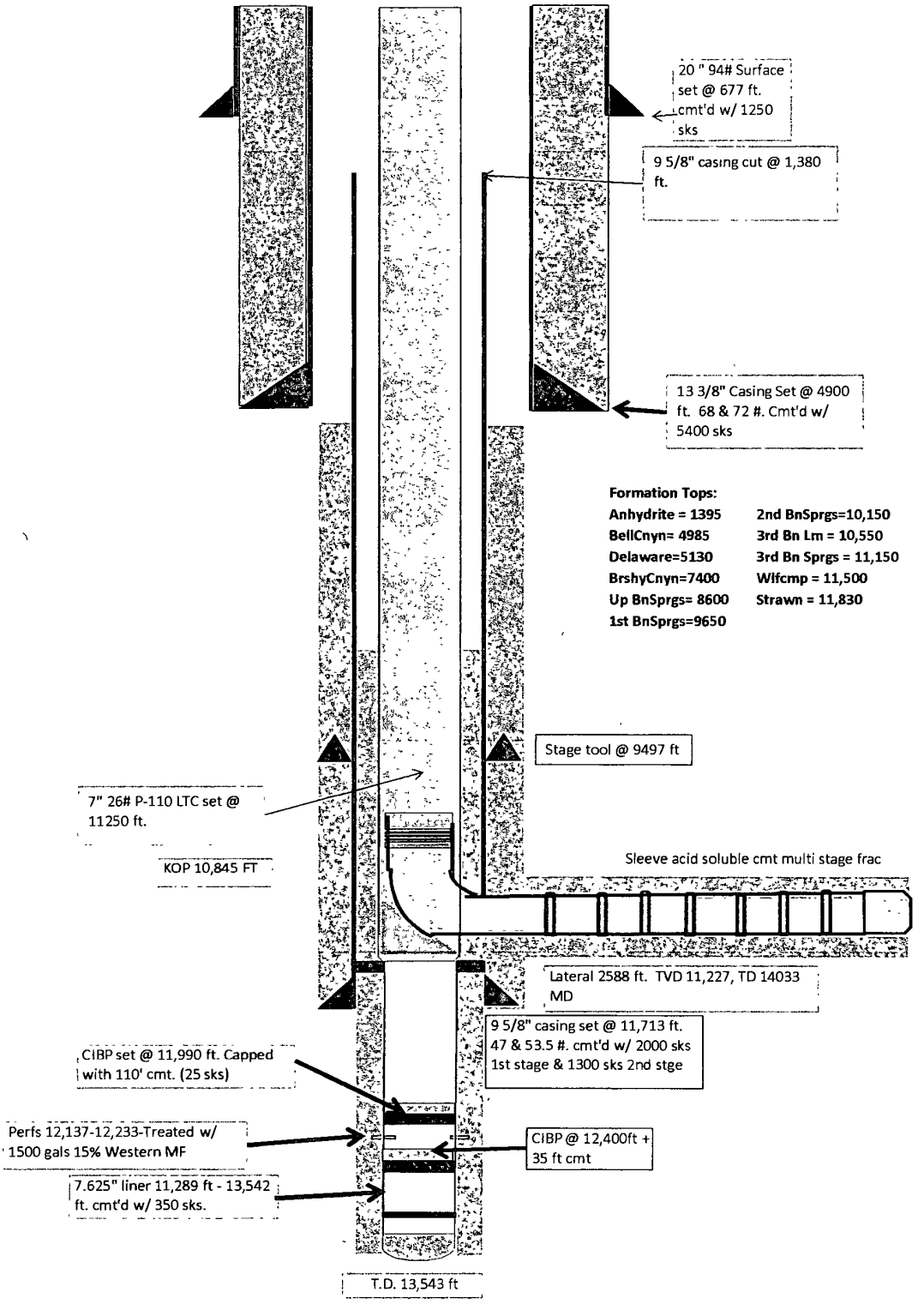
23. POH/L/D rental DP.
24. Install Dry H flange.
25. R/D M/O Drilling Tools
26. Set Anchors. MIRU Well Service unit.
27. RIH w/ 4 ¾" bit & scrapper on 2 7/8" L-80 tubing to PBTD ± 10,500 ft. Circulate hole clean. Displace w/ 2% KCL FW. POH w/ tubing.
28. N/D BOPE & N/U Frac Tree.
29. R/U Frac Equipment. Perform Stage frac as per design.
30. Flowback frac load until well is dead or set Wireline RBP to N/D Frac stack.
31. N/U BOPE. RIH w/ RBP retrieving tool. Retrieve RBP.
32. Clean out excess sand in lateral. Coil may be need for this operation.
33. RIH w/ Production tubing.
34. RIH w/ rods & Pump.
35. Set 640 pumping unit with Gas engine.
36. Pump back frac load to test.
37. Build Battery based on Test. Locate Low Pressure gas sales line.

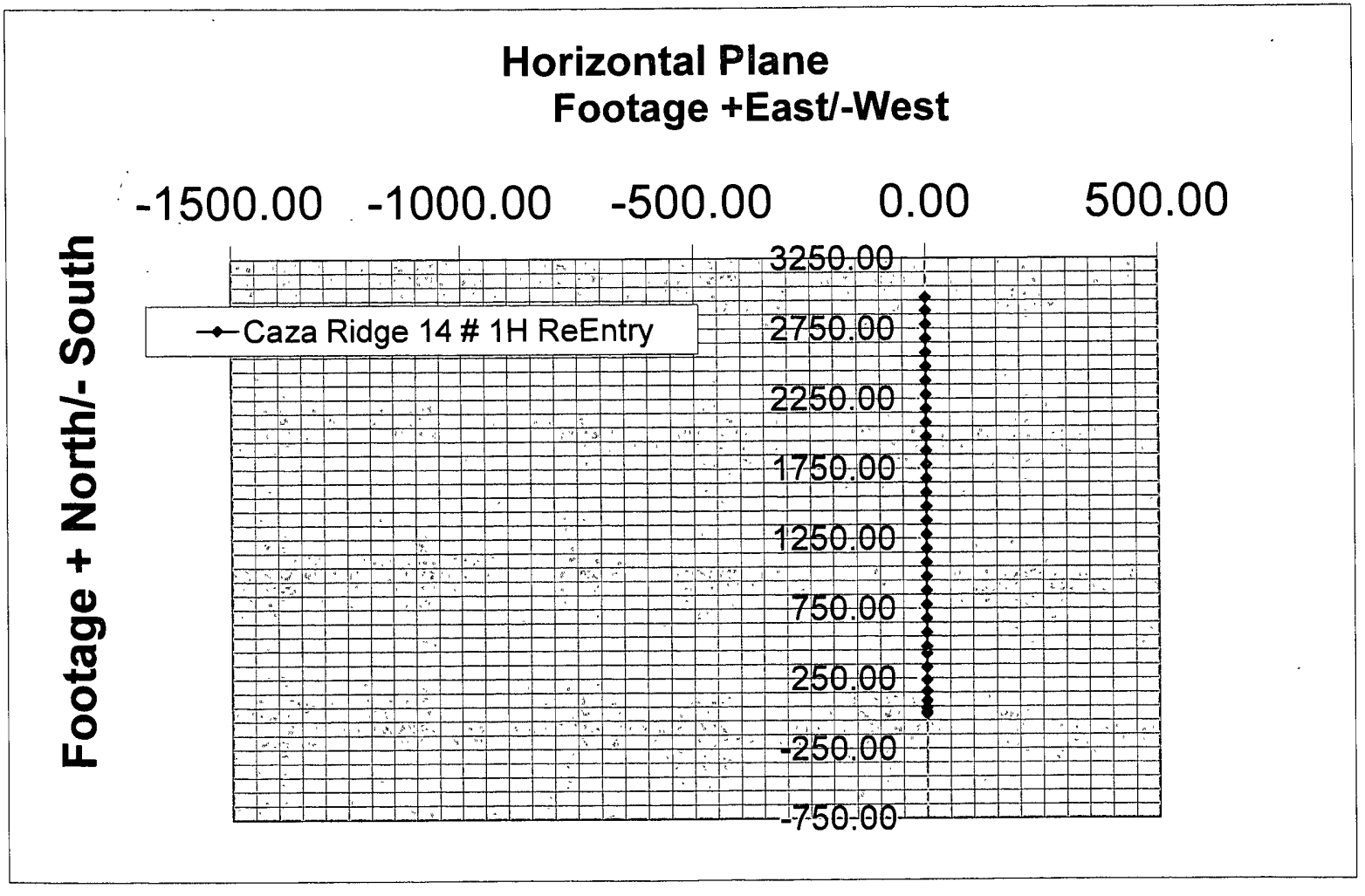
Caza Ridge 14 # 1H ReEntry

1980 FSL & 1980 FEL, Sec 14, T23S, R34E

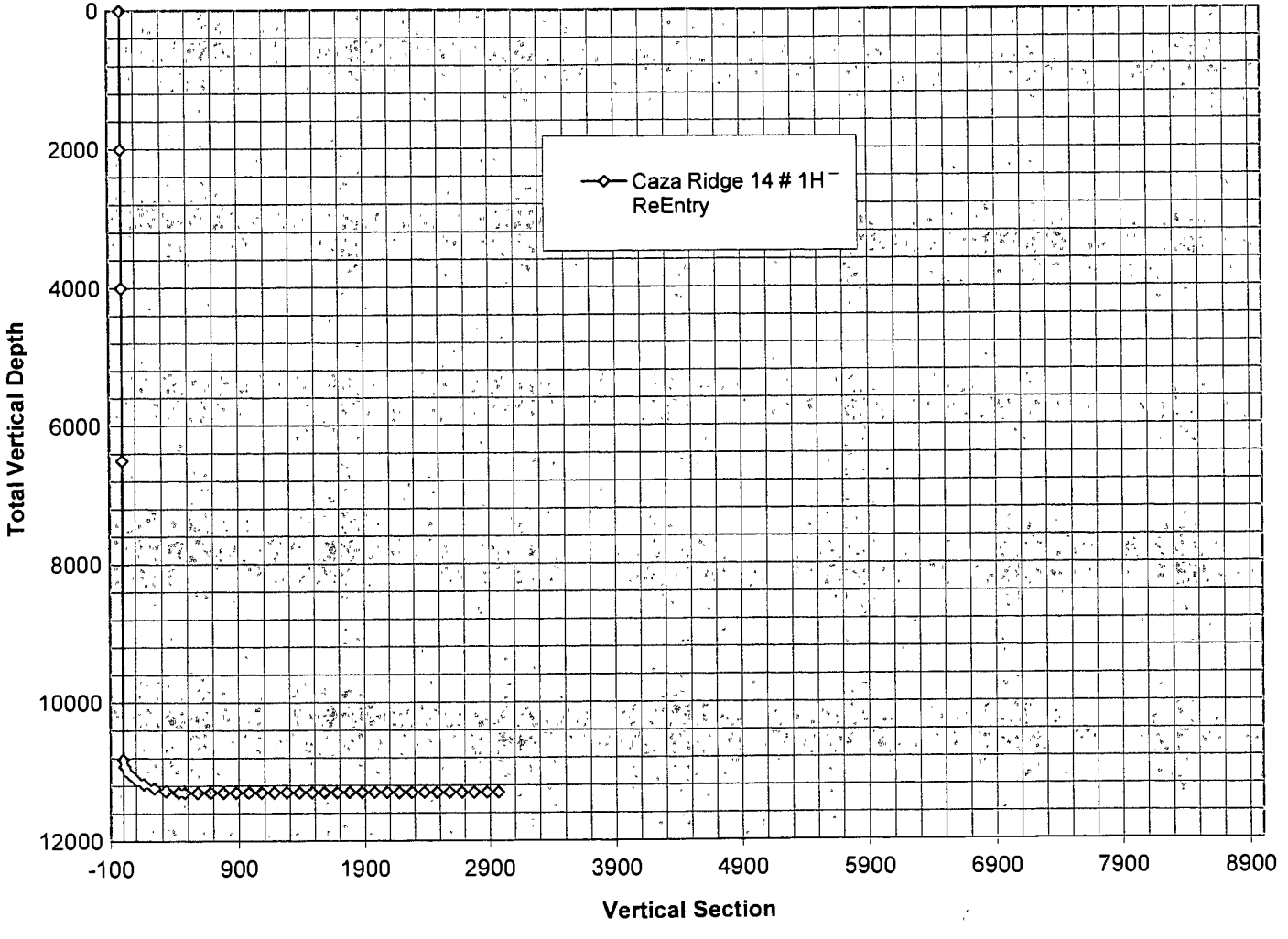
Lea County, New Mexico

GL Elevation 3366. RKB 3398




Horizontal Plane
Footage +East/-West
-1500.00
-1000.00
-500.00
0.00
500.00
Footage + North/- South
Caza Ridge 14 # 1H ReEntry
3250.00
2750.00
2250.00
1750.00
1250.00
750.00
250.00
-250.00
-750.00

Caza Ridge 14 # 1H ReEntry



LONG's METHOD OF SURVEY COMPUTATION

OBLIQUE CIRCULAR ARC INTERPOLATION

6000	MD OF INTERPOLATION DEPTH,(feet)
#N/A	TVD COORDINATE OF THE DEPTH (feet)
#N/A	N/S COORDINATE OF DEPTH (feet)
#N/A	E/W COORDINATE OF DEPTH (feet)

DISTANCE TABLE

STATION A	STATION B
400.00	600.00
300.00	400.00
100.00	300.00
3 D DISTANCE BETWEEN STATION A AND STATION B: 300.00	ft
Calculator =	

TABLE OF SURVEY STATIONS

STA #	ΔMD ft	INCL deg	AZIM deg	MD ft	TVD ft	N+/S- ft	E+/W- ft	DLS deg/100FT
1	TIE POINT =>	0	0	10823.00	10823.00	0.00	0.00	-
2	100	12	0	10923.00	10922.27	10.43	0.00	12.00
3	100	24	0	11023.00	11017.20	41.28	0.00	12.00
4	100	36	0	11123.00	11103.65	91.19	0.00	12.00
5	100	48	0	11223.00	11177.83	157.98	0.00	12.00
6	100	60	0	11323.00	11236.50	238.73	0.00	12.00
7	100	72	0	11423.00	11277.10	329.92	0.00	12.00
8	100	84	0	11523.00	11297.85	427.56	0.00	12.00
9	50	90	0	11573.00	11300.46	477.46	0.00	12.00
10	100	90	0	11673.00	11300.46	577.46	0.00	0.00
11	100	90	0	11773.00	11300.46	677.46	0.00	0.00
12	100	90	0	11873.00	11300.46	777.46	0.00	0.00
13	100	90	0	11973.00	11300.46	877.46	0.00	0.00
14	100	90	0	12073.00	11300.46	977.46	0.00	0.00
15	100	90	0	12173.00	11300.46	1077.46	0.00	0.00
16	100	90	0	12273.00	11300.46	1177.46	0.00	0.00
17	100	90	0	12373.00	11300.46	1277.46	0.00	0.00
18	100	90	0	12473.00	11300.46	1377.46	0.00	0.00
19	100	90	0	12573.00	11300.46	1477.46	0.00	0.00
20	100	90	0	12673.00	11300.46	1577.46	0.00	0.00
21	100	90	0	12773.00	11300.46	1677.46	0.00	0.00
22	100	90	0	12873.00	11300.46	1777.46	0.00	0.00
23	100	90	0	12973.00	11300.46	1877.46	0.00	0.00
24	100	90	0	13073.00	11300.46	1977.46	0.00	0.00
25	100	90	0	13173.00	11300.46	2077.46	0.00	0.00
26	100	90	0	13273.00	11300.46	2177.46	0.00	0.00
27	100	90	0	13373.00	11300.46	2277.46	0.00	0.00
28	100	90	0	13473.00	11300.46	2377.46	0.00	0.00
29	100	90	0	13573.00	11300.46	2477.46	0.00	0.00
30	100	90	0	13673.00	11300.46	2577.46	0.00	0.00
31	100	90	0	13773.00	11300.46	2677.46	0.00	0.00
32	100	90	0	13873.00	11300.46	2777.46	0.00	0.00
33	100	90	0	13973.00	11300.46	2877.46	0.00	0.00
34	92	90	0	14065.00	11300.46	2969.46	0.00	0.00
35								
36								
37								
38								
39								
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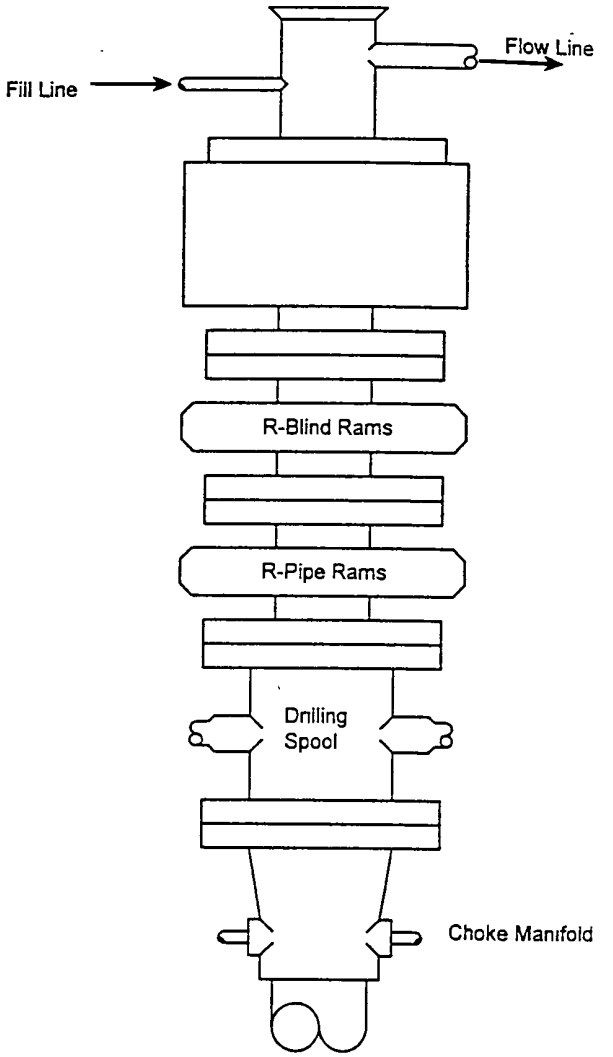
44								

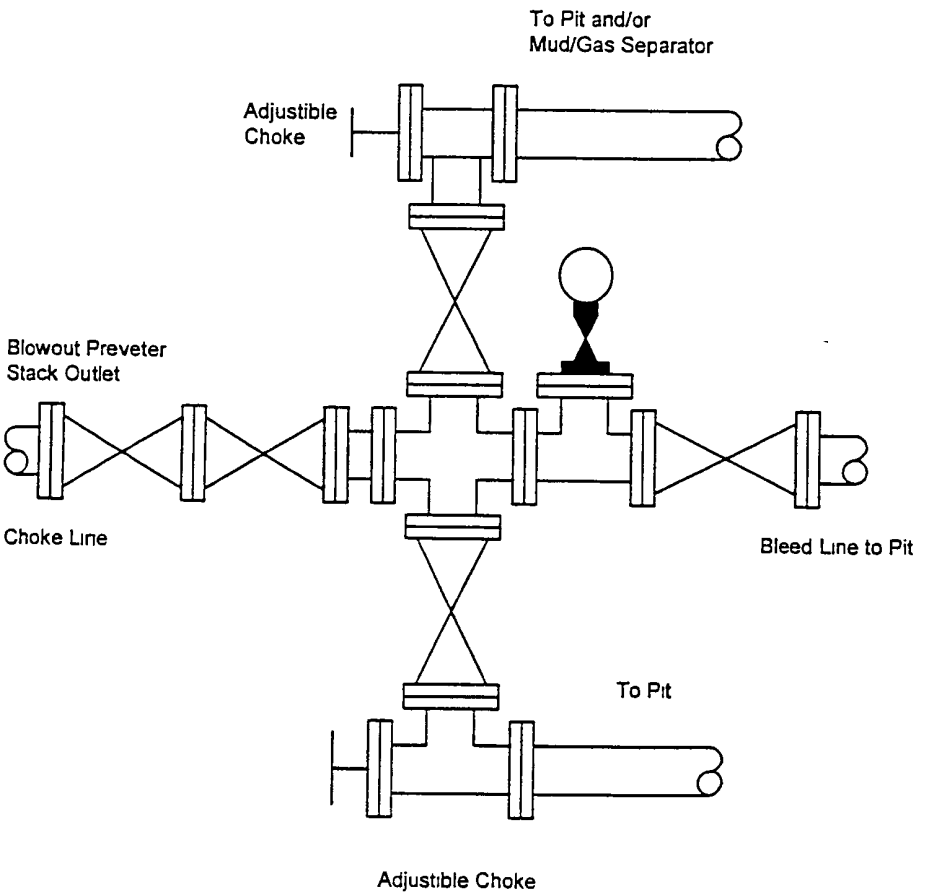
BLOWOUT PREVENTER SYSTEM

5000 PSI



Type 1500 SERIES
5000 psi WP

Choke Manifold Assembly for 5M WP System



District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
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811 S. First St., Artesia, NM 88210
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Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

Form C-101
Revised July 18, 2013

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1 Operator Name and Address	2 OGRID Number
BTA Oil Producers, LLC 104 S Pecos Midland, TX 79701	260297
	3 API Number 30-025-26692

4 Property Code	5 Property Name	6 Well No.
318087	Ridge SWD 8006 JV-P	1

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
J	14	23S	34E		1980	South	1980	East	Lea

8. Proposed Bottom Hole Location

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

9. Pool Information

Pool Name	Pool Code
SWD;DEVONIAN-SILURIAN	97869

Additional Well Information **SWD-1672**

11 Work Type	12 Well Type	13 Cable/Rotary	14 Lease Type	15 Ground Level Elevation
P	S		S	3366
16 Multiple	**17 Proposed Depth**	**18 Formation**	**19 Contractor**	**20 Spud Date**
No	17300'			

Depth to Ground water	Distance from nearest fresh water well	Distance to nearest surface water

☒ We will be using a closed-loop system in lieu of lined pits

SWD-1672

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	26"	20"	94#	677'	1250	Surface
Intl	17-1/2"	13-3/8"	68# & 72#	4900'	5400	Surface
Prod	12-1/4"	9-5/8"	47# & 53.5#	11713'	3300	Surface
Liner	8-1/2"	7-5/8"	39#	14838'	300	
Open	6-1/2"			17300'		

Casing/Cement Program: Additional Comments

See attached Proposed Re-enter Wellbore and Procedure to Convert. C-108 was submitted and approved.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular	5000	5000	

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
I further certify that I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒, if applicable.
Signature: Kayla McConnell

Printed name: Kayla McConnell

Title: Regulatory Analyst

E-mail Address: kmcconnell@btaoil.com

Date: 6/19/2017 Phone: 432-682-3753

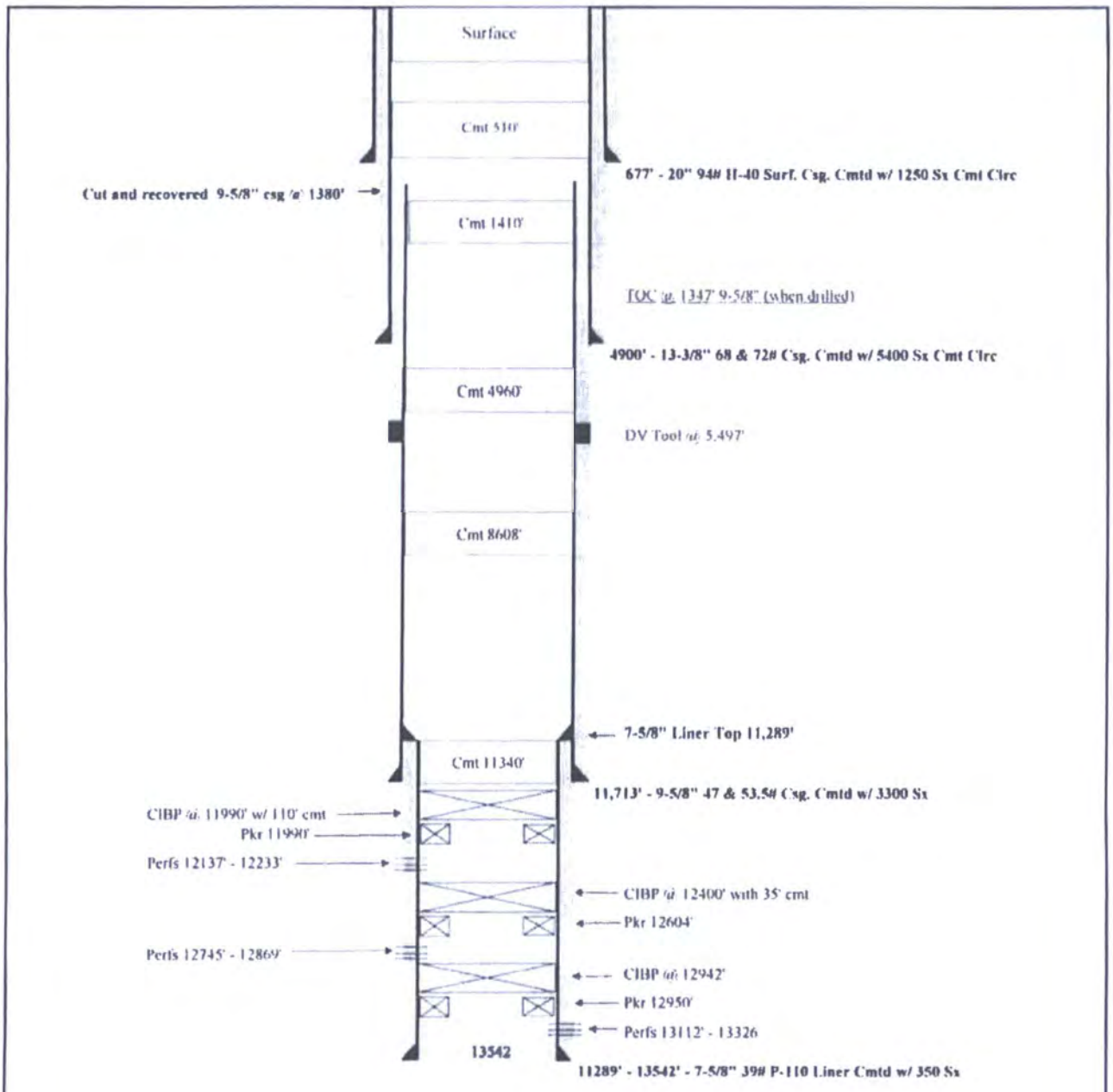
OIL CONSERVATION DIVISION

Approved By:

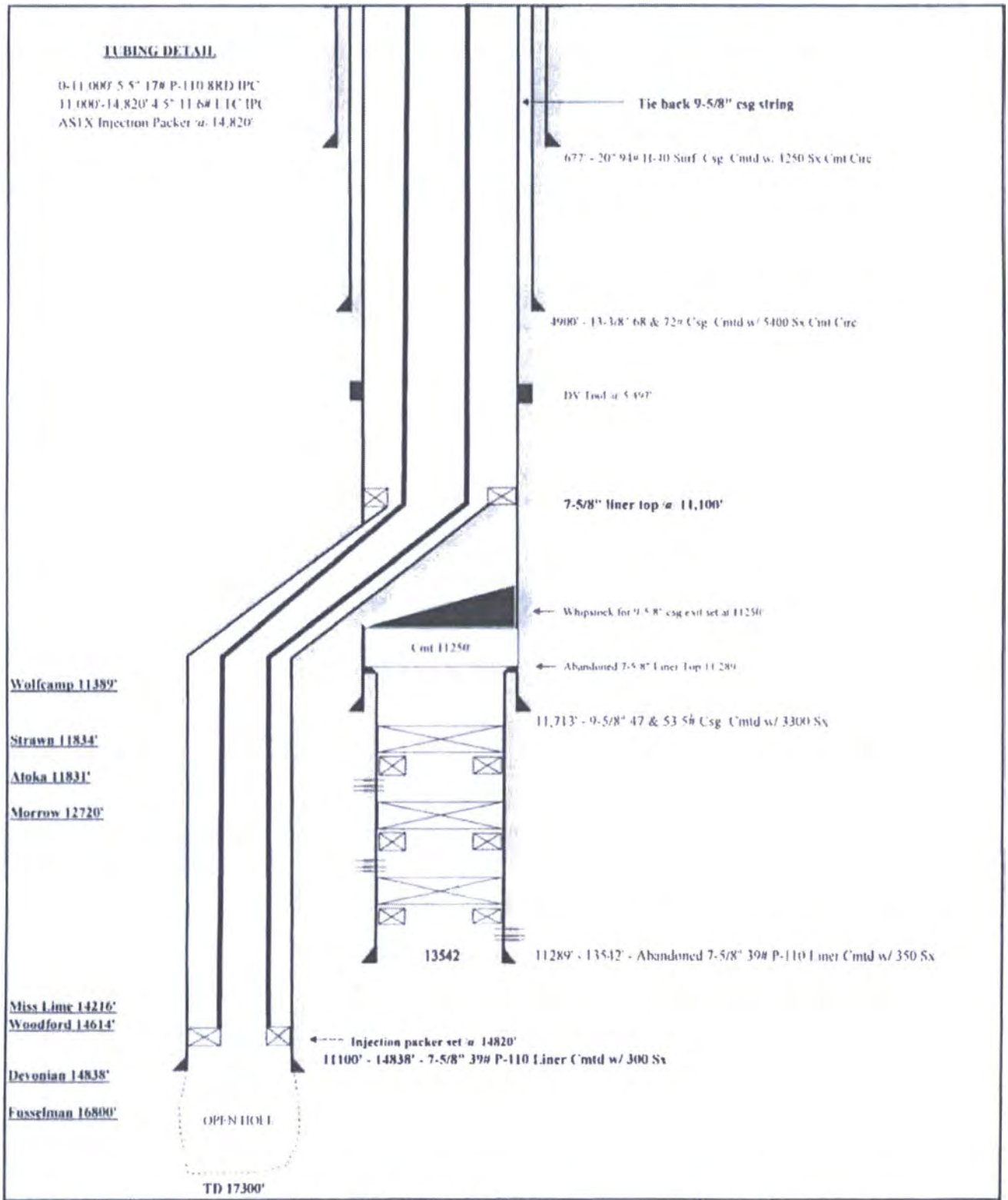
Title: Petroleum Engineer

Approved Date: 06/19/17 Expiration Date: 06/19/19

Conditions of Approval Attached



REVISED		P&A WELLBORE		DRAWN	DATE
		LEASE:	8003 JV-P RIDGE #1	NE	3/22/2017
		FIELD:			
		LOCATION:	Sec 14, T23S-R34E		
		COUNTY: LEA	STATE: NEW MEXICO		
		BTA OIL PRODUCERS, LLC			



REVISED		PROPOSED WELLBORE		DRAWN	DATE
		LEASE:	8003 JV-P RIDGE #1	NE	3/22/2017
		FIELD:			
		LOCATION:	Sec 14, T23S-R31E		
		COUNTY: LEA	STATE: NEW MEXICO		
		INJECTION FORMATION	DEVONIAN		
		BTA OIL PRODUCER, LLC			

State of New Mexico
Energy, Minerals and Natural Resources Department

Administrative Order SWD-1672
May 5, 2017

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Pursuant to the provisions of Division Rule 19.15.26.8B. NMAC, BTA Oil Producers, LLC (the "operator") seeks an administrative order for its 8006 JV-P Ridge SWD Well No. 1 with a location of 1980 feet from the South line and 1980 feet from the East line, Unit J of Section 14, Township 23 South, Range 34 East, NMPM, Lea County, New Mexico, for the purpose of commercial disposal of produced water.

THE DIVISION DIRECTOR FINDS THAT:

The application has been duly filed under the provisions of Division Rule 19.15.26.8B. NMAC and satisfactory information has been provided that affected parties as defined in said rule have been notified and no objections have been received within the prescribed waiting period. The applicant has presented satisfactory evidence that all requirements prescribed in Rule 19.15.26.8 NMAC have been met and the operator is in compliance with Rule 19.15.5.9 NMAC.

IT IS THEREFORE ORDERED THAT:

The applicant, BTA Oil Producers, LLC (OGRID 260297), is hereby authorized to utilize its 8006 JV-P Ridge SWD Well No. 1 (API 30-025-26692) with a location of 1980 feet from the South line and 1980 feet from the East line, Unit J of Section 14, Township 23 South, Range 34 East, NMPM, Lea County, for disposal of oil field produced water (UIC Class II only) through an open-hole interval consisting of the Devonian and Silurian formations from 14838 feet to approximately 17300 feet.

Injection will occur through internally-coated, 5-1/2-inch or smaller tubing inside the surface and intermediate casings, **and a tapered 4-1/2-inch tubing inside the liner**. Further, a packer shall be set within 100 feet of the top of the open-hole interval.

This permit does not allow disposal into the Ellenburger formation (lower Ordovician) or lost circulation intervals directly on top and obviously connected to this formation. The operator shall provide logs and a mudlog over the proposed interval which verify that only the permitted interval is completed for disposal.

IT IS FURTHER ORDERED THAT:

The operator shall run a CBL (or equivalent) across the 7-5/8-inch liner from approximately 10500 feet to 14838 or from approximately 500 feet from the top of liner to the top of the Devonian formation whichever is greater, to demonstrate good cement across the liner.

The operator shall take all steps necessary to ensure that the disposed water enters only the approved disposal interval and is not permitted to escape to other formations or onto the surface. This includes the completion and construction of the well as proposed in the application and, if necessary, as modified by the District Supervisor.

After installing tubing, the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer. The casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The well shall pass an initial mechanical integrity test ("MIT") prior to initially commencing disposal and prior to resuming disposal each time the disposal packer is unseated. All MIT procedures and schedules shall follow the requirements in Division Rule 19.15.26.11(A) NMAC. The Division Director retains the right to require at any time wireline verification of completion and packer setting depths in this well.

The wellhead injection pressure on the well shall be limited to **no more than 2968 psi**. In addition, the disposal well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressure to the maximum allowable pressure for this well.

The Director of the Division may authorize an increase in tubing pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the disposed fluid from the target formations. Such proper showing shall be demonstrated by sufficient evidence including but not limited to an acceptable Step-Rate Test.

The operator shall notify the supervisor of the Division's District I office of the date and time of the installation of disposal equipment and of any MIT so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of disposal to the Division's District I office. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Division Rules 19.15.26.13 and 19.15.7.24 NMAC.

The injection authority granted under this order is not transferable except upon Division approval. The Division may require the operator to demonstrate mechanical integrity of any injection well that will be transferred prior to approving transfer of authority to inject.

The Division may revoke this injection order after notice and hearing if the operator is in violation of Rule 19.15.5.9 NMAC.

The disposal authority granted herein shall terminate two (2) years after the effective date of this Order if the operator has not commenced injection operations into the subject well. One year after the last date of reported disposal into this well, the Division shall consider the well abandoned, and the authority to dispose will terminate *ipso facto*. The Division, upon written request mailed by the operator prior to the termination date, may grant an extension thereof for good cause.

Compliance with this Order does not relieve the operator of the obligation to comply with other applicable federal, state or local laws or rules, or to exercise due care for the protection of fresh water, public health and safety and the environment.

Jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh or protectable waters or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the disposal authority granted herein.

David R. Catanach

DAVID R. CATANACH
Director

DRC/mam

cc: Oil Conservation Division – Hobbs District Office
New Mexico State Land Office – Oil, Gas, and Minerals
Well File – 30-025-26692