JAMES BRUCE ATTORNEY AT LAW

POST OFFICE BOX 1056 SANTA FE, NEW MEXICO 87504

369 MONTEZUMA, NO. 213 SANTA FE, NEW MEXICO 87501

(505) 982-2043 (Phone) (505) 660-6612 (Cell) (505) 982-2151 (Fax)

jamesbruc@aol.com

January 20, 2015

Florene Davidson Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505

Case 15262

RECEIVED OCD

2015 JAN 22 A 8: 34

Dear Florene:

Enclosed for filing, on behalf of Mesquite SWD, Inc., is an application for approval of a salt water disposal well. The advertisement has been e-mailed to the Division. Please re-set this matter for the February 19, 2015 Examiner hearing. Thank you.

Very truly yours,

James Bruce

Attorney for Mesquite SWD, Inc.

Persons Notified of Hearing

| *** | _ | | |
|--------------|----------|---------|-------|
| A A I MANAGE | | **** | Ω P** |
| Mineral | . | , 1Y 11 | |
| T. T. 11 | | | |

Surface BLM Grazing Lessee:

Bureau of Land Management 620 E. Greene St.

Carlsbad NN 88220

Gregg H. Fulfer

also DBA Fulfer Oil & Cattle, LLC

P.O. Box 1224 Jal, NM 88252

Operators:

Chevnon USA, Inc.

15 Smith Rd

Midland, TX 79705

100%

Sec. 11 W/2 NE, W/2

NMLC 0 032618B

Mariah Resources, Inc.

100%

Sec. 14 NW/4, W/2 NE/4

P.O. Box 695

Jackson, CA 95642

COG Operating, LLC 600 W. Illinois Ave

Midland, TX 79701-4882

50%

Sec. 15 NE/4 NE/4

OXY USA WTP, LP

P.O. Box 4294

Houston, TX 77210-4294

50%

Sec. 15 NE/4 NE/4

Topat Oil Corp

505 N. Big Springs, Suite 405

Midland, TX 79701-4369

100%

Sec. 11 SE/4 to 4000'

PROPOSED ADVERTISEMENT

Case No. <u>/5262</u>:

Application of Mesquite SWD, Inc. for approval of a salt water disposal well, Lea County, New Mexico. Applicant seeks an order approving disposal of produced water into the Basal Yates and Upper Seven Rivers formations at depths of 3378-3388 feet subsurface in the proposed Johnny East SWD Well No. 1, to be located 300 feet from the south line and 2340 feet from the west line of Section 11, Township 25 South, Range 36 East, NMPM. The well is located approximately 3 miles northwest of Jal, New Mexico.

RECEIVED OCD



BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION

APPLICATION OF MESQUITE SWD, INC. FOR APPROVAL OF A SALT WATER DISPOSAL WELL, LEA COUNTY, NEW MEXICO.

2015 JAN 22 A 8: 34 Case No. 15262

APPLICATION

Mesquite SWD, Inc. applies for an order approving a salt water disposal well, and in support thereof, states:

- 1. Applicant proposes to drill its proposed Johnny East SWD Well No. 1, to be located 300 feet from the south line and 2340 feet from the west line of Section 11, Township 25 South, Range 36 East, N.M.P.M., Lea County, New Mexico.
- 2. Applicant proposes to dispose of produced water into the Basal Yates and Upper Seven Rivers formations at depths of 3378-3388 feet subsurface.
 - 3. A Form C-108 for the subject well is attached hereto as Exhibit A.
 - The granting of this application will prevent waste and protect correlative rights. 4.

WHEREFORE, applicant requests that, after notice and hearing, the Division enter its order approving this application.

Respectfully submitted,

James Bruce

Post Office Box 1056

Santa Fe, New Mexico 87504

(505) 982-2043

Attorney for Mesquite SWD, Inc.

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

FORM C-108
Revised June 10, 2003
Case 15262

APPLICATION FOR AUTHORIZATION TO INJECT

| i. | PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage Application qualifies for administrative approval? X Yes No |
|--------|---|
| И. | 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: |
| | Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, 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 |
| 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 Howenor DATE: 12/6/2014 |
| * | E-MAIL ADDRESS:Kay@georesources.com If the information required under Sections VI, VIII, X, and XI above has been previous show the date and circumstances of the earlier submittal: |
| DIST | RIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Distriction: |

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: Meso | quite SWD, Inc. | (OGRID 161968) | | | |
|-------------------|--|--|-------------------------|------------------------------|-------------------|
| WELL NAME & NUMBE | R: Johnny East SWD #1 | | | 30-025-NA (New Drill) | - |
| ' | 340' FSL & 2340' FWL FOOTAGE LOCATION | N UNIT LETTER | | S 36E /NSHIP RANGE | |
| <u>WELLB</u> | ORE SCHEMATIC | PROPOSED WELL CONSTRUCTION DATA Surface Casing | | | |
| | | Hole Size: | 20" | Casing Size: 16" Conductor | _ |
| See a | attached diagram | Cemented with: _ | sx. | or <u>144</u> | _ ft³ |
| | | Top of Cement: _ | Surface | Method Determined: Opr | |
| | | Intermediate Casing | | | |
| | | Hole Size: | 12-¼" | Casing Size: 9-5/8" 40# K-55 | |
| | | Cemented with: _ | 500 sx. | or | _ ft ³ |
| | | Top of Cement: _ | Surface | Method Determined: Opr | |
| | | | Production | on Casing | |
| | | Hole Size: | 8-5/8" | Casing Size: 7" 26# L-80 | |
| | | Cemented with: _ | 2100 sx. | ог | ft³ |
| | | Top of Cement: | Surface | Method Determined: Opr | |
| | | Total Depth: | Approx 3,490' Injection | Interval | |
| | | - | Approximately 3,378' | ToApproximately 3,388' | <u>.</u> |

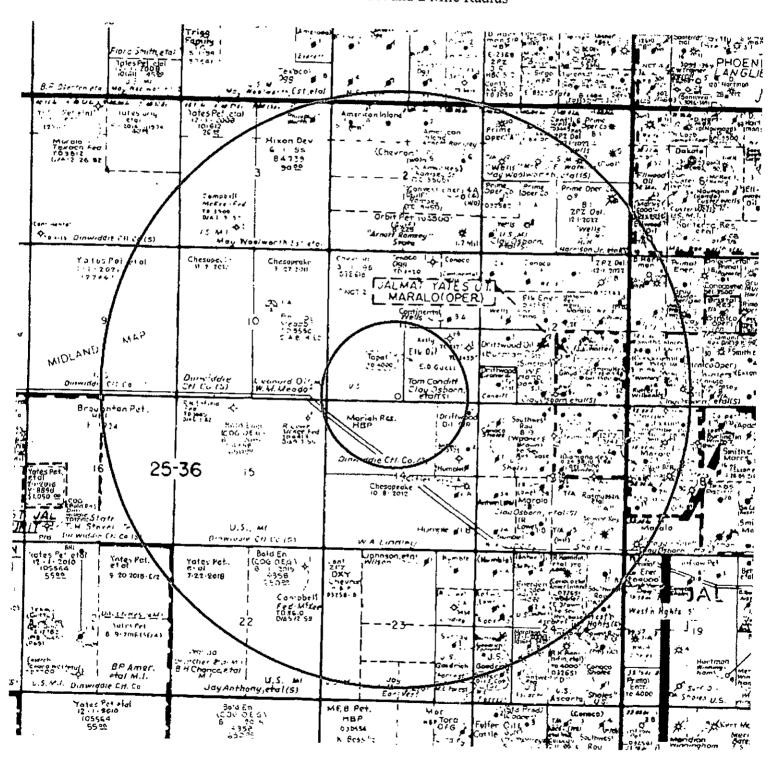
(Perforated or Open Hole; indicate which) Perforated

INJECTION WELL DATA SHEET

| Tub | ing Size: 4-1/2" 12.75# L/N-80 Lining Material: Fiberglass coated |
|------|--|
| Тур | e of Packer: Lok-Set or equivalent |
| Pac | ker Setting Depth: Approx 3,328 ft |
| Oth | er 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: <u>Basal Yates and upper Seven Rivers</u> |
| 3. | Name of Field or Pool (if applicable): |
| 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. New drill |
| 5. (| Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: |
| | |

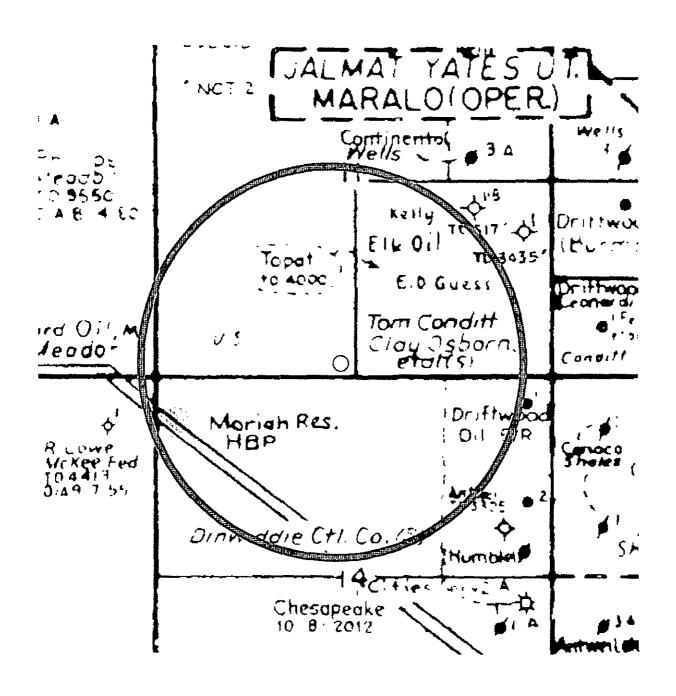
Item V:

Area of Review 1/2 Mile AOR and 2 Mile Radius



Item V (a):

AOR Half - Mile



Item VI: Data on wells in AOR:

There are no known wells presently existing within the Half-mile AOR.

Note: One active well is located immediately outside the AOR. That well information is provided for basic information:

3002528127 Driftwood Oil, LLC J.A.Kontz #1 Unit A Sec. 14, T25S-R36E Lea Co. Elev 3180 GL. Spud 1/15/1983. 12¼" hole set 85%" 8.9# @400' w/250 sx cmt circulated. 77%" hole reported set 3,400' 4½" @3,400' w/1250 sx cmt. TD corrected to 3,300' (survey). PBTD 3,250'. T/Yates 2998', Seven Rivers 3220', Perf 3218'-3228' w/6 shots. Last production reported: March 2013 21 BO, 1 MCFG, 248 BW 31 days. May 2013 produced 122 BW 31 days.

Item VII:

- 1. The maximum injected volume anticipated is 10,000 BWPD. Average anticipated is 8,000 BWPD.
- 2. Injection will be through a closed system.
- 3. Maximum injection pressure is expected to be 706 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 Sundown Ballard (SWD-354) D- Sec. 27, T20S-R34E Lea Co.

CHEMITAK

| CHEM Water and | | г | | |
|---|---|-----------|-------------|--|
| • | | | | |
| Lab ID No. : 0601888 | | 1, 1988 | | |
| =203036353047251042577657705030666322663841 | | 2022220C | | |
| Company : Hondo O11 & Gas | Sampled By : Don Bahm Sample Date: # | ert | | |
| Lease/Unit : Bellard "DE" | Salesperson: Don Bamm | ert | | |
| Well ID. : Sample Loc.: | Formation : Location : Hobbs. N | ** | | |
| • | | | | |
| · · · · · · · · · · · · · · · · · · · | B 本 | ***====== | | |
| CATIONS MG/L MEQ/L | ANTONS . | MG/L | MEQ/L | |
| Calcium as Ca++ 955 47.8 | Hydroxy1 as OH- | _0 | 0.0 | |
| Magnesium as Mg++ 289 23.7 Bodium as Na+ (Caic) 5.648 246.6 | Carbonate as CO3= Bicarbonate as HCO3- | 70 630 | 2.3 10.3 | |
| Barium as Batt Not Determined | Sulfate as 804= | 1.075 | 22.4 | |
| Other 0 | Chloride as CI- | 9,998 | 262.0 | |
| Total Dissolved Solids, Calculated: | 18,605 | mg/L. | | |
| | | | ******* | |
| Calculated Resistivity: 0.320 ohm-meture mg/L. Hydrogen Sulfide: Present mg/L. Carbon Dioxide: Not Determined mg/L. Dissolved Oxygen: Not Determined e 140 F.: +2.328 | | | | |
| Total Hardness: 3,573 Total Iron: 10 | mg/L. as CaCO3 mg/L. as Fe++ | | | |
| | | | 2055200 | |
| | PROBABLE MINERAL | COMPOSIT | ION | |
| • • • • | COMPOUND | MQ/L | HEQ/L | |
| | Ca(HCO3)2 | 837 | 10 | |
| Calcium Sulfate Scaling Potential Not Present | Caso4 | 1,624 | 22 | |
| Fatimated Temperature of Calcium Carbonate Instability is 52 F. | CaC12 | 835 | 15 | |
| | Mg(HC03)2 | 0 | 0 | |
| | Mg804 | ٥ | 0 | |
| | MgG12 | 1,130 | 24 | |
| | NaHC03 | ٥ | ٥ | |
| | Na2804 | O | σ | |
| Analyst 10:11 AM | NECT | 14,219 | 243 | |

Item VIII:

Disposal will be into the basal Yates and upper Seven Rivers formations on the western down-dip flank of the Permian Jalmat Yates pool. Jalmat Yates water sample described above (page 7) is representative of formation waters present in the proposed well. The C-108 location is east of the "Capitan", onto the uplifted western flank of the Central Basin Platform. The proposed location is geologically, structurally, hydrologically and lithologically isolated and separated from the water bearing area of the reef. See Amendment, page 9 below, for geological reference.

There is no known fresh, potable water within a 2-mile radius. Records from the New Mexico Office of the State Engineer on November 29, 2014 shows no known water wells within the 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: Basin: 19

UTMNADBS Radius Search (in meters): Easting (X): 658330

Easting [X): 666330

Northing (Y): 3566949

Radius: 3200

The data to rambbee by the NMCRETEC and is accepted by the recibient with the extressed uncertainting that the ORETEC make no warranties, extressed or inside, contenting the accuracy, comprehenses, refability, or substity, or substitute of the substitute of t

The surface geology of the greater area, including the 2-mile radius as shown in Item V above, is Quaternary eolian and piedmont deposits of Holocene to middle Pleistocene age. These are underlain by the Permian Rustler Formation and evaporites. Based upon surface geology and available shallow data the depth to potential potable water, if present, is estimated to be less than 150'.

Item IX:

Some acid may be applied. No other formation stimulation is currently planned.

Item X:

Logs will be filed with the OCD upon completion of the well.

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.

Amendment:

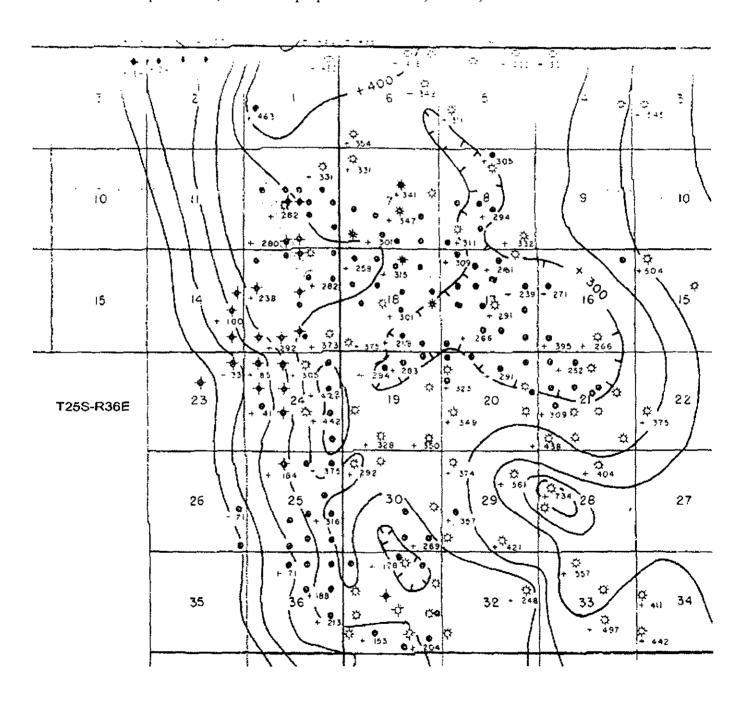
The Central Basin Platform (CBP) is an uplifted north-south structural block along the southeastern side of New Mexico that has long has been a major oil/gas producer. Rocks of Permian age were deposited upon uplifted and eroded earlier Paleozoic deposits. Geologically, the Capitan Reef physically and hydrologically separates the Delaware Basin on its southern seaward side and from the Permian back-reef deposits on the north, west and east sides. The CBP became the Paleozoic host for prolific oil/gas deposits. In the greater study area the Permian Capitan Reef aquifer is physically west of and lithologically separated from the CBP. The Platform is distinct from the reef environment.

The Permian oil/gas deposits of the CBP were discovered in September 1935 with the Anderson Prichard #1 Langlie in the Yates, Seven Rivers and Queen formations. Oil/gas production was eventually developed on the CBP from T-22S through T-26S and R-36E through R-37E to the New Mexico eastern border. An impressive structure contour map on the top of Yates was published in the Roswell Geological Society (RGS) Symposium, 1956 by Bob Stringer, Phillips Petroleum Company, page 227. That extensive map contains well spots and formation top details for many wells not included in present day OCD records. For the purposes of this application the RGS data fully describes and maps the CBP Yates-Seven Rivers structural and stratigraphic position and is exceptionally consistent with present information for the proposed C-108 SWD. More recently drilled wells in close proximity (Sec 11) to the proposed SWD fit quite well structurally. Please refer to map Item V, page 5 above, illustrating the west-side of Jalmat Yates (and Seven Rivers) field location.

RGS 1956 Geological map Top Yates Central Basin Platform

Excerpt of southwestern portion of Top Yates map showing the western part of the field as located in the east part of T25S-R36E and western part of T25S-R37E.

CI = 100' Mesquite SWD, Inc well is proposed for Unit N, Sec. 11, T25S-R36E.



Sec. 11, T25S-R36E Lea County, NM

Proposed Drilling/Completion of Johnny East SWD #1 Well

Proposed New Well Completion Diagram

API:

30025xxxxx

Operator:

Mesquite SWD, Inc.

Lease:

Johnny East SWD

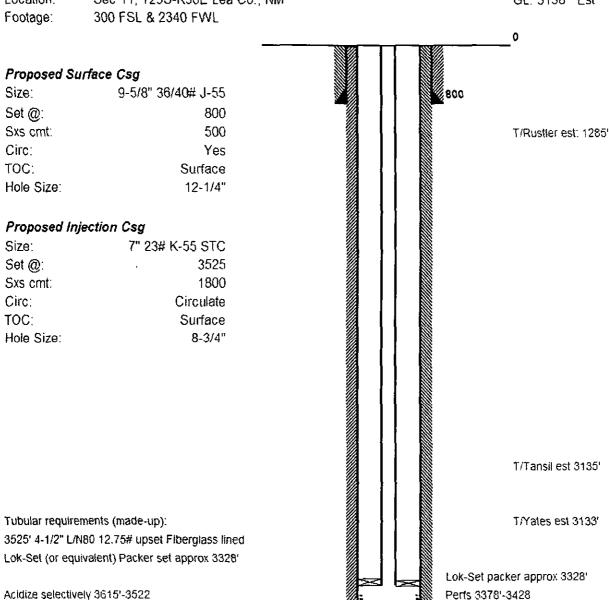
Well No:1

KB: 3158 Est

Location:

Sec 11, T25S-R36E Lea Co., NM

GL: 3138 Est



Acidize selectively 3615'-3522

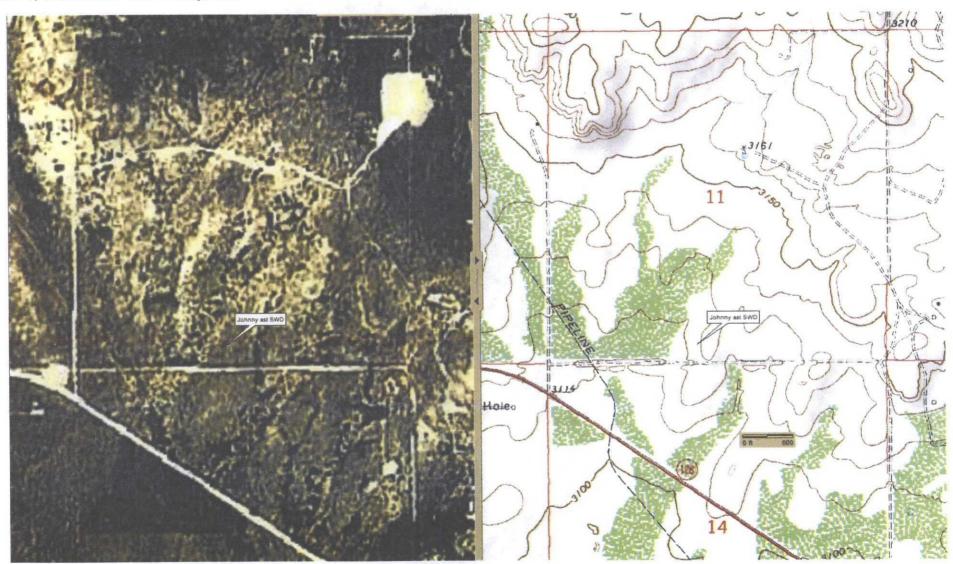
Load tubing annulus w/corrosion inhibitor Complete surface head for disposal

B/7R est 3510'

T/7R est 33801

TD est 3525' 25' cmt TD

Not to Scale



Delorme XMap6
3-miles NW of Jal, NM, off north side of NM-128 and section line road.

Mesquite SWD, Inc. Johnny East SWD #1 300' FSL & 2340' FWL

Sec. 11, T25S-R36E Lea County, NM

Item XIII: Proof of Notice

Minerals Owner: Surface BLM Grazing Lessee:

Bureau of Land Management

620 E. Greene St.

Carlsbad, NM 88220

Gregg H. Fulfer

also DBA Fulfer Oil & Cattle, LLC

P.O. Box 1224

P.O. Box 1224 Jal, NM 88252

Operators:

Chevron USA, Inc. 100% Sec. 11 W/2 NE, W/2
15 Smith Rd NMLC 0 032618B

Midland, TX 79705

Mariah Resources, Inc. 100% Sec. 14 NW/4, W/2 NE/4

P.O. Box 695

Jackson, CA 95642

COG Operating, LLC 50% Sec. 15 NE/4 NE/4

600 W. Illinois Ave

Midland, TX 79701-4882

OXY USA WTP, LP 50% Sec. 15 NE/4 NE/4

P.O. Box 4294

Houston, TX 77210-4294

Topat Oil Corp 100% Sec. 11 SE/4 to 4000'

505 N. Big Springs, Suite 405 Midland, TX 79701-4369

Mesquite SWD, Inc.
Johnny East SWD #1
300' FSL & 2340' FWL

Sec. 11, T25S-R36E Lea County, NM

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 December 9, 2014 and ending with the issue of December 9, 2014.

And that the cost of publishing said notice is the sum of \$ 31.65 which sum has been (Paid) as Court Costs.

Joyce Clemens, Advertising Manager Subscribed and sworn to before me this 22nd day of December, 2014.

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



Legal Notice

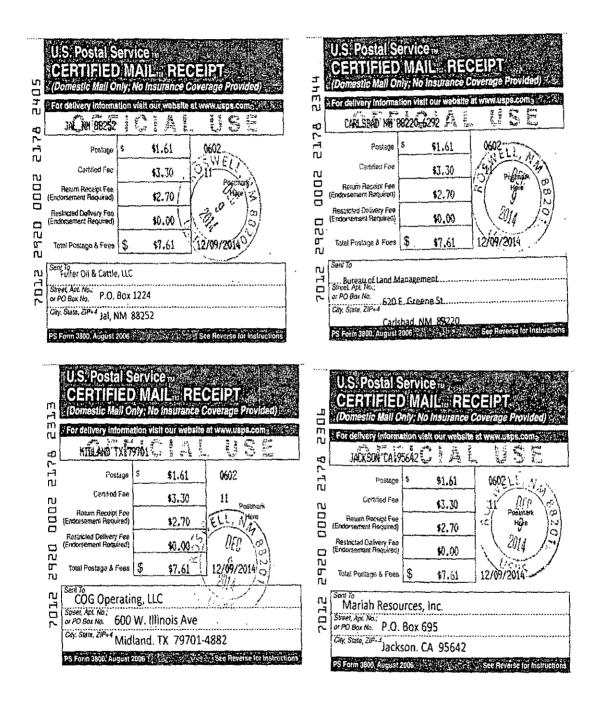
Mesquite SWD, Inc., c/o Kay Havenor, 904 Moore Ave, Roswell, NM 88201, (575)626-4518 Kay@georesources.com, is seeking approval from the New Mexico Oil Conservation Division to drill and complete the Mesquite SWD, Inc. Johnny East SWD No.1 well, API: unassigned, located 300' FSL & 2340' FWL of Section 11, T25S, R36E, Lea County, NM, 3miles NW of Jai, NM, off north side of NM-128, for commercial produced water disposal. The pro-posed disposal interval is commercial in the basal Yates and upper Seven Rivers for-mations through 7" casing perforated from approx mately 3,378 to 3,388 feet. Mesquite SWD, Inc plans to dispose of a max-imum 25,000 BWPD at a maximum pressure of 706 psi. Parties with questions regarding this proposal are urged to contact Kay Havenor at the email address or phone number above. Interested parties must life objections or requests for hearing with-in 15 days to the New Mexico Oil Conservation Division, 1220 S. St. Francis Dr., Santa Fe, NM 87505.

Published in the Lovington Leader December 9, 2014.

Mesquite SWD, Inc.
Johnny East SWD #1
300' FSL & 2340' FWL

Sec. 11, T25S-R36E Lea County, NM

Item XIII: Certified Mail Receipts Page -1



Note: Gregg H. Fulfer was notified via same address as Fulfer Oil & Cattle, LLC, as was acknowledged by legal protest of application. BLM originally incorrectly indicated grazing lease was to the LLC.

Item XIII: Certified Mail Receipts Page 2

| U.S. Postal S CERTIFIED Dominate Man A | ervico v MAIL: RECEIPT Do Ma hallanco Corosada nu vicado |
|--|--|
| | |
| O NIEAND TX: 7 | msCIAL USE |
| iu (27.86)2 | · HW COSNIE |
| CLYLLAST From | |
| FOUNT PRESENT OF SERVICE STATES | 1270 |
| Hadrick of the first of the fir | 10.10 |
| RU IT Treat Protogn & Parci CU | \$ 17.11 12/19/2014 |
| Chevron USA | hc |
| Chewon USA | in Rd |
| Midt | ad. TX 79705 |
| FO Form 3030, August 11 | 05 (Paramata las Inec etits no |



