

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

 Mesquite SWD 14968

ABOVE THIS LINE FOR DIVISION USE ONLY

Bran SWD #1

ADMINISTRATIVE APPLICATION CHECKLIST

30-015-75697

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 _____

P-11-245-31E
 Eddy

- [2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or Does Not Apply
- [A] Working, Royalty or Overriding Royalty Interest Owners
- [B] X Offset Operators, Leaseholders or Surface Owner
- [C] X Application is One Which Requires Published Legal Notice
- [D] X 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

SWD-649
 last protested by Marbobbe
 OH. 4874-6740
 Total 1866'
 OH

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

Packer @ 4825'

[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		Agent	1/23/2012
Print or Type Name	Signature	Title	Date

KHavenor@georesources.com
 e-mail Address



Kay C. Havenor, Ph.D.

Office: 575-626-4518
e-mail: KHavenor@GeoResources.com
904 Moore Ave
Roswell, New Mexico 88201-1144

RECEIVED OCD
2012 JAN 30 A 11:31

January 26, 2012

New Mexico OCD
Engineering Bureau
1220 So. St. Francis Drive
Santa Fe, NM 87505

Re: C-108 Bran SWD #1 SWD-649-A
Sec 11, T24S-R31E, Eddy Co., NM
API 30-015-25691

The enclosed C-108 for Mesquite SWD, Inc. is application for reinstating/extending the commencement date. Please note all Legal publication has been made and parties have been officially re-notified and supplied a copy of the attached C-108.

This well has been physically re-entered and completed. The MIT test was run and passed January 24, 2011.

Your assistance with this renewal is appreciated.

Should you have questions or concerns regarding this application please contact the undersigned by telephone at the above number, or by e-mail to KHavenor@georesources.com.

Respectfully submitted,

Kay Havenor, PG
Agent on behalf of Mesquite SWD, Inc.

Encl: C-108 application

Miss Row	C-108	C-108 disposal application submittals... CHECKLIST to ensure all items are supplied or considered.	
1		<u>Operator, Well, and Contact info:</u>	
2	II	Name of person submitting the application: Kay Haveror	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 0 vs Total Wells Operated 24 ... 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: Bran SWD #1	
9	III	API Num: 80-015-25697 Spud Date: 12/26/1986 Re-entry 10/21/2011	
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 11 Tsp 24S Rge 31E County Eddy	
12		General Location (i.e. Y miles NW of Z): 35 miles west of Jal, NM	
13		Current Well Status: Completed. Ready for SWD	
14	I	General Summary of Planned Work to Well: Commence disposal	
15		<u>INTERVAL TOP and BOTTOM:</u>	
16	IIIB (2)	Proposed disposal Top Depth: 4874' Formation Name: Bell Canyon and Cherry Canyon (include Member Names for Delaware or Mesaverde)	
17	IIIB (2)	Proposed disposal Bottom Depth: 6,740' Formation Name: Cherry Canyon	
18	IIIB (2)	Is the disposal interval OpenHole? X or Perfed? Openhole 4,874'-6,740'	
19	IIIB (2)	What will be the disposal tubing size OD? 3-1/2" Packer Seat. Feet: 4,825'	

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20	VII	What max surf inj. psi are you proposing? <u>974</u>	If differing from 0.2 psi/ft surf. Grad., is supporting data attached such as a Step Rate Test?
21		<u>FRESH WATERS:</u>	
22	VIII	Depth to bottom of Fresh Waters: <u>less than 85'</u> if present	Formation Name(s)? <u>Quaternary alluvium</u>
23	XI	Any Fresh Water Wells Within 1 Mile? <u>No</u>	If so, did you attach an analysis from these Wells?
24		Are all "Fresh" waters isolated with Casing and Cement? <u>Yes</u>	("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? <u>Yes</u>	Item XII
26		<u>WASTE WATERS:</u>	
27	XIV	Will this be a Lease Only disposal well? _____	or only used for the Operator's own waste needs? _____ or Commercial Disposal? <u>Yes</u>
28	VII	Which formations will supply the waste waters to be disposed into this well... List most common...? <u>Delaware Brushy Caayon - Bone Springs</u>	
29	VII	Are Waste waters compatible with proposed disposal interval waters? <u>Yes</u>	Did you include waste water analysis? <u>Yes</u> , Delaware water
30		<u>AT PROPOSED WELL...INSITU WATERS AND HYDROCARBON POTENTIAL:</u>	
31		Is a discussion included of the potential for future OIL/GAS recovery from the proposed disposal interval? <u>Yes</u>	
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? <u>Yes</u>	Is the salinity within the disposal interval more than 10,000 mg/l of TDS? <u>Yes</u> or how will you determine this insitu water salinity?
34	VIII	Does the application include a list of Formation tops down to and including the bottom of the target formation? <u>Yes</u> , on P&A diagram	
35		What is the top <u>main sal1920'</u> and bottom <u>4,268'</u> 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? <u>Yes</u>	If logs not there, please send _____
37	IIIA.	Are the wellbore diagrams for this well included in the Application...Before Conversion? <u>Yes</u> and After Conversion? <u>Yes</u>	

Miss Row	C-108	C-108 disposal application submittals... CHECKLIST to ensure all items are supplied or considered.	
38		Are the top and bottom footage of the proposed disposal interval marked on the "after" diagram?	Yes
39		<u>NOTICE:</u>	
40	XIV	Date of the Newspaper Notice in the County: 1/24/2012	Artesia Daily Press
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	Were they all formally noticed? Yes
43	XIII	If reentering a P&Aed well, are there depth divisions of ownership within that well? NoIf so, have you also noticed all the shallower interests of the intent to use the well for disposal?
44	XIII	Is the proposed well within the R-111-P defined Potash Area or the BLM Secretaries Potash Area? NoIf 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		<u>Area of Review:</u>	
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	Is the list available to be emailed (if requested) in spreadsheet format? Yes - Included in Item VI list
49	VI	Does this list identify all wells penetrating (at least the top of) the disposal interval within 1/2 mile of the proposed well? Yes	
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? Yes	
51	VI	How many wells exist within the 1/2 mile AOR that penetrate the disposal interval? 0	How many of these are Plugged/Dry and Abandoned?
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? NA	
53	VI	Do all reported cement tops describe how that "top" was determined? If Available	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 (DVT) in the subject well and in the AOR wells? NA	
55	VIII	For the target formation, is there significant formation structural depth changes within the 1/2 mile AOR? No	

Miss	Row	C-108	C-108 disposal application submittals... CHECKLIST to ensure all items are supplied or considered.	
	56	VIII	Is there any Karst or Massive Limestone in this target formation? No	...or in the formations directly above or below? No
	57		<u>Administrative or Hearing:</u>	
	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..?	

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 1479, Carlsbad, NM 88221

CONTACT PARTY: Kay Havenor PHONE: 575-622-0283

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 Havenor* DATE: 1/23/2012

E-MAIL ADDRESS: KHavenor@georesources.com 575-626-4518

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

III. WELL DATA

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

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

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

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

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

XIV. PROOF OF NOTICE

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

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

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

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

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

INJECTION WELL DATA SHEET

OPERATOR: Mesquite SWD, Inc. OGRID: 161968

WELL NAME & NUMBER: Bran SWD No.1

WELL LOCATION: 660' FSL & 660' FEL P 11 24S 31E
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 12-1/4" Casing Size: 8-5/8" 24# J-55

Cemented with: 250 sx. or _____ ft³

Top of Cement: Surface Method Determined: Circulated

Intermediate Casing

Hole Size: 7 7/8" Casing Size: 7" FL-4S 23# J-55

Cemented with: 900 sx. or _____ ft³

Top of Cement: Surface Method Determined: circ 128 sx

Production Casing

Hole Size: 7 7/8" Casing Size: 5 1/2 FL-4S 17# J-55

Cemented with: 800 sx. or _____ ft³

Top of Cement: Surface Method Determined: circ 170 sx

Total Depth: 6913' PBTD 6,740"

Injection Interval

4,874 feet to 6,740 feet Open Hole

See attached well diagram

(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 3-1/2" PH6 IPC L-80 12.95# L-80 Lining Material: Fiberglass

Type of Packer: Nickel Arrowset AX-1

Packer Setting Depth: 4825 ft

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

Additional Data

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

If no, for what purpose was the well originally drilled? Oil/gas

2. Name of the Injection Formation: Delaware Mtn Group: Lower Bell Canyon and Cherry Canyon

3. Name of Field or Pool (if applicable): NA (Not 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. No

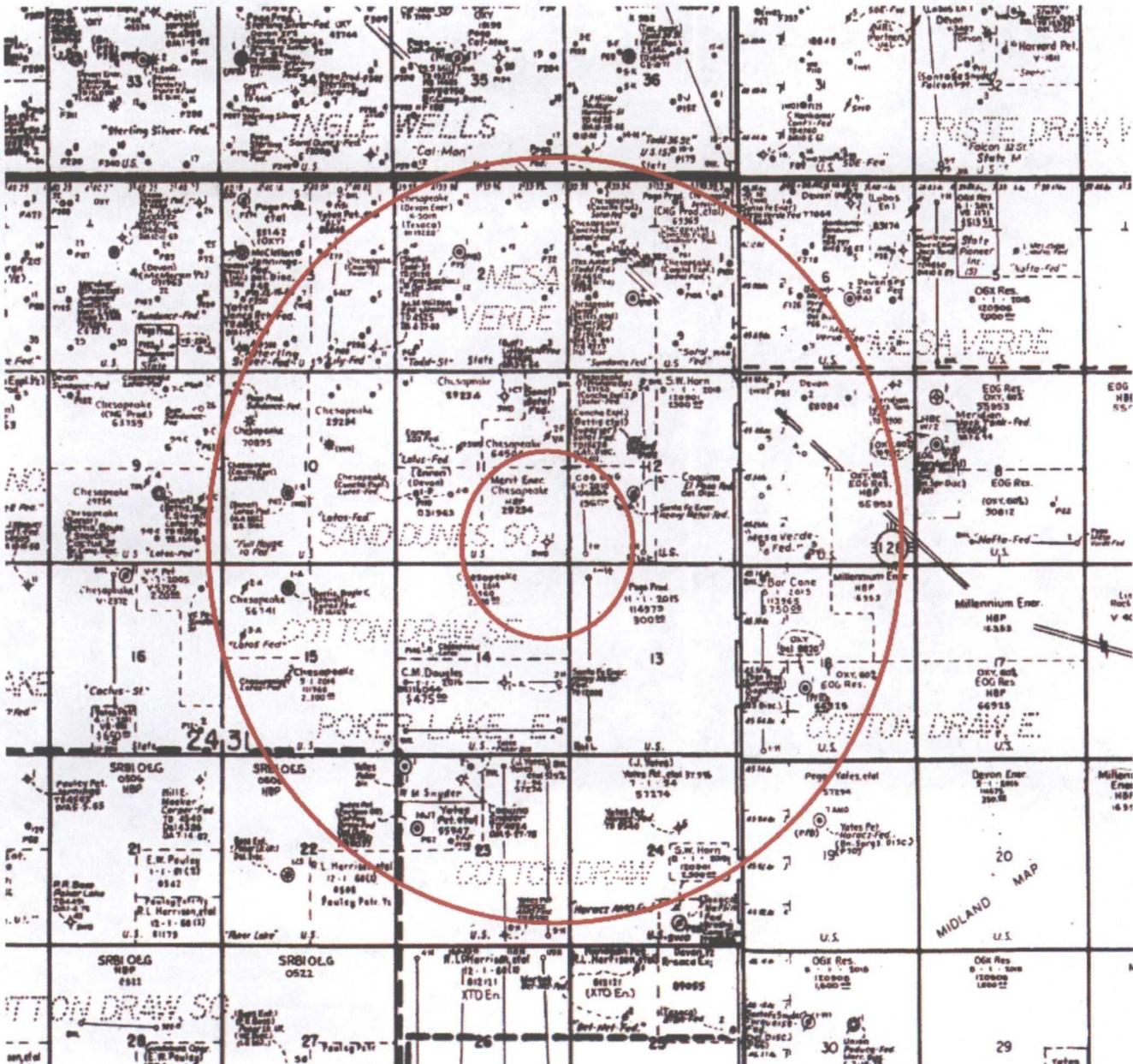
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: No Bell Canyon or Cherry Canyon (Delaware) productive in AOR.

Lower Brushy Canyon - upper Bone Spring productive in the area below 7000'.

Mesquite SWD, Inc.
Bran SWD No. 1
660' FSL & 660' FEL
Sec. 11, T24S-R31E
Eddy County, NM

Item V:

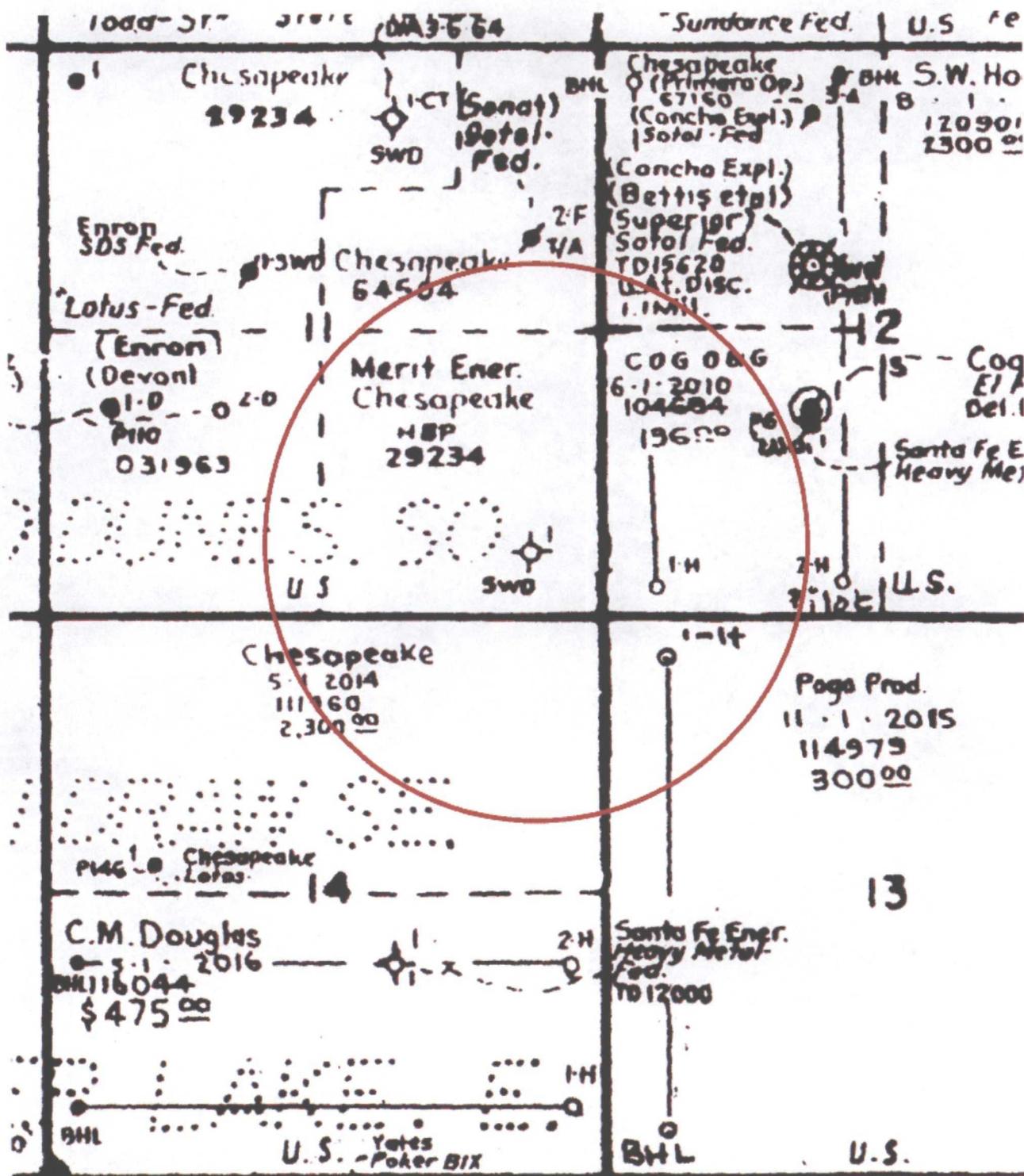
Area of Review
1/2 Mile AOR and 2 Mile Radius



Mesquite SWD, Inc.
 Bran SWD No. 1
 660' FSL & 660' FEL
 Sec. 11, T24S-R31E
 Eddy County, NM

Enlarged View of AOR
 Centered in Unit P Sec. 11-T24S-R31E
 Eddy Co., NM

Item V(a):



Mesquite SWD, Inc.
 Bran SWD No. 1
 660' FSL & 660' FEL
 Sec. 11, T24S-R31E
 Eddy County, NM

no prod

Item VI: Data on wells in AOR.

API	WELL_NAME	STATUS	SEC	TWN	RANGE	NS	EW	OC	OPERATOR	LAND	WELL	PLUG_DATE	SPUD_DATE	ELEV	TVD
3001525697	BRAN SWD 001	SWD	11	24S	31E	660 S	660 E	P	MESQUITE SWD, INC	F	S	19-Jan-87	26-Dec-86	3552	6913
3001537605	SEABISCUIT FEDERAL COM 001H	New	12	24S	31E	330 S	530 W	M	COG OPERATING LLC	F	O			3559	0
3001537607	SEABISCUIT FEDERAL COM 002H	New	12	24S	31E	330 S	2260 W	N	COG OPERATING LLC	F	O	14-Jan-11		3566	9154
3001539191	CANVASBACK 13 FEDERAL 001H	New	13	24S	31E	330 N	480 W	D	COG PRODUCTION, LLC	F	O			3569	0

Item VI(a): Construction of wells in the AOR:

1. 30-015-25697 Mesquite SWD, Inc., Bran SWD #1 Sec. P-11-T24S-R31E Orig spudded 12/26/1986, 8-5/8" @ 410' w/250 sxs circulated.. TD 6794. P&A 1/9/1987. SWD-649-A Re-entered 10/21/2011. CO to TD 6,913'. Set 100 sx cmt PBTD, 6,740'. 7" J-55 FL-S4 26# @ 4,297' w/900 sx cmt, circ to surface. 5 1/2" 17# J-55 FL-S4 @ 4,874' w/800 sx cmt, circ to surface. 3 1/2" Fiberglass lined PH6 L-80 12.95# w/Nickel Arrowset AX-1 pkr @ 4,825'. Completed OH 4,874' - 6,740' no treatment 11/4/2011.
2. 30-015-37607 COG Production, LLC, Seabisquit Federal Com #1, M-12-R24S-R31E Spudded 4/26/2010, 8-5/8" @ 853' w/750 sxs circulated. TD 7" to 9206' and 4306' of 5-1/2" to 13584' w/MD 13550' w/450 sxs circ from DVT @ 8425' and 800 sxs below. TOC temp survey @ 1000' TVD approx 8400'. Well completed as producer, but no perf/treatment data has been filed as of this date.

Item VII:

1. The maximum injected volume anticipated is 8,000 BWPD. Average anticipated is 6,500 BWPD.
2. Injection will be through a closed system.
3. Maximum injection pressure is expected to be 974 PSI.
4. Sources will be only produced water.
5. Water sample analysis Delaware Brushy Canyon 30-015-27276 Sec. 3, T24S-R31E, Eddy Co. See figure from WAIDS data base below.

Mesquite SWD, Inc.
 Bran SWD No. 1
 660' FSL & 660' FEL
 Sec. 11, T24S-R31E
 Eddy County, NM

NM WAIDS



Water Samples for Well LILY ALY FEDERAL 006
API = 3001527276
Formation = DEL
Field = INGLE WELLS
Current Water Production Information

Corrosion
Theory
Equipment
Gases
Prevention
References

Instructions:

- Click For general information about this sample.
- Click For scale calculation pages (Stiff-Davis or Oddo Tomson methods).
- Click To select **this water sample** for water mixing. It will lead to the main page, and add the sample ID to the mixing table.
- Click **664** Click the hyperlinked sample number to make a .csv for that sample, or select several check boxes and click Submit for multiple samples
 The ions are in (mg/L) units.

SampleID	T	R	S	SO4	CL	CO3	HCO3	K	Na	Ca	Mg	
6825		24S	31E	03	25	180198	null	159	null	null	17720	1080

SELECT/DESELECT ALL

Item VIII:

The surface of the area included in the 2-mile radius, as shown in Item V above, is Quaternary alluvium and Recent blow-sand deposited on Cretaceous/Triassic Dewey Lake redbeds to approximately 153'. No shallow samples have been found in the greater area to clearly define shallow tops. E-logs indicate the top of the Rustler Formation in the re-entry well is at 430'. The Rustler Formation extends down to 772' at the top of the Salado. The top of the salt is at 3010. Base of the salt is at 4268'. The lowermost heavy-bedded anhydrite beneath the salt is 226' thick. It is essentially non-porous, non-permeable and rests unconformably on the Delaware Mountain Group's Lamar Limestone at 4494'. The Delaware Mountain Group is comprised of three major sand-shale members: Bell Canyon, Cherry Canyon, and Brushy Canyon. In the subject re-entry well the top of the Bell Canyon is at 4,590' and is 1,264' thick. The top of the partially penetrated Cherry Canyon is at 5,854'. TD is 6,794'.

Virtually no groundwater data is available within the 2-mile radius study area. Texaco drilled a water supply well in 1995 in SE/NW4 Sec. 12, T24S-R31E, but all that is available is the water was to be used for drilling. No water wells are reported within a 2.5 mile radius by the USGS database. Within the 2-mile radius only one

Mesquite SWD, Inc.
 Jack Tank SWD No. 3
 660' FSL & 660' FEL
 Bran SWD No. 1
 Eddy County, NM

water well is reported in the New Mexico Office of the State Engineer's Waters database. That one well is located in SW/4 Sec. 2, T24S-R31E and is 2,280 km (1.4 mi) NNW of the subject re-entry. The well, C-2460, data shown below suggests it is a commercial well for drilling/oil field water supply.



New Mexico Office of the State Engineer Point of Diversion Summary

	(quarters are 1=NW 2=NE 3=SW 4=SE)		(NAD83 UTM in meters)		
POD Number	Q64 Q16 Q4 Sec Tws Rng	X	Y		
C 02460	3 02 24S 31E	617496	3568022*		

Driller License: GLENN'S WATER WELL SERVICE	
Driller Name: CORKY, GLENN	
Source: Shallow	
Drill Start Date: 08/25/1995	Drill Finish Date: 08/25/1995
Log File Date: 09/07/1995	PCW Received Date:
Pump Type:	Pipe Discharge Size:
Casing Size:	Estimated Yield: 7
Depth Well: 320 feet	Depth Water: 212 feet

Water Bearing Stratifications:	Top	Bottom	Description
	260	280	Shallow Alluvium/Basin Fill

In the original permit SWD-649-0 issued 12/10/1996 a water analysis was submitted for "Drinking water" reported taken from Sonat Exploration Todd "2" State Water Well No. 1. It is presumed the well was located in Sec. 2, T24S-R31E although the specific location was not reported in the SWD application. The analyses are shown below. This data is resubmitted from the SWD-649-0 application and is shown below.

Mesquite SWD, Inc.
 Bran SWD No. 1
 660' FSL & 660' FEL
 Sec. 11, T24S-R31E
 Eddy County, NM

Item VIII con't:

Todd "2" State Water Well No. 1

Martin Water Laboratories, Inc.

P O BOX 1468
 MONAHANS, TEXAS 79756
 PH 943-3234 OR 563-1040

709 W INDIANA
 MIDLAND, TEXAS 79701
 PHONE 683-4527

RESULT OF WATER ANALYSES

TO: Mr. Selden Jones LABORATORY NO. 596167
110 W. Louisiana, Ste 500, Midland, TX 79701 SAMPLE RECEIVED 5-17-96
 RESULTS REPORTED 5-23-96

COMPANY Sonat Exploration LEASE _____

FIELD OR POOL _____

SECTION _____ BLOCK _____ SURVEY _____ COUNTY Eddy STATE NM

SOURCE OF SAMPLE AND DATE TAKEN:

- NO. 1 Drinking water - taken from Todd fresh water well **WELL FILE**
 NO. 2 Maximum contents for drinking water as recommended by the Texas Dept. of Health.
 NO. 3 _____
 NO. 4 _____

REMARKS:

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F	1.0020			
pH When Sampled				
pH When Received	6.57			
Bicarbonate as HCO ₃	239			
Supersaturation as CaCO ₃				
Undersaturation as CaCO ₃				
Total Hardness as CaCO ₃	334			
Calcium as Ca	69			
Magnesium as Mg	39			
Sodium and/or Potassium	110			
Sulfate as SO ₄	288	300		
Chloride as Cl	55	300		
Iron as Fe	0.52	0.3		
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	801	1,000		
Temperature °F				
Carbon Dioxide, Calculated				
Dissolved Oxygen				
Hydrogen Sulfide	0.0			
Resistivity, ohm-cm at 77° F.	9.73			
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				
Nitrate, as N	0.2	10.0		

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks Based on the determinations performed herein, we find this water exceeds State recommended maximum contents for drinking water in the level of Iron only. It should be clarified that iron is a highly variable component due to corrosion and may not necessarily be consistently above the standard on the basis of this single analysis.

By 
 Waylan C. Martin, M.A.

Mesquite SWD, Inc.
Bran SWD No. 1
660' FSL & 660' FEL
Sec. 11, T24S-R31E
Eddy County, NM

Item IX:

The well is completed and no treatment to open hole was applied.

Item X:

Logs are on file with the OCD.

Item XI:

No fresh water wells have been found within the 1-mile radius of the project well. See Item VIII above.

Item XII:

There is no geological evidence of open faults nor hydrologic connection between the disposal zone and any possible underground sources of potable water.

Delaware sand production potentials in the injection interval has been evaluated in this well and wells surrounding the greater AOR. No commercially potential zones have been encounter.

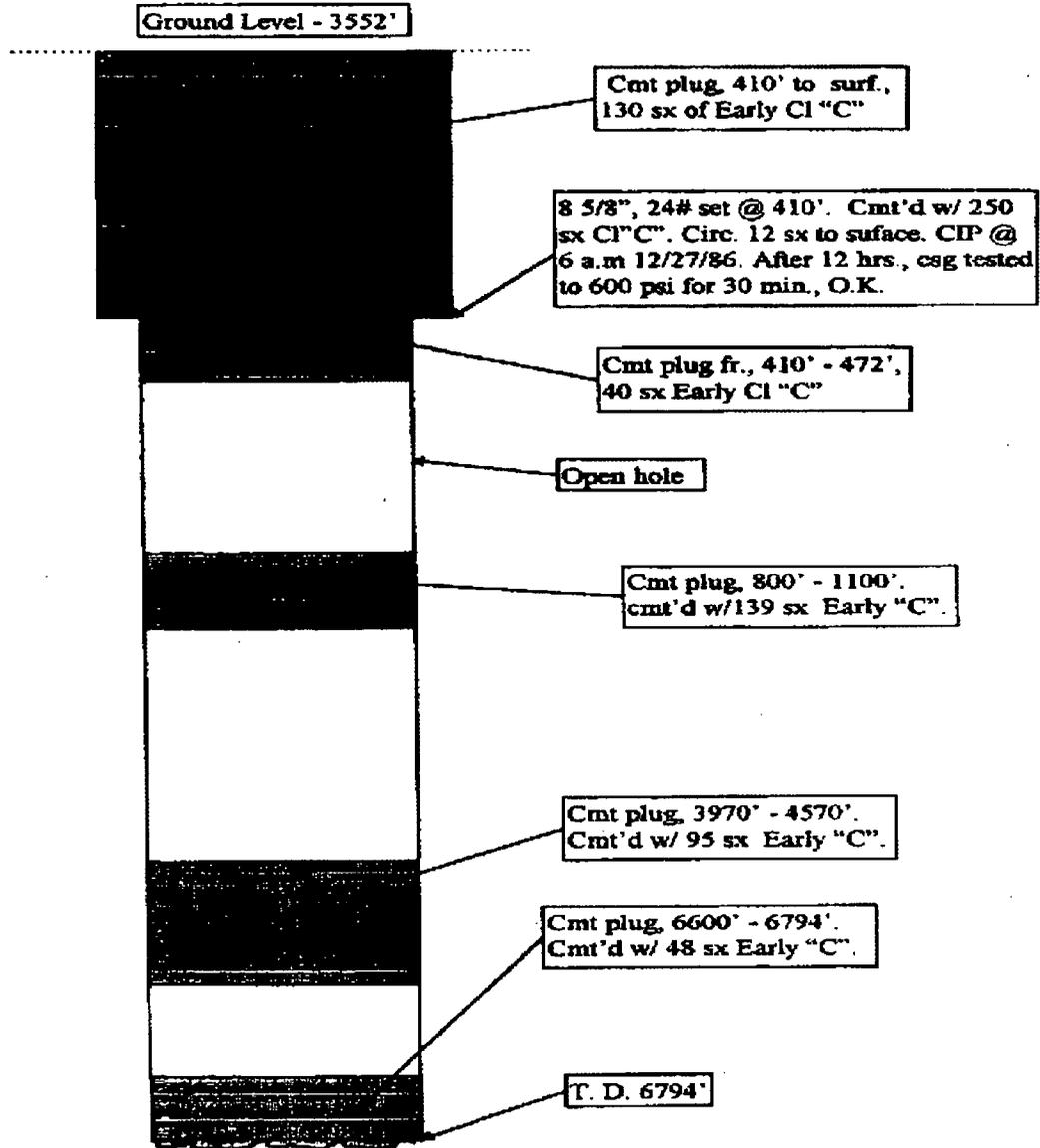
Mesquite SWD, Inc.
Bran SWD No. 1
660' FSL & 660' FEL
Sec. 11, T24S-R31E
Eddy County, NM

Plugging diagram of original well as presented in SWD-649-0 issued 12/10/1996. This data compares to the well file data and plugging reports.

Present

BRAN-BETTIS FEDERAL #1
OPERATOR - BRAN OIL CORPORATION
660' FSL & 660' FEL, Section 11
T24S - R31E, NMPH
Eddy County, New Mexico

Spud - 12/26/86
P&A'D 1/9/87



Mesquite SWD, Inc.
 Bran SWD No. 1
 660' FSL & 660' FEL
 Sec. 11, T24S-R31E
 Eddy County, NM

Current completion:

Top of Lamar Lime is at 4492'.

Bran SWD #1 Completion Diagram

API: 3001525697
 Operator: Mesquite SWD, Inc.
 Lease: Bran SWD
 Location: Sec 11, T24S-R31E Eddy Co., NM
 Footage: 660 FSL, 660 FEL

Well No: 1

KB: 3626
 GL: 3606

Surface Csg

Size: 8-5/8" 24#
 Set @: 410
 Sxs cmt: 250 orig + 150
 Circ: 45 sx
 TOC: Surface
 Hole Size: 12-1/4"

Intermediate Csg Proposed

Size: 7" 26# J-55 FL-4S
 Set @: 4297
 Sxs cmt: 900
 Circ: 128 sx
 TOC: Surface
 Hole Size: 7-7/8"

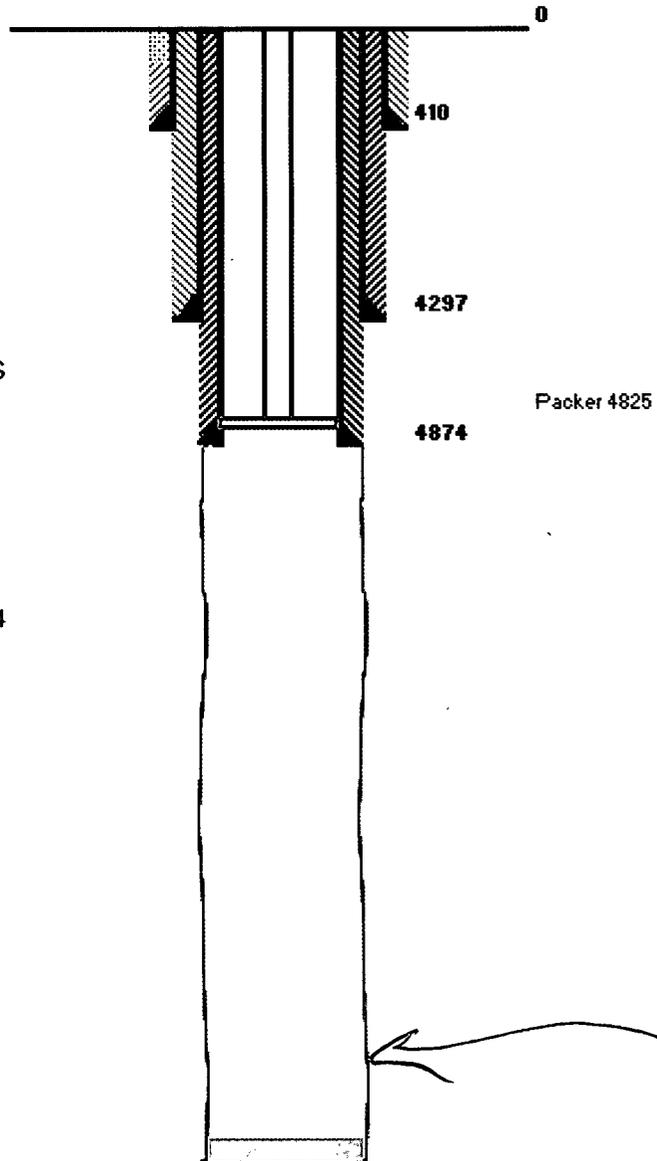
Production Csg Proposed

Size: 5-1/2" 17# J-55 FL-S4
 Set @: 4850'
 Sxs cmt: 800
 Circ: 170 sx
 TOC: Surface
 Hole Size: 7-7/8"

Note: Original OH drilled w/ 7-7/8" bit

4825' 3-1/2" PH6 12.95# L-80 Fiberglass coated
 Nickel ArrowSet AX-1 pkr @4825

Loaded tubing annulus w/corrosion inhibitor
 Completed surface head for disposal



Not to Scale

DOB 6913' PB w/30 lb
 Tagged plug @6740'

Mesquite SWD, Inc.
Bran SWD No. 1
660' FSL & 660' FEL
Sec. 11, T24S-R31E
Eddy County, NM

SPOT10 Satellite and Matching Topographic Map



Mesquite SWD, Inc.
Bran SWD No. 1
660' FSL & 660' FEL
Sec. 11, T24S-R31E
Eddy County, NM

Item XIII:

Notification List

Surface Owner:

Bureau of Land Management
c/o Carlsbad Field Office
620 E. Greene Street
Carlsbad, NM 88220

Operators:

Chesapeake Operating, Inc.
Attn: Justin Zerkle
P.O. Box 18496
Oklahoma City, OK 73154

Devon Energy Operating Corp.
20 N. Broadway
Oklahoma City, OK 73102

COG Production, LLC
2208 W. Main
Artesia, NM 88210

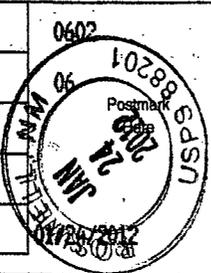
Mesquite SWD, Inc.
 Bran SWD No. 1
 660' FSL & 660' FEL
 Sec. 11, T24S-R31E
 Eddy County, NM

Receipts of Certified Mail

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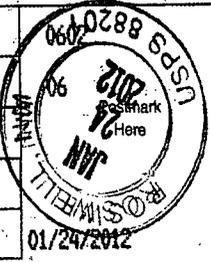
Sent To
 Bureau of Land Management
 Street, Apt. No., or PO Box No. 620 E. Greene Street
 City, State, ZIP+4 Carlsbad, NM 88220

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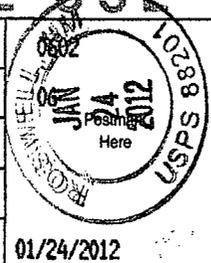
Sent To
 Chesapeake Operating, Inc.
 Street, Apt. No., or PO Box No. P.O. Box 18496
 City, State, ZIP+4 Oklahoma City, OK 73154

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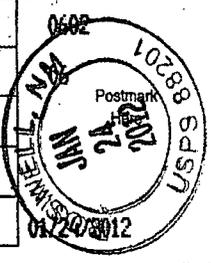
Sent To
 Devon Energy Operating Corp
 Street, Apt. No., or PO Box No. 20 N. Broadway
 City, State, ZIP+4 Oklahoma City, OK 73102

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Restricted Delivery Fee (Endorsement Required)	\$0.00	
Total Postage & Fees	\$ 6.80	

Sent To
 COG Production, LLC
 Street, Apt. No., or PO Box No. 2208 W. Main
 City, State, ZIP+4 Artesia, NM 88210

PS Form 3800, August 2006 See Reverse for Instructions

Mesquite SWD, Inc.
Bran SWD No. 1
660' FSL & 660' FEL
Sec. 11, T24S-R31E
Eddy County, NM

Legal Notice

LEGAL NOTICE

Mesquite SWD, Inc., c/o Kay Havenor, 904 Moore Ave, Roswell, NM 88201-1144, (575) 628-4518, is seeking an administrative renewal/extension from the New Mexico Oil Conservation Division for SWD-649-A for the Mesquite SWD, Inc. Bran SWD #1 well API: 30-015-25697, located 660 feet from the south line and 660 feet from the east line of Section 11, T24S, R31E, Eddy County, NM, 35 miles west of Jal, NM, completed November 4, 2011 for commercial produced water disposal.

The disposal interval is the lower Bell Canyon and the Cherry Canyon Formations of the Delaware Mountain Group through open-hole from 4,874 feet to 6,740 ft.

Mesquite SWD, Inc. plans to dispose of a maximum of 8,000 BWP/D with a maximum pressure of 974 psi.

Parties with questions regarding this proposal can contact Kay Havenor at the address or phone number above.

Interested parties must file objections or requests for hearing within 15 days of publication to the Oil Conservation Division: 1220 S. St. Francis Dr., Santa Fe, NM 87505.

Published in the Artesia Daily Press, Artesia, N.M., Jan. 24, 2012. Legal No 21991.

Jones, William V., EMNRD

From: Kay Havenor [khavenor@georesources.com]
Sent: Friday, February 03, 2012 3:37 PM
To: Jones, William V., EMNRD
Subject: Re: Disposal application from Mesquite SWD, Inc.: Bran SWD #1 30-015-25697

Will,

Thank you. Will work on the name change.

At 02:45 PM 2/3/2012, you wrote:

Hello Dr. Havenor,

We still show the operator of record for this well as Sonat Exploration Company who probably was the last operator prior to it being plugged.

I know Mesquite SWD, Inc. has done the re-entry work and this is a Federal Well – so it must have been corrected with the BLM's CFO.

Would you work with our Artesia office to get this corrected on the OCD records?

I am readying the permit for release Febr 15, 2012

Regards,

William V Jones, P.E.
Engineering, Oil Conservation Division
1220 South St. Francis Drive, Santa Fe, NM 87505
Tel 505.476.3448 ~ Fax 505.476.3462



Kay C. Havenor, Ph.D., PG. CPG
GeoScience Technologies
904 Moore Ave

Jones, William V., EMNRD

From: Phillips, Dorothy, EMNRD
Sent: Thursday, February 16, 2012 10:36 AM
To: Jones, William V., EMNRD
Subject: RE: Disposal Applications Pending Rule 5.9 Issues for Mesquite SWD, Inc.

Will, I have the letter of credit for the Hobbs State No. 3 and I am approving it today. They are now okay on financial assurance and Rule 5.9.

From: Jones, William V., EMNRD
Sent: Monday, February 13, 2012 6:37 PM
To: Kay Havenor
Cc: Gonzales, Elidio L, EMNRD; Kautz, Paul, EMNRD; Shapard, Craig, EMNRD; Dade, Randy, EMNRD; Phillips, Dorothy, EMNRD; Sanchez, Daniel J., EMNRD
Subject: Disposal Applications Pending Rule 5.9 Issues for Mesquite SWD, Inc.

Hello Kay,
For your client Mesquite SWD, Inc.:

According to the OCD web site, the Hobbs State #3 well requires a single well bond to be posted.
You can check with the Hobbs district office to ensure this requirement is correct and, if so, post the bond with Dorothy Philips of this office – who handles the bonds.

We have two pending SWD permits waiting to release (Government AB #4 and Bran SWD #1), but are not allowed to release them if the applicant has Financial Assurance issues.

I will not know if or when this is fixed unless you let me know.

Regards,

Will Jones
New Mexico
Oil Conservation Division
[Images](#) [Contacts](#)

Injection Permit Checklist (11/15/2010)

Federal

WFX _____ PMX _____ SWD 649-A Permit Date 2/15/12 UIC Qtr (JFM)

Wells 1 Well Name(s): Brown Seals #1

API Num: 30-0 15-25697 Spud Date: 12/26/86 New/Old: N (UIC primacy March 7, 1982)

Footages 660FSL/660FEL Unit P Sec 11 Tsp 24S Rge 31E County EDDY

General Location: 3.5 mi West of JAL (7 mi South of WIPP)

Operator: Margate SWD, LLC Contact SUNAT EXPLORATION CO

OGRID: 161968 RULE 5.9 Compliance (Wells) _____ (Finan Assur) _____ IS 5.9 OK? _____

Well File Reviewed Current Status: Set up 4 SWD - (OLD Permit EXPIRED)

Planned Work to Well: _____

Diagrams: Before Conversion _____ After Conversion _____ Elogs in Imaging File: _____

Well Details:	Sizes		Setting Depths	Stage Tool	Cement Sx or Cf	Determination Method
	Hole.....	Pipe				
New_Existing <input checked="" type="checkbox"/> Surface	<u>12 1/4</u>	<u>8 7/8</u>	<u>408/410'</u>	<u>—</u>	<u>250X</u>	<u>CIRC</u>
New_Existing <input checked="" type="checkbox"/> Intern	<u>7"</u>		<u>4297</u>		<u>760+200</u>	<u>CIRC</u>
New_Existing ___ LongSt	<u>5 1/2"</u>		<u>4874'</u>		<u>800</u>	<u>CSPC</u>
New_Existing ___ Liner						
New_Existing <input checked="" type="checkbox"/> OpenHole	<u>7 7/8"</u>		<u>4500'</u>			

Depths/Formations:	Depths, Ft.	Formation	Tops?
Formation(s) Above	<u>4575</u>	<u>o.c.</u>	<input checked="" type="checkbox"/>
Injection TOP:	<u>4874</u>	<u>Bell c.</u>	Max. PSI <u>975</u> OpenHole <input checked="" type="checkbox"/> Parts <u>—</u>
Injection BOTTOM:	<u>6740</u>	<u>Chary C.</u>	Tubing Size <u>3/2</u> Packer Depth <u>4825</u>
Formation(s) Below	<u>5500</u> <u>8421</u>	<u>Chary C.</u> <u>B.S.</u>	<input checked="" type="checkbox"/>

4874
748

Capitan-Reef? (Potash? Noticed?) [WIPP? Noticed?] Salado Top/Bot 1010-4270 Cliff-House?

Fresh Water: Depths: _____ Formation: _____ Wells? _____ Analysis? Affirmative Statement

Disposal Fluid Analysis? Sources: Commercial

Disposal Interval: Analysis? _____ Production Potential/Testing: _____

Notice: Newspaper Date 1/24/12 Surface Owner BLM (1/24/12) Mineral Owner(s) BLM

RULE 26.7(A) Affected Persons: Chary/CG/Dawn

AOR: Maps? Well List? Producing in Interval? NO Wellbore Diagrams?

.....Active Wells 0 Repairs? _____ Which Wells? _____

.....P&A Wells 0 Repairs? _____ Which Wells? _____

Issues: _____ Request Sent _____ Reply: _____