MESQUITE SWD, INC.

PO Box 1479 CARLSBAD, NM 88221-1479 575-887-0980

February 21, 2017

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

Attention: Mr. Michael McMillan

Re: Order No. SWD-1571-B

API #30-025-23895

Vaca Draw Federal SWD #1

Dear Mr. McMillan:

Mesquite SWD, Inc. seeks to amend SWD-1571-B which authorizes produced water disposal in the Devonian and Silurian formations through open hole interval 17498 to 19842 feet.

We request that this Order be amended to include the Montoya formation and that the injection interval be amended to 17465 to 19035'.

Attached is a letter from Kay Havenor stating that in his opinion the Montoya formation will not accept any fluid. Also attached is a copy of the completion report and the mud log.

Thank you for your consideration of this application. Please let me know if there is anything further that you need. I may be reached at 575-914-1461 or by email at mjp1692@gmail.com. Or if you wish to speak with Riley Neatherlin about technical points, he can be reached at 575-706-7288 or by email at <a href="majorage-reached-reach

Sincerely,

Melanie J. Wilson

Cc: Mr. Paul Kautz - Hobbs OCD

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

Mr. Michael A. McMillan Engineering Bureau NM OCD 1220 South St. Francis Drive Santa Fe, NM 87505

Mr. McMillan:

In reviewing the data on Mesquite SWD, Inc Vaca Draw SWD #1, SWD-1571-B re-entry and side-track it is apparent the hole penetrated the upper-most Montoya. The mud-logging (Pason) samples and e-logs clearly confirm the 28' of penetrated Montoya is dense dolomite, limestone and chert that would not accept any fluid.

Respectfully submitted,

KAY HAVENOR

Form 3160-4

UNITED STATES

FORM APPROVED

(August 2007)						THE INT		1000							004-0137 31, 2010
	WELL	COMPL	ETION C						AND I	_OG			ease Serial No IMNM26394		
la. Type of	Well	Oil Well	Gas	Well	☐ Dr	y 🛛 C	ther:	OTH				6. If	Indian, Allot	tee or	Tribe Name
b. Type of	Completion		lew Well	☐ Wo	rk Over	D	eepen	☐ Plug	g Back	Diff. I	Resvr.	7 11	nit on CA Ao		ant Nama and Na
		Othe	er									7. 0	nit or CA Ag	reeme	ent Name and No.
2. Name of MESQU	Operator	INC.	E	:-Mail: r		ontact: M 2@gmail.		E J WILS	ON	y			ease Name and ACA DRAW		ell No. DERAL SWD 1
3. Address	PO BOX		88220					Phone N : 575-91		e area code	:)	9. A	PI Well No.		30-025-23895
4. Location	of Well (Re	port locati	ion clearly ar	nd in acc	ordance	e with Fed	eral rec	uirements	s)*				Field and Poo		Exploratory
At surfac	e SESE	658FSL	662FEL												Block and Survey
At top pr	od interval	reported b	elow SES	SE 658F	SL 66	2FEL						0	r Area Sec	21 T2	25S R33E Mer NM
At total o	depth SES	SE 658F	SL 662FEL										County or Par EA	ish	13. State NM
14. Date Spi 11/29/20	udded 016			ate T.D. /28/201		ed		D&	Complet A 🔼	ed Ready to I	Prod.	17. I	Elevations (D 3350	F, KE GL	3, RT, GL)*
18. Total De	epth:	MD TVD	1903		19. Pl	ug Back T	.D.:	MD TVD	19	9035	20. De	pth Bri	dge Plug Set:		MD TVD
21. Type Ele GR N; A	ectric & Oth	er Mecha	nical Logs R	un (Sub	mit cop	y of each)				22. Was		ed?	⊠ No □] Yes	(Submit analysis)
GR N; A	RRAY IND	UCTION	; GR COM	P; GR E	H PRC	F; MUD				Was Direc	DST run' ctional Su	?	No [(Submit analysis) (Submit analysis)
23. Casing and	d Liner Reco	ord (Repo	ort all strings	set in w	rell)										
Hole Size	Size/Grade Wt. (#/ft.)		To (MI		Bottom Stag		Cementer Depth		No. of Sks. & S		y Vol. Cement		p*	Amount Pulled	
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17.500	1	13.375	61.0		0	4986			3200		_			0	
12.500		10.750	51.0		0	13004			3375					0	
8.750	7.6	25 P110	39.0	,	0	17465	-	11989		1830	0		,	0	
					\dashv		\vdash								
24. Tubing I	Record														
Size I	Depth Set (M	(ID) P	acker Depth	(MD)	Size	Dept	h Set (1	MD) F	acker De	pth (MD)	Size	De	pth Set (MD))	Packer Depth (MD)
5.500		7457		17457											
25. Producin								ation Reco				Τ.			
A) Devonian	rmation	_	Тор	_	Botto	om	I	Perforated	Interval		Size	1	No. Holes		Perf. Status
B) Silurian												+			
C)												\top			
D)															
27. Acid, Fra			ment Squeeze	e, Etc.											
D	Depth Interva	al						A	mount and	d Type of N	Material				
			_							-					
28. Production	on - Interval														
	Test Date	Hours Tested	Test Production	Oil BBL	Ga: MC		Water BBL	Oil Gorr.		Gas Gravit	у	Producti	on Method		
	Tbg. Press.	Csg.	24 Hr.	Oil	Gas		Water	Gas:O	il	Well S	Status				
	Flwg. SI	Press.	Rate	BBL	MC	CF 1	BBL	Ratio							
28a. Producti		l B													
Date First	Test	Hours	Test	Oil	Gas		Water	Oil Gr		Gas		Producti	on Method		
Produced	Date	Tested	Production	BBL	MC	TF 1	BBL	Соп.	API	Gravit	у				

Csg. Press.

24 Hr. Rate

Tbg. Press. Flwg.

Choke

Size

Gas MCF

Oil BBL

Gas:Oil Ratio

Well Status

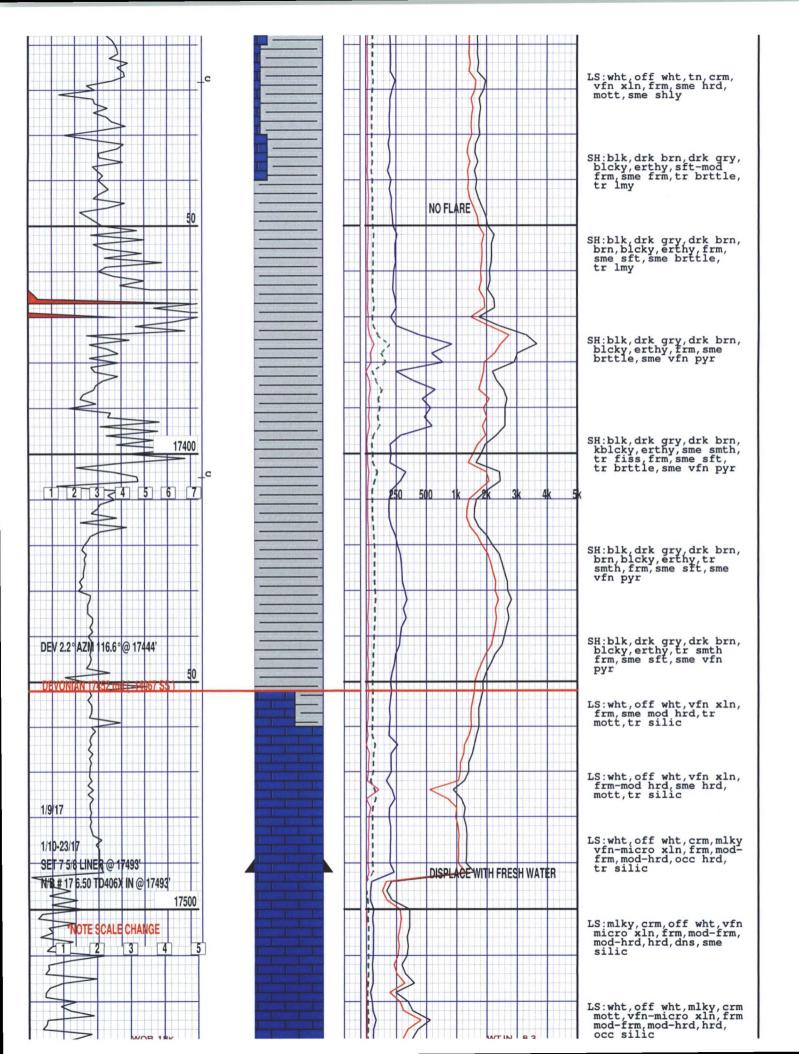
Water BBL

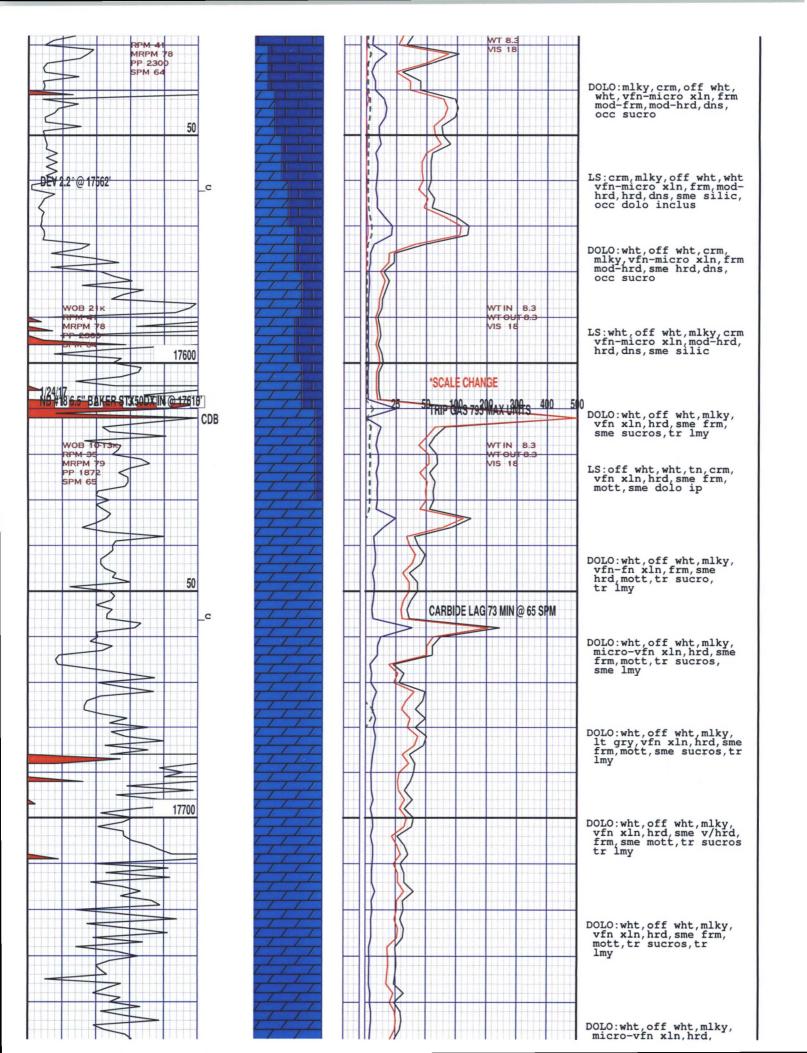
28b. Production - Interval C Date First Test Date Tested Production BBL MCF BBL Corr. APT Gravity Production Method	
Production Date Tested Production BBL MCF BBL Corr. API Gravity	
Size	
Date First Produced Date Hours Test Date Hours Test Date Production Date Hours Tested Production Date Dat	
Produced Date Tested Production BBL MCF BBL Corr. API Gravity Choke Size Tbg. Press. Csg. Press. 24 Hr. Rate BBL MCF BBL Gas Water BBL Ratio 29. Disposition of Gas(Sold, used for fuel, vented, etc.) 30. Summary of Porous Zones (Include Aquifers): Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries. Formation Top Bottom Descriptions, Contents, etc. STRAWN ATOKA BARNETT MISSISSIPPI LIME WOODFORD DEVONIAN FUSSLEMAN FUSSLEMAN	
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STRAWN ATOKA BARNETT MISSISSIPPI LIME WOODFORD DEVONIAN FUSSLEMAN	1,
ATOKA BARNETT MISSISSIPPI LIME WOODFORD DEVONIAN FUSSLEMAN	Top Meas. Depth
32. Additional remarks (include plugging procedure): CBL too large to attach electronically. Please contact me and I will email it to engineer.	14198 14474 15596 16940 17284 17452 18260 19009
33. Circle enclosed attachments:	
	Directional Survey
34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached in Electronic Submission #367638 Verified by the BLM Well Information System.	instructions):
For MESQUITE SWD, INC., sent to the Hobbs	
Name (please print) RILEY G NEATHERLIN Title OPERATIONS MANAGER	
Signature (Electronic Submission) Date 02/21/2017	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any departm	nent or agency

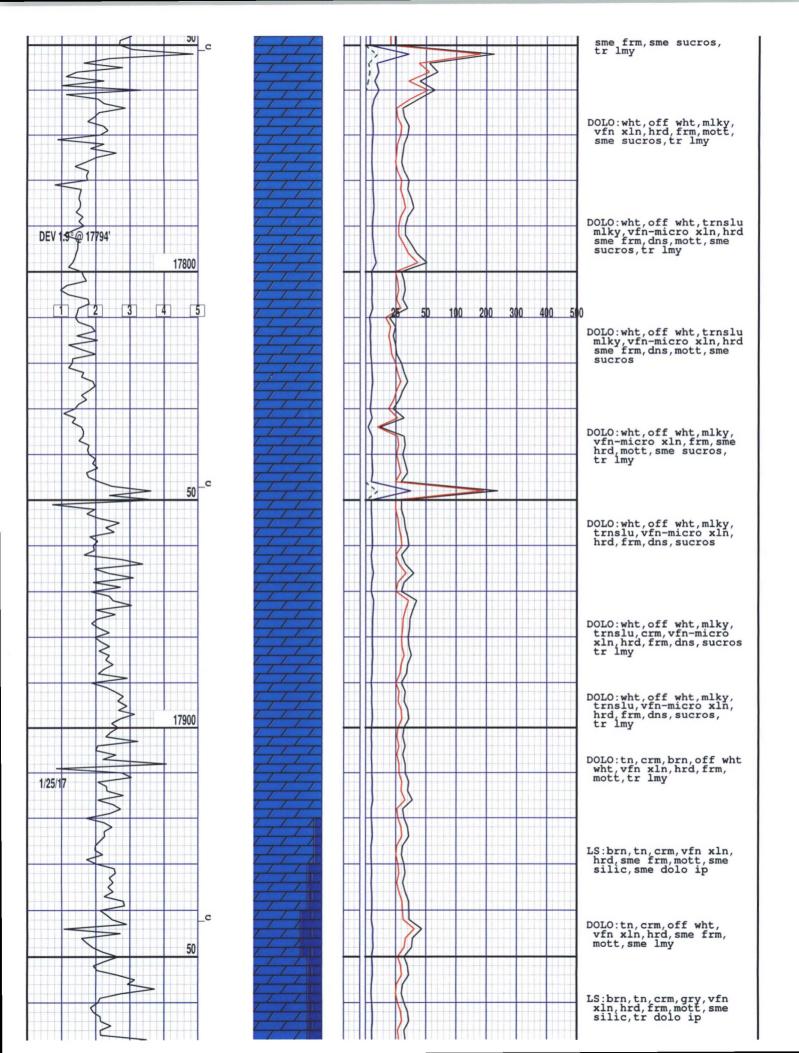
MORCO GEOLOGICAL SERVICES, INC

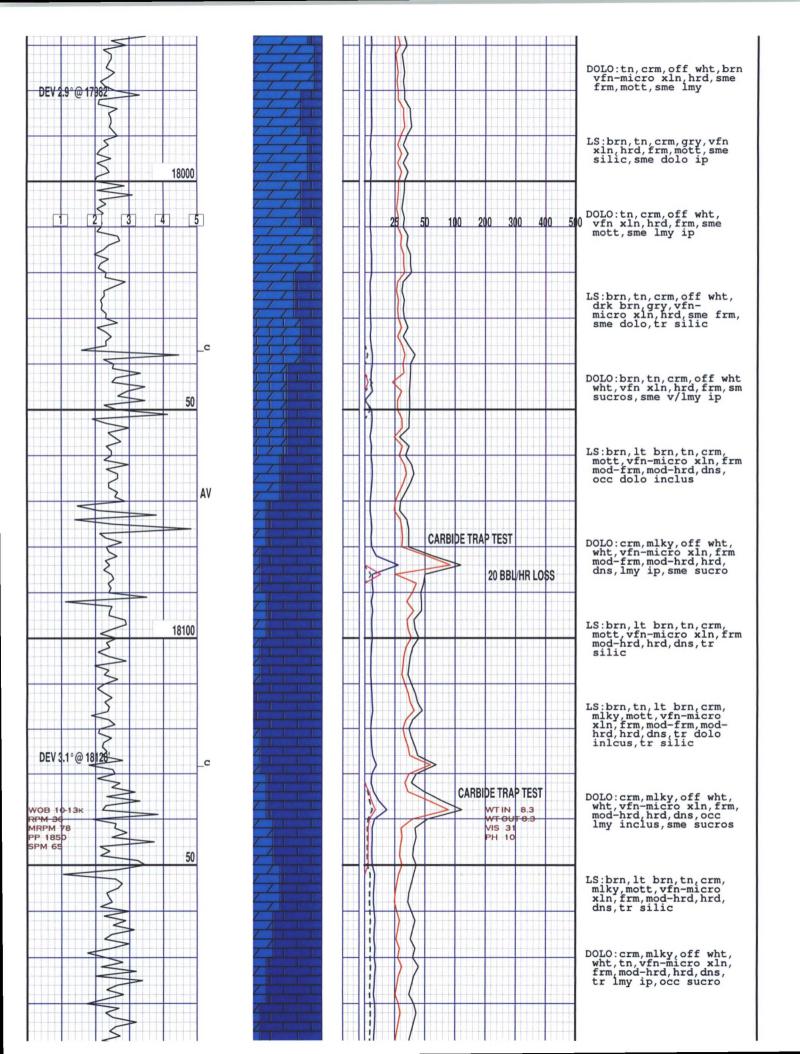
P. O. BOX 2136 CARLSBAD, NM 88221 800-748-2340

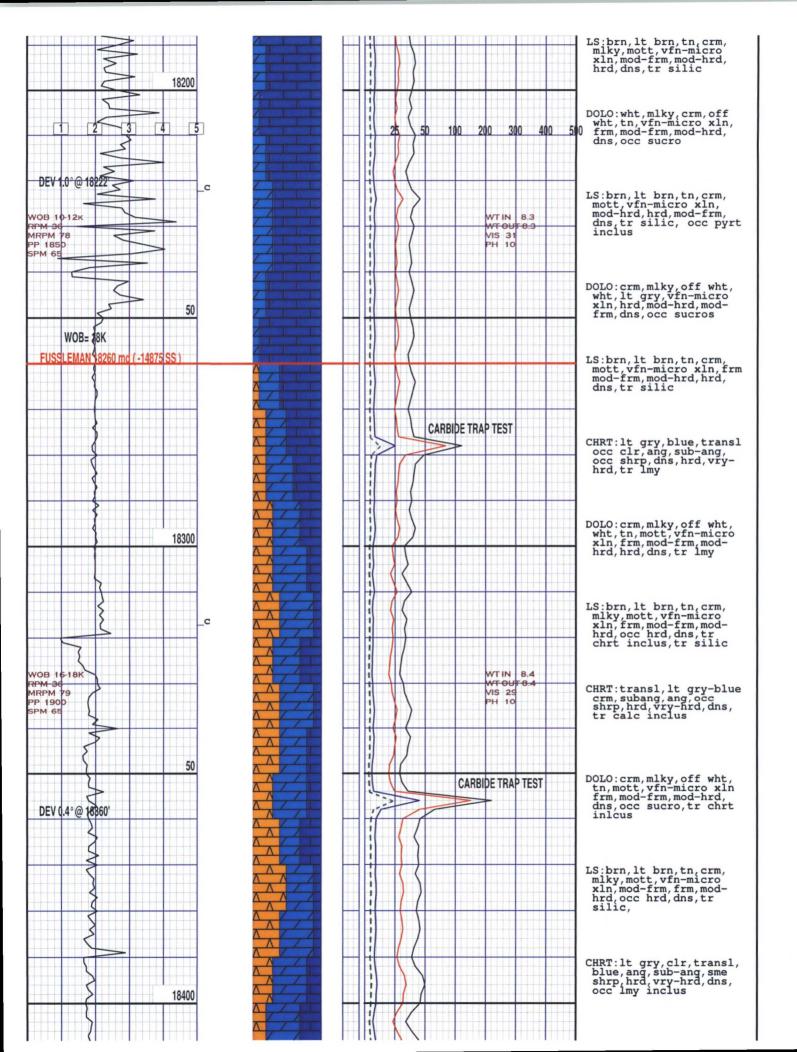
COMPANY:	MESQUITE SV	/D INC.						
WELL:	VACA DRAW SW	D #1						
FIELD:			СО	UN	TY: LEA	STATE: N	EW ME	EXICO
LOCATION:	SEC 21,T 25S,R 3	3E, 658 FSL	.&662	'FEI	L			
_								
Interval Logge	ed: 12467	To: _	1903	5	G.L.:	3359'	K.B:	3385'
Date Logged:	12/3/16	To: _	1/27/	2017	Spud Date:	_		
Rig: _	PRECISION 590				Unit No.: _3			
Loggers:	E. NWAFOR,BRO	WN,A.VALL	E.					
Api No.:	30-025-23895		_					
Filename: _\	/aca_draw_swd_	1.mlw						
Geologist: _								
Created By MainLog								
Abbreviati	ons:			Li	thology Symbols:			Gas Chromatograph Analysis:
	Drill Stem Test		nydrite	Œ		Granite		HW ———
	Pirectional Survey Connection gas		stone omite		Chert Conglomerate	Sandstone Limestone		C1 ————————————————————————————————————
TGTrip Gas LAT	Logged After Trip	Coa	al b Shale	e	Shale	Deritorite		C3
	ump Pressure .Strokes/Min		Shan		Org Sh	Green Sh		IC4 ———
SGSurvey Gas DTG	Down Time Gas		st Sh1		Cust Sh2 Cust Sh5	Cust Sh3 Cust Sh6		NC4 ————————————————————————————————————
Mud Data					Accessories	- Cust one		NC5
	Viscosity Filtrate	₩ ₩ Glaud	conite	рр	Pyrite 66 Fossils	Oolites		
CHLChlorides SC		♦ ♦ Fract	ures	0	Cement			
	Vis		%					
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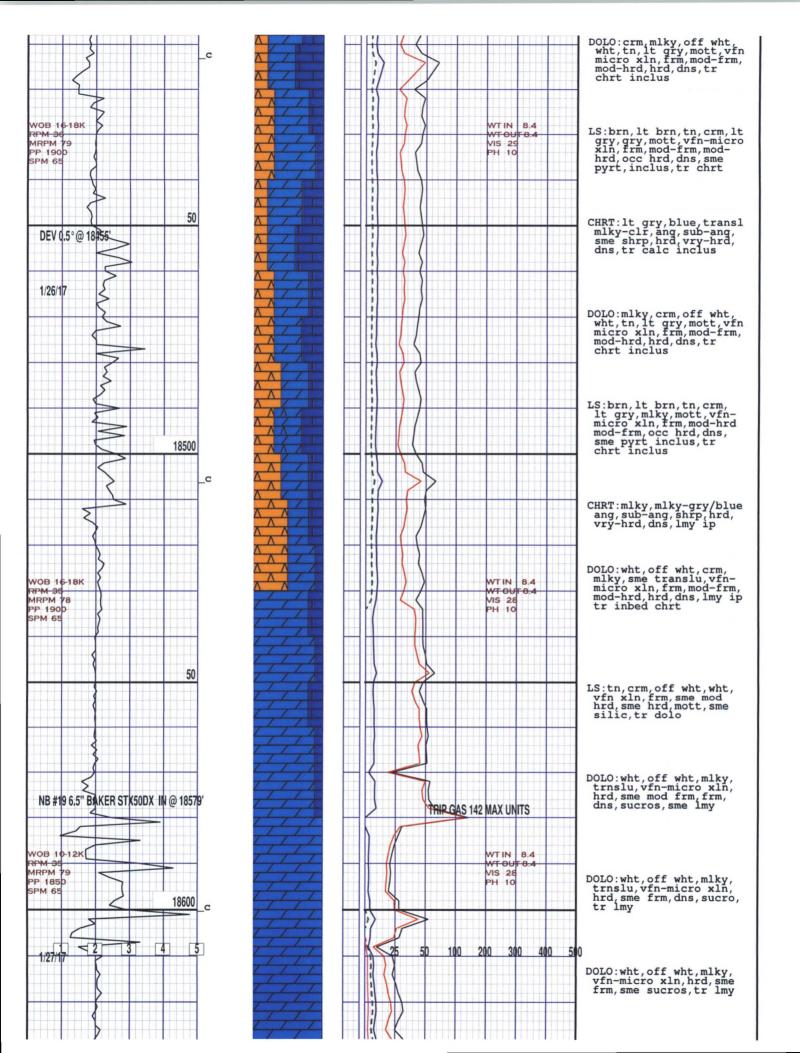


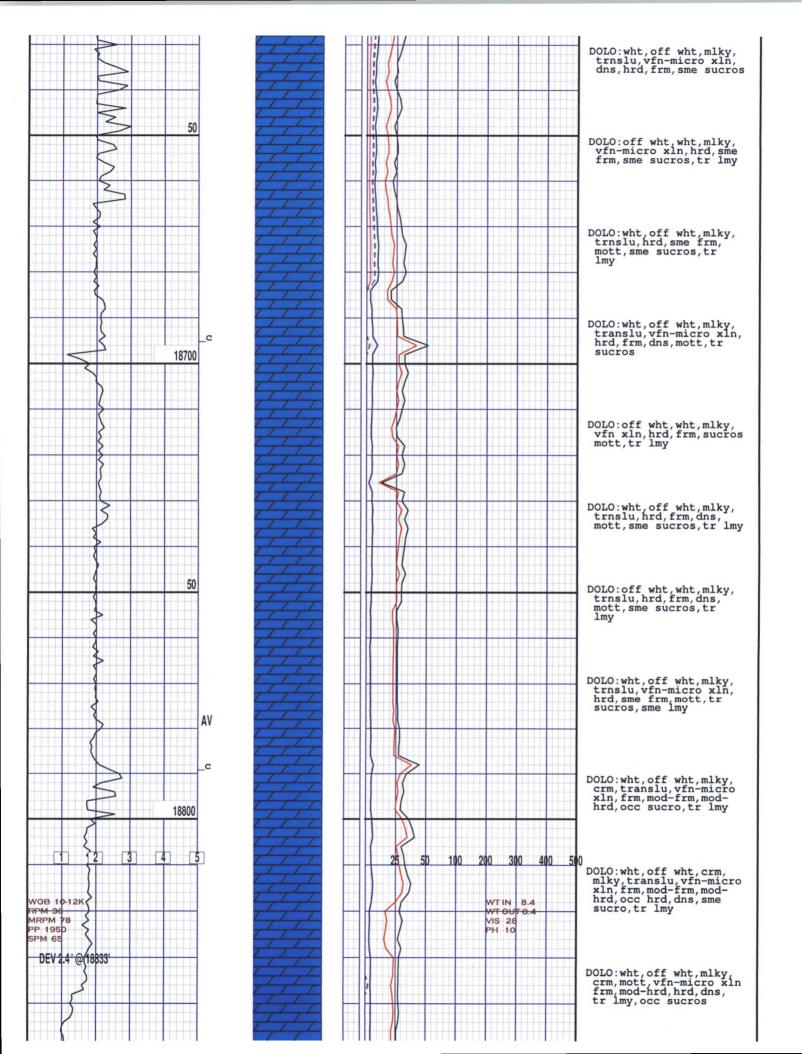


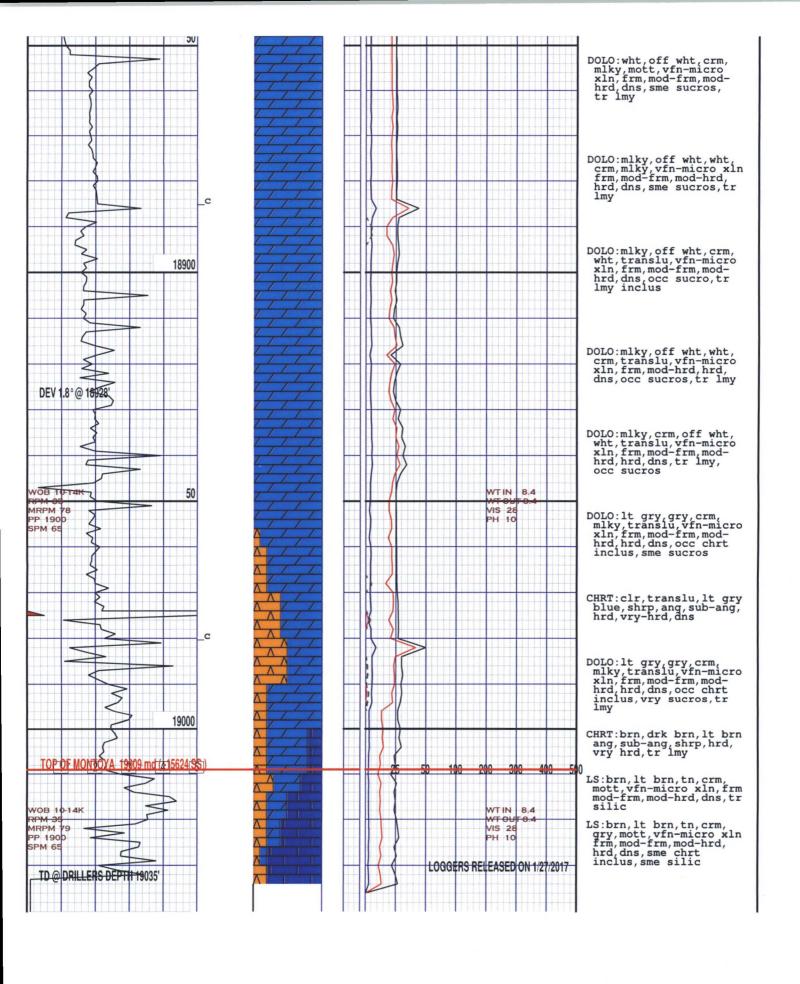












Inactive Well Additional Financial Assurance Report 161968 MESQUITE SWD, INC Total Well Count: 23 Printed On: Tuesday, February 21 2017

Property	Well Name	Lease Type	ULSTR	OCD Unit Letter	API	Well Type	Last Prod/Inj	Inactive Additional Bond Due	Measured Depth	Required Bond Amount	Bond Required Now	Covered By Blanket TA Bond	Bond In Place	In Violation
38571	BIG EDDY SWD #001	F	P-03-20S-31E	Р	30-015-05819	S	12/2016		14205				0	
315072	BLUE QUAIL SWD FEDERAL #001	F	F-11-25S-32E	F	30-025-42717	S	12/2016		Unknown				0	
39091	BRAN SWD #001	F	P-11-24S-31E	P	30-015-25697	S	07/2014		6794				0	
39602	CAGNEY 28 FEDERAL #001	F	P-28-17S-30E	Р	30-015-35249	S	12/2016		11756				0	
317379	CEDAR CANYON SWD #001	P	P-08-24S-29E	P	30-015-44054	S			Unknown				0	
40322	COTTON DRAW SWD #066	F	E-10-25S-32E	E	30-025-22024	S	12/2016		15769				0	
316783	CYPRESS SWD #001	F	L-34-23S-29E	L	30-015-43867	S			Unknown				0	
316780	GNOME EAST SWD #001	F	L-26-23S-30E	L	30-015-43801	S			Unknown				0	
38766	HEAVY METAL 12 FEDERAL #001	F	K-12-24S-31E	K	30-015-29602	S	07/2014		8554				0	
307132	HOBBS STATE #003	S	B-29-18S-38E	В	30-025-23621	S	01/2010	02/01/2012	6083	11083	Y		11083	
301620	KAISER STATE #044	S	F-13-21S-34E	F	30-025-32741	0	03/2006	04/01/2008	4190	9190	Υ		9190	!
317428	MOUTRAY SWD #001	P	A-28-24S-29E	Α	30-015-43895	S			Unknown				0	1
316377	PADUCA 6 SWD #001	Р	3-06-26S-32E	L	30-025-43277	S			960				0	
	PADUCA 6 SWD #001Y	P	2-06-26S-32E	E	30-025-43379	S			Unknown				0	
39498	PADUCA FEDERAL SWD #002	F	O-22-25S-32E	0	30-025-40813	S	12/2016		Unknown				0	
	PADUCA FEDERAL SWD #003Y	F	C-23-25S-32E	C	30-025-42258	S	12/2016		Unknown				0	
38668	PADUCA SWD #001	F	H-22-25S-32E	Н	30-025-27616	S	12/2016		15850				0	
309592	SAND HILLS SWD #001	F	O-31-17S-30E	0	30-015-29104	S	12/2016		13600				0	1
317427	SCOTT B SWD #001	P	N-23-24S-28E	Ν	30-015-44061	S			Unknown				0	
317126	STATION SWD #001	F	F-07-24S-32E	F	30-025-43473	S			Unknown				0	
316781	UBER EAST SWD #001	F	I-24-23S-31E	1	30-015-43806	S			Unknown				0	
316782	UBER NORTH SWD #001	F	B-15-23S-31E	В	30-015-43805	S			Unknown				0	
309620	WEST JAL DISPOSAL #001	P	G-10-25S-36E	G	30-025-26676	S	12/2016	01/01/2019	9550	14550			0	

WHERE Ogrid:161968

Inactive Well List

Total Well Count: 23 Inactive Well Count: 2 Printed On: Tuesday, February 21 2017

District	API	Well	ULSTR	OCD	OGRID	Operator	Lease Type	Well Type	Last Production	Formation/Notes	Status	TA Exp Date
2	30-015-25697	BRAN SWD #001	P-11-24S-31E	Р	161968	MESQUITE SWD, INC	F	S	07/2014	SEE COMMENTS BELL CYN- CHERRY CYN		
2	30-015-29602	HEAVY METAL 12 FEDERAL #001	K-12-24S-31E	K	161968	MESQUITE SWD, INC	F	S	07/2014	CONVERTED TO SWD-1269		

WHERE Ogrid:161968, County:All, District:All, Township:All, Range:All, Section:All, Production(months):15, Excludes Wells Under ACOI, Excludes Wells in Approved TA Period

State of New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez Governor

Tony Delfin Acting Cabinet Secretary David R. Catanach, Division Director
Oil Conservation Division



Administrative Order SWD-1571-B November 30, 2016

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Pursuant to the provisions of Division Rule 19.15.26.8B. NMAC, Mesquite SWD, Inc. (the "operator") seeks an administrative order to authorize the Vaca Draw Federal SWD Well No. 1 located 657.5 feet from the South line and 661.5 feet from the East line, Unit P of Section 21, Township 25 South, Range 33 East, NMPM, Lea County, New Mexico, for the commercial disposal of produced water.

This Order supersedes Administrative Order SWD 1571-A, issued on May 25, 2016 that designates a new operator.

THE DIVISION DIRECTOR FINDS THAT:

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

IT IS THEREFORE ORDERED THAT:

The applicant, Mesquite SWD, Inc. (OGRID 161968), is hereby authorized to utilize its Vaca Draw Federal SWD Well No. 1 (API 30-025-23895) located 657.5 feet from the South line and 661.5 feet from the East line, Unit P of Section 21, Township 25 South, Range 33 East, NMPM, Lea County, for commercial disposal of oil field produced water (UIC Class II only) in the Devonian and Silurian formations, through open-hole interval from 17498 to 19842 feet. Injection will occur through internally-coated, 4½-inch or smaller tubing and a packer set within 100 feet of the uppermost perforation.

IT IS FURTHER ORDERED THAT:

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

The operator shall supply the Division with a copy of a mudlog over the permitted disposal

Administrative Order SWD-1571-B Mesquite SWD. Inc. November 30, 2016 Page 2 of 3

interval and an estimated insitu water salinity based on open-hole logs. If significant hydrocarbon shows occur while drilling, the operator shall notify the Division's District I and the operator shall be required to receive written permission prior to commencing disposal.

Prior to commencing disposal, the operator shall submit mudlog and geophysical logs information, to the Division's District geologist and Santa Fe Bureau Engineering office, showing evidence agreeable that only the permitted formations are open for disposal including a summary of depths (picks) for contacts of the formations which the Division shall use to amend this order for a final description of the depth for the injection interval.

The operator shall run a CBL (or equivalent) across the 7-5/8 inch liner from to 12000 feet to the bottom of the liner to demonstrate a good cement bond between the liner and the 10-3/4 inch casing.

If the upper contact of the Ordovician Ellenburger formation is encountered prior to the lower limit of the approved injection interval at 19842 feet, then the total depth of the well (and injection interval) shall be reduced to the upper contact of Ellenburger formation.

Within two years after commencing disposal, the operator shall conduct an injection survey, consisting of a temperature log or equivalent, over the entire injection interval using representative disposal rates. Copies of the survey results shall be provided to the Division's District I office and Santa Fe Engineering Bureau office.

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

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

The wellhead injection pressure on the well shall be limited to **no more than 3500 psi**. In addition, the disposal well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressure to the maximum allowable pressure for this well.

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

The operator shall notify the supervisor of the Division's District I office of the date and time of the installation of disposal equipment and of any MIT so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of disposal

Administrative Order SWD-1571-B Mesquite SWD. Inc. November 30, 2016 Page 3 of 3

to the Division's District office. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Division Rules 19.15.26.13 and 19.15.7.24 NMAC.

Without limitation on the duties of the operator as provided in Division Rules 19.15.29 and 19.15.30 NMAC, or otherwise, the operator shall immediately notify the Division's District I office of any failure of the tubing, casing or packer in the well, or of any leakage or release of water, oil or gas from around any produced or plugged and abandoned well in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.

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

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

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

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

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

DAVID R. CATANACH

Director

DRC/mam

cc: Oil Conservation Division – Hobbs District Office Bureau of Land Management – Carlsbad Well File - 30-025-23895