DATE IN 4/14/2016	SUSPENSE	ENGINEER PPG	LOGGED IN 4/14/2016	TYPE SWD	APP NO. PMAM1631954872

1571-B

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- 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

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify ______________

- SWD
- Mesquite SWD Inc
161968

Well
- 7811 JV-P
Vacuum Devonian
SWD #1
30-025-23895
Pool
- SWD; Devonian - Silurian
96101
97869

[2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☐ Offset Operators, Leaseholders or Surface Owner

[C] ☐ Application is One Which Requires Published Legal Notice

[D] ☐ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **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.

Kay Havenor	See Application to Inject	Consultant	11-14-2016
Print or Type Name	Signature	Title	Date

____
e-mail Address

Form 3160-5
(June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Hobbs
HOBBS OCD
OCT 12 2016
RECEIVED

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.
NMNM26394

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☐ Oil Well ☐ Gas Well ☑ Other SWD

8. Well Name and No.
7811 JV-P VACA DRAW UNIT SWD #1

2. Name of Operator MESQUITE SWD, INC (161968)

9. API Well No.
30-025-23895 ✓

3a. Address PO BOX 1479
CARLSBAD NM 88221-1479

3b. Phone No. *(include area code)*
575-706-7288

10. Field and Pool or Exploratory Area
SWD;DEVONIAN

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*
658' FSL & 662' FEL, SESE SEC 21, T25S-R33E UL-P-

11. Country or Parish, State
LEA

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
	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☑ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	NAME CHANGE

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 perfonned 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 detennined that the site is ready for final inspection.)

IN ACCORDANCE WITH COA, MESQUITE INTENDS TO CHANGE THE NAME OF THE WELL
FROM: 7811 JV-P VACA DRAW UNIT SWD #1
TO: VACA DRAW FED SWD #1

NEW PROPERTY ID 317129

SUBJECT TO LIKE
APPROVAL BY STATE

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)*
RILEY G NEATHELRIN

Title PRODUCTION FOREMAN

Signature

Date 9/30/16

APPROVED
OCT 18 2016
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

THE SPACE FOR FEDERAL OR STATE OFICE 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 operations thereon.

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)

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: Mesquite SWD, Inc

ADDRESS: P.O. Box 1478 Carlsbad, NM 88220

CONTACT PARTY: Kay Havenor PHONE: 575-626-4518

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: Kay Havenor TITLE: Agent

SIGNATURE: Kay C Havenor DATE: 10/16/2016

E-MAIL ADDRESS: Kay.Havenor@Gmail.com Mesquite SWD, Inc contact: ClayLWilson@hotmail.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.

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Mesquite SWD, Inc. (OGRID 161968)

WELL NAME & NUMBER: 7811 JV-P Vaca Draw Unit SWD #1 30-025-23895

(Note: This is a new survey correction of original reported 660' FSL & FEL)

WELL LOCATION:	687.5' FSL & 661.5' FEL	P	21	25S	33E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC

See attached diagram

PROPOSED WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 24" Casing Size: 20" Surface 30# H40

Cemented with: 1550 sx. *or* ____ ft³

Top of Cement: Surface Method Determined: Circulated

1st Intermediate-Casing

Hole Size: 17½" Casing Size: 13⅜ 61/68#

Cemented with: 3200 sx. ____

Top of Cement: Surface Method Determined: Circulated

2ND Intermediate-Casing

Hole Size: 12¼" Casing Size: 10¾"

Cemented with: 2100 sx. or ____ ft³

DV tool @ 6601'

Top of Cement: Surface Method Determined: Circulated

Total Depth: 17,909' (Base csg 12,690')

Injection Interval

Proposed 17,498' To 19,042'

(Perforated or Open Hole; indicate which) Open Hole

INJECTION WELL DATA SHEET

Tubing Size: 4-1/2" P110/N-80 Lining Material: Fiberglass coated

Type of Packer: Lok-Set or equivalent

Packer Setting Depth: Approx 17,498' ft (in new side-tracked hole)

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

Additional Data

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

   If no, for what purpose was the well originally drilled? Gas Vaca Draw Unit

   P&A 2/20/1973

2. Name of the Injection Formation: Siluro-Devonian

3. Name of Field or Pool (if applicable): Vaca Draw Unit

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

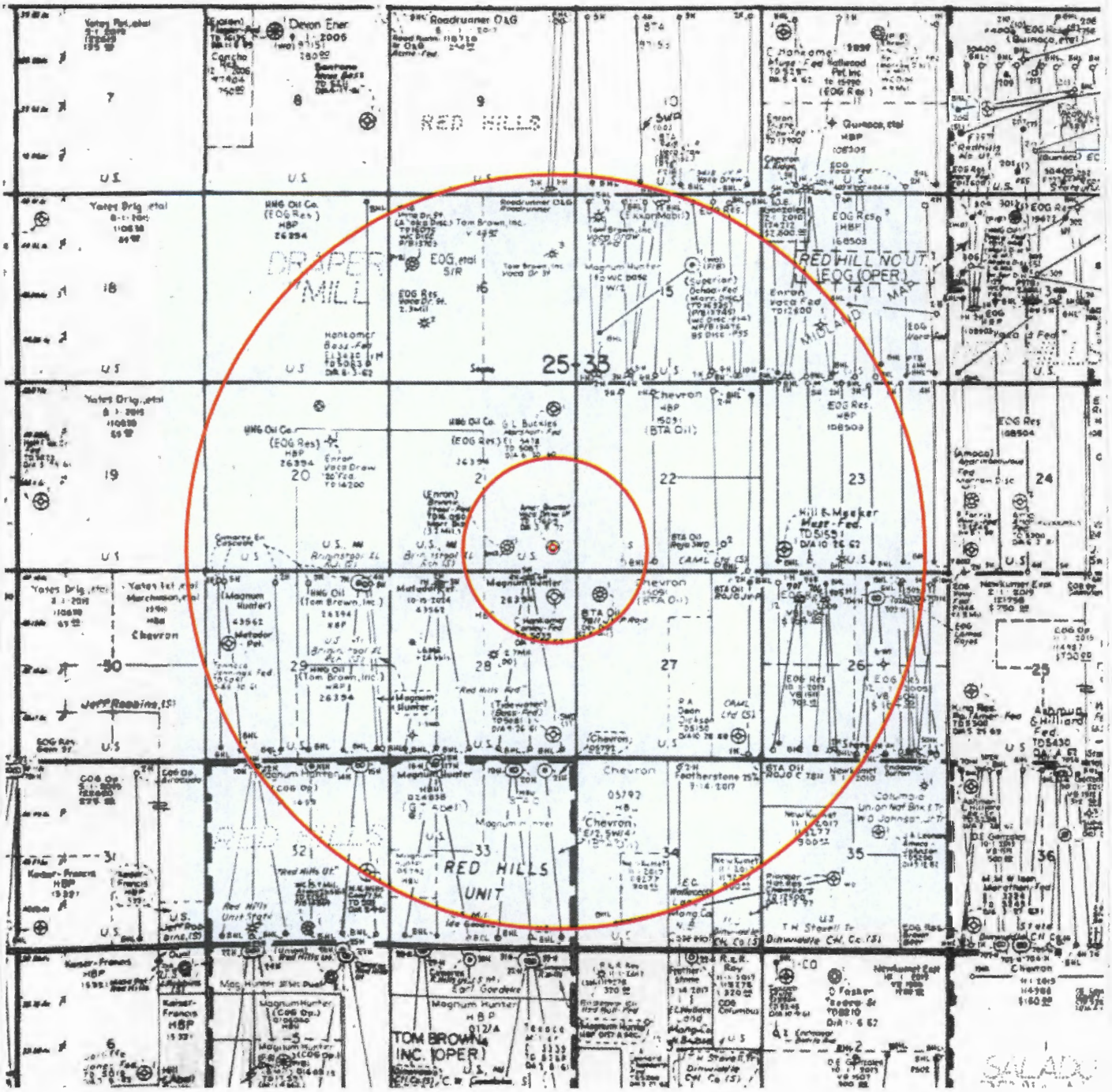
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Delaware sand 4977', Bone Springs 9324',Siluro-Devonian 17,400' +/-

Mesquite SWD, Inc.
7811 J V-P Vaca Draw Unit SWD #1
657.5' FSL & 661.5' FEL
Sec. 21, T25S-R33E Lea County, NM

API 30-025-23895

Item V:

Area of Review
½ Mile AOR and 2 Mile Radius



Mesquite SWD, Inc.
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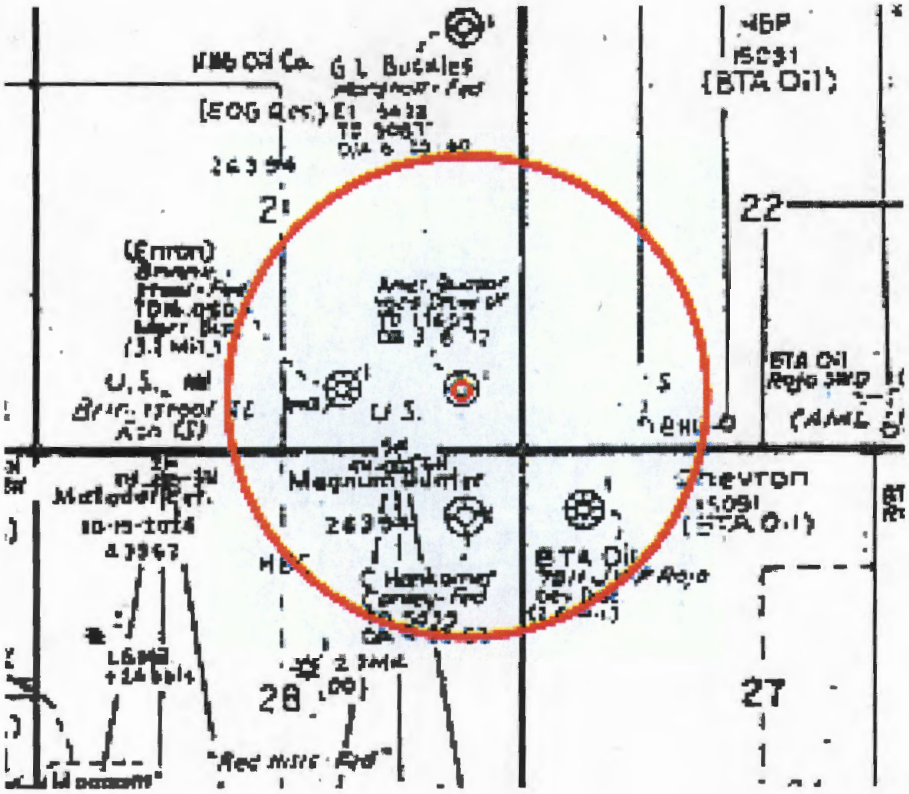
API 30-025-23895

Item V (a):

AOR Half - Mile



Mesquite SWD, Inc.
7811 J V-P Vaca Draw Unit SWD #1
657.5' FSL & 661.5' FEL
Sec. 21, T25S-R33E Lea County, NM

API 30-025-23895

Item VI: Data on wells in AOR:

API	WELL_NAME	STATUS	SDIV	SEC	TWN	RANGE	FTG_	NS	FTG	EW	OCD	OPERATOR	WELL	LAND	PLUG_DATE	SPUD	ELEVGL	TVD_DEPTH
3002539943	VACA 14 FEDERAL 006H	drilled or	C	14	25.0S	33E	50	N	2130	W	C	EOG RESOURCES INC	O	F		07-Sep-12	3366	9445
3002539944	VACA 14 FEDERAL COM 005H	drilled or	D	14	25.0S	33E	50	N	330	W	D	EOG RESOURCES INC	O	F		05-Dec-10	3369	14092
3002537839	VACA 14 FEDERAL 002H	Active	I	14	25.0S	33E	1980	S	330	E	I	EOG RESOURCES INC	O	F		25-May-06	3352	12299
3002534118	VACA 14 FEDERAL 001	Plugged	K	14	25.0S	33E	1650	S	1650	W	K	EOG RESOURCES INC	O	F	07-Oct-97	20-Sep-97	3352	12600
3002535445	VACA DRAW 15 FEDERAL 001	Active	D	15	25.0S	33E	660	N	660	W	D	CIMAREX ENERGY CO. OF COLORADO	G	F		20-Jul-01	3381	13779
3002527623	OCHOA FEDERAL 001H	Active	G	15	25.0S	33E	1979	N	1979	E	G	EOG RESOURCES INC	O	F		20-Nov-81	3369	15185
3002530050	BRINNINSTOOL 21 FEDERAL 001	Plugged	O	21	25.0S	33E	660	S	1980	E	O	EOG RESOURCES INC	G	F	07-Jan-04	30-Jun-92	3364	16050
3002523895	VACA DRAW UNIT 001	Plugged	P	21	25.0S	33E	660	S	660	E	P	AMERICAN QUASAR PET	O		20-Feb-73	10/2/1971	3350	17609
3002542897	ROJO B 7811 JV P 001H	drilled or	C	22	25.0S	33E	210	N	2178	W	C	BTA OIL PRODUCERS, LLC	O	F		11-Nov-15	3370	9347
3002526188	ROJO 7811 JV-P 001	Active	D	27	25.0S	33E	660	N	660	W	D	BTA OIL PRODUCERS, LLC	G	F		2/9/1979	3339	17525
3002508390	CONLEY FEDERAL 001	Plugged	A	28	25.0S	33E	660	N	660	E	A	CURTIS HANKAMER	O	F	28-Apr-62	12-Apr-62	3354	5039

3002530050 EOG Resources, Inc. Unit O. Sec 21, T25S-R33E Lea Co. Elev 3364 GL, Spudded 10/5/1987, 17½' hole set 640' 13⅜" 48# H40 STC with 650 sx cmt to surface. 12¼" hole set 4875' 9 ⅝" 40# K55 & 36# K55 L/STC with 1900 sx cmt to surface. 8½" hole set 13264' 7" 26# P110 S/L & LTC w/1425 sx cmt, Opr est TOC 8600'. 4½" liner 12889'-16047' 15.10# P110 cmt with 425 sx. PBTD 15954' Perf 15764-66'. Perf 15759'-15766'. Perf 15170'-15380. TA Morrow sand plug approx 14900'. Perf Wolfcamp 13676-13686'. Cut stuck tbg 12816', CIBP +35' cmt CBL tagged @12728'. Set 40 sx cmt 12525'-12729'. Apollo perf I SPF 9541'-9555', 9575'-9615', 9669'-9683', 9731'-9755'. CIBP 9529'. CIBP @ 9529' + 22' cmt. Perf 9379'-9380'. CIBP 9350' + 25 sx cmt to 9286. Cut csg @ 6350'. Recut @ 6350'. Pulled 7". 50 sx cmt 6300'-6416', tagged 6271'. 75 sx cmt 4925'-4792', tagged @ 4741'. 35 sx cmt 1900'-2000'. 35 sx cmt 1350'-1450'. 45 sx cmt 590'-690' tagged @564'. 25 sxs 61' to surface. P&A 1/17/2004.

3002523895 American Quasar Petroleum Co. Of New Mexico Unit P, Sec 21,T25S-R33E Lea Co. Elev 3358 GL. Spudded 10/2/1971. 24" hole for 920' 20" 94# N-40 STC with 1550 sx cmt circ to surface. 17½" hole set 13⅜" 61/68# @ 4906' w/3200 sx cmt circ to surface. 12¼" hole set 10¾" 13,004' w/3375 sx cmt circulated to surface. 8¾"hole set 7¾" liner 45.3# @ 12715'-17495' w/2600 sx cmt circ to surface. Extensive DST, perf and completion attempts were made (below new proposed side track 12600' - 17375'). All tested zones were not producible or were water-wet. Non-OCD data indicates P&A cmt plugs 13100'-13210', 12615'-12715', 6500'-6600', 4800'-4900', 900'-100', and 10 sx cmt surface.

Mesquite SWD, Inc.
7811 J V-P Vaca Draw Unit SWD #1
657.5' FSL & 661.5' FEL
Sec. 21, T25S-R33E Lea County, NM

API 30-025-23895

Item VI: Data on wells in AOR (continued)

3002534118 EOG Resources, Inc. Unit K, Sec 14, T25S-R33E Lea Co. Elev 3352 GL, Spudded 9/20/1997, 14¾" hole set 650' 11¾" 42# with 400 sx cmt to surface. 11" hole set 4845' 8⅝" 32# HCK-55 STC & 32# J-55 STC with 1425 sxs cmt circ to surface. TD 12600'. Plugs 100' cmt over 9291-9191', 7813-7713', 6402-6302', 4895-4795', 700-600', and surface 10'. P&A 10/6/1977.

3002508390 Curtis Hankamar Unit A, Sec 28, T25S-R33E Lea Co. Elev 3354 GL. Spudded 4/12/1962. Set 324' 8⅝ csg w/ 200 sx cmt. TD 5039'. Set 20 sxs cmt plugs 5039'-4976', 4620'-4555', 1210'-1165', 1210'-1165', 324'-265', and 10 sxs at surface. P&A 4/22/1962.

30-025-26188 BTA Oil Producers, LLC Unit D, Sec 27, T25S-R33E, Lea Co. An active well. Originally tested the Devonian as water wet, plugged back and completed in the Atoka. Presently active gas well 15018'-15856'.

Mesquite SWD, Inc.
7811 J V-P Vaca Draw Unit SWD #1
657.5' FSL & 661.5' FEL
Sec. 21, T25S-R33E Lea County, NM

API 30-025-23895

Item VII:

1. The maximum injected volume anticipated is 40,000 BWPD. Average anticipated is 30,000 BWPD.
2. Injection will be through a closed system.
3. Maximum injection pressure is expected to be 3,500 psi, or as controlled by depth.
4. Sources will be produced water that is compatible with known waters in the disposal zones.
5. Water sample analyses from the surrounding Siluro-Devonian area are not know. However, the regional information suggests it is non-productive of hydrocarbons. The closest water sample is from the Delaware in Sec. 25, T26S-R32E. It is representative of Delaware water received for disposal.

General Information About: Sample 4222			
NORTH EL MAR UNIT 022			
API	3002508278	Sample Number	
Unit/Section/ Township/Range	J / 25 / 26 S / 32 E	Field	EL MAR
County	Lea	Formation	DEL
State	NM	Depth	
Lat/Long	32.01136 / -103.62579	Sample Source	UNKNOWN
TDS (mg/L)	244815	Water Type	
Sample Date(MM/DD/YYYY)		Analysis Date(MM/DD/YYYY)	
Remarks/Description			
Cation Information (mg/L)		**Anion Information (mg/L)**	
Potassium (K)		Sulfate (SO)	220
Sodium (Na)		Chloride (Cl)	153500
Calcium (Ca)		Carbonate (CO_3)	
Magnesium (Mg)		Bicarbonate (HCO_3)	88
Barium (Ba)		Hydroxide (OH)	
Mangariese (Mn)		Hydrogen Sullide (H_2S)	
Strontium (Sr)		Carbon Dioxide (CO_2)	
Iron (Fe)		Oxygen (O)	

Data obtained from http://octance.nmt.edu

Mesquite SWD, Inc.
7811 J V-P Vaca Draw Unit SWD #1
657.5' FSL & 661.5' FEL
Sec. 21, T25S-R33E Lea County, NM

API 30-025-23895

Item VIII:

Disposal will be into the Siluro-Devonian formations above the Montoya Formation.
There is no known potable water within a 2-mile radius. Records from the New Mexico Office of the State Engineer on May 27, 2016 show no known water wells within a 2-mile radius of the proposed Mesquite SWD disposal well.

New Mexico Office of the State Engineer

Wells with Well Log Information

No wells found.

Basin/County Search:
County: Eddy

UTMNAD83 Radius Search (in meters):
Easting (X): 666330 Northing (Y): 3556940 Radius: 3200

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

5/27/16 6:44 PM Page 1 of 1 WELLS WITH WELL LOG INFORMATION

The surface geology of the greater area, including the 2-mile radius as shown in Item V above, is Quaternary eolian Holocene underlain or upon the Permian Rustler Formation and evaporites. Based upon surface geology and available shallow data the depth to potential potable water (not hole depth), if present, is estimated to be less than 200'

Mesquite SWD, Inc.
7811 J V-P Vaca Draw Unit SWD #1
657.5' FSL & 661.5' FEL
Sec. 21, T25S-R33E Lea County, NM

API 30-025-23895

Item IX:

Acid may be applied after completion. No other formation stimulation is currently planned.

Item X:

No new open-hole logs are required ← OCD will requirethem

Item XI:

No water wells are reported in the 2-mile radius of the proposed SWD. Please note Item VIII discussion above.

Item XII:

There is no geological evidence of open faults or hydrologic connection between the disposal zone and any possible underground sources of protectable water.

Addendum:

Proposed re-entry - Casing program

Drill-out P&A plugs 600-1000', 4800-4900', 6500-6600' and tag plug at 12600' inside 10¾" casing (that was cemented to surface in original drill). Kick-off with 9⅝" side-track hole through 10½" csg at 12600' for approximately 10-25', then vertical drill to 17498'. Run 7⅝" 39# LTC with appropriate DV location to insure cement from 17498' back to cover the kick-off point inside the 10½" csg. Drill out from casing with 6¼" bit for open-hole zone to TD 19042'.

Mesquite SWD, Inc.
7811 J V-P Vaca Draw Unit SWD #1
657.5' FSL & 661.5' FEL
Sec. 21, T25S-R33E Lea County, NM

API 30-025-23895

PROPOSED RE-ENTRY WELL DIAGRAM

API: 3002523895
Operator: Mesquite SWD, Inc
Lease: 7811-JV-P Vaca Draw Unit SWD
Location: Sec 21, T25S-R33E Lea Co., NM
Footage: 657.5' FSL, 661.5 FEL

Well No: 1

KB: 3392
GL: 3358
MSL of TD: -14591

Surface Csg
Size: 20" H-40 STC
Set @: 920
Sxs cmt: 1550
Circ: Yes
TOC: Surf

Intermediate Csg
Size: 13-3/8" 61#68# N-80 LTC
Set @: 4,986
Sxs cmt: 3200
Circ: Yes
TOC: Surf
Hole Size: 17-1/2"

Intermediate-2 Csg
Size: 10-3/4" 53.5# L-80 LTC
Set @: 13004
Sxs cmt: 3375
Circ: Yes
Hole Size: 12-1/4"

Re-entry Side Track-sleeve
Size: 7-5/8"39 # LTC
Set @: 12690
Sxs cmt: 0
Circ:
Hole Size: Inside -9-5/8" Intermediate

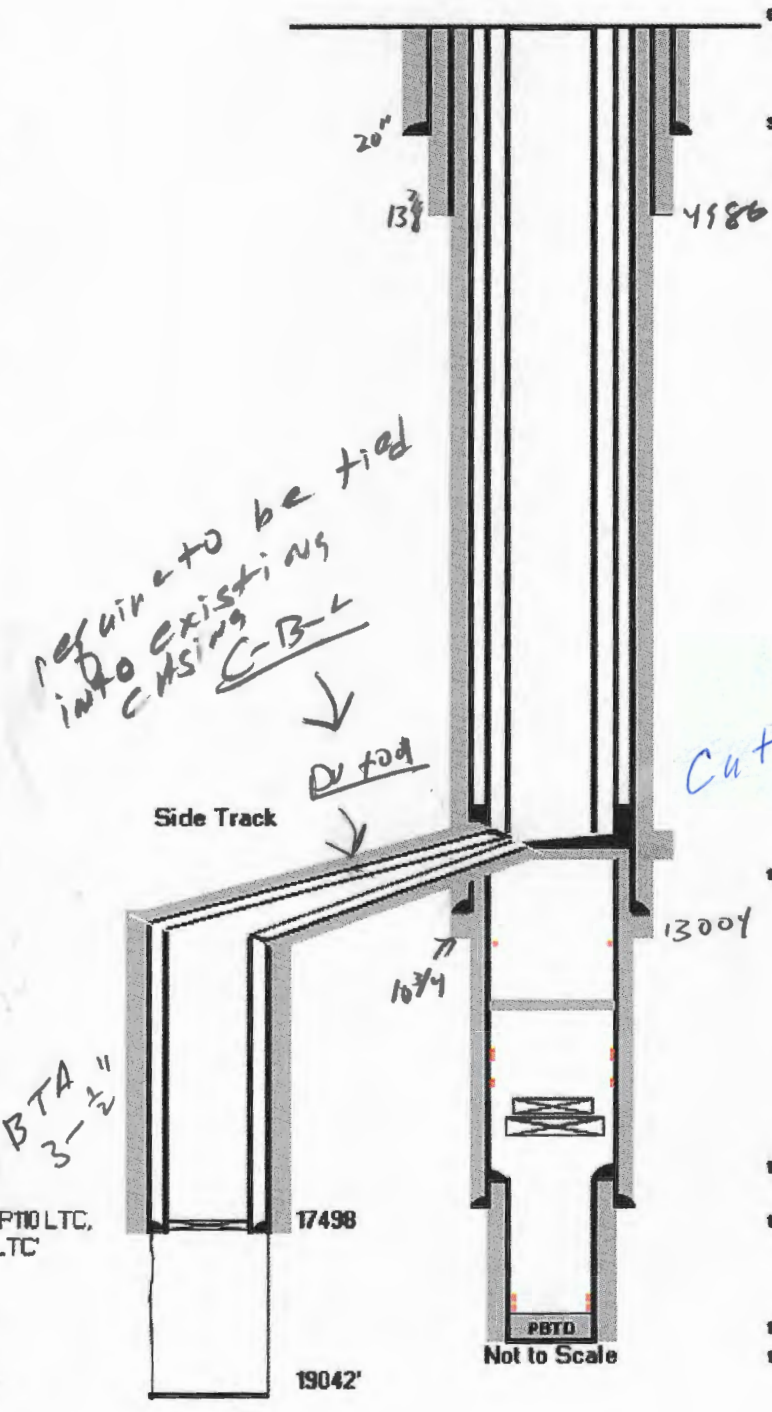
Liner (Below Side Track)
Size: 7-5/8"39 # LTC
Top 12715
Set @ 17498
Sx cmt 2600
Circ Yes
Hole Size: 8-3/4"

Open Hole (For Side Track)
Size
Interval 17498-19042'
Hole Size 6-1/4"

Tubular requirements (made-up):
17,498 + estimate 15' offset 4-1/2"
w/0-5800' 11.6# P-110 BUT, 6200' 11.6# P110 LTC,
1700' 13.5# N80 LTC, 3805 13.5# P110 LTC'

Lok-Set or equivalent approx 17498'.'

Open hole acid if reqiuried.
Tubing annulus w/corrosion inhibitor
Complete surface head for disposal



0
920 Rustler 1007
Delaware Lime 4955
Bone Springs est 9067'
3rd Bone Spng Sand 11635'
Wolfcamp12366'
Exit 10-3/4"" 12600'
12715 Top of liner
Strawn 14185'
Atoka 14462'
Morrow 14741'
Barnett 15575'
16782 Miss Lo 16826'
17498 Top Siluro-Devonian
17599
17875 TD

require to be tied into existing CASING C-B-L

DV tool

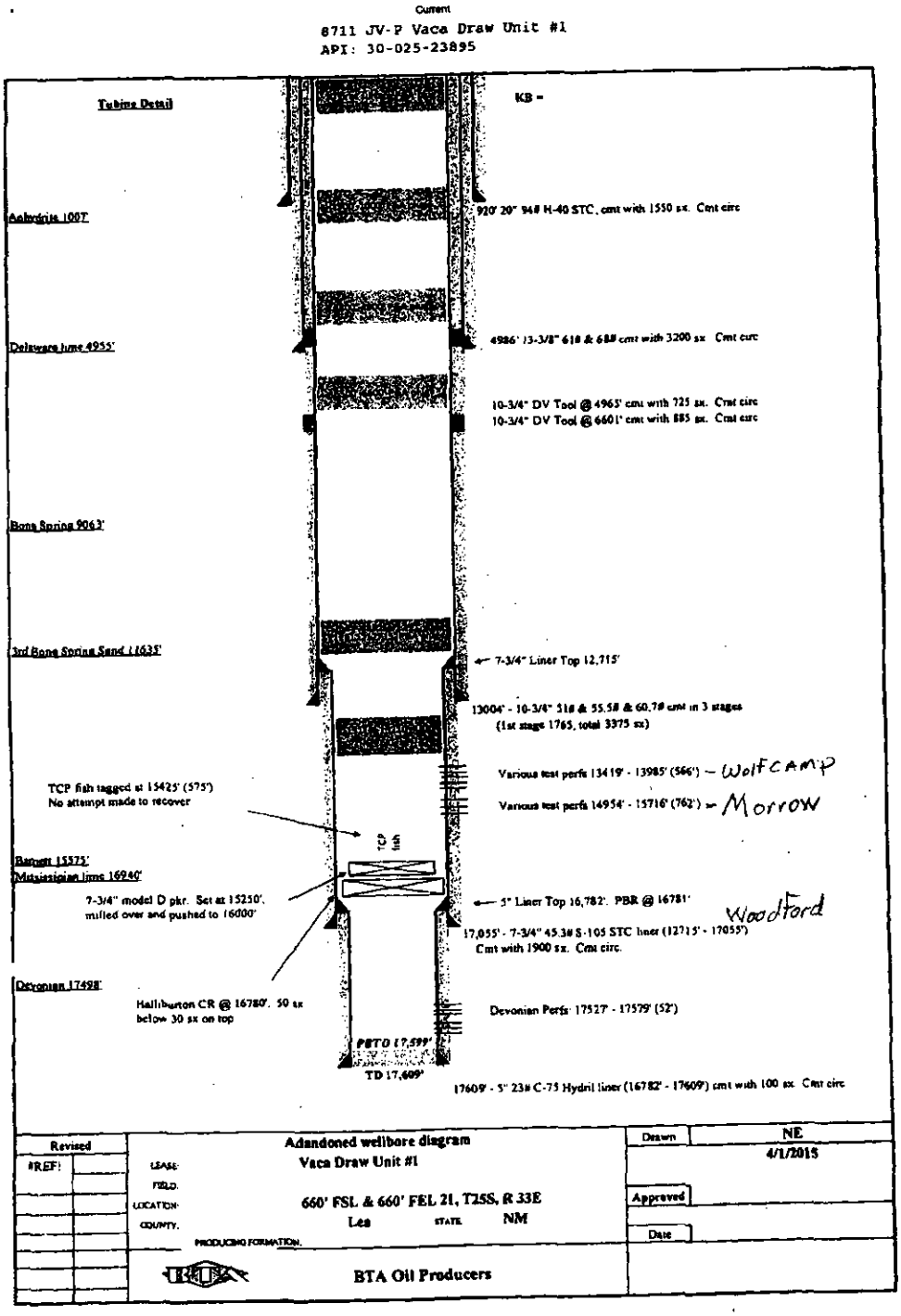
Cut window & mill

BTA 3-1/2"

Mesquite SWD, Inc.
7811 J V-P Vaca Draw Unit SWD #1
657.5' FSL & 661.5' FEL
Sec. 21, T25S-R33E Lea County, NM

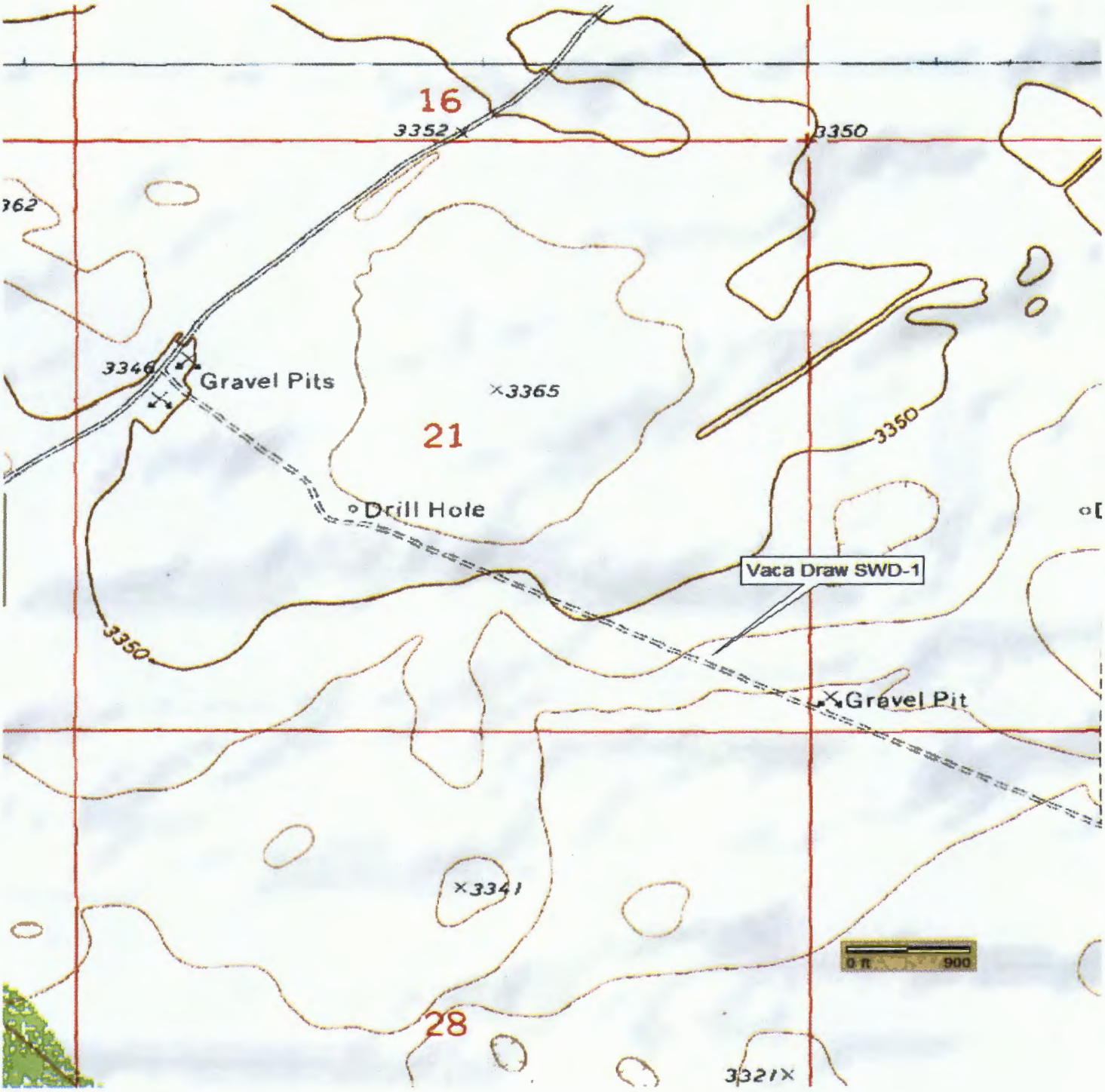
API 30-025-23895

P&A 7811 J V-P Vaca Draw Unit #1 (Proposed re-entry well)



Mesquite SWD, Inc.
7811 J V-P Vaca Draw Unit SWD #1
657.5' FSL & 661.5' FEL
Sec. 21, T25S-R33E Lea County, NM

API 30-025-23895



Delorme Xmap 6
16 miles west of Jal, NM

Mesquite SWD, Inc.
7811 J V-P Vaca Draw Unit SWD #1
657.5' FSL & 661.5' FEL
Sec. 21, T25S-R33E Lea County, NM

API 30-025-23895

Item XIII: Proof of Notice

Minerals Owner:

Bureau of Land Management
620 E. Greene St.
Carlsbad, NM 87220

Surface:

Bureau of Land Management

Operators:

BTA Oil Producers, LLC
104 South Pecos
Midland, TX 79701

Sec 27

Chevron USA
15 Smith Road
Midland, TX 79702

Sec 28, 33

Cimarex Energy Company
600 N. Marienfeld St, Ste 600
Midland, TX 79702

Sec 28

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

Mesquite SWD, Inc.
7811 J V-P Vaca Draw Unit SWD #1
657.5' FSL & 661.5' FEL
Sec. 21, T25S-R33E Lea County, NM

API 30-025-23895

Item XIII: Legal Publication

Affidavit of Publication

STATE OF NEW MEXICO)
) ss.
COUNTY OF LEA)

Joyce Clemens being first duly sworn on oath deposes and says that she is Advertising Manager of THE LOVINGTON LEADER, a thrice a week newspaper of general paid circulation published in the English language at Lovington, Lea County, New Mexico; that said newspaper has been so published in such county continuously and uninterruptedly for a period in excess of Twenty-six (26) consecutive weeks next prior to the first publication of the notice hereto attached as hereinafter shown; and that said newspaper is in all things duly qualified to publish legal notices within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico.

That the notice which is hereto attached, entitled Legal Notice was published in a regular and entire issue of THE LOVINGTON LEADER and not in any supplement thereof, for one (1) day(s), beginning with the issue of October 18 , 2016 and ending with the issue of October 18 , 2016.

And that the cost of publishing said notice is the sum of $ 28.38 which sum has been (Paid) as Court Costs.

Joyce Clemens

Joyce Clemens, Advertising Manager
Subscribed and sworn to before me this 18th day of October , 2016.

Gina Fort

Gina Fort
Notary Public, Lea County, New Mexico
My Commission Expires June 30, 2018

OFFICIAL SEAL
GINA FORT
Notary Public
State of New Mexico
My Comm. Expires 6/30/18

Legal Notice

Mesquite SWD, Inc., c/o Kay Havenor, 904 Moore Ave, Roswell, NM 88201, (575) 626-4518, email: Kay@georesources.com, is seeking approval from the New Mexico Oil Conservation Division to re-enter and complete the Mesquite SWD, Inc. 7811 J V-P Vaca Draw Unit SWD No.1 well, API: 30-025-23895, located 657.5' FSL & 661.5' FEL, Sec. 21, T25S-R33E Lea County, NM, 16 miles NW of Jal, NM, for commercial produced water disposal. The proposed disposal interval is into the Siluro-Devonian formations through open-hole approximately17,498' to 19,842 feet. Mesquite SWD, Inc. plans to dispose a maximum 40,000 BWPD at a maximum pressure of 3,500 psi. Parties with questions regarding this proposal are urged to contact Kay Havenor at the email address or phone number above. Interested parties must file objections or requests for hearing within 15 days to the New Mexico Oil Conservation Division, 1220 S. St. Francis Dr., Santa Fe, NM 87505.

Published in the Lovington Leader October 18, 2016

Mesquite SWD, Inc.
7811 J V-P Vaca Draw Unit SWD #1
657.5' FSL & 661.5' FEL
Sec. 21, T25S-R33E Lea County, NM

API 30-025-23895

Item XIII: Certified Mail Receipts

BTA Oil Producers, LLC

Tracking Number: 70150920000176774497

Expected Delivery Day: Thursday, October 20, 2016

Product & Tracking Information

Postal Product:	Features:	
First-Class Mail®	Certified Mail™	Return Receipt

See tracking for related item: 9590940214915329716062

DATE & TIME	STATUS OF ITEM	LOCATION
October 20, 2016, 8:38 am	Notice Left (No Authorized Recipient Available)	MIDLAND, TX 79701
	We attempted to deliver your item at 8:38 am on October 20, 2016 in MIDLAND, TX 79701 and a notice was left because an authorized recipient was not available	
October 20, 2016, 1:44 am	Departed USPS Destination Facility	MIDLAND, TX 79711
October 19, 2016, 1:21 pm	Arrived at USPS Destination Facility	MIDLAND, TX 79711
October 19, 2016, 12:35 am	Departed USPS Facility	LUBBOCK, TX 79402
October 18, 2016, 11:00 pm	Arrived at USPS Facility	LUBBOCK, TX 79402
October 18, 2016, 2:54 pm	Departed Post Office	ROSWELL, NM 88201
October 18, 2016, 10:26 am	Acceptance	ROSWELL, NM 88201

7015 0920 0001 7677 4497

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only
For delivery information, visit our website at www.usps.com®.
MIDLAND TX 79701 OFFICIAL USE

Postage	$3.30
Certified Fee	$2.70
Return Receipt Fee (Endorsement Required)	$0.00
Restricted Delivery Fee (Endorsement Required)	$0.00
Total Postage & Fees	$7.36

0602 06
ROSWELL NM 88201
OCT 18 2016 Postmark Here
10/18/2016

Sent To: BTA Oil Producers, LLC
Street & Apt. No., or PO Box No.: 104 South Pecos
City, State, ZIP+4: Midland, TX 79701

PS Form 3800, July 2014 — See Reverse for Instructions

Cimarex Energy Company

Tracking Number: 70150920000176755953

Expected Delivery Day: Thursday, October 20, 2016

Product & Tracking Information

Postal Product:	Features:	
First-Class Mail®	Certified Mail™	Return Receipt

See tracking for related item: 9590940214915329427623

DATE & TIME	STATUS OF ITEM	LOCATION
October 20, 2016, 10:14 am	Delivered, Left with Individual	MIDLAND, TX 79701
	Your item was delivered to an individual at the address at 10:14 am on October 20, 2016 in MIDLAND, TX 79701	
October 20, 2016, 1:44 am	Departed USPS Destination Facility	MIDLAND, TX 79711
October 19, 2016, 1:21 pm	Arrived at USPS Destination Facility	MIDLAND, TX 79711
October 19, 2016, 12:35 am	Departed USPS Facility	LUBBOCK, TX 79402
October 18, 2016, 11:00 pm	Arrived at USPS Facility	LUBBOCK, TX 79402
October 18, 2016, 2:54 pm	Departed Post Office	ROSWELL, NM 88201
October 18, 2016, 10:26 am	Acceptance	ROSWELL, NM 88201

7015 0920 0001 7675 5953

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only
For delivery information, visit our website at www.usps.com®.
MIDLAND TX 79701 OFFICIAL USE

Postage	$3.30
Certified Fee	$2.70
Return Receipt Fee (Endorsement Required)	$0.00
Restricted Delivery Fee (Endorsement Required)	$0.00
Total Postage & Fees	$7.36

0602 06
ROSWELL NM 88201
OCT 18 2016 Postmark Here
10/18/2016

Sent To: Cimarex Energy Company
Street & Apt. No., or PO Box No.: 600 N. Marienfeld St. Ste 600
City, State, ZIP+4: Midland, TX 79701

PS Form 3800, July 2014 — See Reverse for Instructions

Mesquite SWD, Inc.
7811 J V-P Vaca Draw Unit SWD #1
657.5' FSL & 661.5' FEL
Sec. 21, T25S-R33E Lea County, NM

API 30-025-23895

Item XIII: Certified Mail Receipts (Page. 2)

EOG

SENDER: COMPLETE THIS SECTION

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

1. Article Addressed to:

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

9590 9402 1491 5329 4276 30

2. Article Number (Transfer from service label)
7014 2120 0001 6413 4077

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

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X
☐ Agent
☐ Addressee

B. Received by (Printed Name) J. Berry
C. Date of Delivery 10-24-16

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

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

Domestic Return Receipt

7014 2120 0001 6413 4077

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

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

MIDLAND TX 79702 OFFICIAL USE

Postage	$2.70
Certified Fee	$0.00
Return Receipt Fee (Endorsement Required)	$0.00
Restricted Delivery Fee (Endorsement Required)	$0.00
Total Postage & Fees	$3.36

ROSWELL NM OCT 18 2016 Postmark Here 88201 0602 10/18/2016

Sent To EOG Resources, Inc
Street & Apt. No., or PO Box No. P.O. Box 2267
City, State, ZIP+4 Midland, TX 79702

PS Form 3800, July 2014 See Reverse for Instructions

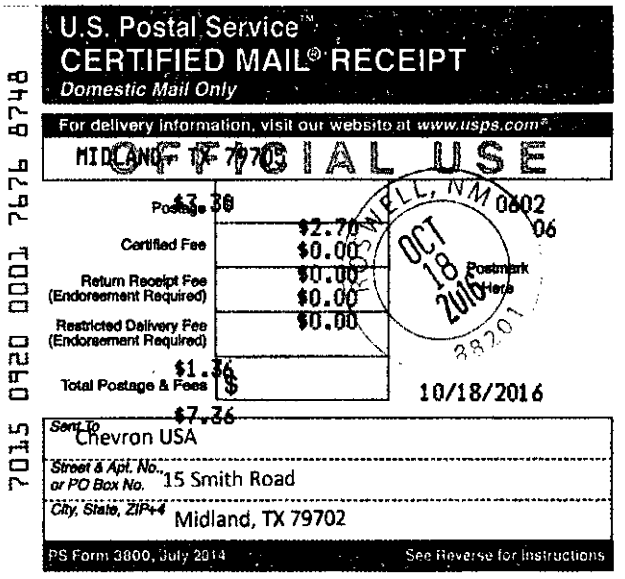
Mesquite SWD, Inc.
7811 J V-P Vaca Draw Unit SWD #1
657.5' FSL & 661.5' FEL
Sec. 21, T25S-R33E Lea County, NM

API 30-025-23895

Item XIII: Certified Mail Receipts (Page 3)

Chevron USA Cert Mail Oct 28, 2016 delivered by USPS Nov 10, 2016

DATE & TIME	STATUS OF ITEM	LOCATION
November 10, 2016 , 1:26 pm	Delivered, To Mail Room	MIDLAND, TX 79706
Your item has been delivered to the mail room at 1:26 pm on November 10, 2016 in MIDLAND, TX 79706.		
November 9, 2016 , 12:13 pm	Out for Delivery	MIDLAND, TX 79701
November 9, 2016 , 12:03 pm	Sorting Complete	MIDLAND, TX 79701
November 9, 2016 , 10:27 am	Arrived at Unit	MIDLAND, TX 79701
November 9, 2016 , 1:29 am	Departed USPS Destination Facility	MIDLAND, TX 79711
November 8, 2016 , 6:49 pm	Arrived at USPS Destination Facility	MIDLAND, TX 79711
November 8, 2016 , 2:01 am	In Transit to Destination	
November 7, 2016 , 3:23 am	Departed USPS Facility	NORTH TEXAS PROCESSING AND DISTRIBUTION CENTER
November 6, 2016 , 2:01 pm	Arrived at USPS Facility	NORTH TEXAS PROCESSING AND DISTRIBUTION CENTER
October 22, 2016 , 11:02 am	Forwarded	MIDLAND, TX
October 21, 2016 , 3:26 pm	In Transit to Destination	
October 19, 2016 , 4:58 pm	Departed USPS Facility	MIDLAND, TX 79711
October 19, 2016 , 1:26 pm	Arrived at USPS Destination Facility	MIDLAND, TX 79711
October 19, 2016 , 12:35 am	Departed USPS Facility	LUBBOCK, TX 79402
October 18, 2016 , 11:00 pm	Arrived at USPS Facility	LUBBOCK, TX 79402
October 18, 2016 , 2:54 pm	Departed Post Office	ROSWELL, NM 88201
October 18, 2016 , 10:26 am	Acceptance	ROSWELL, NM 88201



Miss	Row	C-108	C-108 disposal application submittals... CHECKLIST to ensure all items are supplied or considered.
	1		***Operator, Well, and Contact info:***
	2	II	Name of person submitting the application: Kay Havenor Other Contact?
	3	II	Did you Include a contact Email in the application? Yes and Mailing Address? Yes and Phone? Yes
	4	II	Operator Name: Mesquite SWD, Inc OGRID Num 161968
	5		RULE 5.9 Compliance..... Number of Inactive Wells 2 vs Total Wells Operated 14 .... Is financial assurance required on any well? No Violation
	6		Is there any hearing order finding this operator out of compliance with Division Rule 19.15.5.9 NMAC? No
	7		Are all Rule 5.9 issues OK to allow the Division to issue Disposal Permits?
	8	III	Well Name: 7811 V-P Vaca Draw Unit SWD #1
	9	III	API Num: 30-025-23895 Spud Date:10/2/1971
	10		Have you included API numbers on all wellbore diagrams and well list(s) in this application? Yes
	11	III	Proposed well...Footages 660' FSL & 660' FEL Unit P Sec 21 Tsp 25S Rge 33E County Lea
	12		General Location (i.e. Y miles NW of Z): 16-miles W of Jal, NM
	13		Current Well Status: P&A
	14	I	General Summary of Planned Work to Well: Re-enter and side track in Wolfcamp, drill to base Siluro-Devonian (S-D). Complete S-D open hole for SWD.
	15		***INTERVAL TOP and BOTTOM:***
	16	IIIB.(2)	Proposed disposal 17498' - 19042' Formation Name Siluro-Devonian (include Member Names for Delaware or Mesaverde)
	17	IIIB.(2)	Proposed disposal Bottom Depth: 19,042' Formation Name: Siluro-Devonian
	18	IIIB.(2)	Is the disposal interval OpenHole? Yes or Perfed?
	19	IIIB.(2)	What will be the disposal tubing size OD? 4-1/2" Packer Seat, Feet: 17498'
	20	VII	What max surf inj. psi are you proposing? 3500 If differing from 0.2 psi/ft surf. Grad., is supporting data attached such as a Step Rate Test?

Miss	Row	C-108	C-108 disposal application submittals... CHECKLIST to ensure all items are supplied or considered.
	21		***FRESH WATERS:***
	22	VIII	Depth to bottom of Fresh Waters: less than 200' Formation Name(s)? Quaternary alluvium
	23	XI	Any Fresh Water Wells Within 1 Mile? No If so, did you attach an analysis from these Wells?
	24		Are all "Fresh" waters isolated with Casing and Cement? Yes ("Fresh" water is defined as less than 10,000 mg/l of TDS)
	25	XII	Included "Affirmative Statement" concerning any Connection from Disposal Depths to existing Fresh Waters? Yes Item XII
	26		***WASTE WATERS:***
	27	XIV	Will this be a Lease Only disposal well? No or only used for the Operator's own waste needs? or Commercial Disposal? Yes
	28	VII	Which formations will supply the waste waters to be disposed into this well... List most common: Delaware/Bone Springs
	29	VII	Are Waste waters compatible with proposed disposal interval waters? Yes Did you include waste water analysis? Yes, V11 P. 9
	30		***AT PROPOSED WELL....INSITU WATERS AND HYDROCARBON POTENTIAL:***
	31		Is a discussion included of the potential for future OIL/GAS recovery from the proposed disposal interval? Yes
	32		If your proposed well for disposal is a depleted producer (within the proposed interval); do you know what was the cumulative oil/gas/water? and did you include a Rate-Time plot of this depleted interval?
	33	VII	Insitu water analysis Included? No Is the salinity within the disposal interval more than 10,000 mg/l of TDS? or how will you determine this insitu water salinity? Regional knowledge Siluro-Devonian.
	34	VIII	Does the application include a list of Formation tops down to and including the bottom of the target formation? Yes, on Page 13
	35		What is the top main salt 2795 and bottom 4710 of the Salado Salt (....If this well is in the Southeast and the Salt is present)
	36	X	Are all existing Logs (including any CBL over the disposal interval) are on the OCD Web Site? Yes If logs not there, please send
	37	IIIA.	Are the wellbore diagrams for this well included in the Application.....Before Conversion? Yes and After Conversion? Yes..
	38		Are the top and bottom footage of the proposed disposal interval marked on the "after" diagram? Yes
	39		***NOTICE:***
	40	XIV	

Miss	Row	C-108	C-108 disposal application submittals... CHECKLIST to ensure all items are supplied or considered.
	41	V	Within 1/2 mile, did you clearly identify (either on a map or by legal description) all separately owned tracts of lands within the disposal interval? _Yes
	42	XIII	Did you identify the owner(s) of each of these separately owned tracts? Yes, in Item XIII, P. 15 Were they all formally noticed? Yes
	43	XIII	If reentering a P&Aed well, are there depth divisions of ownership within that well .....If so, have you also noticed all the shallower interests of the intent to use the well for disposal? Yes
	44	XIII	Is the proposed well within the R-111-P defined Potash Area or the BLM Secretaries Potash Area? No ... If so, did you send notice to the nearest Potash lessee?
	45	XIV	Who owns the surface lands at the disposal well site (BLM, SLO, or who)? BLM Was that party formally noticed? Yes
	46		***Area of Review:***
	47	V	Did you include a map identifying all wells within 2 miles? Yes
	48	VI	Did you include a list of all AOR wells? Yes, P. 7 Is the list available to be emailed (if requested) in spreadsheet format? Yes - Included in Item VI list
	50	VI	Did you include wellbore diagrams for all P&Aed wells that exist within the 1/2 mile AOR that penetrate the disposal interval? None present
	51	VI	How many wells exist within the 1/2 mile AOR that penetrate the disposal interval? 1 How many of these are Plugged/Dry and Abandoned? 1 (the re-entry well)
	52	VI	Are details included on cement coverage of the proposed disposal interval for all wells penetrating the disposal interval within 1/2 mile of the proposed well? N/A
	53	VI	Do all reported cement tops describe how that "top" was determined? N/A If you calculated any tops, what fillup efficiency factor did you use?
	54	VI	Did you identify the presence and depth of all Cement Stage Tools (DV) in the subject well and in the AOR wells? When available
	55	VIII	For the target formation, is there significant formation structural depth changes within the 1/2 mile AOR? No
	56	VIII	Is there any Karst or Massive Limestone in this target formation? No ...or in the formations directly above or below? No
	57		***Administrative or Hearing:***
	58	VI	How many wells within the 1/2 mile AOR currently are producing (or still have open perforations) within the disposal interval? 0 is it "gas" or "oil"?
	59		.... NOTE: If the proposed disposal interval is a "Gas" interval or if any AOR wells are producing or have open perforations within this interval then this application may not be properly classified as a "disposal". _These types of applications must be processed at an examiner hearing.
	60		Any other Issues..? No

P. O. BOX 1468
MONAHANS, TEXAS 79756
PHONE 943-3234 OR 563-2992

Martin Water Laboratories, Inc.

COPY

709 W. INDIANA
MIDLAND, TEXAS 79701
PHONE 683-4521

9

RESULT OF WATER ANALYSES

LABORATORY NO. 49057
SAMPLE RECEIVED 4-6-90
RESULTS REPORTED 4-11-90

TO: Mr. Tom Williams
104 South Pecos, Midland, Texas

COMPANY BTA Oil Producers LEASE Rojo
FIELD OR POOL Red Hills
SECTION ___ BLOCK ___ SURVEY ___ COUNTY Lea STATE NM
SOURCE OF SAMPLE AND DATE TAKEN:
NO. 1 Produced water - taken from Rojo #1. 4-5-90
NO. 2
NO. 3
NO. 4
REMARKS: Devonian

CHEMICAL AND PHYSICAL PROPERTIES

	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0849			
pH When Sampled				
pH When Received	6.38			
Bicarbonate as HCO_3	264			
Supersaturation as $CaCO_3$				
Undersaturation as $CaCO_3$				
Total Hardness as $CaCO_3$	18,800			
Calcium as Ca	6,640			
Magnesium as Mg	535			
Sodium and/or Potassium	39,583			
Sulfate as SO_4	472			
Chloride as Cl	73,860			
Iron as Fe	0.14			
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	121,353			
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen,				
Hydrogen Sulfide	27.0			
Resistivity, ohms/m at 77° F.	0.082			
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks: Our area records of Devonian are some 10 and 15 miles to the north of this field. In comparing with those records, we note that this water has decidedly similar ratios of salts but a higher level of the salts than these records to the north. This gives strong implication of the probability that this is a natural water from the Devonian interval and appears to have little, or no, influence from condensed water vapor.

Form No. 3

By Waylan C. Martin, M.A.

COPY

Martin Water Laboratories, Inc.
P. O. BOX 1468
MONAHANS, TEXAS 79756
PH: 943-3234 OR 563-1040
709 W. INDIANA
MIDLAND, TEXAS 79701
PHONE 683-4521

9

RESULT OF WATER ANALYSES

LABORATORY NO. 89713
SAMPLE RECEIVED 8-5-97
RESULTS REPORTED 8-6-97

TO: Mr. Tom Williams
104 South Pecos, Midland, TX 79701-5099

COMPANY BTA Oil Producers LEASE Mesa #1 8105
FIELD OR POOL
SECTION 1 BLOCK SURVEY T-26S&R-32E COUNTY Lea STATE NM
SOURCE OF SAMPLE AND DATE TAKEN:
NO. 1 Produced water - taken from Mesa #1
NO. 2
NO. 3
NO. 4
REMARKS: Wolfcamp

CHEMICAL AND PHYSICAL PROPERTIES

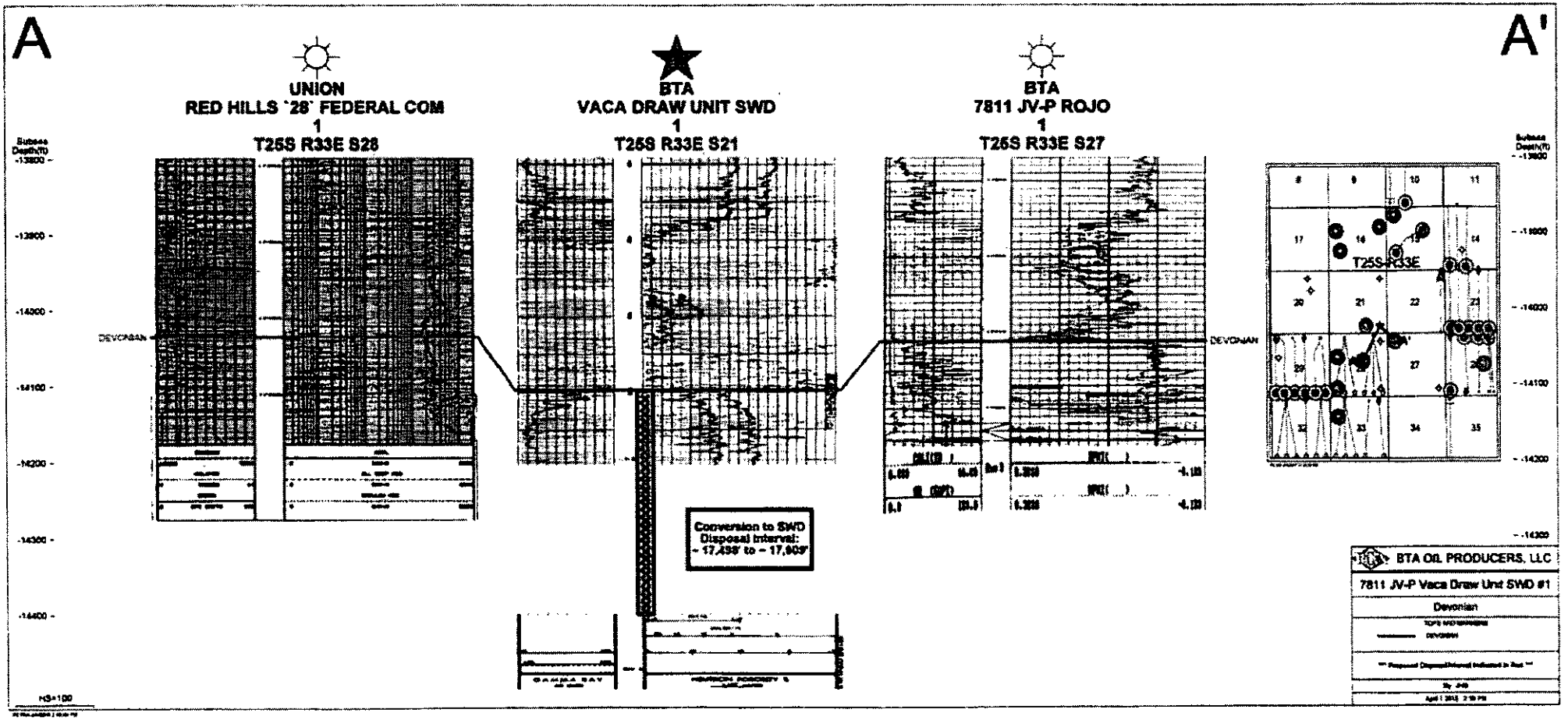
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0156			
pH When Sampled				
pH When Received	7.28			
Bicarbonate as HCO_3	390			
Supersaturation as $CaCO_3$				
Undersaturation as $CaCO_3$				
Total Hardness as $CaCO_3$	720			
Calcium as Ca	232			
Magnesium as Mg	34			
Sodium and/or Potassium	7,483			
Sulfate as SO_4	48			
Chloride as Cl	11,786			
Iron as Fe	371			
Barium as Ba	0			
Turbidity, Electric				
Color as Pt.				
Total Solids, Calculated	19,974			
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen				
Hydrogen Sulfide	11.0			
Resistivity, ohm/m at 77° F.	0.400			
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				

Results Reported As Milligrams Per Liter

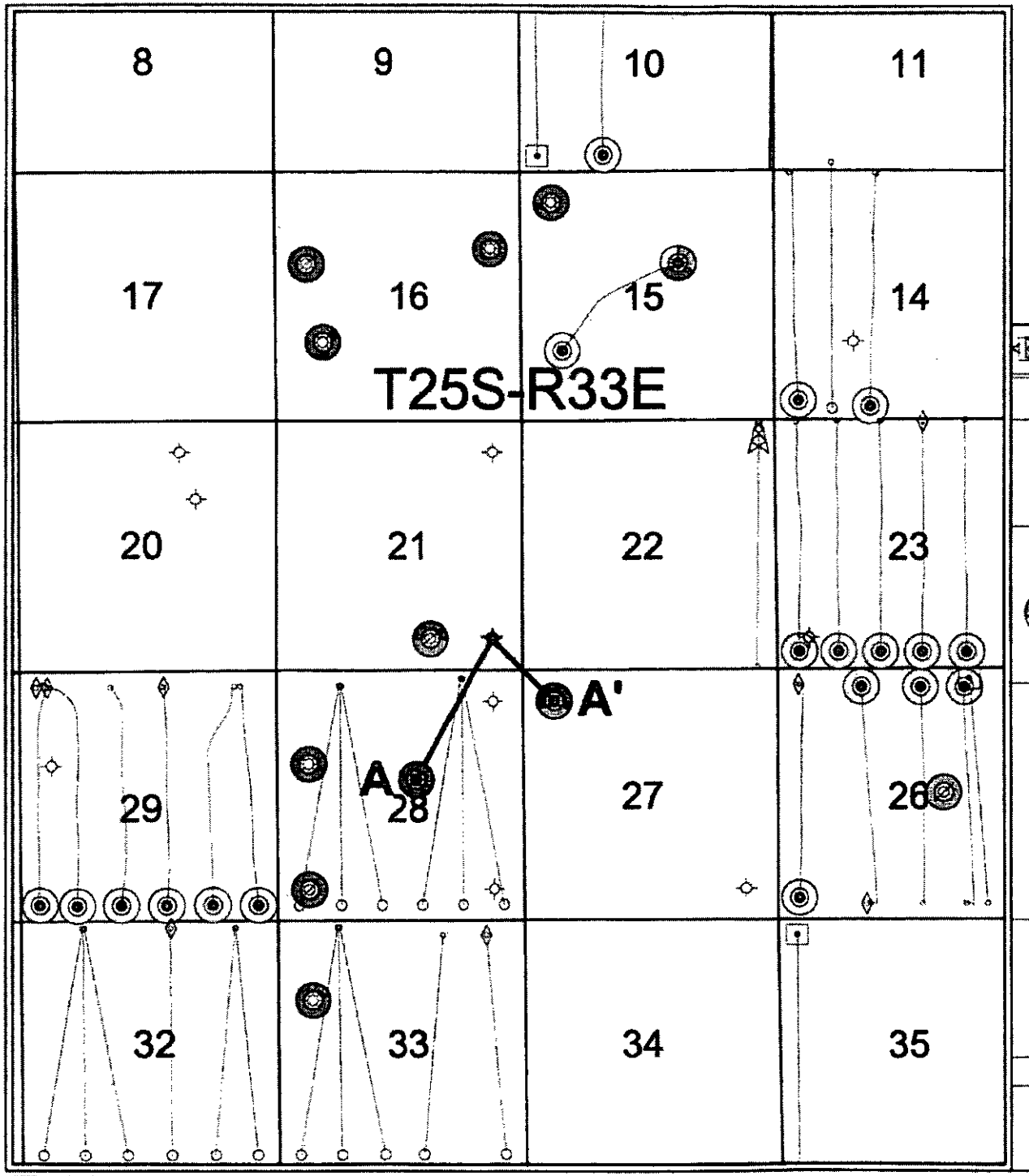
Additional Determinations And Remarks: In comparing this water with our nearest cataloged records some 5 miles to the northeast, we find this water has ratios of salts decidedly similar to what would be expected from a natual Wolfcamp. However, the levels of the salts are approximately one-third those that would be expected from a natural Wolfcamp, therefore strongly indicating a significant dilution influence exists; but there can be some slight amount of Wolfcamp water involved.

Form No. 3

By Waylan C. Martin, M.A.



BTA OIL PRODUCERS, LLC
7811 JV-P Vaca Draw Unit SWD #1
Attachment to C-108
API: 30-025-23895



BTA OIL PRODUCERS, LLC
7811 JV-P Vaca Draw Unit SWD #1
Attachment to C-108
API: 30-025-23895

BTA OIL PRODUCERS, LLC

7811 JV-P Vaca Draw Unit SWD #1

Producing Formation Map

660'FSL & 660'FEL Sec.21,T25S,R33E

Lea Co. New Mexico

ATTRIBUTE MAP

- Producing Formation Contains "DELAWARE"
- Producing Formation Contains "BELL CANYON"
- Producing Formation Contains "BONESPRING"
- Producing Formation Contains "WOLFCAMP"
- Producing Formation Contains "ATOKA"
- Producing Formation Contains "MORROW"
- Producing Formation Contains "DEVONIAN"

WELL SYMBOLS

- Proposed Location
- Location Only
- Drilling Well
- Drilled, Waiting on Completion
- Oil Well
- Gas Well
- Dry Hole
- Injection Well
- Plugged & Abandoned Gas Well
- Plugged And Abandoned Oil and Gas Well
- Pilot Hole

REMARKS

Top of Devonian Stratigraphic Cross Section Shown On Map

Only Wells Within 2 Mile Radius Shown on Map

By: JHB

0 3,000 6,000
FEET

PETRA 4/1/2015 12:54:23 PM

C-108 Review Checklist: Received 5/04/2016 Add. Request: 5/27/2016 Reply Date: _____ Suspended: _____ [Ver 15]

ORDER TYPE: WFX / PMX / SWD Number: 157-A Order Date: _____ Legacy Permits/Orders: SWD-1571

Well No. 1 Well Name(s): 78-11-JV-P UMCA Brown SWD #1

API: 30-0 25-42385 Spud Date: NOTBD New or Old: N (UIC Class II Primacy 03/07/1982)

Footages 660 FSL 660 FEL Lot ___ or Unit P Sec 21 Tsp 25S Rge 33E County Lea

General Location: 2 miles W JAL Pool: SWD; Devonian Pool No.: 96101

BLM 100K Map: JAL Operator: BTA Oil Producers, LLC OGRID: 260297 Contact: Kayla McConnell

COMPLIANCE RULE 5.9: Total Wells: 156 Inactive: 4 Fincl Assur: Y Compl. Order? NA IS 5.9 OK? Y Date: 5-23-2016

WELL FILE REVIEWED ✓ Current Status: P&A

WELL DIAGRAMS: NEW: Proposed ○ or RE-ENTER: Before Conv. ○ After Conv. ○ Logs in Imaging: Y

Planned Rehab Work to Well: run CBL new drill 12500–17494

Well Construction Details	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Stage Tool	Cement Sx or Cf	Cement Top and Determination Method
Planned __or Existing __Surface	24/20	520		1530	Surface/Visual
Planned__or Existing __Interm/Prod	17½/13⅜	4986		3200	Surface/Visual
Planned__or Existing __Interm/Prod	12¼/10¾	12647		2100	Surface/Visual
Planned__or Existing __Prod/Liner	8¾/7"	12500–17550		620	12550/Surf
Planned__or Existing __Liner					
Planned__or Existing __OH / PERF	17448 / 17492		Inj Length 1544		

Injection Lithostratigraphic Units:	Depths (ft)	Injection or Confining Units	Tops
Adjacent Unit: Litho. Struc. Por.	[redacted]	new	17552
Confining Unit: Litho. Struc. Por.		new	17270
Proposed Inj Interval TOP:			
Proposed Inj Interval BOTTOM:			
Confining Unit: Litho. Struc. Por.			
Adjacent Unit: Litho. Struc. Por.	[redacted]		

Completion/Operation Details:

Drilled TD 17604 PBTD 17599
NEW TD 17492 NEW PBTD 17492
NEW Open Hole ✓ or NEW Perfs ○
Tubing Size 3½ in. Inter Coated? Y
Proposed Packer Depth 17448 ft
Min. Packer Depth 17348 (100-ft limit)
Proposed Max. Surface Press. 3500 psi
Admin. Inj. Press 3500 (0.2 psi per ft)

AOR: Hydrologic and Geologic Information

POTASH: R-111-P NA Noticed? ___ BLM Sec Ord ○ WIPP ○ Noticed? ___ Salt/Salado T: ___ B: ___ NW: Cliff House fm ___

FRESH WATER: Aquifer Quaternary Max Depth 110 HYDRO AFFIRM STATEMENT By Qualified Person ✓

NMOSE Basin: Carlsbad CAPITAN REEF: thru ___ adj NA No. Wells within 1-Mile Radius? 0 FW Analysis ___

Disposal Fluid: Formation Source(s) Bone Spring, Delaware Analysis? Y On Lease ○ Operator Only ○ or Commercial ✓

Disposal Int: Inject Rate (Avg/Max BWPD): 20K/25K Protectable Waters? ___ Source: ___ System: Closed or Open Non-commercial

HC Potential: Producing Interval? N/A Formerly Producing? ___ Method: Logs / DST / P&A / Other Test 2-Mile Radius Pool Map ○

AOR Wells: 1/2-M Radius Map? Y Well List? ___ Total No. Wells Penetrating Interval: 2 Horizontals? 0

Penetrating Wells: No. Active Wells 1 Num Repairs? ___ on which well(s)? ___ Diagrams? ___

Penetrating Wells: No. P&A Wells 1 Num Repairs? ___ on which well(s)? ___ Diagrams? ___

NOTICE: Newspaper Date February, 2016 Mineral Owner BLM Surface Owner BLM N. Date May 2016

RULE 26.7(A): Identified Tracts? Y Affected Persons: EOG, Oxy, Cimarex N. Date May 2016

Order Conditions: Issues: D-V tool At base of Wolfcamp Formation

Add Order Cond: ___

McMillan, Michael, EMNRD

From: Kayla McConnell <KMcConnell@btaoil.com>
Sent: Monday, May 23, 2016 3:36 PM
To: McMillan, Michael, EMNRD
Subject: RE: UIC Question/Vaca Draw Unit SWD Well No. 1

Michael,

Thank you, I talked to our Drilling Manager, he agreed to the DV tool stipulation and we plan to run a CBL to the referenced depth.

Thank you,
Kayla McConnell

From: McMillan, Michael, EMNRD [mailto:Michael.McMillan@state.nm.us]
Sent: Monday, May 23, 2016 9:25 AM
To: Kayla McConnell <KMcConnell@btaoil.com>
Subject: RE: UIC Question/Vaca Draw Unit SWD Well No. 1

Kayla:
I spoke with Will Jones, and he recommended approval of the Vaca Draw SWD Well No. 1 with the stipulation that BTA run a DV tool at the base of the Wolfcamp formation.
I will also require a CBL through the liner to 12000 feet.

Call me with questions or concersn
Mike

From: Kayla McConnell [mailto:KMcConnell@btaoil.com]
Sent: Thursday, May 05, 2016 12:08 PM
To: McMillan, Michael, EMNRD
Subject: FW: UIC Question

From: McMillan, Michael, EMNRD [mailto:Michael.McMillan@state.nm.us]
Sent: Friday, March 18, 2016 11:50 AM
To: Kayla McConnell <KMcConnell@btaoil.com>
Cc: Goetze, Phillip, EMNRD <Phillip.Goetze@state.nm.us>; Jones, William V, EMNRD <WilliamV.Jones@state.nm.us>; Lowe, Leonard, EMNRD <Leonard.Lowe@state.nm.us>
Subject: RE: UIC Question

It would be considered a major modification, and you would have to submit a new application.

Thank You

C-108 Review Checklist: Received 1/14/2016 Add. Request: _____ Reply Date: _____ Suspended: _____ [Ver 15]

ORDER TYPE: WFX / PMX / SWD Number: _____ Order Date: _____ Legacy Permits/Orders: _____

Well No. 1 Well Name(s): 7811 - JVP VACA Draw SWD

API : 30-0 25-23855 660FSL Spud Date: 10/2/1971 TBD New or Old: D (UIC Class II Primacy 03/07/1982)

Footages 660 FEL Lot ___ or Unit P Sec 21 Tsp 25S Rge 33E County Lea

General Location: ~2 20 mile S of Jal Pool: SWD; Devonian Silurian Mesquite Pool No.: 97861

BLM 100K Map: JAL Operator: SWD, Inc OGRID: 16196 Contact: Kay Havenor, Agent

COMPLIANCE RULE 5.9: Total Wells: _____ Inactive: _____ Fincl Assur: _____ Compl. Order? _____ **IS 5.9 OK?** ___ **Date:** _____

WELL FILE REVIEWED ✓ Current Status: PEA

WELL DIAGRAMS: NEW: Proposed ○ or **RE-ENTER:** Before Conv. ○ After Conv. ○ Logs in Imaging: Y

Planned Rehab Work to Well: New C-13-L 12500 - 17498

Well Construction Details	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Stage Tool	Cement Sx or Cf	Cement Top and Determination Method
Planned __or Existing __ Surface	24/20	420		1550	Surface
Planned __or Existing __ Interm/Prod	17½/13¾	4586		3200	Surface
Planned __or Existing __ Interm/Prod	12¼/10¾	12650		3375	Surface
Planned __or Existing __ Prod/Liner	8¾/7⅝	17498		1700 Blow	Surface
Planned __or Existing __ Liner					
Planned __or Existing __ OH / PERF	17458/17498		Inj Length 154		

Injection Lithostratigraphic Units:	Depths (ft)	Injection or Confining Units	Tops
Adjacent Unit: Litho. Struc. Por.	[redacted]	DV	17156
Confining Unit: Litho. Struc. Por.		Wd	17227
Proposed Inj Interval TOP:			
Proposed Inj Interval BOTTOM:			
Confining Unit: Litho. Struc. Por.			
Adjacent Unit: Litho. Struc. Por.	[redacted]		

Completion/Operation Details:

Drilled TD 17605 PBTD _____
NEW TD 17042 NEW PBTD _____
NEW Open Hole ✓ or NEW Perfs ○
Tubing Size 4½ in. Inter Coated? _____
Proposed Packer Depth 17458 ft
Min. Packer Depth 17498 (100-ft limit)
Proposed Max. Surface Press. 350 psi
Admin. Inj. Press. 350 (0.2 psi per ft)

AOR: Hydrologic and Geologic Information

POTASH: R-111-P NA Noticed? ___ **BLM Sec Ord** ○ **WIPP** ○ Noticed? ___ **Salt/Salado** T: ___ B: ___ **NW:** Cliff House fm ___

FRESH WATER: Aquifer Quaternary Max Depth 110' **HYDRO AFFIRM STATEMENT** By Qualified Person ✓

NMOSE Basin: Carlsbad **CAPITAN REEF:** thru adj NA **No. Wells within 1-Mile Radius?** 0 FW Analysis

Disposal Fluid: Formation Source(s) Bone Spring, Wolfcamp, Permian only Analysis? 1 On Lease ○ Operator Only ○ or Commercial ✓

Disposal Int: Inject Rate (Avg/Max BWPD): 30K / 40K Protectable Waters? ___ Source: ___ System: Closed or Open

HC Potential: Producing Interval? ___ Formerly Producing? ___ Method: Logs/DST/P&A/Other Test - Non-commercial 2-Mile Radius Pool Map ○

AOR Wells: 1/2-M Radius Map? Y Well List? ___ Total No. Wells Penetrating Interval: ___ Horizontals? ___

Penetrating Wells: No. Active Wells Y Num Repairs? ___ on which well(s)? ___ Diagrams? ___

Penetrating Wells: No. P&A Wells 1 Num Repairs? ___ on which well(s)? Y (Application) Diagrams? ___

NOTICE: Newspaper Date 10-7-24 Mineral Owner BLM Surface Owner BLM N. Date ___

RULE 26.7(A): Identified Tracts? ___ Affected Persons: EOG, Limerock, EOG N. Date 10-7-24

Order Conditions: Issues: Cut window @ 12600'

Add Order Cond: _____