Initial

Application Part I

Received: 07/30/2019

This application is placed in file for record. It MAY or MAY NOT have been reviewed to be determined Administratively Complete

RECEIVED	07/30/2019	REVIEWER:	TYPE: SW/D		110211/18076
	.,,20,2010		ABOVE THIS TABLE FOR OCD DIVISION USE O		119211480/6
	1:	NEW MEXICO C - Geological & 220 South St. Franc	DIL CONSERVATION & Engineering Bure :is Drive, Santa Fe,	I DIVISION eau – NM 87505	
		ADMINISTRATI	VE APPLICATION C	HECKLIST	
	THIS CHECKLIST	IS MANDATORY FOR ALL ADM REGULATIONS WHICH REQUIRE	PROCESSING AT THE DIVISION	N LEVEL IN SANTA FE	VISION RULES AND
Applicar Well Nan	nt:			OGRID N API:	lumber:
Pool:				Pool Co	de:
SUBMI	accurate an	D COMPLETE INFORM	MATION REQUIRED TO IDICATED BELOW	O PROCESS THE	TYPE OF APPLICATION
1) TYPE A. I	OF APPLICATIO Location – Spac	N: Check those whic cing Unit – Simultane	ch apply for [A] eous Dedication AREA) NSP(PRORA		SWD-2215
B.	Check one only [1] Comminglir DHC [1] Injection -	y for [1] or [11] 1g – Storage – Measu CTB PLC Disposal – Pressure Ir PMX SWD	urement PC OLS ncrease – Enhancec IPI EOR	□OLM I Oil Recovery □PPR	
2) NOTI A. [B. [C.[D. [E. [F. [G.[H. [FICATION REOU Offset opera Royalty, ove Application Notification Surface owr For all of the No notice re	IRED TO: Check thos tors or lease holders rriding royalty owne requires published n and/or concurrent a and/or concurrent a ner above, proof of no equired	se which apply. rs, revenue owners otice approval by SLO approval by BLM tification or publicat	ion is attached	Notice Complete Application Content Complete
3) CERTI admi	FICATION: I her nistrative appro	eby certify that the i oval is accurate and	information submitte complete to the be	ed with this app est of my knowle	plication for edge. I also

understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Print or Type Name

Haufe Fisher Signature

Date

Phone Number

e-mail Address



Mr. Michael McMillan New Mexico Oil Conservation Division 1220 S. St. Francis Drive Santa Fe, NM 87505

Re: C-108 Application for Authorization to Inject Permian Oilfield Partners, LLC Renegade Federal SWD #1 931' FNL & 267' FWL Sec 27, T25S, R31E Eddy County, NM

Mr. McMillan,

Attached is a C-108 Application for administrative approval of Permian Oilfield Partners LLC's proposed Renegade Federal SWD #1 located in Sec 27, Twp 25S, Rge 31E, Eddy County, New Mexico. This well will be completed open hole in the Devonian-Silurian formation and will be operated as a commercial salt water disposal well.

Similar application exhibits were sent to all Affected Persons. The distribution list and proof of mailing, as well as affidavit of publication are enclosed. A copy of this application has also been sent to NM OCD District 2 in Artesia.

If you have any questions, please contact us at (817)606-7630.

Sincerely,

Sem Finz

Sean Puryear Permian Oilfield Partners, LLC <u>spuryear@popmidstream.com</u>

Date: 7-30-2019

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

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: **Disposal** Application qualifies for administrative approval? **Yes**
- II. OPERATOR: Permian Oilfield Partners, LLC.

ADDRESS: P.O. Box 3329, Hobbs, NM 88241

CONTACT PARTY: Sean Puryear

- 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? No
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
 - 1. Proposed average and maximum daily rate and volume of fluids to be injected;
 - 2. Whether the system is open or closed;
 - 3. Proposed average and maximum injection pressure;
 - 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
 - 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- *XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: Sean Puryear

SIGNATURE: Sem Funz

TITLE: Manager DATE: 7-30-2019

E-MAIL ADDRESS: spuryear@popmidstream.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:

PHONE: (817) 600-8772

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.

Additional Data

- 1. Is this a new well drilled for injection? Yes
- 2. Name of the Injection Formation: Devonian: Open Hole Completion
- **3.** Name of Field or Pool (if applicable): SWD; Devonian-Silurian
- 4. Has the well ever been perforated in any other zone(s)? No: New Drill for Injection of Produced Water
- 5. Give the name and depths of any oil or gas zones underlying or overlying the proposed Injection zone in this area:

Overlying Potentially Productive Zones: Delaware, Bone Spring, Wolfcamp, Strawn, Atoka & Morrow Tops all above <u>14,015</u>'

Underlying Potentially Productive Zones: None

WELL CONSTRUCTION DATA

Permian Oilfield Partners, LLC. Renegade Federal SWD #1 931' FNL, 267' FWL Sec. 27, T25S, R31E, Eddy Co. NM Lat 32.1059910° N, Lon 103.7736378° W GL 3342', RKB 3372'

Surface - (Conventional)

Hole Size: 26" Casing: 20" - 94# H-40 & 106.5# J-55 STC Casing Depth Top: Surface Depth Btm: 1235' Cement: 832 sks - Class C + Additives Cement Top: Surface - (Circulate)

Intermediate #1 - (Conventional)

Hole Size: 17.5" Casing: 13.375" - 54.5# J-55 & 61# J-55 STC Casing Depth Top: Surface Depth Btm: 4291' Cement: 1472 sks - Lite Class C (50:50:10) + Additives Cement Top: Surface - (Circulate)

Intermediate #2 - (Conventional)

 Hole Size:
 12.25"
 Casing:
 9.625"
 - 40# L-80 & 40# HCL-80 BTC Casing

 Depth Top:
 Surface

 Depth Btm:
 11735'
 ECP/DV Tool:
 4391'

 Cement:
 1982 sks - Lite Class C (60:40:0) + Additives

 Cement Top:

 Surface - (Circulate)

Intermediate #3 - (Liner)

Casing: 7.625" - 39# HCL-80 FJ Casing

Depth Top: 11535' Depth Btm: 16761'

Hole Size: 8.5"

Cement: 254 sks - Lite Class C (60:40:0) + Additives Cement Top: 11535' - (Volumetric)

Intermediate #4 - (Open Hole)

Hole Size: 6.5" Depth: 18076' Inj. Interval: 16761' - 18076' (Open-Hole Completion)

Tubing - (Tapered)

 Tubing Depth:
 16716'
 Tubing:
 7" - 26# HCP-110 FJ Casing & 5.5"
 17# HCL-80

 X/O Depth:
 11535'
 FJ Casing (Fiberglass Lined)

 X/O:
 7" 26# HCP-110 FJ Casing - X - 5.5"
 17# HCL-80 FJ Casing (Fiberglass Lined)

 Packer Depth:
 16726'
 Packer:
 5.5" - Perma-Pak or Equivalent (Inconel)

WELLBORE SCHEMATIC

Permian Oilfield Partners, LLC. Renegade Federal SWD #1 931' FNL, 267' FWL Sec. 27, T25S, R31E, Eddy Co. NM Lat 32.1059910° N, Lon 103.7736378° W GL 3342', RKB 3372'

Surface - (Conventional)

 Hole Size:
 26"

 Casing:
 20" - 94# H-40 & 106.5# J-55 STC Casing

 Depth Top:
 Surface

 Depth Btm:
 1235'

 Cement:
 832 sks - Class C + Additives

 Cement Top:
 Surface - (Circulate)

Intermediate #1 - (Conventional)

 Hole Size:
 17.5"

 Casing:
 13.375" - 54.5# J-55 & 61# J-55 STC Casing

 Depth Top:
 Surface

 Depth Btm:
 4291'

 Cement:
 1472 sks - Lite Class C (50:50:10) + Additives

 Cement Top:
 Surface - (Circulate)

Intermediate #2 - (Conventional)

 Hole Size:
 12.25"

 Casing:
 9.625" - 40# L-80 & 40# HCL-80 BTC Casing

 Depth Top:
 Surface

 Depth Btm:
 11735'

 Cement:
 1982 sks - Lite Class C (60:40:0) + Additives

 Cement Top:
 Surface - (Circulate)

 ECP/DV Tool:
 4391'

Intermediate #3 - (Liner)

 Hole Size:
 8.5"

 Casing:
 7.625" - 39# HCL-80 FJ Casing

 Depth Top:
 11535'

 Depth Btm:
 16761'

 Cement:
 254 sks - Lite Class C (60:40:0) + Additives

 Cement Top:
 11535' - (Volumetric)

Intermediate #4 - (Open Hole)

 Hole Size:
 6.5"

 Depth:
 18076'

 Inj. Interval:
 16761' - 18076' (Open-Hole Completion)



<u> Tubing - (Tapered)</u>

 Tubing Depth:
 16716'

 Tubing:
 7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)

 X/O Depth:
 11535'

 X/O:
 7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)

 Packer Depth:
 16726'

 Packer:
 5.5" - Perma-Pak or Equivalent (Inconel)

VII:

- 1. The average injected volume anticipated is <u>40,000</u> BWPD The maximum injected volume anticipated is <u>50,000</u> BWPD
- 2. Injection will be through a closed system
- 3. The average injection pressure anticipated is 2,000 psi The proposed maximum injection pressure is 3,352 psi
- 4. Disposal Sources will be produced waters from surrounding wells in the Delaware, Avalon, Bone Spring and Wolfcamp formations. These formation waters are known to be compatible with Devonian formation water. Representative area produced water analyses were sourced from Go-Tech's website and are listed below.

	FIGHTING OKRA 18	SALADO DRAW 6	RATTLESNAKE 13 12 FEDERAL	SNAPPING 2
	FEDERAL COM #001H	FEDERAL #001H	COM #001H	STATE #014H
арі	3002540382	3002541293	3002540912	3001542688
latitude	32.0435333	32.0657196	32.0369568	32.06555986
longitude	-103.5164566	-103.5146942	-103.416214	-103.7413815
section	18	6	13	2
township	26S	26S	26S	26S
range	34E	34E	34E	31E
unit	E	М	Р	Р
ftgns	2590N	200S	330S	250S
ftgew	330W	875W	330E	330E
county	Lea	Lea	Lea	EDDY
state	NM	NM	NM	NM
formation	AVALON UPPER	BONE SPRING 3RD SAND	DELAWARE-BRUSHY CANYON	WOLFCAMP
sampledate	42046	41850	41850	42284
ph	8	6.6	6.2	7.3
tds_mgL	201455.9	99401.9	243517.1	81366.4
resistivity_ohm_cm	0.032	0.064	0.026	0.1004
sodium_mgL	66908.6	34493.3	73409.8	26319.4
calcium_mgL	9313	3295	15800	2687.4
iron_mgL	10	0.4	18.8	26.1
magnesium_mgL	1603	396.8	2869	326.7
manganese_mgL	1.6	0.37	3.12	
chloride_mgL	121072.7	59986.5	149966.2	50281.2
bicarbonate_mgL	1024.8	109.8	48.8	
sulfate_mgL	940	710	560	399.7
co2_mgL	1950	70	200	100

5. Devonian water analysis from the area of review is unavailable. Representative area water analyses were sourced from Go-Tech's website and are listed below.

WELL NAME	ANTELOPE RIDGE UNIT #003	BELL LAKE UNIT #006
арі	3002521082	3002508483
latitude	32.2593155	32.3282585
longitude	-103.4610748	-103.507103
sec	34	6
township	235	235
range	34E	34E
unit	К	0
ftgns	1980S	660S
ftgew	1650W	1980E
county	LEA	LEA
state	NM	NM
field	ANTELOPE RIDGE	BELL LAKE NORTH
formation	DEVONIAN	DEVONIAN
samplesource	UNKNOWN	HEATER TREATER
ph	6.9	7
tds_mgL	80187	71078
chloride_mgL	42200	47900
bicarbonate_mgL	500	476
sulfate_mgL	1000	900

VIII: Injection Zone Geology

Fluid injection will take place in the Devonian-Silurian formations. This sequence is bounded above by the Upper Devonian Woodford shale. Underlying the Woodford is the first injection formation, the Devonian, consisting of dolomitic carbonates & chert, followed by the Upper Silurian dolomites, and the Lower Silurian Fusselman dolomite. The lower bound of the injection interval is the limestone of the Upper Ordovician Montoya. This proposed well will TD above the top of the Montoya, and will not inject fluids into the Montoya itself, in order to provide a sufficient barrier to preclude fluid injection into the Middle Ordovician Simpson, the Lower Ordovician Ellenburger, the Cambrian, and the PreCambrian below.

Injection zone porosities are expected to range from 0% to a high of 8%, with the higher ranges being secondary porosity in the form of vugs & fractures due to weathering effects, with occasional interbedded shaly intervals. Permeabilities in the 2-3% porosity grainstone intervals are estimated to be in the 10-15 mD range, with the higher porosity intervals conservatively estimated to be in the 40-50 mD range. It is these intervals of high secondary porosity and associated high permeability that are expected to take the majority of the injected water.

The Devonian-Silurian sequence is well suited for SWD purposes, with a low permeability shale barrier overlying the injection interval to prevent upward fluid migrations to USDW's, sufficient permeabilities and porosities in zone, and multiple formations available over a large depth range. This large injection depth range means there is a large injection surface area available, allowing for low injection pressures at high injection rates. Permian Oilfield Partners, LLC. Renegade Federal SWD #1 931' FNL, 267' FWL Sec. 27, T25S, R31E, Eddy Co. NM Lat 32.1059910° N, Lon 103.7736378° W GL 3342', RKB 3372'

GEOI	LOGY PR	OGNOSIS	
FORMATION	TOP	BOTTOM	THICKNESS
FURMATION	KB TVD (ft)	KB TVD (ft)	(ft)
Salt	1,265	4,155	2,890
Delaware	4,266	8,245	3,979
Bone Spring	8,245	11,685	3,440
Wolfcamp	11,685	12,319	634
Lwr. Mississippian	15,949	16,425	476
Woodford	16,425	16,726	301
Devonian	16,726	17,652	926
Fusselman (Silurian)	17,652	18,101	449
Montoya (U. Ordovician)	18,101	18,572	471
Simpson (M. Ordovician	18,572	19,022	450

- According to the New Mexico Office of the State Engineer, there is <u>1</u> fresh water well within the proposed well's one-mile area of review indicating the presence of freshwater at depths less than <u>400</u>'. Regionally, shallow fresh water is known to exist at depths less than <u>1025</u>'. There are no underground sources of fresh water present below the injection interval.
- **IX:** Formation chemical stimulation with 40,000 gals of 15% Hydrochloric Acid is planned after well completion.
- **X:** A compensated neutron/gamma ray log will be run from surface to TD upon well completion. All logs will be submitted to the NMOCD upon completion.
- XI: According to the New Mexico Office of the State Engineer, there is <u>1</u> fresh water wells within the proposed well's one-mile area of review. A water sample was obtained from the pond fed by the well, and the water analysis report is attached.

Well Name	Formation Name	Depth Top	Depth Bottom	Thickness	Status
C 02250	None Given	390'	400'	10'	Active to Pond

- XII: Hydrologic affirmative statement attached.
- **XIII:** Proof of notice and proof of publication attached.

 District I

 I625 N. French Dr., Hobbs, NM 88240

 Phone: (575) 393-6161 Fax: (575) 393-0720

 District II

 811 S. First St., Artesia, NM 88210

 Phone: (575) 748-1283 Fax: (575) 748-9720

 District III

 1000 Rio Brazos Road, Aztec, NM 87410

 Phone: (505) 334-6178 Fax: (505) 334-6170

 District IV

 1220 S. St. Francis Dr., Santa Fe, NM 87505

 Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

AMENDED REPORT

57		W	ELL L	OCAT	ION AND	ACF	REAGE DEDIC	CATION PLA	Т				
1	API Numbe	r		² Pool C	Code			³ Pool Na	me				
30-015-				9786	69		SW	D; DEVONIAN	I-SILURI	IAN			
4Property Coo	le				5 Pro	perty N	lame		2		6 Well Number		
				RE	ENEGADE	FED	DERAL SWD				1		
7 OGRID N	NO.				8 Op	erator N	lame		,	9	Elevation		
32825	9		Р	ERMI	AN OILFII	ELD	PARTNERS	LLC			3342'		
	¹⁰ Surface Location								10				
UL or lot no.	Section	Township	Range	Lot Idi	n Feet from	n the	North/South line	Feet From the	East/W	est line	County		
D	27	25S	31E		931	L	NORTH	267	WE	ST	EDDY		
			11]	Bottom	n Hole Loca	ation	If Different Fr	om Surface					
UL or lot no.	Section	Township	Range	Lot Idi	n Feet from	n the	North/South line	Feet from the	East/W	est line	County		
							3	47					
12 Dedicated Acres	13 Joint	or Infill 14 C	Consolidation	n Code	15 Order No.								

No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.

C		<u>S 89°39'19" W 2652.2.8</u>	D	<u>S 89°31'24" W 2651.75'</u>	<u> </u>)
	16		1			¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete
	31,		1			to the best of my knowledge and belief, and that this organization either
	6		d.	1	~	owns a working interest or unleased mineral interest in the land including
.00,			1	GEODETIC DATA	, 20,	the proposed bottom hole location or has a right to drill this well at this
647	<u></u> ∼os.L.		4	NAD 83 GRID - NM EAST	2645	location pursuant to a contract with an owner of such a mineral or working
N Lu	[_] 267'		- 1 	SURFACE LOCATION	*	interest, or to a voluntary pooling agreement or a compulsory pooling
7" 1			!	1 402/43.9 - L /1403/./	2	order heretofore entered by the division.
0,01		Ē.	240 240	LONG: 103.7736378° W	1,10	Jan Film, 7-24-2019
.00			÷	CORNER DATA	00	Signature Date
<			34. A C	NAD 83 GRID - NM EAST	>	Gary E FISNEr Printed Name
		r. L	ii ii	A: FOUND BRASS CAP "1939" N 398377.7 – E 714362.6		
			1 I	B: FOUND BRASS CAP "1939"		<u></u>
0	-	n an an an an an A	27	N 401027.2 - E 714365.7	Ē	
B			- 27 -	C: FOUND BRASS CAP "1939"		¹⁸ SURVEYOR CERTIFICATION
		Ĩ,	31.			I hereby certify that the well location shown on this
		<u>[</u>]	1	N 403690.5 – E 717025.2		plat was plotted from field notes of actual surveys
× 1			1	E: CALCULATED CORNER		made by me or under my supervision, and that the
0.02			4	N 403712.6 - E 719676.3	8.13	same is true and correct to the best of my belief.
265			1	F: FOUND BRASS CAP "1939" N 401064.4 – E 719677.2	264	07-09-2019 L. FA
E				G: FOUND BRASS CAP "1939"	Ŕ	Date of Survey
.04			10 60	N 398416.8 - E 719679.1	21"	Signature and Seal of Profesional Surveyor
, 70.0				H: FOUND BRASS CAP "1939"	,20.	
V OC			215	N 396397.6 - E 717016.9	<i>N 00</i>	Dollar & Annob
			1			TOX - Ju
			4			
			1	1		Centrate Number
					G	
(A)		S 89°34'02″ W 2656.96'	(H)	S 89°35′26″ W 2660.73'	Joh	No · 1 \$19030268R1



1 & 2 Mile AOR, Renegade Federal SWD #1

¥ CO2 New

- 🔆 CO2, Plugged
- K CO2, Temporaily Abandoned

Oil. Active

Oil, New

Oil, Cancelled

- Water, New
- Water, Plugged ۵
- Water, Temporarily Abandoned
- PLSS First Division

U.S. BLM Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c)

			Rene	gade Fe	ederal SW	D #1 - Wells w	ithin 1	L Mile	Area	of Review	1				
API Number	Current Operator	Well Name	Well Number	Well Type	Well Direction	Well Status	Section	Township	Range	OCD Unit Letter	Surface Location	Bottomhole Location	Formation	MD	TVD
30-015-05857	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#007	Oil	Vertical	Plugged, Site Released	28	T25S	R31E	D	D-28-25S-31E 660 FNL 660 FWL	D-28-255-31E 660 FNL 660 FWL	DELAWARE	4335	4335
30-015-24155	DEVON ENERGY PRODUCTION COMPANY, LP	AMOCO DB FEDERAL	#001	Gas	Vertical	Active	22	T25S	R31E	J	J-22-25S-31E 1980 FSL 1980 FEL	J-22-25S-31E 1980 FSL 1980 FEL	WOLFCAMP	14750 1	14750
30-015-32022	CHEVRON U S A INC	BIG SINKS 27 FEDERAL COM	#001	Gas	Vertical	Cancelled Apd	27	T25S	R31E	В	B-27-25S-31E 1170 FNL 1420 FEL	B-27-25S-31E 1170 FNL 1420 FEL	WOLFCAMP	13400 1	13400
30-015-39795	XTO PERMIAN OPERATING LLC.	POKER LAKE UNIT	#420	Oil	Horizontal	Active	28	T25S	R31E	Р	P-28-25S-31E 700 FSL 1300 FEL	A-29-25S-31E 382 FNL 137 FEL	DELAWARE	13619	8078
30-015-43641	DEVON ENERGY PRODUCTION COMPANY, LP	SHIRE 22 FEDERAL	#004H	Oil	Horizontal	New	15	T25S	R31E	Р	P-15-25S-31E 100 FSL 660 FEL	P-22-25S-31E 330 FSL 660 FEL	BONE SPRING	15162 1	10392
30-015-44423	DEVON ENERGY PRODUCTION COMPANY, LP	LUSITANO 27 15 FEDERAL COM	#234H	Oil	Horizontal	New	27	T25S	R31E	Α	A-27-25S-31E 235 FNL 295 FEL	A-15-25S-31E 330 FNL 330 FEL	BONE SPRING	20193 1	10310
30-015-44424	DEVON ENERGY PRODUCTION COMPANY, LP	LUSITANO 27 34 FEDERAL COM	#235H	Oil	Horizontal	Active	27	T25S	R31E	A	A-27-25S-31E 435 FNL 295 FEL	H-34-25S-31E 2186 FNL 381 FEL	BONE SPRING	17614 1	10292
30-015-44425	DEVON ENERGY PRODUCTION COMPANY, LP	LUSITANO 27 34 FEDERAL COM	#336H	Oil	Horizontal	Active	27	T25S	R31E	Α	A-27-25S-31E 235 FNL 325 FEL	P-34-25S-31E 209 FSL 404 FEL	BONE SPRING	21785 1	11513
30-015-44426	DEVON ENERGY PRODUCTION COMPANY, LP	LUSITANO 27 34 FEDERAL COM	#528H	Oil	Horizontal	Active	27	T25S	R31E	Α	A-27-25S-31E 435 FNL 355 FEL	P-34-25S-31E 260 FSL 371 FEL	BONE SPRING	19055	8750
30-015-44427	DEVON ENERGY PRODUCTION COMPANY, LP	LUSITANO 27 34 FEDERAL COM	#536H	Oil	Horizontal	Active	27	T25S	R31E	Α	A-27-25S-31E 435 FNL 325 FEL	P-34-25S-31E 276 FSL 787 FEL	BONE SPRING	19260	9006
30-015-44428	DEVON ENERGY PRODUCTION COMPANY, LP	LUSITANO 27 34 FEDERAL COM	#626H	Gas	Horizontal	Active	27	T25S	R31E	А	A-27-25S-31E 235 FNL 385 FEL	P-34-25S-31E 215 FSL 1056 FEL	WOLFCAMP	21945 1	11737
30-015-44429	DEVON ENERGY PRODUCTION COMPANY, LP	LUSITANO 27 34 FEDERAL COM	#718H	Gas	Horizontal	Active	27	T25S	R31E	Α	A-27-25S-31E 235 FNL 355 FEL	P-34-25S-31E 461 FSL 375 FEL	WOLFCAMP	21852 1	11906
30-015-45478	XTO PERMIAN OPERATING LLC.	POKER LAKE UNIT 28 BS	#102H	Gas	Horizontal	New	28	T25S	R31E	E	E-28-255-31E 2310 FNL 720 FWL	M-04-26S-31E 200 FSL 990 FWL	WOLFCAMP	24653 1	11564
30-015-45479	XTO PERMIAN OPERATING LLC.	POKER LAKE UNIT 28 BS	#104H	Gas	Horizontal	New	28	T25S	R31E	F	F-28-25S-31E 2310 FNL 2040 FWL	N-04-26S-31E 200 FSL 2310 FWL	WOLFCAMP	24668 1	11579
30-015-45480	XTO PERMIAN OPERATING LLC.	POKER LAKE UNIT 28 BS	#121H	Gas	Horizontal	New	28	T25S	R31E	E	E-28-25S-31E 2310 FNL 660 FWL	M-04-26S-31E 200 FSL 330 FWL	WOLFCAMP	24790 1	11585
30-015-45481	XTO PERMIAN OPERATING LLC.	POKER LAKE UNIT 28 BS	#122H	Gas	Horizontal	New	28	T25S	R31E	E	E-28-255-31E 2310 FNL 690 FWL	M-04-26S-31E 200 FSL 991 FWL	WOLFCAMP	24957 1	11866
30-015-45482	XTO PERMIAN OPERATING LLC.	POKER LAKE UNIT 28 BS	#123H	Gas	Horizontal	New	28	T25S	R31E	F	F-28-255-31E 2310 FNL 1980 FWL	N-04-26S-31E 200 FSL 1650 FWL	WOLFCAMP	24800 1	11709
30-015-45483	XTO PERMIAN OPERATING LLC.	POKER LAKE UNIT 28 BS	#124H	Gas	Horizontal	New	28	T25S	R31E	F	F-28-255-31E 2310 FNL 2010 FWL	N-04-26S-31E 200 FSL 2310 FWL	WOLFCAMP	24972 1	11882
30-015-45484	XTO PERMIAN OPERATING LLC.	POKER LAKE UNIT 28 BS	#126H	Gas	Horizontal	New	28	T25S	R31E	G	G-28-255-31E 2310 FNL 1950 FEL	O-04-26S-31E 200 FSL 1650 FEL	WOLFCAMP	24997 1	11912
30-015-45485	XTO PERMIAN OPERATING LLC.	POKER LAKE UNIT 28 BS	#128H	Gas	Horizontal	New	28	T25S	R31E	Н	H-28-25S-31E 2310 FNL 630 FEL	P-04-26S-31E 200 FSL 330 FEL	WOLFCAMP	25008 1	11755
30-015-45487	XTO PERMIAN OPERATING LLC.	POKER LAKE UNIT 28 BS	#701H	Oil	Horizontal	New	28	T25S	R31E	E	E-28-255-31E 2310 FNL 600 FWL	M-04-26S-31E 200 FSL 330 FWL	BONE SPRING	23387 1	10296
30-015-45488	XTO PERMIAN OPERATING LLC.	POKER LAKE UNIT 28 BS	#703H	Oil	Horizontal	New	28	T25S	R31E	F	F-28-25S-31E 2310 FNL 1920 FWL	N-04-26S-31E 200 FSL 1650 FWL	BONE SPRING	23401 1	10313
30-015-45489	XTO PERMIAN OPERATING LLC.	POKER LAKE UNIT 28 BS	#901H	Oil	Horizontal	New	28	T25S	R31E	E	E-28-255-31E 2310 FNL 630 FWL	M-04-26S-31E 200 FSL 330 FWL	BONE SPRING	24547 1	11455
30-015-45490	XTO PERMIAN OPERATING LLC.	POKER LAKE UNIT 28 BS	#903H	Oil	Horizontal	New	28	T25S	R31E	F	F-28-25S-31E 2310 FNL 1950 FWL	N-04-26S-31E 200 FSL 1650 FWL	BONE SPRING	24560 1	11471
30-015-45491	XTO PERMIAN OPERATING LLC.	POKER LAKE UNIT 28 BS	#907H	Oil	Horizontal	New	28	T25S	R31E	н	H-28-25S-31E 2310 FNL 690 FEL	P-04-26S-31E 200 FSL 990 FEL	BONE SPRING	24468 1	11514
30-015-45507	XTO PERMIAN OPERATING LLC.	POKER LAKE UNIT 28 BS	#106H	Gas	Horizontal	New	28	T25S	R31E	G	G-28-255-31E 2310 FNL 1920 FEL	O-04-26S-31E 200 FSL 1650 FEL	WOLFCAMP	24692 1	11609
30-015-45508	XTO PERMIAN OPERATING LLC.	POKER LAKE UNIT 28 BS	#125H	Gas	Horizontal	New	28	T25S	R31E	G	G-28-255-31E 2310 FNL 1980 FEL	O-04-26S-31E 200 FSL 2310 FEL	WOLFCAMP	24834 1	11741
30-015-45509	XTO PERMIAN OPERATING LLC.	POKER LAKE UNIT 28 BS	#905H	Oil	Horizontal	New	28	T25S	R31E	G	G-28-25S-31E 2310 FNL 2010 FEL	O-04-26S-31E 200 FSL 2310 FEL	BONE SPRING	24594 1	11503
30-015-45539	XTO PERMIAN OPERATING LLC.	POKER LAKE UNIT 28 BS	#127H	Gas	Horizontal	New	28	T25S	R31E	н	H-28-25S-31E 2310 FNL 660 FEL	P-04-26S-31E 200 FSL 990 FEL	WOLFCAMP	24841 1	11755
30-015-45540	XTO PERMIAN OPERATING LLC.	POKER LAKE UNIT 28 BS	#108H	Gas	Horizontal	New	28	T25S	R31E	Н	H-28-25S-31E 2310 FNL 600 FEL	P-04-26S-31E 200 FSL 330 FEL	WOLFCAMP	24705 1	11623
30-015-45631	DEVON ENERGY PRODUCTION COMPANY, LP	LUSITANO 27 34 FEDERAL COM	#535H	Oil	Horizontal	New	27	T25S	R31E	В	B-27-25S-31E 385 FNL 1904 FEL	0-34-25S-31E 20 FSL 1870 FEL	BONE SPRING	19092	8805
30-015-45632	DEVON ENERGY PRODUCTION COMPANY, LP	LUSITANO 27 34 FEDERAL COM	#624H	Gas	Horizontal	New	27	T25S	R31E	В	B-27-25S-31E 235 FNL 1934 FEL	O-34-25S-31E 20 FSL 2310 FEL	WOLFCAMP	21904 1	11768
30-015-45633	DEVON ENERGY PRODUCTION COMPANY, LP	LUSITANO 27 34 FEDERAL COM	#233H	Oil	Horizontal	New	27	T25S	R31E	С	C-27-25S-31E 385 FNL 1702 FWL	N-34-25S-31E 20 FSL 1650 FWL	BONE SPRING	20461 1	10280
30-015-45634	DEVON ENERGY PRODUCTION COMPANY, LP	LUSITANO 27 34 FEDERAL COM	#733H	Gas	Horizontal	New	27	T25S	R31E	С	C-27-25S-31E 235 FNL 1672 FWL	N-34-25S-31E 20 FSL 1650 FWL	WOLFCAMP	22241 1	11964
30-015-45635	DEVON ENERGY PRODUCTION COMPANY, LP	LUSITANO 27 34 FEDERAL COM	#525H	Oil	Horizontal	New	27	T25S	R31E	В	B-27-25S-31E 385 FNL 1874 FEL	O-34-25S-31E 20 FSL 1430 FEL	BONE SPRING	19104 8	8805
30-015-45636	DEVON ENERGY PRODUCTION COMPANY, LP	LUSITANO 27 34 FEDERAL COM	#734H	Gas	Horizontal	New	27	T25S	R31E	В	B-27-25S-31E 235 FNL 1904 FEL	0-34-25S-31E 21 FSL 2310 FEL	WOLFCAMP	22381 1	12092
30-015-45638	DEVON ENERGY PRODUCTION COMPANY, LP	LUSITANO 27 34 FEDERAL COM	#533H	Oil	Horizontal	New	27	T25S	R31E	С	C-27-25S-31E 385 FNL 1732 FWL	N-34-25S-31E 20 FSL 1650 FWL	BONE SPRING	19111 9	9030
30-015-45651	DEVON ENERGY PRODUCTION COMPANY, LP	LUSITANO 27 34 FEDERAL COM	#232H	Oil	Horizontal	New	27	T25S	R31E	В	B-27-25S-31E 385 FNL 1934 FEL	O-34-25S-31E 20 FSL 1980 FEL	BONE SPRING	20099	9973
30-015-45652	DEVON ENERGY PRODUCTION COMPANY, LP	LUSITANO 27 34 FEDERAL COM	#333H	Oil	Horizontal	New	27	T25S	R31E	C	C-27-25S-31E 235 FNL 1732 FWL	C-34-25S-31E 1300 FNL 2310 FWL	BONE SPRING	21305 1	11153
30-015-45654	DEVON ENERGY PRODUCTION COMPANY, LP	LUSITANO 27 34 FEDERAL COM	#335H	Oil	Horizontal	New	27	T25S	R31E	Α	A-27-25S-31E 235 FNL 1264 FEL	0-34-25S-31E 20 FSL 1650 FEL	BONE SPRING	21307 1	11173
30-015-45655	DEVON ENERGY PRODUCTION COMPANY, LP	LUSITANO 27 34 FEDERAL COM	#523H	Oil	Horizontal	New	27	T25S	R31E	С	C-27-25S-31E 385 FNL 1762 FWL	N-34-25S-31E 20 FSL 2090 FWL	BONE SPRING	18822 8	8770
30-015-45656	DEVON ENERGY PRODUCTION COMPANY, LP	LUSITANO 27 34 FEDERAL COM	#622H	Gas	Horizontal	New	27	T25S	R31E	С	C-27-25S-31E 235 FNL 1702 FWL	C-34-25S-31E 990 FNL 1650 FWL	WOLFCAMP	17423 1	11748
30-015-45657	DEVON ENERGY PRODUCTION COMPANY, LP	LUSITANO 27 34 FEDERAL COM	#716H	Gas	Horizontal	New	27	T25S	R31E	Α	A-27-25S-31E 235 FNL 1234 FEL	O-34-25S-31E 20 FSL 1650 FEL	WOLFCAMP	22087 1	11798
30-015-45658	DEVON ENERGY PRODUCTION COMPANY, LP	LUSITANO 27 34 FEDERAL COM	#713H	Gas	Horizontal	New	27	T255	R31E	С	C-27-25S-31E 235 FNL 1762 FWL	C-34-25S-31E 990 FNL 2310 FWL	WOLFCAMP	22079 1	11788
30-015-45659	DEVON ENERGY PRODUCTION COMPANY, LP	LUSITANO 27 34 FEDERAL COM	#736H	Gas	Horizontal	New	27	T25S	R31E	A	A-27-25S-31E 235 FNL 1210 FEL	0-34-255-31E 330 FSL 1350 FEL	WOLFCAMP	21753 1	11788
30-015-45732	XTO PERMIAN OPERATING LLC.	POKER LAKE UNIT 28 BS	#707H	Oil	Horizontal	New	28	T25S	R31E	н	H-28-25S-31E 2310 FNL 720 FEL	P-04-26S-31E 200 FSL 990 FEL	BONE SPRING	23439 1	10356
30-015-45737	XTO PERMIAN OPERATING LLC.	POKER LAKE UNIT 28 BS	#705H	Oil	Horizontal	New	28	T25S	R31E	G	G-28-255-31E 2310 FNL 2040 FEL	O-04-26S-31E 201 FSL 2310 FEL	BONE SPRING	23434 1	10344



Statement of Notifications

Re: C-108 Application for Authorization to Inject Permian Oilfield Partners, LLC Renegade Federal SWD #1 931' FNL & 267' FWL Sec 27, T25S, R31E Eddy County, NM

Permian Oilfield Partners, LLC has mailed notifications to Affected Persons as per the following list:

Renegade	Federal SWD #1 - Affecte	d Persons within 1 Mile	e Area	of Review	
Notified Name	Notifed Address	Notified City, State, ZIP Code	Shipper	Tracking No.	Mailing Date
Bureau Of Land Management	620 E Greene St.	Carlsbad, NM 88220	USPS	9414811899561411714332	7/30/2019
New Mexico State Land Office	310 Old Santa Fe Trail	Santa Fe, NM 87501	USPS	9414811899561411712253	7/30/2019
Devon Energy Production Company, LP	333 West Sheridan Ave.	Oklahoma City, OK 73102	USPS	9414811899561411715209	7/30/2019
Chevron USA Inc	6301 Deauville Blvd	Midland, TX 79706	USPS	9414811899561411714035	7/30/2019
XTO Permian Operating LLC	6401 Holiday Hill Road Building 5	Midland, TX 79707	USPS	9414811899561411712369	7/30/2019
XTO Permian Operating LLC	22777 Springwoods Village Pkwy	Spring, TX 77389	USPS	9414811899561411712154	7/30/2019
Mewbourne Holdings Inc	P.O. Box 5270	Hobbs, NM 88241	USPS	9414811899561411715445	7/30/2019
Hayes Land & Production LP	P.O. Box 51407	Midland, TX 79710	USPS	9414811899561411715810	7/30/2019
Advance Energy Partners LLC	11490 Westheimer Rd, Ste 950	Houston, TX 77077	USPS	9414811899561411714974	7/30/2019
Longhorn Partners	P.O. Box 1973	Midland, TX 79702	USPS	9414811899561411715018	7/30/2019
Hayes Land Corp	3300 N A St Bldg 1 #220	Midland, TX 79705	USPS	9414811899561411715711	7/30/2019
V-F Petroleum Inc	P.O. Box 1889	Midland, TX 79702	USPS	9414811899561411712604	7/30/2019
Joe J. Reynolds	2333 50th St #4	Lubbock, TX 79421	USPS	9414811899561411715643	7/30/2019
Hayes Partners I	P.O. Box 3700	Midland, TX 79702	USPS	9414811899561411715957	7/30/2019
M. Brad Bennett Inc.	P.O. Box 2062	Midland, TX 79702	USPS	9414811899561411715049	7/30/2019
Occidental Permian LP	5 Greenway Plaza #110	Houston, TX 77046	USPS	9414811899561411712277	7/30/2019
Hayes Properties Inc	P.O. Box 3700	Midland, TX 79702	USPS	9414811899561411715971	7/30/2019
Big Sinks Joint Venture	10501 N Central Expy #303	Dallas, TX 75231	USPS	9414811899561411714110	7/30/2019
CTV O&G NM, LLC	201 Main Street	Fort Worth, TX 76102	USPS	9414811899561411714561	7/30/2019
Keystone O&G NM LLC	201 Main Street	Fort Worth, TX 76102	USPS	9414811899561411715100	7/30/2019
Thru Line O&G NM LLC	201 Main Street	Fort Worth, TX 76102	USPS	9414811899561411712963	7/30/2019
LMBI OG NM LLC	201 Main Street	Fort Worth, TX 76102	USPS	9414811899561411715360	7/30/2019
SRBI OG NM LLC	201 Main Street	Fort Worth, TX 76102	USPS	9414811899561411712789	7/30/2019
PRB II 1993C OG NM LLC	123 E. Marcy St. Suite 101	Sante Fe, NM 87501	USPS	9414811899561411712888	7/30/2019
Delbasin Corporation	201 Main Street	Fort Worth, TX 76102	USPS	9414811899561411714585	7/30/2019
BOPCO, LP	6401 Holiday Hill Rd., Bldg. 5	Midland, TX 79707	USPS	9414811899561411714134	7/30/2019
Mewbourne Oil Co.	PO Box 5270	Hobbs, NM 88241	USPS	9414811899561411715568	7/30/2019

Semting

Sean Puryear Permian Oilfield Partners, LLC <u>spuryear@popmidstream.com</u> Date: 7-30-2019

ARTICLE NUMBER: 9414 8118 9956 1411 7143 32

ARTICLE ADDRESSED TO:

Bureau of Land Management 620 E Greene St Carlsbad NM 88220-6292

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ARTICLE ADDRESSED TO:

Devon Energy Production Co., LP 333 West Sheridan Ave Oklahoma City OK 73102-5010

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ARTICLE ADDRESSED TO:

New Mexico State Land Office 310 Old Santa Fe Trail Santa Fe NM 87501-2708

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Chevron USA 6301 Deauville Midland TX 79706-2964

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3.50

6.55

ARTICLE NUMBER: 9414 8118 9956 1411 7123 69

ARTICLE ADDRESSED TO:

XTO Permian Operating, LLC 6401 Holiday Hill Rd, Bldg #5 Midland TX 79707-2157

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ARTICLE NUMBER: 9414 8118 9956 1411 7121 54

ARTICLE ADDRESSED TO:

XTO Permian Operating LLC 22777Springwoods Village Pkwy Spring TX 77389



ARTICLE NUMBER: 9414 8118 9956 1411 7154 45

ARTICLE ADDRESSED TO:

Mewbourne Holdings, Inc. PO Box 5270 Hobbs NM 88241-5270

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ARTICLE NUMBER: 9414 8118 9956 1411 7149 74

ARTICLE ADDRESSED TO:

Advance Energy Partners LLC 11490 Westheimer Rd., Ste. 950 Houston TX 77077-6841

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ARTICLE NUMBER: 9414 8118 9956 1411 7158 10

ARTICLE ADDRESSED TO:

Hayes Land & Production LP PO Box 51407 Midland TX 79710-1407

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ARTICLE NUMBER: 9414 8118 9956 1411 7150 18

ARTICLE ADDRESSED TO:

Longhorn Partners PO Box 1973 Midland TX 79702-1973

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ARTICLE NUMBER: 9414 8118 9956 1411 7157 11

ARTICLE ADDRESSED TO:

Hayes Land Corp. 3300 N A St., Bldg 1-220 Midland TX 79705-5414

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ARTICLE ADDRESSED TO:

V-F Petroleum Inc. PO Box 1889 Midland TX 79702-1889

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ARTICLE NUMBER: 9414 8118 9956 1411 7156 43

ARTICLE ADDRESSED TO:

Joe J. Reynolds 2333 50th St., 4 Lubbock TX 79412-2501

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ARTICLE NUMBER: 9414 8118 9956 1411 7150 49

ARTICLE ADDRESSED TO:

M. Brad Bennett Inc. PO Box 2062 Midland TX 79702-2062

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ARTICLE NUMBER: 9414 8118 9956 1411 7159 57

ARTICLE ADDRESSED TO:

Hayes Partners I PO Box 3700 Midland TX 79702-3700

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ARTICLE NUMBER: 9414 8118 9956 1411 7122 77

ARTICLE ADDRESSED TO:

Occidental Permian LP 5 Greenway Plaza, Suite 110 Houston TX 77046-0521

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ARTICLE NUMBER: 9414 8118 9956 1411 7159 71

ARTICLE ADDRESSED TO:

Hayes Properties Inc. PO Box 3700 Midland TX 79702-3700

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ARTICLE NUMBER: 9414 8118 9956 1411 7141 10

ARTICLE ADDRESSED TO:

Big Sinks Joint Venture 10501 N Central Expy Ste 303 Dallas TX 75231-2219



ARTICLE NUMBER: 9414 8118 9956 1411 7145 61

ARTICLE ADDRESSED TO:

CTV OG NM LLC 201 Main Street Fort Worth TX 76102-3105

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ARTICLE NUMBER: 9414 8118 9956 1411 7129 63

ARTICLE ADDRESSED TO:

Thru Line OG NM LLC 201 Main Street Fort Worth TX 76102-3105

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ARTICLE NUMBER: 9414 8118 9956 1411 7127 89

ARTICLE ADDRESSED TO:

SRBI OG NM LLC 201 Main Street Fort Worth TX 76102-3105

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ARTICLE NUMBER: 9414 8118 9956 1411 7151 00

ARTICLE ADDRESSED TO:

Keystone OG NM LLC 201 Main Street Fort Worth TX 76102-3105

FEES Postage Per Piece Certified Fee Total Postage & Fees:



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ARTICLE NUMBER: 9414 8118 9956 1411 7153 60

ARTICLE ADDRESSED TO:

LMBI OG NM LLC 201 Main Street Fort Worth TX 76102-3105

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ARTICLE ADDRESSED TO:

PRB II 1993C OG NM LLC 123 E. Marcy St., Suite 101 Santa Fe NM 87501-2034

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ARTICLE NUMBER: 9414 8118 9956 1411 7141 34

ARTICLE ADDRESSED TO:

BOPCO, LP 6401 Holiday Hill Rd, Bldg. 5 Midland TX 79707-2157

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ARTICLE ADDRESSED TO:

Mewbourne Oil Co. PO Box 5270 Hobbs NM 88241-5270



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Ad No. 0001292485

PERMIAN OILFIELD PARTNERS, LLC PO BOX 3329

HOBBS NM 88241

I, a legal clerk of the **Carlsbad Current-Argus**, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the State wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

07/27/19 Legal Clerk

Subscribed and sworn before me this 30th of July 2019.

State of WI, County of Brown NOTARY PUBLIC

My Commission Expires

Newspaper Publication Notice

Permian Oilfield Partners, LLC, PO Box 3329, Hobbs, NM 88241, phone (817)606-7630, attention Gary Fisher, has filed form C-108 (Application for Authorization for Injection) with the New Mexico Oil Conservation Division seeking approval to drill a commercial salt water disposal well in Eddy County, New Mexico. The well name is the Renegade Federal SWD #1, and is located 931' FNL & 267' FWL, Unit Letter D, Section 27, Township 25 South, Range 31 East, NMPM, approximately 19.3 miles SE of Malaga, NM. The well will dispose of water produced from nearby oil and gas wells into the Devonian formation from a depth of 16,761 feet to 18,076 feet. The maximum expected injection rate is 50,000 BWPD at a maximum surface injection pressure of 3,352 psi. Interested parties must file objections or requests for hearing with the New Mexico Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico, 87505 within 15 days.

July 27, 2019



Ad#:0001292485 P O : Renegade Federal # of Affidavits :0.00

Renegade Federal SWD #1 Water Wells in 1mi Radius

SESE 17 (P) 17	SWSW (M)	SESW (N)	16 SWSE (0)	SESE (P)	swsw (M)	SESW 1 (N) 1	5 SWSE (O)	SESE (P)	5 ff 14 SWSW (M)
NENE	NWNW	NENW	NWNE	NENE	NWNW	NENW	NWNE	NENE	NWNW
(A)	(D)	(C)	(B)	(A)	(D)	(C)	(B)	(A)	(D)
SENE	SWNW	SENW	SWNE	SENE	SWNW	SENW	STATE	SENE	SWNW
(H)	(E)	(F)	(G)	(H)	(E)	(F)	16	(H)	(E)
	NWSW (L)	NESW (K)	NWSE (J)	NESE (1)	NWSW (L)	NESW (K)	NWSE (J)	MESE	
SESE	sysw	SER SER	SWSE	SESE	SWSW	SESW	SWSE	SESE	SWSW
(P)	M)		(0)	(P)	(M)	(N)	(0)	(P)	(M)
NENE (A)	NWNW (D)	NENW (C)	NWNE (B)	NENE (A) 251	NWNW (D)	NENW (C)	NWNE (B)	NENE (A)	NWNW (D)
SENE	SWNW	SENW	SWNE	SENE	SWNW	SENW	SWNE	SENE	SWNW
(H)	(E)	(F)	(G)	(H)	(E)	(F)	(G)	(H)	(E)
NESE	NWSN (L)	NESW	NWSE	NESE	NWSW	NESW	NWSE	NESE	NWSW
(1)		(K)	(J)	(1)	(L)	(K)	(J)	(1)	(L)
SESE	SWSW	SESW	SWSE	SESE	SWSW	SESW	SWSE	SESE	SWSW
(P)	(M)	(N)	(O)	(P)	(M)	(N)	(0)	(P)	(M)
NENE	NWNW	NENW	NWNE	NENE	NWNW	NEMW	NWNE	NENE	NWNW
(A)	(D)	(C)	(B)	(A)	(D)	(C)	(B)	(A)	(D)
32 SENE (H)	SWNW (E)	3 SENW (F)	3 SWNE (G)	SENE (H)	SWNW (E)	SENW (F)	SWNE (G)	SENE (H)	35 SWNW (E)
NESE	NWSW	NESW	NWSE	NESE	NWSW	NESW3342 //	NWSE (J)	NESE	NWSW
(1)	(L)	(K)	(J)	(1)	(L)	(K)		(1)	(L)

7/16/2019, 11:14:47 AM

Override 1

PLSS First Division

PLSS Second Division

PLSS Townships

1:18,056 0 0.17 0.35 0.7 mi 0 0.28 0.55 1.1 km

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community



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 replaced O=orpha C=the fil closed)	has been , ined, le is	1 (qu (qu	iarte iarte	ers a	are are	1=NW smalle	V 2=N est to 1	E 3=SW argest)	4=SE) (NAD8	3 UTM in meter	s)	(In feet)	
POD Number	Codo	POD Sub- basin	County	Q 64	Q 16	Q	Soa	Тже	Dng	v	V	DonthWallDo	W nthWater Co	ater
<u>C 02250</u>	Coue	CUB	ED	3	1	4	21	25S	31E	614912	3553620*	400	390	10
<u>C 02568</u>		CUB	ED	4	3	1	01	25S	31E	619103	3558892*	1025		
<u>C 02569</u>		CUB	ED	4	4	2	02	25S	31E	618699	3558891* 🌍	1016		
<u>C 02570</u>		CUB	ED	4	2	4	02	25S	31E	618704	3558489* 🌍	895		
<u>C 02571</u>		CUB	ED	4	1	2	02	25S	31E	618292	3559294* 🌍	860		
<u>C 02572</u>		CUB	ED	4	2	2	02	25S	31E	618695	3559294* 🌍	852		
<u>C 02573</u>		CUB	ED	1	4	2	02	25S	31E	618499	3559091* 🌍			
<u>C 02574</u>		CUB	ED	1	1	2	02	25S	31E	618092	3559494* 🌍			
<u>C 03830 POD1</u>		CUB	ED	4	2	4	02	25S	31E	618632	3558432 🥘	450		
											Average Depth to	o Water:	390 fee	t
											Minimu	ım Depth:	390 fee	t
											Maximu	m Depth:	390 fee	t
Record Count: 9														

PLSS Search:

Township: 25S Range: 31E

*UTM location was derived from PLSS - see Help

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.

7/16/19 11:07 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

	New Poi	v Mexico Offic nt of Dive	e of the	e State Engin n Summ	^{eer} ary
Well Tag	POD Number C 02250	(quarters are 1=NW 2=NE (quarters are smallest to la Q64 Q16 Q4 Sec 1 3 1 4 21 2	3=SW 4=SE) argest) Sws Rng 25S 31E	(NAD83 UTM in meters) X Y 614912 3553620*	
x Driller Lice Driller Nar	ense: ne: UNKNOWN	Driller Company:			
Drill Start Log File Da Pump Type	Date: ate: e:	Drill Finish Date: PCW Rcv Date: Pipe Discharge Size:	12/31/1941	Plug Date: Source: Estimated Yield:	6 GPM

*UTM location was derived from PLSS - see Help

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, or suitability for any particular purpose of the data.

7/16/19 11:05 AM

POINT OF DIVERSION SUMMARY

Imperative Water Analysis Report

	SYSTEM IDENTIFIC	CATION	WATER CHEMISTRY								
	Company: Pormian	Oilfaild Partners LLC	CATIONS		ANIONS						
			Calcium(as Ca)	651.60	Chloride(as Cl)	4000					
	Location: Renegation	e Federal SWD I	Magnesium(as Mg)	163.30	Sulfate(as SO ₄)	1204					
	Sample Source: Po		Barium(as Ba)	0.00	Dissolved CO ₂ (as CO ₂)	50.00					
EMILAL PARINERS	Account Rep: Dann	iy Gonzales	Strontium(as Sr)	9.44	Bicarbonate(as HCO ₃)	85.48					
			Sodium(as Na)	2092	H ₂ S (as H ₂ S)	50.00					
			Potassium(as K)	57.06	Boron(as B)	6.24					
			Iron(as Fe)	0.275							
	Comple ID#		Manganese(as Mn)	0.00300	PARAMETERS						
	Sample ID#:	VV-11/21			Temperature(^O F)	121.20					
					Sample pH	6.13					
	Comple Date:	07 22 2010			Conductivity	10832					
	Sample Date:	07-22-2019			T.D.S.	8303					
	Report Date:	07-24-2019			Resistivity	92.32					
					Sp.Gr.(g/mL)	1.00					

SCALE AND CORROSION POTENTIAL

∣∖

Temp.	Press.	Ca	lcite	Anh	ydrite	drite Gypsum		Barite Cele		estite	Siderite		Mackawenite		CO ₂	pCO ₂	
(⁰ F)	(atm)	Ca	ICO3	Ca	ISO4	CaSO ₄ *2H ₂ O BaS		ISO4	O ₄ SrSO ₄		FeCO ₃		FeS		(mpy)	(atm)	
70.00	1.00	0.0285	-0.0976	0.291	-434.35	0.494	-242.18	0.00	-0.00836	0.416	-9.42	0.0204	-0.0997	0.522	-0.0410	0.195	0.0472
81.82	1.36	0.0314	-0.0884	0.295	-421.29	0.474	-256.02	0.00	-0.0111	0.413	-9.50	0.0245	-0.0868	0.488	-0.0467	0.301	0.0558
93.64	1.73	0.0344	-0.0806	0.309	-395.38	0.459	-265.32	0.00	-0.0142	0.419	-9.29	0.0291	-0.0759	0.462	-0.0516	0.429	0.0644
105.45	2.09	0.0373	-0.0738	0.332	-359.08	0.458	-262.88	0.00	-0.0177	0.429	-8.93	0.0343	-0.0665	0.441	-0.0557	0.562	0.0730
117.27	2.45	0.0403	-0.0680	0.365	-314.94	0.498	-225.96	0.00	-0.0218	0.438	-8.57	0.0400	-0.0586	0.421	-0.0599	0.580	0.0816
129.09	2.82	0.0432	-0.0629	0.411	-265.32	0.539	-193.47	0.00	-0.0266	0.447	-8.28	0.0461	-0.0517	0.401	-0.0648	0.580	0.0902
140.91	3.18	0.0459	-0.0585	0.473	-212.50	0.581	-164.85	0.00	-0.0324	0.454	-8.04	0.0526	-0.0459	0.379	-0.0703	0.562	0.0988
152.73	3.55	0.0484	-0.0547	0.554	-158.42	0.622	-139.59	0.00	-0.0392	0.460	-7.85	0.0593	-0.0409	0.356	-0.0768	0.585	0.107
164.55	3.91	0.0507	-0.0514	0.661	-104.74	0.663	-117.25	0.00	-0.0473	0.465	-7.70	0.0662	-0.0366	0.333	-0.0841	0.602	0.116
176.36	4.27	0.0526	-0.0485	0.800	-52.79	0.704	-97.49	0.00	-0.0567	0.469	-7.59	0.0730	-0.0329	0.309	-0.0927	0.602	0.125
188.18	4.64	0.0541	-0.0460	0.984	-3.65	0.744	-80.02	0.00	-0.0677	0.471	-7.52	0.0797	-0.0297	0.285	-0.103	0.299	0.133
200.00	5.00	0.0552	-0.0438	1.23	42.05	0.784	-64.47	0.00	-0.0805	0.472	-7.49	0.0860	-0.0270	0.261	-0.114	0.196	0.142
			Lbs per		Lbs per		Lbs per		Lbs per		Lbs per		Lbs per		Lbs per		
		xSAT	1000	xSAT	1000	xSAT	1000	xSAT	1000	xSAT	1000	xSAT	1000	xSAT	1000		
			Barrels		Barrels		Barrels		Barrels		Barrels		Barrels		Barrels		

Saturation Levels (xSAT) are the ratio of ion activity to solubility, e.g. Ca_{CO_3}/K_{sp} . pCO₂ (atm) is the partial pressure of CO₂ in the gas phase. Lbs/1000 Barrels scale is the quantity of precipitation (or dissolution) required to instantaneously bring the water to equilibrium.





Item XII. Affirmative Statement

Re: C-108 Application for Authorization to Inject Permian Oilfield Partners, LLC Renegade Federal SWD #1 931' FNL & 267' FWL Sec 27, T25S, R31E Eddy County, NM

Permian Oilfield Partners, LLC. has examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

Hay Ertihan

Gary Fisher Manager Permian Oilfield Partners, LLC.

Date: 7/24/2019

Plugging Risk Assessment

Permian Oilfield Partners, LLC. Renegade Federal SWD #1 SL: 931' FNL & 267' FWL Sec 27, T25S, R31E Eddy County, New Mexico

WELLBORE SCHEMATIC

Permian Oilfield Partners, LLC. Renegade Federal SWD #1 931' FNL, 267' FWL Sec. 27, T25S, R31E, Eddy Co. NM Lat 32.1059910° N, Lon 103.7736378° W GL 3342', RKB 3372'

Surface - (Conventional)

Hole Size:	26"
Casing:	20" - 94# H-40 & 106.5# J-55 STC Casing
Depth Top:	Surface
Depth Btm:	1235'
Cement:	832 sks - Class C + Additives
Cement Top:	Surface - (Circulate)

Intermediate #1 - (Conventional)

Hole Size:	17.5"
Casing:	13.375" - 54.5# J-55 & 61# J-55 STC Casing
Depth Top:	Surface
Depth Btm:	4291'
Cement:	1472 sks - Lite Class C (50:50:10) + Additives
Cement Top:	Surface - (Circulate)

Intermediate #2 - (Conventional)

Hole Size:	12.25"
Casing:	9.625" - 40# L-80 & 40# HCL-80 BTC Casing
Depth Top:	Surface
Depth Btm:	11735'
Cement:	1982 sks - Lite Class C (60:40:0) + Additives
Cement Top:	Surface - (Circulate)
ECP/DV Tool:	4391'

Intermediate #3 - (Liner)

Hole Size:	8.5"
Casing:	7.625" - 39# HCL-80 FJ Casing
Depth Top:	11535'
Depth Btm:	16761'
Cement:	254 sks - Lite Class C (60:40:0) + Additives
Cement Top:	11535' - (Volumetric)

Intermediate #4 - (Open Hole)

Hole Size:	6.5"
Depth:	18076'
Inj. Interval:	16761' - 18076' (Open-Hole Completion)

Tubing - (Tapered)

 Tubing Depth:
 16716'

 Tubing:
 7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)

 X/O Depth:
 11535'

 X/O:
 7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)

 Packer Depth:
 16726'

 Packer:
 5.5" - Perma-Pak or Equivalent (Inconel)



Plugging Risk Assessment

Page 2

<u>7" UFJ Tubing Inside of 9 %" 40# Casing</u>

Bowen	Series	150	Releasing	and	Circulation	Overshots
Maximum I	Catch Size	65% ^{or} to	7%" Inclusive			

	6%	6%	7	7%
	5%	6%	6%	65%
	8%	7%	8%	89%
	ES.	S.H.	S.H.	S.H.
Part No.	C-3032	C-5222	9217	C-5354
Weight	280	243	251	260
Part No.	A-3033	A-5223	9218	A-5355
Part No.	B-3034	B-5224	9219	B-5356
Part No.	A-1814	B-5225	9224	B-5357
Part No.	N-84	B-5227	9222	B-5359
Part No.	M-89	A-5228	9223	B-5380
Part No.	A-1818	A-5229	9226	A-5381
Part No.	N-84	B-5227	9222	B-5359
Part No.	M-89	A-5228	9223	B-5380
Part No.	A-1814-R	B-5225-R	9224-R	B-5357-R
	Part No. Weight Part No. Part No. Part No. Part No. Part No. Part No. Part No. Part No. Part No.	694 5% 8% F.S. Part No. C-3032 Weight 280 Part No. A-3033 Part No. A-3034 Part No. A-1814 Part No. N-84 Part No. A-1818 Part No. N-89 Part No. M-89 Part No. A-1814-R	6% 6% 5% 6% 8% 7% F.S. S.H. Part No. C-3032 C-5222 Weight 280 243 Part No. A-3033 A-5223 Part No. A-3034 B-5224 Part No. A-1814 B-5225 Part No. N-84 B-5227 Part No. A-1818 A-5228 Part No. N-84 B-5227 Part No. M-89 A-5228 Part No. N-84 B-5227 Part No. N-84 B-5228 Part No. A-1818 A-5228 Part No. N-84 B-5227 Part No. M-89 A-5228 Part No. M-89 A-5228 Part No. M-89 A-5228 Part No. M-89 A-5228 Part No. A-1814-R B-5225-R	5% 5% 6% 6% 5% 6% 6% 6% 8% 7% 8% 8% F.S. S.H. S.H. Part No. C-3032 C-5222 9217 Weight 280 243 251 Part No. A-3033 A-5223 9218 Part No. B-3034 B-5224 9219 Part No. A-1814 B-5225 9224 Part No. N-84 B-5227 9222 Part No. M-89 A-5228 9223 Part No. N-84 B-5227 9222 Part No. M-89 A-5228 9223 Part No. M-89 A-5228 9224 Part No. M-89 A-5228 9224 Part No. M-89 A-5228 9223 Part No. M-89 A-5228 9223 Part No. M-89 A-5228 9224 Part No. M-89 A-5228

A 8.125" O.D. Bowen Series 150 Overshot will be used to perform this overshot operation. Details on the overshot are listed above. Casing to tubing clearance dimensions are listed below.

7" 26# FJ Casing Inside 9.625" 40# BTC Casing													
(learance (in)	Pipe Size	Weight	Grada	Conn.	Туре	Body	Coupling	I.D.	Drift	Lined Wt.	Lined	Flare	Lined Drift
Clearance (in)	(in)	lb/ft	Grade			O.D. (in)	O.D. (in)	(in)	(in)	lb/ft	I.D. (in)	I.D. (in)	(in)
0.840	9 5/8	40.0	L-80	BTC	Casing	9.625	10.625	8.835	8.679	-	-	÷	-
0.840	7	26.0	HCP-110	FJ	Casing	7.000	7.000	6.276	6.151	28.500	6.080	5.940	5.815

*Red Indicates Tubing

Fishing Procedure

Overshot Fishing Procedure

In the Event of a Connection Break

- If fishing neck is clean

- 1. Trip in hole with overshot and engage fish.
- 2. Pick up 2 points over neutral weight.
- 3. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
- 4. Once released from packer, trip out of hole with fish.

A skirted mill may be substituted for a standard mill to ensure pipe stabilization and the casing is not damaged while milling

- If dressing fishing neck is required

- 1. Trip in hole with mill and dress fishing neck to allow for overshot to engage tubing.
- 2. Trip out of hole with mill.
- 3. Trip in hole with overshot and engage fish.
- 4. Pick up 2 points over neutral weight.
- 5. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
- 6. Once released from packer, trip out of hole with fish.

A skirted mill may be substituted for a standard mill to ensure pipe stabilization and the casing is not damaged while milling

In the Event of a Body Break

- If fishing neck is clean

- 1. Trip in hole with overshot and engage fish.
- 2. Pick up 2 points over neutral weight.
- 3. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
- 4. Once released from packer, trip out of hole with fish.

- If dressing fishing neck is required

- 1. Trip in hole with mill and dress fishing neck to allow for overshot to engage tubing.
- 2. Trip out of hole with mill.
- 3. Trip in hole with overshot and engage fish.
- 4. Pick up 2 points over neutral weight.

Plugging Risk Assessment

- 5. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
- 6. Once released from packer, trip out of hole with fish.

A skirted mill may be substituted for a standard mill to ensure pipe stabilization and the casing is not damaged while milling

Spear Fishing Procedure

If an overshot cannot be used to retrieve the fish, a spear may be used.

- Due to the use of insert lined tubing, the composite liner must be removed from the tubing before engaging the fish with a spear.
- 1. Trip in hole with spear sized to engage the I.D. of the insert liner.
- 2. Engage the insert liner inside the tubing with spear.
- 3. Pull the insert liner out of the tubing.
- 4. Trip out of hole with insert liner.
- 5. Trip in hole with spear sized to engage the I.D. of the tubing.
- 6. Engage the tubing with spear.
- 7. Pick up 2 points over neutral weight.
- 8. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
- 9. Once released from packer, trip out of hole with fish.

Inside Diameter Cutting Tool Fishing Procedure

If an overshot is required but a mill cannot be used to dress off a fishing neck, an inside diameter cutting tool may be used.

- Due to the use of insert lined tubing, the composite liner must be removed from the tubing before engaging the fish with a spear.
- 1. Trip in hole with spear sized to engage the I.D. of the insert liner.
- 2. Engage the insert liner inside the tubing with spear.
- 3. Pull the insert liner out of the tubing.
- 4. Trip out of hole with insert liner.
- 5. Trip in hole with inside diameter cutting tool and cut the tubing below the damaged fishing neck.
- 6. Trip out hole with cutting tool.
- 7. Trip in hole with spear sized to engage the I.D. of the tubing.
- 8. Engage the previously cut tubing segment with spear.
- 9. Trip out hole with cut tubing segment and spear.
- 10. Trip in hole with overshot and engage fish.
- 11. Pick up 2 points over neutral weight.
- 12. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
- 13. Once released from packer, trip out of hole with fish.

Plugging Risk Assessment

5 1/2" UFJ Tubing Inside of 7 5/8" 39# Casing

Series 150 Overshots

Tools are listed in order of maximum catch size.

The following table shows only a partial listing of available NOV Dowhole Bowen® overshots.

NOTE: Nitralloy Grapples are available upon request.

Bowen Series 150 Releasing and Circulation Overshots Maximum Catch Size 4%" to 5%" Inclusive

Maximum Catch Size (Spiral)		4%	4%	4%	4%	5	5	5½
Maximum Catch Size (Basket)		31%	4%	4%	4%	4%	4%	4%
Overshot O.D.		5%	5%	5%	5%	5%	8%	65%
Туре		ES.	S.H.	S.H.	S.F.S.	S.H.	ES.	S.H.
Complete Assembly	Part No.	5896	5698	C-5168	8975	C-5171	C-4825	8625
(Dressed Spiral Parts)	Weight	130	130	133	138	140	192	185
Replacement Parts								
Top Sub	Part No.	5897	5699	A-5169	8976	A-5172	B-4826	8828
Bowl	Part No.	5898	5700	B-5170	8977	B-5173	B-4827	8817
Packer	Part No.	169	1140	B-2199	8114	L-5950	L-4505	8618
Spiral Grapple	Part No.	165	1135	B-2201	6112	B-4369	M-1071	8619
Spiral Grapple Control	Part No.	186	1137	B-2202	8113	B-4370	M-1072	8620
Standard Guide	Part No.	187	1143	B-2203	8121	B-4371	L-1074	8621
Basket Parts								
Basket Grapple	Part No.	165	1135	B-2201	8112	B-4369	M-1071	8619
Basket Grapple Control	Part No.	186	1137	B-2202	6113	B-4370	M-1072	8620
Mill Control Packer	Part No.	189-R	1140-R	B-2199-R	6114-R	L-5950-R	M-4505	L-8618-R

A (6.625" turned down to **6.500**" O.D.) Bowen Series 150 Overshot will be used to perform this overshot operation. Details on the overshot are listed above. Casing to tubing clearance dimensions are listed below.

5.5" 17# FJ Casing Inside 7.625" 39# FJ Casing													
Clearance (in)	Pipe Size Weight		Crede	0	T	Body	Coupling	I.D.	Drift	Lined Wt.	Lined	Flare	Lined Drift
	(in)	lb/ft	Graue	Com.	Tybe	O.D. (in)	O.D. (in)	(in)	(in)	lb/ft	I.D. (in)	I.D. (in)	(in)
0.500	7 5/8	39.0	HCL-80	FJ	Casing	7.625	7.625	6.625	6.500	:			-
0.500	5 1/2	17.0	HCL-80	FJ	Casing	5.500	5.500	4.892	4.767	18.500	4.520	4.400	4.275

*Red Indicates Tubing

Fishing Procedure

Overshot Fishing Procedure

In the Event of a Connection Break

- If fishing neck is clean

- 1. Trip in hole with overshot and engage fish.
- 2. Pick up 2 points over neutral weight.
- 3. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
- 4. Once released from packer, trip out of hole with fish.

A skirted mill may be substituted for a standard mill to ensure pipe stabilization and the casing is not damaged while milling

- If dressing fishing neck is required

- 1. Trip in hole with mill and dress fishing neck to allow for overshot to engage tubing.
- 2. Trip out of hole with mill.
- 3. Trip in hole with overshot and engage fish.
- 4. Pick up 2 points over neutral weight.
- 5. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
- 6. Once released from packer, trip out of hole with fish.

A skirted mill may be substituted for a standard mill to ensure pipe stabilization and the casing is not damaged while milling

In the Event of a Body Break

- If fishing neck is clean

- 1. Trip in hole with overshot and engage fish.
- 2. Pick up 2 points over neutral weight.
- 3. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
- 4. Once released from packer, trip out of hole with fish.

- If dressing fishing neck is required

- 1. Trip in hole with mill and dress fishing neck to allow for overshot to engage tubing.
- 2. Trip out of hole with mill.
- 3. Trip in hole with overshot and engage fish.
- 4. Pick up 2 points over neutral weight.

Plugging Risk Assessment

- 5. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
- 6. Once released from packer, trip out of hole with fish.

A skirted mill may be substituted for a standard mill to ensure pipe stabilization and the casing is not damaged while milling

Spear Fishing Procedure

If an overshot cannot be used to retrieve the fish, a spear may be used.

- Due to the use of insert lined tubing, the composite liner must be removed from the tubing before engaging the fish with a spear.
- 1. Trip in hole with spear sized to engage the I.D. of the insert liner.
- 2. Engage the insert liner inside the tubing with spear.
- 3. Pull the insert liner out of the tubing.
- 4. Trip out of hole with insert liner.
- 5. Trip in hole with spear sized to engage the I.D. of the tubing.
- 6. Engage the tubing with spear.
- 7. Pick up 2 points over neutral weight.
- 8. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
- 9. Once released from packer, trip out of hole with fish.

Inside Diameter Cutting Tool Fishing Procedure

If an overshot is required but a mill cannot be used to dress off a fishing neck, an inside diameter cutting tool may be used.

- Due to the use of insert lined tubing, the composite liner must be removed from the tubing before engaging the fish with a spear.
- 1. Trip in hole with spear sized to engage the I.D. of the insert liner.
- 2. Engage the insert liner inside the tubing with spear.
- 3. Pull the insert liner out of the tubing.
- 4. Trip out of hole with insert liner.
- 5. Trip in hole with inside diameter cutting tool and cut the tubing below the damaged fishing neck.
- 6. Trip out hole with cutting tool.
- 7. Trip in hole with spear sized to engage the I.D. of the tubing.
- 8. Engage the previously cut tubing segment with spear.
- 9. Trip out hole with cut tubing segment and spear.
- 10. Trip in hole with overshot and engage fish.
- 11. Pick up 2 points over neutral weight.
- 12. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
- 13. Once released from packer, trip out of hole with fish.

Plugging Risk Assessment

Abandonment Procedure

If the tubing cannot be recovered and the well is to be abandoned.

- The operator will ensure that all geologic formations are properly isolated.
- 1. Confirm the I.D. of the injection tubing is free from obstructions.
- 2. Run in hole with wireline set profile plug.
- Set plug inside of packer assembly.
 (Plug will allow cement to fill the I.D. of the injection tubing and the tubing to casing annulus)
- 4. Run in hole with wireline conveyed perforating guns and perforate the tubing immediately above the packer.
- 5. Trip in hole with an overshot, spear, cement retainer or isolation tool that will provide a work string-to- injection tubing seal.
- 6. Engage the fish with sealing tool.
- 7. Confirm circulation down the tubing and up the tubing-to-casing annulus.
- 8. Cement the work string, injection tubing, injection tubing-to-casing annulus and work string-tocasing annulus to surface.
- 9. Confirm the entirety of the wellbore is cemented to surface and all zones are isolated.
- 10. ND wellhead and install permanent capping flange.



Attachment to C-108 Permian Oilfield Partners, LLC Renegade Federal SWD #1 931' FNL & 267' FWL Sec 27, T25S, R31E Eddy County, NM

July 24, 2019

STATEMENT REGARDING SEISMICITY

Examination of the USGS and TexNet seismic activity databases has shown minimal historic seismic activity in the area (< 30 miles) of our proposed above referenced SWD well as follows:

- 1. M3.1, 2012-03-18, 13.89 miles away @ 330.28 deg heading
- 2. M2.9, 1984-12-09, 16.85 miles away @ 49.02 deg heading

Permian Oilfield Partners does not own any 2D or 3D seismic data in the area of this proposed SWD well. Our fault interpretations are based on well to well correlations and publicly available data and software as follows:

- 1. USGS Quaternary Fault & Fold database shows no quaternary faults in the nearby area.
- 2. Based on offset well log data, we have not interpreted any faults in the immediate area.
- 3. Basement PreCambrian faults are documented in the Snee & Zoback paper, "State of stress in the Permian Basin, Texas and New Mexico: Implications for induced seismicity", published in the February 2018 issue of the SEG journal, The Leading Edge, along with a method for determining the probability of fault slip in the area.
- 4. Fault data was also correlated to the publicly available USGS GIS geologic units & structural features database, to Ewing's 1990 Tectonic map of Texas (via Ruppel's 2005 Preparation of Maps Depicting Geothermal Gradient and PreCambrian Structure in the Permian Basin), and to fault maps as published in the New Mexico Geological Society Special Publication 13A, "Energy and Mineral Resources of New Mexico: Petroleum Geology," by R. F. Broadhead, 2017.
- 5. The distance from the proposed injection well to the nearest faults is approximately 25.8km to the west, and 24.5km to the east. The large distance to either fault means that there is effectively no impact on fault delta-pressures even after 30 years.
- 6. The analysis below assumes an improbable well failure through the Montoya & Simpson barrier zones, through the Ellenburger & Cambrian permeable zones, into the PreCambrian.

Input assumptions: using A-phi & Hor stress direction values for western faults

Rate (BBL/day)	50000
Interval height (ft)	1500
Average Porosity (%)	3
Vert stress gradient (psi/ft)	0.75
Hor stress direction (deg N)	35
Fault dip (deg)	75
Ref depth (ft)	20000
Initial res press gradient (psi/ft)	0.47
A phi	0.52
Friction coefficient	0.58
Weighted average perm	12.5
Fluid density (kg/m3)	1100
Dynamic viscosity	0.0003
Fluid compressibility (/Pa)	4 e-10
Rock compressibility (/Pa)	1.08 e-09

Geomechanics Pore Pressure to Slip





Year 30 Fault Slip Probability (0% for all fault segments after 30 years. 0.1 psi fault delta pressure is much less than the 3047 psi required for fault slip in the closest fault segment #13)

As per NM OCD requirements (injection well to injection well spacing minimum of 1.5 miles), this proposed above referenced SWD well is located 3.28 miles away from the nearest active or permitted Devonian disposal well.

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