RECEIVED: /2017

Signature

REVIEWER:

APP NO:

e-mail Address

# NEW MEXICO OIL CONSERVATION DIVISION Geological & Engineering Burgary



- Geological & Engine	ering Bureau –	
1220 South St. Francis Drive,	Santa Fe, NM 87505	
ADMINISTRATIVE APPLI	CATION CHECKLIST	
THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE , REGULATIONS WHICH REQUIRE PROCESSING		
		* N.
Applicant: Mesquite SWD, Inc.		D Number: <u>161968</u>
Well Name: Mesa Verde SWD#3  Pool: SWD Devonian-Silurian		0-015-pending
Ool. Swb bevoluan-shartan	roor	Code: <u>97869</u>
SUBMIT ACCURATE AND COMPLETE INFORMATION R		THE TYPE OF APPLICATION
INDICATED	BELOW	5 WD - 1696
1) TYPE OF APPLICATION: Check those which apply a A. Location – Spacing Unit – Simultaneous Dediction – NSL NSP (PROJECT AREA)  B. Check one only for [1] or [1]		SD.
[1] Commingling – Storage – Measurement  DHC CTB PLC PC  [11] Injection – Disposal – Pressure Increase –  WFX PMX SWD IPI	OLS OLM Enhanced Oil Recove EOR PPR	,
2) NOTIFICATION REQUIRED TO: Check those which of	nnoly.	FOR OCD ONLY
A. ☐ Offset operators or lease holders	appiy.	Notice Complete
B. Royalty, overriding royalty owners, revenu	e owners	Application
C. Application requires published notice D. Notification and/or concurrent approval	hv SI O	Content
E. Notification and/or concurrent approval	•	Complete
F. Surface owner G. For all of the above, proof of notification H. No notice required	or publication is attact	ned, and/or,
The Honor regards		
<ol> <li>CERTIFICATION: I hereby certify that the informatic administrative approval is accurate and complete understand that no action will be taken on this ap notifications are submitted to the Division.</li> </ol>	to the best of my kno	wledge. I also
Note: Statement must be completed by an individu	al with managerial and/or sup	ervisory capacity.
	,,	
	September 18, 201	
Kay Havenor	Dale	
Print or Type Name	575-626-4518	
	Phone Number	<del></del>
East Applications		
SEC Application	Kay.havenor@gn	nail.com

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 Si 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:
	<ol> <li>Proposed average and maximum daily rate and volume of fluids to be injected;</li> <li>Whether the system is open or closed;</li> <li>Proposed average and maximum injection pressure;</li> <li>Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,</li> <li>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.).</li> </ol>
*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. water.	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:
	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.

1

### INJECTION WELL DATA SHEET

OPERATOR:	Mesquite SWD, Inc.		(OGRIE	161968)	
WELL NAME & N	NUMBER: Mesa Verde SWD #3		3	0-025-NA (New	Drill)
WELL LOCATION:	1030' FSL & 2635' FWL	N	13	248	31E
•	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE
<u> </u>	WELLBORE SCHEMATIC			ELL CONSTRUCTURE CLASSING	CTION DATA
	·	Hole Size:	26"	Casing S	Size: 20" 133# J-55 BTC
	See attached diagram	Cemented with	:1980	sx. <i>or</i>	ft <sup>3</sup> ·
	+'	Top of Cement	: Surface	Method	Determined: <u>Circulate</u>
			<u>Inter</u>	mediate-1 Casing	
		Hole Size:	17-½"	Casing S	ize: <u>13-%" 68#HCN-80 LTC</u>
ż		Cemented with	:1000	_ sx. <i>or</i>	ft³
		Top of Cement	: Surface	Method I	Determined: Circulate
			Inter	mediate-2 Casing	
		Hole Size:	121/4"	Casing S	ize: 9%" 47# HCL
4		Cemented with	:1800	_ sx. or	ft³
		Ton of Cement	: Surface	Method I	Determined: Onr

# Hole Size 8½" Casing Size 75%" 39/42.8# P-110 Cemented with: 2880 sx. or ft³ Top of Cement Surface Method Determined Opr Total Depth: Approx 17,820' Injection Interval Approximately 16,620' To Approximately 17,820'

(Perforated or Open Hole; indicate which) Open Hole

Liner

### **INJECTION WELL DATA SHEET**

Tubing Size: 5.5" 0-11,650' 17/20#, 4.5" 11,650'-16,620' P-110/N80 Fiberglass coated							
Type of Packer: Lok-Set or equivalent							
Packer Setting Depth: Approx 16,620 ft							
Other Type of Tubing/Casing Seal (if applicable):							
Additional Data							
1. Is this a new well drilled for injection? X Yes No							
If no, for what purpose was the well originally drilled?							
Name of the Injection Formation: Siluro-Devonian							
3. Name of Field or Pool (if applicable):							
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: Delaware & Bone Springs horizons all above approximately 9,800'							

Mesquite SWD, Inc. Mesa Verde SWD #3 1030' FSL & 2635' FWL

Sec. 13, T24S-R31E Eddy County, NM

### PROPOSED NEW WELL DIAGRAM

API:

30025xxxx

Operator: Mesquite SWD, Inc

Lease:

Mesa Verde SWD

Location: Sec 13, T24S-R31E Eddy Co., NM

Footage: 1030 FSL & 2635 FWL

Well No:

3

KB:

3621' est

GL:

3601' (Google)

MSL of TD: -14199' est

32.21265N 103.735940W

Surface Csq

Size: 20" 133# J-55 BTC Set @: 880 Sxs cmt: 1980 Circ: Yes TOC: Surf Hole Size: 26"

Intermediate Csg

13-3/8" 68# HCN-80 LTC Size: Set @: 4,400 Sxs cmt: 1000 Circ: Yes TOC: Surf Hole Size: 17-1/2"

Intermediate-2 Csq

9-5/8" 47# HCL Size: Set @: 11700 Sxs cmt: 1800 Circ: Yes Hole Size: 12-1/4"

Liner

Size: 7-5/8" 39/42.8# P-110 Top 11650 Set @ 16620 Sx cmt 2880 Circ Yes Hole Size: 8-12"

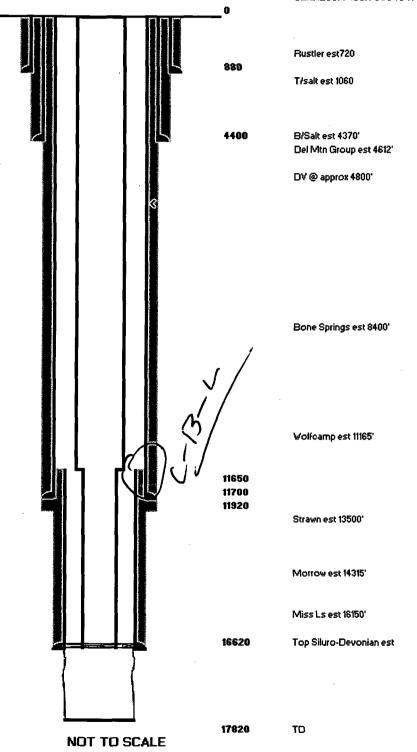
Open Hole

Size Interval 16620-180101 Hole Size 6-14"

Tubular requirements (made-up): 5-1/2" 0-300' 17# N80 Butt, 330'-11,000' 17# N80 LTC, 11,000'-11,650' 20# N80 LTC. 4.5" 11,650'-12,800' 11.6# P110 LTC, 12,800'-14,400' 13.5# N80 LTC 14,400'-16,620' 31.5# P110 LTC

Lok-Set or equivalent approx 16,620'

Open hole acid if regiuried. Tubing annulus wicorrosion inhibitor Complete surface head for disposal



State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION

STRICT III	D., ATTRC, 1	DI 87410				exico 87505		Distr	ct Offi
max (305) 834—617 STRICT IV 0 8. 57. yearing de max (505) 470—348	70 Feat (505)	634-6170			• • • • • • • • • • • • • • • • • • • •	i . i.	** 	C) AMEND	ED REPO
			WELL LO		N AND ACRE	AGE DEDICATI		· · · · · · · · · · · · · · · · · · ·	
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Property C		<u> </u>	<del>1</del>	<del></del>	Property Na			Well Nur	
11-operty C		}		•	MESA VERD			3	HOOF
OGRID No	<b>.</b>	<del> </del>			Operator Na		<del></del>	Elovati	010.
					MESQUITE	SWD	:	359	7.2'
					Surface Lo	cation			
or lot No.	Section	Township	Range	Lot Mn	Feet from the	North/South line	Feet from the	East/West line	Count
N.	13	24-S	31-E	Ì	1030	SOUTH	2635	WEST	EDD
		<u> </u>	Rottom	Hole I		lerent From Sur	<u> </u>	<u> </u>	
or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	Count
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					1		E-mail Addre	<u></u>	
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				SURE	CE LOCATION			UST 28, 2017	
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Mesquite SWD, Inc. PO Box 1479 Carlsbad NM 88221

Michael,

Per my conversation with Ray Podany in the Artesia OCD office, the Mesa Verde SWD #3 on C-108 Mesquite SWD has submitted to the OCD.

Mesquite SWD, Inc. is requesting that the footage submitted on the C-108 stay as it is.

Mesquite SWD, Inc. worked with OXY on picking this location, so it wouldn't interfere with their future development plans in the Mesa Verde area, Sec 13 T24S R31E.

Mesquite SWD, Inc. is requesting that the footage submitted in the C-108 be approved.

2635' FWL & 1030' FSL Sec 13 T24S R31E.

Thank you for your help in this matter.

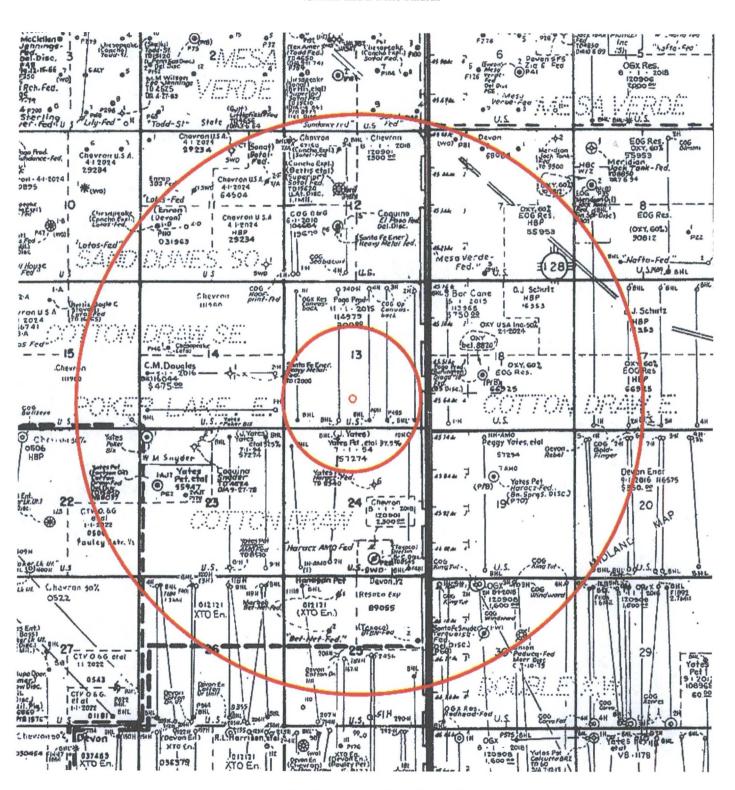
Clay Wilson

President

Mesquite SWD, Inc.

Item V:

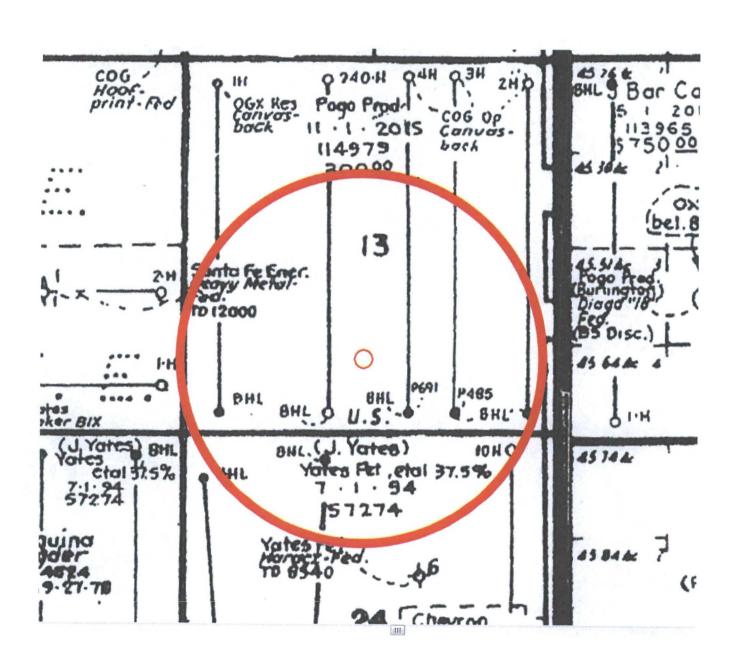
Area of Review 1/2 Mile and 2 Mile Radius



Some wells shown may not have been drilled.

Item V (a):

**AOR Half-Mile** 



Some wells shown may not have been drilled.

Mesquite SWD, Inc. Mesa Verde SWD #3 1030' FSL & 2635' FWL

Sec. 13, T24S-R31E Eddy County, NM

### 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
3001540538	CANVASBACK 13 FEDERAL 002H	drilled or	A	13	24.05	31E	330	N	480	E	A	COG PRODUCTION, LLC	0	F		10-Aug-12	3580	8415
3001541529	CANVASBACK 13 FEDERAL 003H	drilled or	В	13	24.08	31E	190	N	1470	E	В	COG PRODUCTION, LLC	0	F		21-Aug-13	3582	8409
3001541552	CANVASBACK 13 FEDERAL 004H	drilled or	В	13	24.08	31E	190	N	2130	E	В	COG PRODUCTION, LLC	0	F		15-Sep-13	3582	8385
3001539191	CANVASBACK 13 FEDERAL 001H	drilled or	D	13	24.05	31E	330	N	480	W	D	COG PRODUCTION, LLC	0	F		13-Jan-12	3569	8388

No known wells in the AOR penetrate pre-Pennsylvanian formations.

### Item VII:

- 1. The maximum injected volume anticipated is 25,000 BWPD. Average anticipated is 18,000 BWPD.
- 2. Injection will be through a closed system.
- 3. Maximum injection pressure is expected to be 3,900 psi, or as controlled by depth.
- 4. Disposal sources will be produced waters that, based upon regional experience, are compatible with known waters in the disposal zone.
- 5. Water sample analysis from Sundown Ballard (SWD-354) Sec. 27, T20S-R34E Lea Co., Seven Rivers (4000') reports 18,665 mg/l TDS.

Item VIII:

Disposal will be into Siluro-Devonian formations.

There is no known potable water within a 1-mile radius. Records from the New Mexico Office of the State Engineer on April 25, 2017 show no known water wells within a 1-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: Lea County

UTMNAD83 Radius Search (in meters):

Easting (X): 621420

Northing (Y): 3564670

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.

3/25/17 5:39 PM

WELLS WITH WELL LOG INFORMATION

The surface geology of the greater area, including the 2-mile radius as shown in Item V above, is lower Pliocene to middle Miocene Ogallala Formation eolian and alluvial deposits. These are underlain by Permian formations and evaporities. Based upon surface geology the depth of potable water is expected to be less than 250'.

Mesquite SWD, Inc. Mesa Verde SWD #3 1030' FSL & 2635' FWL

Sec. 13, T24S-R31E Eddy County, NM

### Item VIII: continued

WELLNAME	API	TOWNSHIP	RANGE	SECTION	TDS(mg/L)	Chlorides(mg/L)
HEFLIN FED #001	3001505853	24S	31E	24	133002	82400
HEFLIN FED #001	3001505853	24S	31E	24	37824	13300
HEFLIN FED #001	3001505853	24S	31E	24	256580	158000

Item IX:

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

Item X:

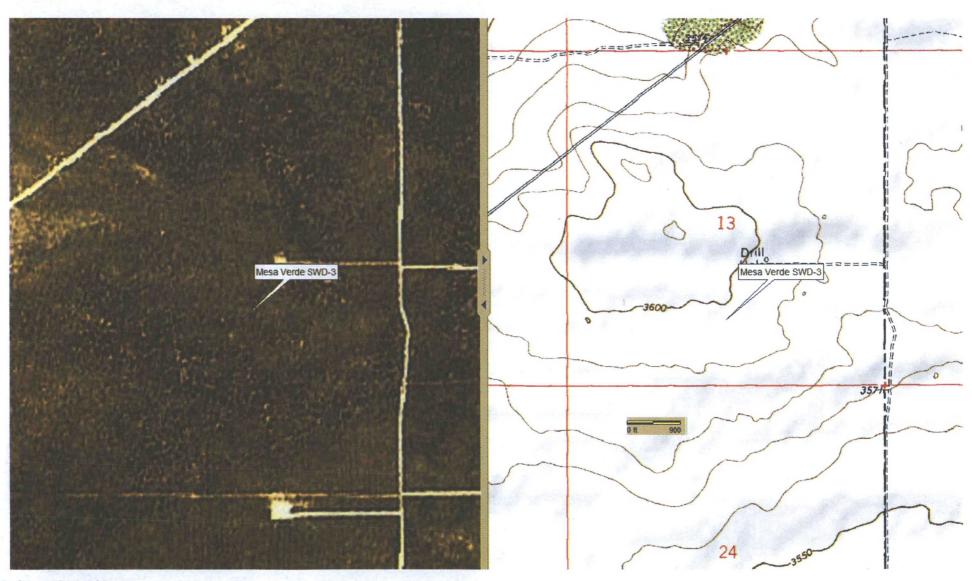
Logs will be filed with the OCD upon completion of the well. Density-Neutron will cover open-hole.

Item XI:

Please note Item VIII discussion above.

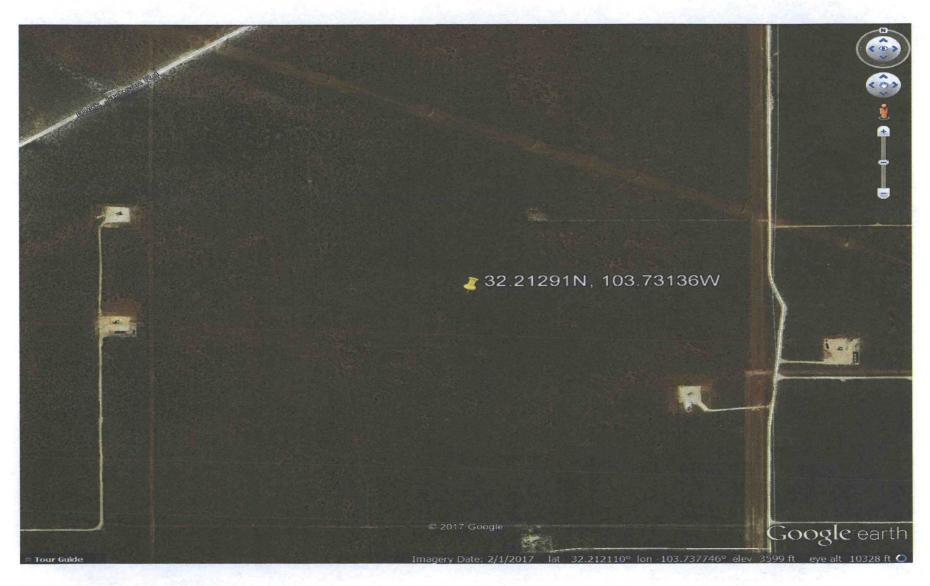
Item XII:

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



Delorme X-Map6 Pro Location approximately 32 miles west of Jal, NM, southwest on Buck Jackson Road approximately 2 miles off Mesquite SWD, Inc.

API 30-025-NA



Google Earth Mesa Verde SWD-3 Google Earth view of Mesa Verde SWD #3 proposed location.

### Item XIII: Proof of Notice

Minerals Owner:	Surface:
Bureau of Land Management 620 E. Greene St. Carlsbad, NM 88220	BLM
Operators in AOR:	
COG Operatinng, LLC 600 W. Illinois Ave Midland, TX 79701	Sec. 13
EOG Y Resources, Inc. 104 S. 4th St. Artesia, NM 88210	Sec 24

Item XIII: Legal Publication

### **Affidavit of Publication**

24405 State of New Mexico County of Eddy: **Danny Scott** being duly sworn saye that she is the Publisher of the Artesia Daily Press, a daily newspaper of General circulation, published in English at Artesia, said county and state, and that the hereto attached Legal Ad was published in a regular and entire issue of the said Artesia Daily Press, a daily newspaper duly qualified for that purpose within the meaning of Chapter 167 of the 1937 Session Laws of the state of New Mexico for Consecutive weeks/day on the same day as follows: First Publication September 8, 2017 Second Publication Third Publication Fourth Publication Fifth Publication Sixth Publication Seventh Publication Subscribed and sworn before me this 12th day of September 2017 OFFICIAL SEAL

Latisha Romine

Notary Public, Eddy County, New Mexico

### **Copy of Publication:**

### Legal Notice

Mesquite SWD, Inc., c/o Kay Havenor, 904 Moore Ave, Roswell, NM 88201-1144, (575) 626-4518, is seeking approval from the New Mexico Oil Conservation Division to drill and completethe Mesquite SWD, Inc., Mesa Verde SWD #3, well API: unassigned, to be located 1030' from the south line and 2635' from the west line of Section 13, Township 24 south and Range 31 east, Eddy County, NM for commercial produced water disposal. The proposed disposal interval isopen-hole into the Siluro-Devonian formations approximately 16,633'-17.843'.

Mesquite SWD, Inc. plans to dispose a maximum of 35,000 BWPD with a maximum pressure of 3,569 psi. Parties with questions regarding this proposal can contact Kay. Havenor at the address or phonenumber above.

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

Published in the Artesia Daily Press, Artesia, N.M., Sept. 8, 2017 Legal No. 24405.

> Item XIII: Notification Receipts

Page 1



September 12,2017

Dear Customer:

The following is the proof-of-delivery for tracking number 770215146502.

Delivery Information:

Status:

Signed for by:

Delivered

T.NORRIS

Delivered to: Delivery location: Receptionist/Front Desk

620 E GREENE ST CARLSBAD, NM 88220

Service type: Special Handling: FedEx Express Saver Deliver Weekday Delivery date:

Sep 11, 2017 12:41



Shipping Information:

Tracking number:

770215146502

Ship date:

Sep 8, 2017

Recipient:

Bureau of Land Management 620 E GREENE ST CARLSBAD, NM 88220 US Shipper:

Deborah Havenor 904 Moore Ave Roswell, NM 88201 US

Thank you for choosing FedEx.

Page 2



September 12,2017

Dear Customer:

The following is the proof-of-delivery for tracking number 770215654905.

Delivery Information:

Status:

Signed for by:

Delivered

R.PEREZ

Delivered to:

Delivery location:

Receptionist/Front Desk 600 W ILLINOIS

MIDLAND, TX 79701

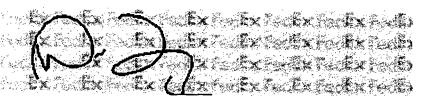
Service type: Special Handling:

FedEx Express Saver

Deliver Weekday

Delivery date:

Sep 12, 2017 10:22



Shipping Information:

Tracking number:

770215654905

Ship date:

Sep 8, 2017

Recipient:

COG Operating, LLC 600 W ILLINOIS AVE MIDLAND, TX 79701 US Shipper:

Deborah Havenor 904 Moore Ave Roswell, NM 88201 US

Thank you for choosing FedEx.

Page 3



September 12,2017

Dear Customer:

The following is the proof-of-delivery for tracking number 770215694324.

Delivery Information:

Status:

Delivered

Signed for by:

**N.ANDERSON** 

Delivered to:

**Delivery location:** 

Receptionist/Front Desk

105 S 4TH ST

ARTESIA, NM 88210

Service type:

Special Handling:

FedEx Express Saver Deliver Weekday

Delivery date:

Sep 11, 2017 09:52



Shipping information:

Tracking number:

770215694324

Ship date:

Sep 8, 2017

Recipient:

EOG-Y Resources, Inc. 104 S 4TH ST ARTESIA, NM 88210 US Shipper:

Deborah Havenor 904 Moore Ave

Roswell, NM 88201 US

Thank you for choosing FedEx.



# New Mexico Office of the State Engineer Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) (NAD83 UTM in meters)

No records found.

PLSS Search:

Section(s): 13-14, 23-24

Township: 24S

Range: 31E

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.

10/5/17 9:06 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER



# New Mexico Office of the State Engineer Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) (NAD83 UTM in meters)

No records found.

PLSS Search:

Section(s): 18

Township: 24S

Range: 32E

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.

10/5/17 9:07 AM

WATER COLUMN/ AVERAGE **DEPTH TO WATER** 

# - Inside Secretury'sords - Outside R-111-P

9/17/2017/10/06/2017/10/2017

C-108 Review Checklist	Received Add. Requ	est:	Reply Date:	Suspended: [Ver 15]	
ORDER TYPE: WFX / PMX / SWD	Number: Orde	r Date:	Legacy Perm	its/Orders:	
Well No. 3 Well Name(s): he	s-vend	٠	<del> </del>		
API: 30-0 15 - Pending Spud	Date:   TBI)	New or Old	:\ (UIC Class	II Primacy 03/07/1982)	
1030 FSL 1 Footages 2635 FWL Lo	ot or Unit Sec	3 Tsp 2	45 Rge 3/4	E County Eddy	
General Location: 2 3 unijes	- 1541 Pool: (	56011	jelonim-s	15 LANGE NO.: 9786 9	
General Location: 230m;/=5  BLM 100K Map: 5A/ Operator:	mesquite SLB ILL	OGRI	D://6/1918 Con	tact: KHY HAVELING	
COMPLIANCE RULE 5.9: Total Wells: 26 Inc	active: Fincl Assur:	OK-Comp	ol. Order? MA-1s	5.9 OK? V Date: 10-10-20	ワ
WELL FILE REVIEWED   Current Status:	<b>1</b>				
WELL DIAGRAMS: NEW: Proposed O or RE-ENTI	ER: Before Conv. After C	Conv. (	Logs in Imaging:	MA	
Planned Rehab Work to Well:			<del></del>		
Well Construction Details  Sizes (in) Borehole / Pipe	Setting e Depths (ft)		Cement Sx or Cf	Cement Top and Determination Method	1
Planned _or Existing _Surface 26 "/20		Stage Tool	1480	SUPFACT/VISHY	]
Planned_or ExistingInterm/Prod 174 1/137	4400		1000	SUFFEC-   Visyal	]
Planned_or Existing _Interm/Prod /12/4/15		4800		SUFFEE VISHAL	1
Planned_or Existing_Prod Liner	16620	ļ	2800	11654 6-13-6	1
Planned_or Existing Liner		 	·		4
Planned_or Existing OH / PERF		Inj Length	Comp	letion/Operation Details:	1
Injection Lithostratigraphic Units: Depths (ft)	Injection or Confining Units	Tops	Drilled TD	PBTD BS 1/2 NEW PBTD S& re-	
Adjacent Unit: Litho. Struc. Por.	16620	DEV	NEW TD:	NEW PBTD Sure	42-1
Confining Unit: Litho. Struc. Por.	16152	MS	NEW Open Hole	or NEW Perfs True	7
Proposed Inj Interval TOP:				in. Inter Coated? B 44 -11	<del> </del> >
Proposed Inj Interval BOTTOM:  Confining Unit: Litho. Struc. Por.		\ 		Depth ft Link	F
Adjacent Unit: Litho. Struc. Por.				face Press psi	l
AOR: Hydrologic and Geologic		· //	Admin. Inj. Press.	(0.2 psi per ft)	
POTASH: R-111-PMA Noticed?BLM Sec	Ord WIPP O Noticed?	M/Salt/S	alado T: 1 *6 O B: 43	フルW: Cliff House fm	1
FRESH WATER: Aquifer		•	·-	•	
NMOSE Basin: CALSBAD CAPITAN RE	EF: thru adj NA	No. Wells	within 1-Mile Radiu	s? FW Analysis	
Disposal Fluid: Formation Source(s)	Analysi	is?	_ On Lease ( ) Oper	rator <b>O</b> nly  Or Commercial  O	
Disposal Int: Inject Rate (Avg/Max BWPD): MA	1-2514 Protectable Water	ers?	Source:	System: Osed or Open	1
HC Potential: Producing Interval? MAFormerly					
AOR Wells: 1/2-M Radius Map? Well Li	st? Total No. Wells I	Penetrating	Interval:	Horizontals?	
Penetrating Wells: No. Active Wells Num Re	pairs?on which well(s)?	· · · · · · · · · · · · · · · · · · ·		Diagrams?	
Penetrating Wells: No. P&A Wells Num Repa	irs?on which well(s)? _			Diagrams?	
NOTICE: Newspaper Date September Mine	eral Owner Bum	Surface	Owner_BLN	ΛN. Date <b>5</b> - <i>L</i> /1/	
NOTICE: Newspaper Date September Mine RULE 26.7(A): Identified Tracts?Affected	Persons: CUV, t	=06	7	N. Date <u>Sept 11.</u> \) 5 4	ME
order Conditions: Issues: C-13-	L blw I	nto	inmedias	Le g'LineA	
dd Order Cond:				,	

### Kay C. Havenor

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

September 7, 2017

New Mexico OCD Attn: Mr. Michael McMillan 1220 South St. Francis Dr. Santa Fe, NM 81505

Re: Mesquite SWD, Inc.
Sand Dunes SWD #1
Sec 5, T24S-R31E, Eddy Co., NM
C-108 application

Dear Mr. McMillan:

The proposed well construction in the submitted application may have minor field changes due to actual joint lengths received on site. Casing depths in this well are planed to insure there will be no hydrologic connection between underground sources of drinking water and the injection zone.

Respectfully submitted,

KAY HAVENOV

Kay Havenor, PhD, PG

Agent on behalf of Mesquite SWD, Inc.

### Kay C. Havenor

Ph.D., Registered Geologist Arizona #30438 Certified Professional Geologist

Environmental - Hydrogeology Remote Sensing - Resources e-mail kay.havenor@gmail.comu 904 Moore Avenue Roswell, New Mexico 88201

Office: 505-624-4518

September 8, 2017

New Mexico OCD Attn: Mr. Michael McMillan 1220 South St. Francis Dr. Santa Fe, NM 81505

Re: Mesquite SWD, Inc.
Mesa Verde SWD #3
Sec 13, T24S-R31E, Eddy Co.
C-108 application

Dear Mr. McMillan:

Your request for notification to Potash is respectfully believed to not be required. The proposed location is 1030' FSL and 2635' FWL of section 13. This location is 2-1/4 miles from the closest edge of Potash property and therefore outside the 2-mile area of review. Additionally, to my understanding, it does not come under the Rule 5.9 notification requirements.

Should I be incorrect please so advise me.

Respectfully,

KAY HAVENOT

### Water samples in Sand Dunes SWD #1 greater area

Sand Dunes SWD #1

Unit N, 260' FSL & 2053' FWL Sec 5, T24S-R31E, Eddy Co., NM

MELLEMME	API	TOWNSHIP	(W)(e)3	<b>eismon</b>	inglich)	
TODD 23 C FEDERAL #018	3001532629	23S	31E	23	277304.6	167584
TODD 23 C FEDERAL #018	3001532629	235	31E	23	277467	167584
TODD 27 I FEDERAL #009	3001535521	235	31E	27	183197.7	113568
TODD 27 I FEDERAL #009	3001535521	238	31E	27	183536	113569
TODD 26 F FEDERAL #003	3001520302	23S	31E	26	248666.5	147008
TODD 36 B STATE #015	3001529102	235	31E	36	277300.2	169386
TODD 14 K FEDERAL #001	3001520298	238	31Ë	14	283352.3	179150
TODD 23 O FEDERAL #001	3001520796	238	31E	23	259135.1	160870
TODD 23 J FEDERAL #002	3001522473	238	31E	23	78713.6	45722
TODD 23 I FEDERAL #004	3001526928	235	31E	23	281743.1	178230
GRAHAM AKB STATE #003	3001531604	228	31E	02		164963
GRAHAM AKB STATE #009	3001531606	22S	31È	02		166962
) ARK 36 STATE #001H	3001542082	228	31E	36	146288.1	90420.2
GRAHAM AKB STATE #001	3001526875	228	31E	02	295345	184958
GRAHAM AKB STATE #002	3001526876	225	31E	02	301948	188957

Borns

# Devon Energy Corp Water samples (commingled) from Bone Springs and Wolfcamp

WELLNAME	API	TOWNSHIP	RANGE	SECTION	TDS(mg/L) Chlorides(mg/L)
TODD 14 K FEDERAL #001	3001520298	<b>23S</b>	31E	14	283352.3 179150
TODD 14 K FEDERAL #001	3001520298	23S	31E	14	301106.9 176934