Mn	7(34) 7,04			
Mm	RECEIVED:	REVIEWER:	TYPE:	APPNO: Dry Am 1820645771
	•	*PO\/E	THIS TABLE FOR OCD DIVISION LISE OF	any .

NEW MEXICO OIL CONSE	RVATION DIVISION
- Geological & Enginee	
1220 South St. Francis Drive, Sc	anta Fe, NM 87505
ADMINISTRATIVE APPLIC	ATION CHECKLIST
THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE AP REGULATIONS WHICH REQUIRE PROCESSING A	PLIC ATIONS FOR EXCEPTIONS TO DIVISION RULES AND
REGULATIONS WHICH REQUIRE PROCESSING A	I THE DIVISION LEVEL IN SANTAFE
Applicant: Percussion Petroleum Operating, LLC	OGRID Number: <u>371755</u>
Well Name: Everest No.1 SWD (Currently J.H. Evererst et al 2 No.	
Pool: Proposed: SWD; Devonian-Silurian	Pool Code: 97869
SUBMIT ACCURATE AND COMPLETE INFORMATION RE INDICATED B	
1) <b>TYPE OF APPLICATION:</b> Check those which apply fo A. Location – Spacing Unit – Simultaneous Dedica NSL NSP <sub>(PROJECT AREA)</sub>	
B. Check one only for [1] or [11]  [1] Commingling – Storage – Measurement  DHC CTB PC PC [  [11] Injection – Disposal – Pressure Increase – E  WFX PMX SWD IPI	OLS OLM Inhanced Oil Recovery EOR PPR FOR OCD ONLY
<ul> <li>2) NOTIFICATION REQUIRED TO: Check those which application or lease holders</li> <li>B. Offset operators or lease holders</li> <li>B. Royalty, overriding royalty owners, revenue</li> <li>C. Application requires published notice</li> <li>D. Notification and/or concurrent approval by</li> <li>E. Notification and/or concurrent approval by</li> <li>F. Surface owner</li> <li>G. For all of the above, proof of notification or</li> <li>H. No notice required</li> </ul>	Notice Complete  owners  Application Content Complete
3) <b>CERTIFICATION:</b> I hereby certify that the information administrative approval is <b>accurate</b> and <b>complete</b> understand that <b>no action</b> will be taken on this approvalifications are submitted to the Division.	to the best of my knowledge. I also
Note: Statement must be completed by an individual	with managerial and/or supervisory capacity.
D. C.	7/24/2018 Date
Ben Stone	Date
Print or Type Name	903-488-9850
	Phone Number

Signature

ben@sosconsulting.us

e-mail Address





July 24, 2018

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

Attn: Ms. Heather Riley, Director

Re: Application of Percussion Petroleum, LLC to permit for salt water disposal the JH Everest 2 et al Well No.1, located in Section 14, Township 18 South, Range 26 East, NMPM, Eddy County, New Mexico.

Dear Ms. Riley,

Please find the enclosed form C-108 Application for Authority to Inject, supporting the above-referenced request for salt water disposal. Upon approval, the well will be renamed to the Everest SWD No.1. Percussion selected this well for private disposal of produced water coming from their operations in the area.

Percussion Petroleum seeks to optimize efficiency, both economically and operationally, of its operations in southeast New Mexico. Approval of this application is consistent with that goal as well as the NMOCD's mission of preventing waste and protection of correlative rights.

Published legal notice ran July 25, 2018 in the Artesia Daily Press and all offset operators and other interested parties have been notified individually. The legal notice affidavit is included herein. This application also includes a wellbore schematic, area of review maps, affected party plat and other required information for a complete Form C-108. The well is located on private land and minerals. There are state lands & minerals and private minerals within the one-half mile radius notice area and the State Land Office and offset operators have been notified of this application.

I respectfully request that the approval of this salt water disposal well proceed swiftly and if you or your staff requires additional information or has any questions, please do not hesitate to call or email me.

Best regards,

Ben Stone, Partner SOS Consulting, LLC

Agent for Percussion Petroleum, LLC

Cc: Application attachment and file

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: Salt Water Disposal and the application QUALIFIES for administrative approval.

II. OPERATOR: Percussion Petroleum Operating, LLC
ADDRESS: 919 Milam, Ste.2475, Houston, TX 77002

CONTACT PARTY: Agent: SOS Consulting, LLC - Ben Stone (903) 488-9850

- III. WELL DATA: All well data and applicable wellbore diagrams are ATTACHED.
- IV. This is not an expansion of an existing project.
- V. A map is attached 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. A tabulation is attached of data on all wells of public record within the area of review which penetrate the proposed injection zone.

  There are NO Wells in the subject AOR which penetrate the target interval. The data includes a description of each well's type, construction, date drilled, location, depth, and a schematic of P&A'd wells.
- VII. The following data is ATTACHED 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;
  - 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. Appropriate geologic data on the DEVONIAN formation is ATTACHED 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. Stimulation program a conventional acid job may be performed to clean perfs and open the formation.
- \*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted). **NEW well logs will be run and filed with OCD.**
- \*XI. There are Numerous PODs/ water wells within one mile of the proposed salt water disposal well. 2 or 3 wells are being sampled and the analysis will be forwarded upon receipt.
- XII. An affirmative statement is ATTACHED that available geologic and engineering data has been examined and no evidence was found of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. "Proof of Notice" section on the next page of this form has been completed and ATTACHED. There are 3 offset lessees and/or operators within ½ mile; Well location and minerals private w/ state offsetting leases and unleased minerals.
- 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: Ben Stone TITLE: SOS Consulting, LLC agent for Percussion Petroleum Operating, LLC

SIGNATURE: DATE: 7/24/2018

E-MAIL ADDRESS: ben@sosconsulting.us

<sup>\*</sup> 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:

#### FORM C-108 - APPLICATION FOR AUTHORIZATION TO INJECT (cont.)

#### III. WELL DATA - The following information and data is included (See ATTACHED Wellbore Schematic):

- 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 pursuant to the following criteria is ATTACHED.

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.

## C-108 - Items III, IV, V

## Item III - Subject Well Data

Wellbore Diagram - CURRENT Wellbore Diagram - PROPOSED

The well is currently PA'd and will be drilled out with NEW 5-1/2" casing set and reconfigured for SWD.

#### Item IV – Tabulation of AOR Wells

Tabulation includes all construction data for all wells within a one-half mile radius.

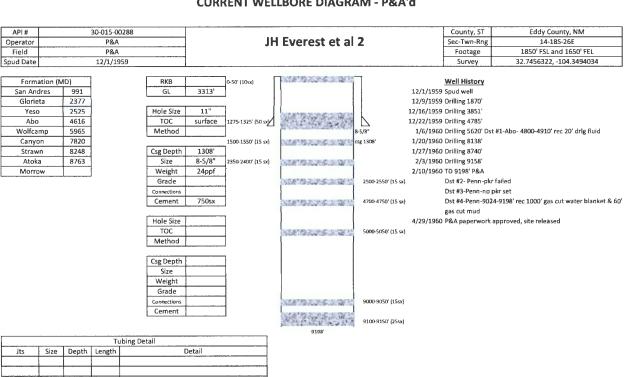
NO wells penetrate the proposed injection interval.

## Item V – Area of Review Maps

- 1. Two Mile AOR Map with One-Mile Fresh Water Well Radius
  - 2. One-Half Mile AOR Map

All Above Exhibits follow this page.

#### **CURRENT WELLBORE DIAGRAM - P&A'd**



Pod Poteil									

	Rod Detail											
Rods	Size	Depth	Length	Guides	Detail							
		ļ										
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				$\vdash$								
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l			L									

Last Update

Ву

5/14/2018

CB

Hole Size				Perforations
TOC		ŀ	ŀ	
Method		1	ļ	
		-		
			İ	
Csg Depth			ı	
Size				
Weight			i i	
Grade			1	
Connections		- 1	1	
Cement		1		
		ļ		
		l		
PBTD		i		
TD MD		1		
TD TVD		1		



SA: 850

GLOR: 2257

ABO: 4391

W/LFC: 5738

STRWN: 8270

ATOKA: 8716

MISS LS: 9200

DEV: 9600'

10000

2000

. 3000

4000

- 5000

- 6000

- 7000

## WELL SCHEMATIC - PROPOSED Everest SWD Well No.1

(Formerly JH Everest 2 et al No.1) API 30-015-00288

Annulus Monitored or open to atomosphere

Annulus Loaded \_\_\_\_ w/ Inert Packer Fluid

1308

9600

DTD @ 10800°

1850' FSL & 1650' FEL, SEC. 14-T18S-R26E EDDY COUNTY, NEW MEXICO SWD; Devonian-Silurian (97869)

Spud Date: 12/01/1959 Config SWD Dt (Est): ~10/01/;

Injection Pressure Regulated and Volumes Reported 1920 psi Max. Surface (0.2 psi/ft)

#### Surface Casing

8.625", 24.0# J-55 STC Csg. (12.25" Hole) @ 1308' 750 sx - Circ to Surface

## Percussion Petroleum

Convert to SWD: D/O & C/O Existing Plugs to 9600'.
Install NEW 5.5" Casing from 0' to 9600'.
Drill 4.5" Openhole Interval to 10,800'
Run PC Tubing and PKR - Conduct MIT.
Commence Disposal Operations.

3.5" FJ/ IC Tubing (or smaller)
PKR ~9500'+

Note: PRK Set 100' Above Final Uppermost OH Interval.

#### **NEW Production Casing**

5.5", 17.0# N-80/ K-55 Csg. (8.75" Hole) @ 9600' 1500 sx - 2 stage DV @ ~5800' - Circ. to Surface

Openhale Injection 9600'-10,800'

Oneum by Ben Stone, 7/24/2018

## Form C-108 Item VI - Tabulation of AOR Wells

	Top of Proposed DEVONIAN Interval 9600'					NO I	Wells Penetrate Prop	oosed Interval.	
API	Current Operator	Well Name	Well Number	Туре	Mineral Owner	Status	ULSTR	Measured Depth	Plugged Or
ubject Well									
0-015-00288	[214263] PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#001	Oil	State	P&A-R	J-14-18S-26E	9198'	1/1/1900
							See attached CURRE	NT and PROPOSED We	llbore Diagran
ection 14 Wells									
0-015-00194	[277558] LIME ROCK RESOURCES II-A, L.P.	ATOKA SAN ANDRES UNIT	#131	Injection	Private	Active	B-14-18S-26E	1700	
0-015-00194	[6137] DEVON ENERGY PRODUCTION COMPANY, LP	ATOKA SAN ANDRES UNIT	#135	Injection	Private	P&A-R	F-14-185-26E	1743'	2/25/2008
0-015-00207	[277558] LIME ROCK RESOURCES II-A, L.P.	ATOKA SAN ANDRES UNIT	#136	Oil	Private	Active	G-14-18S-26E	1970	_,,,
0-015-00195	[277558] LIME ROCK RESOURCES II-A, L.P.	TERRY COM	#001	Oil	Private	Active	G-14-18S-26E	4385'	
		ATOKA SAN ANDRES UNIT	#161	OII	Private	Active	G-14-18S-26E	1850'	
0-015-25792	[277558] LIME ROCK RESOURCES II-A, L.P.	TERRY 14G	#003	Oli	Private	Active	G-14-185-26E	4200	
0-015-44494	[277558] LIME ROCK RESOURCES II-A, L.P.			Oll	Private	Active	G-14-185-26E	4226'	
0-015-44495	[277558] LIME ROCK RESOURCES II-A, L.P.	TERRY 14G	#007	Oil	Private	P&A-R	H-14-18S-26E	955'	1/1/190
0-015-00201	[214263] PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#001		Private	Active	H-14-18S-26E	1760'	1/1/130
0-015-00199	[277558] LIME ROCK RESOURCES II-A, L.P.	ATOKA SAN ANDRES UNIT	#137	Oil				991'	1/1/190
-015-00198	[214263] PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#003	Oil	Private	P&A-R	I-14-185-26E		1/1/190
0-015-00196	[277558] LIME ROCK RESOURCES II-A, L.P.	ATOKA SAN ANDRES UNIT	#144	Injection	Private	Active	1-14-18S-26E	3028'	2/22/201
0-015-00197	[6137] DEVON ENERGY PRODUCTION COMPANY, LP	ATOKA SAN ANDRES UNIT	#145	Injection	Private	P&A-R	J-14-185-26E	1849'	3/22/20:
0-015-00205	[277558] LIME ROCK RESOURCES II-A, L.P.	ATOKA SAN ANDRES UNIT	#146	Oil	Private	Active	K-14-18S-26E	1682'	
0-015-00285	[372000] POGO OIL & GAS OPERATING, INC	EVEREST	#002	Oil	Private	Active	L-14-18S-26E	1743'	
0-015-25844	[372000] POGO OIL & GAS OPERATING, INC	EVEREST	#003	Oll	Private	Active	L-14-18S-26E	1750'	
0-015-40980	[277558] LIME ROCK RESOURCES II-A, L.P.	EVEREST 14 M	#009	Oll	Private	Active	M-14-185-26E	4300'	
0-015-00206	[277558] LIME ROCK RESOURCES II-A, L.P.	ATOKA SAN ANDRES UNIT	#148	Injection	Private	Active	N-14-185-26E	1760'	
-015-34760	[277558] LIME ROCK RESOURCES II-A, L.P.	EVEREST 14 N	#005	OII	Private	Active	N-14-185-26E	3449'	
0-015-40488	[277558] LIME ROCK RESOURCES II-A, L.P.	EVEREST 14 N	#008	Oll	Private	Active	N-14-185-26E	4315'	
0-015-41015	[277558] LIME ROCK RESOURCES II-A, L.P.	EVEREST 14 O	#007	Oll	Private	Active	O-14-18S-26E	4375	
-015-00204	[277558] LIME ROCK RESOURCES II-A, L.P.	ATOKA SAN ANDRES UNIT	#149	Oil	Private	Active	O-14-185-26E	1782'	
-015-00287	[277558] LIME ROCK RESOURCES II-A, L.P.	ATOKA SAN ANDRES UNIT	#150	Oil	Private	Active	P-14-185-26E	1778'	
0-015-40489	[277558] LIME ROCK RESOURCES II-A, L.P.	MCNATT VANDERGRIFF 14 P	#002	OII	Private	Active	P-14-18S-26E	4300'	
-015-35745	[277558] LIME ROCK RESOURCES II-A, L.P.	EVEREST 14P	#006	Oll	Private	Active	P-14-18S-26E	3750'	
ction 13 wells									
-015-24461	[277558] LIME ROCK RESOURCES II-A, L.P.	ATOKA SAN ANDRES UNIT	#157	OII	Private	Active	E-13-185-26E	1827'	
-015-24461	[277558] LIME ROCK RESOURCES II-A, L.P.	ATOKA SAN ANDRES UNIT	#143	Oil	Private	Active	L-13-185-26E	1772'	
		ATOKA SAN ANDRES UNIT	#151	Injection	Private	P&A-R	M-13-18S-26E	1852'	2/6/201
-015-00290	[277558] LIME ROCK RESOURCES II-A, L.P.	ATOKA SAN ANDRES UNIT	#002	Oil	Private	New ND	M-13-185-26E	4750' Prpsd	2/0/201



## Form C-108 Item VI - Tabulation of AOR Wells (cont.)

Section 23 wells

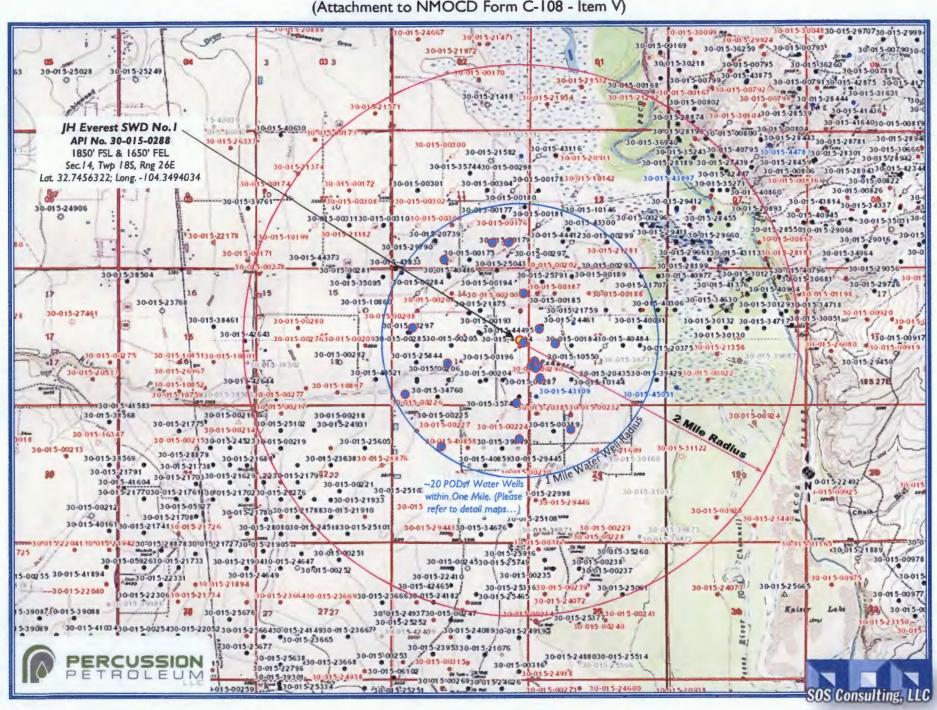
2/10/2014 A-23-185-26E 1804 30-015-00224 [277558] LIME ROCK RESOURCES II-A, L.P. ATOKA SAN ANDRESUNIT #154 Injection Private P&A-R 1/1/1900 PRE-ONGARD WELL #001 Oil State P&A-R C-23-185-26E 1175' 30-015-00223 [214263] PRE-ONGARD WELL OPERATOR

SUMMARY: 0 wells penetrate proposed disposal interval.



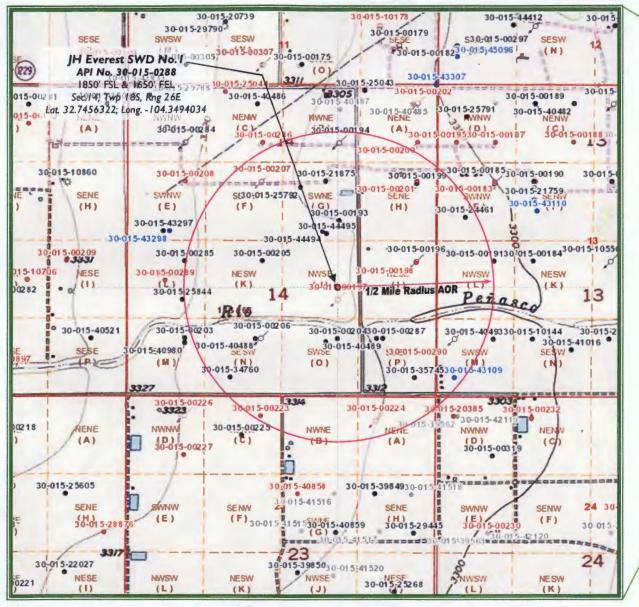
## JH Everest SWD No.1 - Area of Review / 2 Miles

(Attachment to NMOCD Form C-108 - Item V)



## JH Everest SWD No.1 - Area of Review / Overview Map

(Attachment to NMOCD Form C-108, Application for Authority to Inject.)



6.8 miles S/SE of Artesia, NM





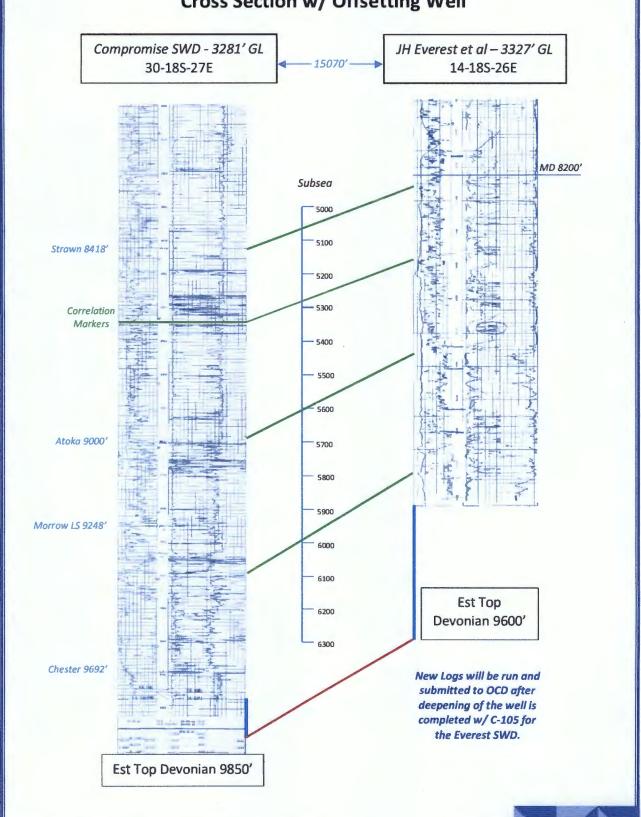
Eddy County, New Mexico



## **C-108 ITEM X**

Logs and Available Test Data

## Cross Section w/ Offsetting Well



#### C-108 ITEM VII – PROPOSED OPERATION

#### **Everest SWD No.1**

#### **Private Use SWD Facility**

Upon approval of all permits for SWD, operations would begin within 30 days. Completion of the well operations will take approximately 6-8 weeks. Facility construction including installation of the tank battery, berms, plumbing and other and associated equipment would be occurring during the same interval but not to interfere with well operations. In any event, it is not expected for the construction phase of the project to last more than 60 days, depending on availability of contractors and equipment.

#### Configure for Salt Water Disposal

Clear and level location; recondition as necessary. Install  $8.625'' \times 11''$  5M wellhead and BOP. Drill down to ~9,600', set 5.5'' 17.0# casing to the top of the Devonian; cement w/ 1500 sx Cls H in 2 stages. Drill out DV tool and test to 1000 psi. drill 4.5'' hole to 10,800'. Run in hole w/ 3.5'' FJ or 2.785'' IPC tubing and set packer at ~9500'; acidize openhole if desired. Conduct witnessed MIT and commence injection.

Prior to commencing any work, an NOI sundry(ies) will be submitted to configure the well for SWD and will detail the completion workover including all work otherwise described above, any change to the procedure noted herein and to perform mechanical integrity pressure test per OCD test procedures. (Notify NMOCD 24 hours prior.) The casing/tubing annulus will be monitored for communication with injection fluid or loss of casing integrity.

#### **Operational Summary**

The Everest SWD well will be for Percussion's area production from Gloieta/ Yeso wells.

The SWD facility will not be fenced. Primary water transportation will be via pipeline but offloading hookups will be available so that trucks may access for load disposal in needed.

The well and injection equipment will be a closed system and equipped with pressure limiting devices and volume meters. The annulus, loaded with an inert, anti-corrosion packer fluid, will be monitored for pressure.

The tanks will be equipped with telemetry devices and visual alarms to alert the operator and customers of full tanks or an overflow situation.

Anticipated daily maximum volume is 5,000 bpd and an average of 3,500 bpd at a maximum surface injection pressure of 1920 psi (.2 psi/ft gradient – maximum pressure will be adjusted If the top of interval is modified after well logs are run).

Potential releases will be contained and cleaned up immediately. The operator shall repair or otherwise correct the situation within 48 hours before resuming operations. OCD will be notified within 24 hours of any release greater than 5 bbls. If required, remediation will start as soon as practicable. Operator shall comply with 19.15.29 NMAC and 19.15.30 NMAC, as necessary and appropriate.

## C-108 ITEM VII - PRODUCED WATER ANAYLSES

**Item VII.4 – Water Analysis of Source Zone Water** 

Glorieta/Yeso

**Item VII.5 - Water Analysis of Disposal Zone Water** 

Devonian

Water Analyses follow this page.

## **SOURCE ZONE**

GLO/	YESO								Lab ID		
									Sample	e ID	1146
	API No	30015247							Sample		
v	Vell Name	PLATT PA			009						
	Location		26 18	S 26	Ε		Lat / Long	32.71216		1,35742	
		33	0 S	990	W				County	Eddy	
	Operator	(when san	npled)	Yates P	etroleum C	Corp.					
			Field	ATOKA					Unit M		
	San	nple Date		8/4/198	4	Analys	sis Date				
			Sample S	Source We	ellhead			Depth (	if known)		
			Water Ty	p Pro	oduced Wa	ater					
	ph				7.5		alkalinity	y_as_caco3_	_mgL		
	ph_ter	np_F					hardnes	s_as_caco3	_mgL		
	specifi	cgravity					hardnes	ss_mgL		1800	
	specifi	cgravity_te	mp_F				resistivit	ty_ohm_cm			
	tds_m	gL			120382		resistivit	ty_ohm_cm_	temp		
	tds_m	gL_180C					conduct	tivity			
	chloric	le_mgL			113000		conduct	tivity_temp_F	-		
	sodiur	n_mgL			71415		carbona	ite_mgL		0	
	calciu	m_mgL			2560		bicarbo	nate_mgL		476	
	iron_n	ngL			0		sulfate_	mgL		2001	
	bariun	n_mgL					hydroxid	de_mgL			
	magne	esium_mgL			0		h2s_mg	ıL		0	
	potass	ium_mgL					co2_mg	JL.			
	stronti	um_mgL					o2_mgL				
	manga	anese_mgL					anionre	marks			

(Produced water data courtesy of NMT Octane NM WAIDS database.)

Remarks



## **SOURCE ZONE**

GLO	/YESO								Lab ID		
	API No Well Name	3001524 PLATT I				0(	08		Sample Sample		1207
	Location		26 130	18 S	S 26		Lat / Long	32,71245	-104 County	1.35329 Eddy	
	<b>Operator</b> San	(when sa	Fiel	-	Yates ATOK/ 1/19/19	A	m Corporation  Analysis Date		Unit N		
				nple S ter Ty		ell head roduced	Water	Depth (if	f known)		
	ph						6 alkalini	ty_as_caco3_	mgL		
	ph_ter	np_F					hardne	ss_as_caco3_	_mgL		
	specifi	cgravity					hardne	ss_mgL		11500	
	specifi	cgravity_t	temp_l	F			resistiv	ity_ohm_cm			
	tds_m	gL				13632	4 resistiv	ity_ohm_cm_t	temp_		
	tds_m	gL_180C					conduc	tivity			
	chlorid	le_mgL				12100	00 conduc	tivity_temp_F			
	sodiur	n_mgL				6157	'1 carbon	ate_mgL			
	calciu	m_mgL				416	50 bicarbo	onate_mgL		104	
	iron_n	ngL					0 sulfate	_mgL		3720	
	bariun	n_mgL					hydroxi	ide_mgL			

Remarks

magnesium\_mgL

potassium\_mgL strontium\_mgL

manganese\_mgL

 $(Produced\ water\ data\ courtesy\ of\ NMT\ Octane\ NM\ WAIDS\ database.)$ 

7340

h2s\_mgL

co2\_mgL

o2\_mgL

anionremarks



## **SOURCE ZONE**

BON	E SPRING	ì							Labello		
									Lab ID Sample	In	5847
P	API No	300152	20225						Sample		3047
٧	Well Name	BIG ED	DY UN	<b>1</b>		012			Jampie	140	
	Location ULSTR 21 20			20	S 31	Е	Lat / Long	32,56399	-103	.87994	
			660	Ν	660	W			County	Eddy	
	Operator	(when s	sample	d)	MALLO	N OIL COM	MPANY				
			Fie	ld	BIG ED	DY			Unit D		
	Sam	ple Date	е		8/27/199	9	Analysis Date	8/	31/1999		
			6	I- C	<b></b>			Donath (	M I.		
				•	Source			Depth (	if known)		
			vva	ter Ty	þ						
	ph					5.2	alkalinit	y_as_caco3_	_mgL		
	ph_ten	np_F					hardnes	ss_as_caco3	_mgL		
	specific	cgravity				1.125	hardnes	ss_mgL			
	specific	gravity_	_temp_	F			resistivi	ty_ohm_cm			
	tds_mg	<b>j</b> L				181697	resistivi	ty_ohm_cm_	temp_		
	tds_mg	JL_1800					conduct	tivity			
	chloride	e_mgL				123750	conduct	tivity_temp_F	=		
	sodium	_mgL				73895.6	carbona	ate_mgL			
	calciun	n_mgL				5625	bicarbo	nate_mgL		13,725	
	iron_m	gL				337.5	sulfate_	mgL		787.5	
	barium	_mgL					hydroxid	de_mgL			
	magne	sium_m	ıgL				h2s_mg	JL.		0	
	potass	ium_mg	L				co2_mg	<b>J</b> L			
	strontic	ım_mgL					o2_mgl				
	manga	nese_m	ngL				anionre	marks			

(Produced water data courtesy of NMT Octane NM WAIDS database.)

Remarks



#### **DISPOSAL ZONE**

DEV	ONIAN		

Lab ID

6170

API No.

3001510280

Sample ID Sample No

Well Name

JURNEGAN POINT

001

Ε

Unit M

Location ULSTR 05

24

Lat / Long 32.24037

-104.42375

660

S 25 S 660 W

Eddy County

Operator (when sampled)

Field

**WILDCAT** 

Depth (if known)

Sample Date

12/14/1964

Analysis Date

Sample Source DST

Water Type

ph

7

ph\_temp\_F

alkalinity\_as\_caco3\_mgL hardness\_as\_caco3\_mgL

specificgravity

hardness\_mgL

specificgravity\_temp\_F

resistivity\_ohm\_cm

tds\_mgL

229706

resistivity\_ohm\_cm\_temp\_

tds\_mgL\_180C

conductivity

chloride\_mgL

136964

conductivity\_temp\_F

sodium\_mgL

carbonate\_mgL

calcium\_mgL

iron\_mgL

bicarbonate\_mgL sulfate\_mgL

198 2511

barium\_mgL

hydroxide\_mgL

magnesium\_mgL

h2s\_mgL

potassium\_mgL

co2\_mgL

strontium\_mgL

o2\_mgL

manganese\_mgL

anionremarks

Remarks

(Produced water data courtesy of NMT Octane NM WAIDS database.)



#### C-108 – Item VIII

## **Geologic Information**

The Devonian and Silurian consist of carbonates including light colored dolomite and chert intervals interspersed with some tight limestone intervals. Several thick sections of porous dolomite capable of taking water are believed present within the subject formations in the area. Depth control data was inferred from the Metropolis SWD located 1.1 miles southwest of the proposed SWD. If the base of Devonian and top of Silurian rocks come in as expected the well will only be drilled deep enough for adequate logging rathole; expected TD at 10,800'.

The well will TD approximately 1,200' below the estimated top of the Devonian. Mud logging through the interval will ensure the target interval remains in Devonian and Silurian. Once Devonian is determined, the casing shoe depth will be set at an approximate maximum upper depth of 9600' BGL. Injection will occur through the resulting openhole interval. Should mud or other logs indicate depth adjustment is required to exploit the desired formation as described; sundries with appropriate data will be filed with the OCD.

The Devonian is overlain by the Woodford Shale and Mississippian Lime and underlain by the Middle and Lower Ordovician; Simpson, McKee and Ellenburger.

Fresh water in the area is generally available from the Pecos Valley complex of Quaternary alluvial sand and gravel deposits. State Engineer's records show water wells in the area with a average depth to groundwater 50 feet.

There are numerous water wells and/or PODs located within one mile of the proposed SWD; 2 or 3 will be sampled and analyses will be forwarded upon receipt.

## C-108 Item XI

## Water Wells Within One Mile

## JH Everest SWD No.1 - Water Well Locator Map

There are numerous water wells/ PODs within a one-mile radius of the proposed SWD.

Inset View is displayed on next page for closest water well identification.



Data from NM Office of the State Engineer displayed in OSE-GIS System.



## C-108 Item XI

Water Wells Within One Mile

## JH Everest SWD No.1 - Water Well Locator Map

## **INSET VIEW**

2 or 3 of the closest water wells will be sampled and analyzed. (Note: RA-03585 does NOT show on latest imagery.)



Data from NM Office of the State Engineer displayed in OSE-GIS System.



## C-108 ITEM XI - WATER WELLS IN AOR

## Depth to Ground Water



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

(A CLW#### in the POD suffix indicates the POD has been replaced & no longer serves a

water right file.)

(R=POD has been replaced, O=orphaned,

C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(in feet)

		POD Sub-		0	^	0							-	****
POD Number	Code		County		16	-		Tws	Rng	x	Y			Water
RA 00773		RA	ED		1	2	23	185	26E	560856	3622508*			
RA 00774		RA	ED		1	2	23	185	26E	560856	3622508*			
RA 00775		RA	ED		1	2	23	185	26E	560856	3622508*	900		
RA 01144-S		RA	CH		3	1	23	185	26E	560055	3622102*	809		
RA 01296		RA	ED	3	3	1	23	185	26E	559954	3622001*	180	80	100
RA 01296 CLW229885	0	RA	ED	1	3	1	23	185	26E	559954	3622201"	180	70	110
RA 01343 CLW	0	RA	CH	1	2	4	14	185	26E	561157	3623417"	150	23	127
RA 03585		RA	ED	4	1	4	14	185	26E	560955	3623216*	1849		
RA 03600		RA	ED	2	3	2	14	185	26E	560956	3623821*	955		
RA 03731		RA	ED	1	1	1	14	185	26E	559953	3624223°	120	30	90
RA 12483 POD1		RA	ED	1	4	4	14	185	26E	561070	3623006	72	55	17
RA 12483 POD2		RA	ED	1	4	4	14	185	26E	561084	3622999	62	51	11
RA 12483 POD3		RA	ED	1	4	4	14	185	26E	561120	3623003	58	47	11
RA 12483 POD4		RA	ED	1	4	4	14	185	26E	561086	3622959	60	48	12
RA 12483 POD5		RA	ED	1	4	4	14	185	26E	561126	3622920	59	53	6

Average Depth to Water: 5

50 feet

Minimum Depth: 23 feet

Maximum Depth: 80 feet

Record Count: 15

**PLSS Search**:

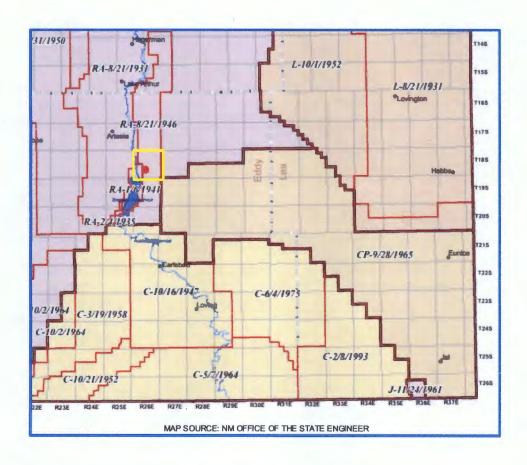
Section(s): 13, 14, 23

Township: 18S

Range: 26E

## C-108 - Item XI

Groundwater Basins - Water Column / Depth to Groundwater



The subject well is located within the Roswell Artesian Basin.

The Roswell Artesian Basin consists of an eastward-dipping carbonate aquifer overlain by a leaky evaporitic confining unit, overlain in turn by an unconfined alluvial aquifer. The carbonate aquifer is artesian to the east but under water-table conditions in the western outcrop area. Recharge occurs by direct infiltration of precipitation and by runoff from intermittent losing streams flowing eastward across a broad area east of the Sacramento Mountains. (USGS)

State Engineer's records show fresh water wells in the area with an average depth to water at 50 feet.

There are numerous (20+) water wells or PODs located within one mile of the proposed SWD; 2 or 3 will be sampled and analysis will be forwarded upon receipt.



## C-108 ITEM XII

## Geologic Affirmation

We have examined available geologic and engineering data and have found no evidence of open faults or other hydrologic connection between the disposal interval and any underground sources of drinking water.

Ben Stone, Partner SOS Consulting, LLC

Project: Perci

Percussion Petroleum Operating, LLC

Everest SWD No.1 Reviewed 7/24/2018

## C-108 ITEM XIII - PROOF OF NOTIFICATION

## **IDENTIFICATION AND NOTIFICATION OF INTERESTED PARTIES**

## **Exhibits for Section**

**Affected Parties Map** 

List of Interested Parties

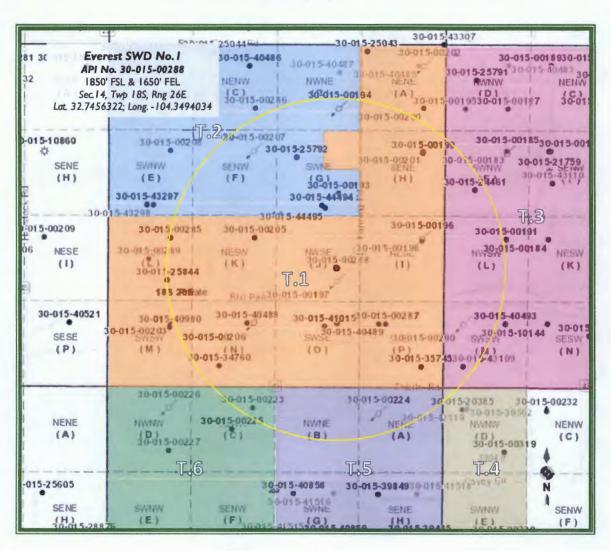
**Notification Letter to Interested Parties** 

**Proof of Certified Mailing** 

**Published Legal Notice** 

## Everest SWD No.1 – Affected Parties Plat

(Attachment to NMOCD Form C-108, Application for Authority to Inject.)





#### LEGEND -

- T.1 Private Charles R. Martin, Inc.
- T.2 Private William & Patricia Netherlin
- T.3 Private John R. Gray, LLC 4 ExxonMobil Corp.
- T.4 Private Abarm, LLC E0-5313-0000 Chevron USA, Inc.
- T.5 Rogers, Inc. B1-1339-0003 ExxonMobil Corp.
- T.6 Private Charles R. Martin, Inc. ExxonMobil Corp.



## C-108 ITEM XIII – PROOF OF NOTIFICATION AFFECTED PARTIES LIST

SOS Consulting is providing electronic delivery of C-108 applications.

ALL APPLICABLE AFFECTED PARTIES ARE PROVIDED A LINK IN THE NOTICE LETTER TO A SECURE SOS/ CITRIX SHAREFILE® SITE TO VIEW AND DOWNLOAD A FULL COPY OF THE SUBJECT C-108 APPLICATION IN PDF FORMAT.

#### **SURFACE OWNERS**

CHARLES R. MARTIN, INC. P.O. Box 706 Artesia, NM 88211-0706 Certified: 7017 2400 0000 5297 5553

#### OFFSET MINERALS LESSEES and OPERATORS (All Notified via USPS Certified Mail)

#### **Operators**

LIME ROCK RESOURCES II-A, LP 1111 Bagby Street, Ste.4600 Houston, TX 77002 Certified: 7017 2400 0000 5297 5560

DEVON ENERGY PRODUCTION COMPANY, LP 333 W. Sheridan Ave. OKC, OK 77056 Certified: 7017 2400 0000 5297 5577

POGO OIL & GAS OPERATING, INC. 1515 Calle Sur, Ste.174 Hobbs, NM 88240 Certified: 7017 2400 0000 5297 5584

#### OFFSET MINERALS OWNERS (Notified via USPS Certified Mail)

STATE OF NEW MEXICO
Oil, Gas and Minerals Division
310 Old Santa Fe Trail
Santa Fe, NM 87504
Certified: 7017 2400 0000 5297 5591

#### **REGULATORY**

NEW MEXICO OIL CONSERVATION DIVISION (FedEx'ed original and copy) 1220 S. St. Francis Dr. Santa Fe, NM 87505

NEW MEXICO OIL CONSERVATION DIVISION (FedEx'ed copy) 811 S. First St. Artesia, NM 88210





July 24, 2018

# NOTIFICATION TO INTERESTED PARTIES via U.S. Certified Mail – Return Receipt Requested

To Whom It May Concern:

Percussion Petroleum Operating, LLC, Houston, Texas, has made application to the New Mexico Oil Conservation Division to reenter and complete for salt water disposal the JH Everest 2 et al No.1 (to be renamed Everest SWD No.1). The proposed SWD will be for private produced water disposal from Percussion's area operations. As indicated in the notice below, the well is located in Section 14, Township 18 South, Range 26 East in Eddy County, New Mexico.

The published notice states that the interval will be from 9600 feet to 10,800 feet.

Following is the notice published in the Artesia Daily Press, New Mexico on or about July 25, 2018.

#### LEGAL NOTICE

Percussion Petroleum Operating, LLC – 919 Milam, Ste.2475, Houston, Texas 77002, is filing Form C -108 (Application for Authority to Inject) with the New Mexico Oil Conservation Division seeking administrative approval to reenter and configure the JH Everest et al 2 Well No.1 for salt water disposal; located 1850' FSL and 1650' FEL, Section 14, Township 18 South, Range 26 East, Eddy County, New Mexico; approximately 7.5 miles south/ southeast of Artesia, NM. Upon approval, the well will be renamed the Everest SWD No.1.

Produced water from Percussion's area production will be privately disposed into the Devonian formation at a maximum interval depth of 9600 feet to 10,800 feet at a maximum surface pressure of 1920 psi and a rate limited only by such pressure.

Interested parties wishing to object to the proposed application must file with the New Mexico Oil Conservation Division, 1220 St. Francis Dr., Santa Fe, NM 87505, (505)476-3460 within 15 days of the date of this notice. Additional information may be obtained from the applicant's agent, SOS Consulting, LLC, (903)488-9850 or, email info@sosconsulting.us.

You have been identified as a party who may be interested as an offset lessee or operator.

You are entitled to a full copy of the application. A full copy in PDF format is posted on the SOS Consulting **ShareFile** site and is available for immediate download.

Use the URL link https://sosconsulting.sharefile.com/d-s2f0f44ede21499fb

(Please Note: The ShareFile service is powered by Citrix Systems and is completely secure.\*)

The link to this file will be active for 30 days from the date of this letter. Your company can access and download the file a maximum of five (5) times. (Copies may be downloaded and shared as needed among your company.)

Alternatively, you may call SOS Consulting, LLC at 903-488-9850, or email info@sosconsulting.us, and the same PDF file copy will be expedited to you via email.

Please use a subject like, "Everest SWD July 2018 PDF Copy Request".

Thank you for your attention in this matter.

Best regards,

Ben Stone, SOS Consulting, LLC

Agent for Percussion Petroleum Operating, LLC

Cc: Application File

SOS Consulting is committed to providing superior quality work using technology to assist clients and interested parties in obtaining the documentation required. SOS will continue to utilize methods for reducing papers copies and are less energy and resource intensive.

We hope you'll partner with us and appreciate these efforts.

\* You will be asked for your email, name and company.
This will not be used by anyone except keeping track of the file downloads.
You will not be solicited by SOS or anyone else. Data is stored on Citrix Systems servers only.



## C-108 - Item XIV

Proof of Notice (Certified Mail Receipts)

U.S. Postal Service <sup>™</sup> CERTIFIED MAIL® RECEIPT	U.S. Postal Service™ CERTIFIED MAIL® RECEIPT
Domestic Mail Only	Domestic Mail Only
For delivery information, visit our website at www.usps.com*.	For delivery information, visit our website at www.usps.com
OFFICIAL USE	OFFICIALINUSE
Certified Mail Fee	Certified Mail Fee
Extra Services & Fees (check box, add fee as appropriate)  Return Receipt (hardcopy)	Extra Services & Fees (check box, add fee as appropriate)  Return Receipt (hardcopy)
Return Receipt (electronic) \$ Postmark	Return Receipt (electronic) \$ Pastmark
Adult Signature Required \$	Adult Signature Required \$
Postage	Postage
S Total Postage and Fees 0	\$ Total Postage and Fees ( )
Sent To	Sent To
Street a	Pil Chart and 4
CHARLES R. MARTIN, INC.	LIME ROCK RESOURCES II-A, LP  City, State, 1111 Bagby Street, Ste.4600
Adopin NIM 00044 0706	ions PS Form 3 Houston, TX 77002 ions
Domestic Mail Only	Domestic Mail Only
For delivery information, visit our website at www.usps.com	For delivery information, visit our website at www.usps.com
OFFICIALOUSE	OFFICIALINUSE
Certified Mail Fee	Certified Mail Fee
Extra Services & Fees (check box, add fee as appropriate)    Return Receipt (hardcopy) \$	Extra Services & Fees (check box, add fee as appropriate)    Return Receipt (hardcopy)
Return Receipt (electronic)  Return Receipt (electronic)  Certified Mail Restricted Delivery  Here	Return Receipt (electronic) \$ Postmark
Adult Signature Required \$	Adult Signature Restricted Delivery \$
Adult Signature Restricted Delivery \$ Postage	Postage
S Total Postage and Fees	Total Postage and Fees
\$ Sent To	Sent To
Street and DEVON ENERGY PRODUCTION	Chart and
COMPANY, LP	POGO OIL & GAS OPERATING, INC.  City, State, 1515 Calle Sur, Ste.174
333 W. Sheridan Ave.	tions R PS Form: Hobbs, NM 88240 tions
Domestic Mail Only	
For delivery information, vis	sit our website at www.usps.com .
OFFIC	CIALUSE
Certified Mail Fee 3 44	5
Extra Services & Fees (check box, add	(fee as appropriate)
☐ Return Receipt (electronic) \$ ☐ Certifled Mail Restricted Delivery \$	Postmark
☐ Adult Signature Required \$ ☐ Adult Signature Restricted Delivery \$	1111 2 4 2 min
Postage 50	1
Total Postage and Fees	
\$ O 1	O SPECIAL XI
러	OF NEW MEXICO
City. State Oil, Gas	and Minerals Division
310	Old Santa Fe Trail
San	nta Fe NM 87504

#### **C-108 - Item XIV**

#### Proof of Notice – Legal Notice Newspaper of General Circulation

#### Legal Notice

Percussion Petroleum Operating, LLC – 919 Milam, Stc.2475, Houston, Texas 77002, is filing Form C-108 (Application for Authority to Inject) with the New Mexico Oil Conservation Division seeking administrative approval to reenter and configure the JH Everest et al 2 Well No.1 for salt water disposal; located 1850' FSL and 1650' FEL, Section 14, Township 18 South, Range 26 East, Eddy County, New Mexico; approximately 7.5 miles south/ southeast of Artesia, NM. Upon approval, the well will be renamed the Everest SWD No.1.

Produced water from Percussion's area production will be privately disposed into the Devonian formation at a maximum interval depth of 9600 feet to 10,800 feet at a maximum surface pressure of 1920 psi and a rate limited only by such pressure.

Interested parties wishing to object to the proposed application must file with the New Mexico Oil Conservation Division, 1220 St. Francis Dr., Santa Fe, NM 87505, (505) 476-3460 within 15 days of the date of this notice. Additional information may be obtained from the applicant's agent, SOS Consulting, LLC, (903)488-9850 or, email info@sosconsulting.us.

Published in the Artesia Daily Press, Artesia, N.M., July 25, 2018 Legal No. 24767.

The above is the "Proof Copy" sent from the Artesia Daily Press. The affidavit of publication will be forwarded as soon as it is received.

## **Affidavit of Publication**

24767 State of New Mexico County of Eddy: Danny Scott being duly s sworn sayes that she is the 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 July 25, 2018 Second Publication Third Publication **Fourth Publication** Fifth Publication Sixth Publication Seventh Publication Subscribed and sworn before me this 2018 26th day of July



Latisha Romine

Notary Public, Eddy County, New Mexico

## Copy of Publication:

Percussion Petroleum Operating, LLC – 919 Milam, Ste. 2475, Houston, Texas 77002, is filing Form C-108 (Application for Authority to Inject) with the New Mexico Oil Conservation Division seeking administrative approval to reenter and configure the JH Everest et al 2 Well No.1 for salt water disposal; located 1850' FSL and 1650' FEL, Section 14, Township 18 South, Range 26 East, Eddy County, New Mexico; approximately 7.5 miles south/ southeast of Artesia, NM. Upon approval, the well will be renamed the Everest SWD No.1.

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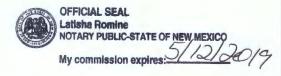
Published in the Artesia Daily Press, Artesia, N.M., July 25, 2018 Legal No. 24767.

**Affidavit of Publication** 24767 State of New Mexico County of Eddy: Danny Scott being duly sworn sayes that she is the 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

1	Consecutive weeks/day on the same		
day as fo	llows:		
First Publication		July 25, 2018	
Second P	ublication		
Third Pul	olication		
Fourth Pu	ıblication		
Fifth Pub	lication		
Sixth Pub	lication		
Seventh	Publication		
Subscribe	ed and sworn befo	re me this	
26th	day of	July	2018



Latisha Romine

Notary Public, Eddy County, New Mexico

## **Copy of Publication:**

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