AE Order Number Banner

Application Number: pMSG2325252627

SWD-2573

Pilot Water Solutions SWD LLC [331374]

R https://intransingen.gony/9/2023/9-9-202/ derManagement/AdminOrders/Banner/pMSG2325252627



September 01, 2023

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

Subject: Pilot Water Solutions SWD LLC Application for Authorization to Inject Juice SWD State #1

Mr. Fuge,

Pilot Water Solutions SWD LLC (Pilot) is applying for administrative approval of the attached Application for Authorization to Inject (Form C-108) for their proposed Juice SWD State #1. The application is requesting authorization to dispose of saltwater from oil and gas production in the area via commercial disposal into the San Andres Formation in Lea County, NM.

Questions regarding this application or the included materials can be directed to Nate Alleman (Pilot Regulatory Advisor Contractor) via telephone at 918-237-0559 or via email at nate.alleman@aceadvisors.com.

Sincerely,

Nate Alleman Chief Regulatory Advisor Ace Energy Advisors

RECEIVED:	REVIEWER:	TYPE:	APP NO:	
		ABOVE THIS TABLE FOR OCD DIVI	sion use only	
	- Geologi	CO OIL CONSERVA cal & Engineering rancis Drive, Santa	Bureau –	STOR NEW MERON
	ADMINIST	RATIVE APPLICATIC	ON CHECKLIST	
THIS	CHECKLIST IS MANDATORY FOR A REGULATIONS WHICH R	ALL ADMINISTRATIVE APPLICAT EQUIRE PROCESSING AT THE D		
Applicant: Pilot W	ater Solutions SWD LLC		OGRI	D Number: <u>331374</u>
Well Name: Juice	SWD State #1		API: 30	
Pool: <u>SWD;</u> San Ar	ndres		Pool	Code: 96121
1) TYPE OF APPL A. Location	ICATION: Check those – Spacing Unit – Simu NSL INSP (F one only for [1] or [11]	INDICATED BELON which apply for [A] Itaneous Dedication ROJECT AREA)	N	THE TYPE OF APPLICATION
[[II] Inje [PLC PC OL ure Increase – Enhai WD IPI EC	nced Oil Recove	FOR OCD ONLY
A. ♥ Offse B. Roya C. ♥ Appl D. ♥ Notifi E. Notifi F. ♥ Surfa G.♥ For a	N REQUIRED TO: Check t operators or lease ho lty, overriding royalty o cation requires publish cation and/or concurr cation and/or concurr ce owner Il of the above, proof o ptice required	Iders whers, revenue owr led notice rent approval by SLC rent approval by BLN) Л	Notice Complete Application Content Complete
3) CERTIFICATIO	N: I hereby certify that	the information sub	mitted with this c	application for

administrative approval is accurate and complete to the best of my knowledge. I also understand that no action will be taken on this application until the required information and notifications are submitted to the Division.

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

David Grounds

Print or Type Name

09/01/2023 Date

713-307-8752

Phone Number

david.grounds@pilotwater.com e-mail Address

David Grounds

Signature

Received by OCD: 9/9/2023 3:00:56 PM

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, New Mexico 87505 *Page 4 of 50* FORM C-108 Revised June 10, 2003

	APPLICATION FOR AUTHORIZATION TO INJECT
I.	PURPOSE: Secondary Recovery Pressure Maintenance X_Disposal Storage Application qualifies for administrative approval? X_Yes No
II.	OPERATOR: Pilot Water Solutions SWD LLC
	ADDRESS: 20 Greenway Plaza, Suite 200, Houston, TX 77046
	CONTACT PARTY: David Grounds PHONE: 713-307-8752
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?YesYesNo If yes, give the Division order number authorizing the project:
V.	Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
VI.	Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
VII.	Attach data on the proposed operation, including:
	 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; 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.	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.
*Х.	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: David Grounds	_TITLE:
SIGNATURE: David Grounds	
devid areve de Orilet veter een	

_DATE: <u>09/01/2023</u>

E-MAIL ADDRESS: _____david.grounds@pilotwater.com

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

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

III. Well Data

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

(1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.

Operator: Pilot Water Solutions SWD LLC (OGRID# 331374) Lease/Well Name & Number: Juice SWD State #1 Legal 497' FNL & 771' FWL - Unit D – Section 7 T19S R37E – Lea County

(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.

Casing String	Hole Size (in)	Casing Size (in)	Casing Depth (ft)	Sacks Cement (sx)	Top of Cement (ft)	Method Determined
Surface	17-1/2	13-3/8	1,448	2,269.6	0	Circulation
Production	12-1/4	9-5/8	5,510	1,644.7	0	Circulation

A wellbore diagram is included in *Attachment 1*.

(3) A description of the tubing to be used including its size, lining material, and setting depth.

5-1/2" fiberglass-coated tubing set at 4,408'

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Weatherford AS1X Stainless 9-5/8" X 5-1/2" set at 4,408'

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.

Injection Formation Name - San Andres Pool Name - SWD; San Andres Pool Code – 96121

(2) The injection interval and whether it is perforated or open-hole.

Cased-hole injection between 4,408' - 5,510'

- (3) State if the well was drilled for injection or, if not, the original purpose of the well. New drill for injection
- (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.

None

- (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.
 - Overlying
 - Yates (2,729')
 - 7 Rivers (3,006')
 - Queen (3,586')
 - o Grayburg (3,969')
 - Underlying No underlying oil and gas zones present.

Note: the proposed SWD is located on the Central Basin Platform. Therefore, the listed productive zones are limited to those productive zones occurring on the Central Basin Platform.

V. AOR Maps

Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

The following maps are included in *Attachment 2*:

- 1/2-Mile AOR/Surface & Mineral Ownership Map
- 1/2-Mile Lease Map
- 2-Mile Oil & Gas Well Map

VI. AOR List

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.

Details of the wells within the 0.5-mile AOR are included in *Attachment 2*. No wells within the 0.5-mile AOR penetrate the top of the proposed injection zone.

VII. Operational Information

Attach data on the proposed operation, including:

(1) Proposed average and maximum daily rate and volume of fluids to be injected;

Maximum: 25,000 bpd Average: 15,000 bpd

(2) Whether the system is open or closed;

The system will be closed.

(3) Proposed average and maximum injection pressure;

Maximum: 882 psi (surface) Average: approx. 500-600 psi (surface)

(4) Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water;

It is anticipated that produced water from Wolfcamp and Bone Spring production wells in the area will be injected into the proposed SWD. Therefore, water analysis from these formations was obtained and is included in *Attachment 3*.

(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.).

The proposed injection interval for this SWD is the San Andres formation, which is a nonproductive zone known to be compatible with formation water from the Wolfcamp and Bone Spring formations. Water analyses of samples collected from the proposed injection formation in the area were obtained and are included in *Attachment 4*.

VIII. Geologic Description

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.

The proposed injection interval is located in the San Andres formation between the depths of 4,408 and 5,510 feet. The San Andres formation consists of an interbedded carbonate sequence composed of limestone and dolomite. These cycles tend to be mappable within the San Andres and are differentiated by sections of either very high or very low porosity and permeability development. Upper and lower confinement will be provided by tight carbonate facies present within San Andres that occur above and below the porous injection interval. The upper confining interval occurs at the top of the San Andres formation, directly underlying the Grayburg formation, and ranges from 125' – 150' net thickness based on a review of nearby open-hole geophysical logs. The lower confining interval occurs at the bottom of the San Andres formation, directly overlying the Glorieta formation, and ranges from 150' - 200' net thickness based on a review of nearby open-hole geophysical logs.

The base of the lowermost Underground Source of Drinking Water (USDW), identified as the top of the first anhydrite, was determined to occur at the top of the Rustler formation at a depth of 1,423'. Water wells in the area are drilled to a depth of approximately 95' – 143'.

IX. Proposed Stimulation Program

Describe the proposed stimulation program, if any.

A minor acid job utilizing 15-20% hydrochloric acid may be used to cleanup the wellbore.

X. Logging and Test Data

Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).

Logs will be run and submitted to the Division once the well is completed.

XI. Groundwater Wells

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.

Based on data obtained from the New Mexico Office of the State Engineer (OSE), a total of 14 groundwater wells (8 active, 1 pending, 5 plugged) are located within 1 mile of the proposed SWD location. Water samples have been collected and analyzed for 3 of these water wells.

Attachment 5 includes a table with details of the water wells within 1-mile, a water well map, and analysis of the collected water samples.

XII. No Hydrologic Connection Statement

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.

A geologic review conducted on offset wireline log data and published regional studies did not identify any faulting in the vicinity of the proposed locations that would allow for the hydraulic communication between the injection interval and overlying USDWs. The base of the lowermost Underground Source of Drinking Water (USDW), identified as the top of the first anhydrite, was determined to occur at the top of the Rustler formation at a depth of 1,423'.

XIII. Proof of Notice

Applicants must complete the "Proof of Notice" section on the reverse side of this form.

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.

A copy of the application was mailed to the Affected Persons, including the OCD District Office, surface owner, leasehold operators within the AOR, and BLM/SLO if they own minerals within the AOR. *Attachment 6* includes a list of the Affected Persons receiving notice of the application and the associated certified mailing receipts (green sheets).

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.

A Public Notice was published in the Hobbs NewsSun, a newspaper of general circulation in the area, and the associated affidavit is included in *Attachment 6*.

Attachment 1

1625 N. French Dr., Hobbs, NM 88240

811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720

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

1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

District I

District II

District III

District IV

.

State of New Mexico	
Energy, Minerals & Natural Resources Department	<i></i>
OIL CONSERVATION DIVISION	Sub
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

		WI	ELL LC	OCATIO	N AND ACH	REAGE DEDIC	CATION PLA	Т							
1	API Number	³ Pool Na	me												
				96121	I	SWD; San Andres									
⁴ Property C	Code					⁶ \	Vell Number								
	JUICE SWD STATE #1														
⁷ OGRID I	No.	⁸ Operator Name ⁹ Elevation													
37137	4	Pilot Water Solutions SWD LLC 3723.65'													
	¹⁰ Surface Location														
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East	/West line		County				
D	7	19 S	37 E		497	NORTH	771	WE	ST	LEA					
		• • • •	^п Во	ttom Ho	le Location I	f Different From	n Surface								
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East	/West line		County				
¹² Dedicated Acres	¹³ Joint o	r Infill ¹⁴ Co	nsolidation	Code ¹⁵ O	rder No.	•									

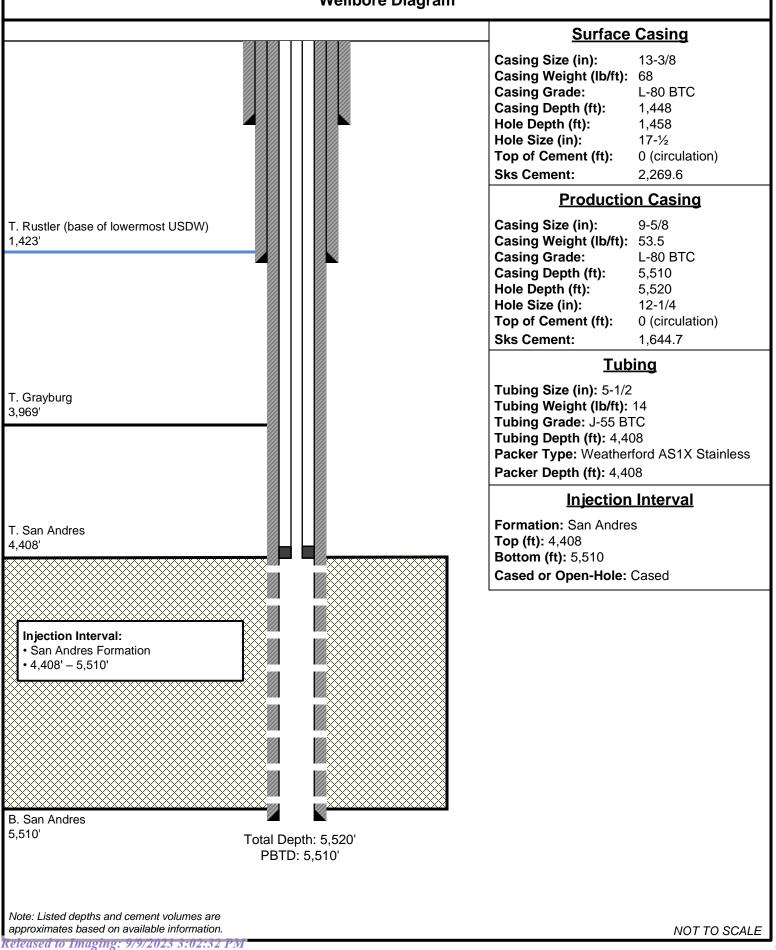
No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

*1 771'	С	В	2 A	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.
E	NAD 83 1 JUICE SW X: 860	D STATE 1 296.21'	Н	Nothin Allina 08/22/2023 Signature Date Nate Alleman Printed Name nate.alleman@aceadvisors.com E-mail Address
L	1-Y=613523.07 2-Y=613473.44 3-Y=608197.49			¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date of Survey ME K Pate
M (4)	Ν	0	P 3	Date of Survey MEL Date Signature and Sear of Professional Surgeyor: 17320

Page 11 of 50

Juice SWD State #1

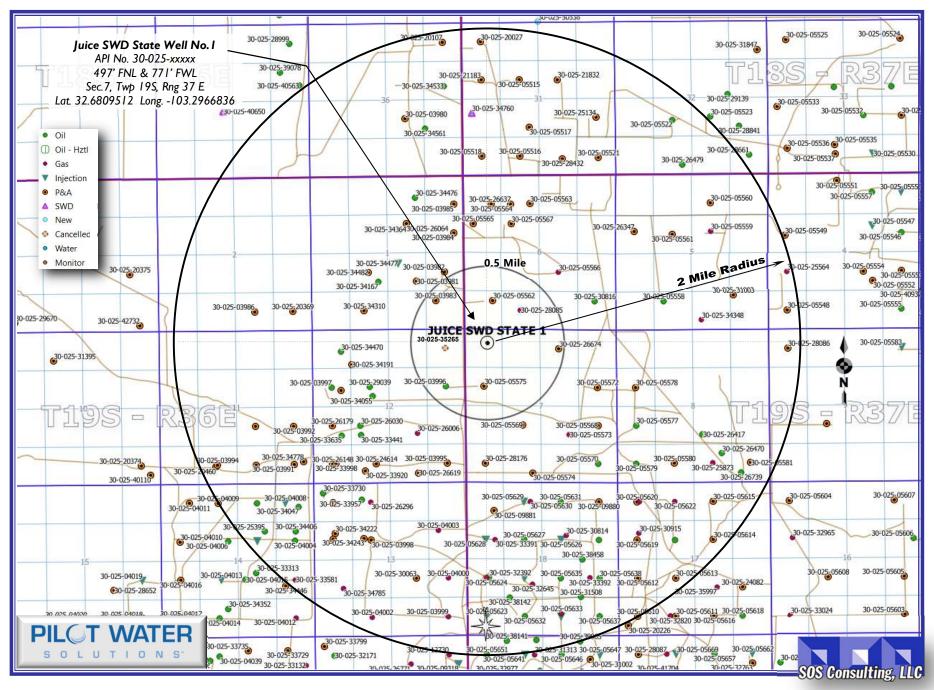
Wellbore Diagram

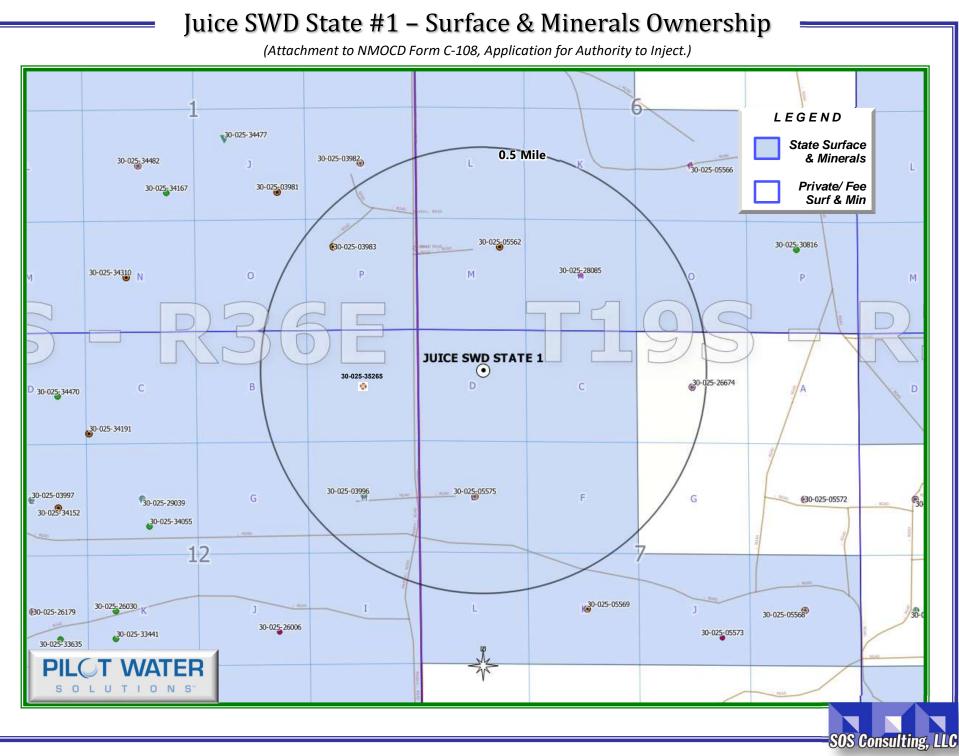


Attachment 2

Juice SWD State Well No.1 - Area of Review - 2 Miles

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

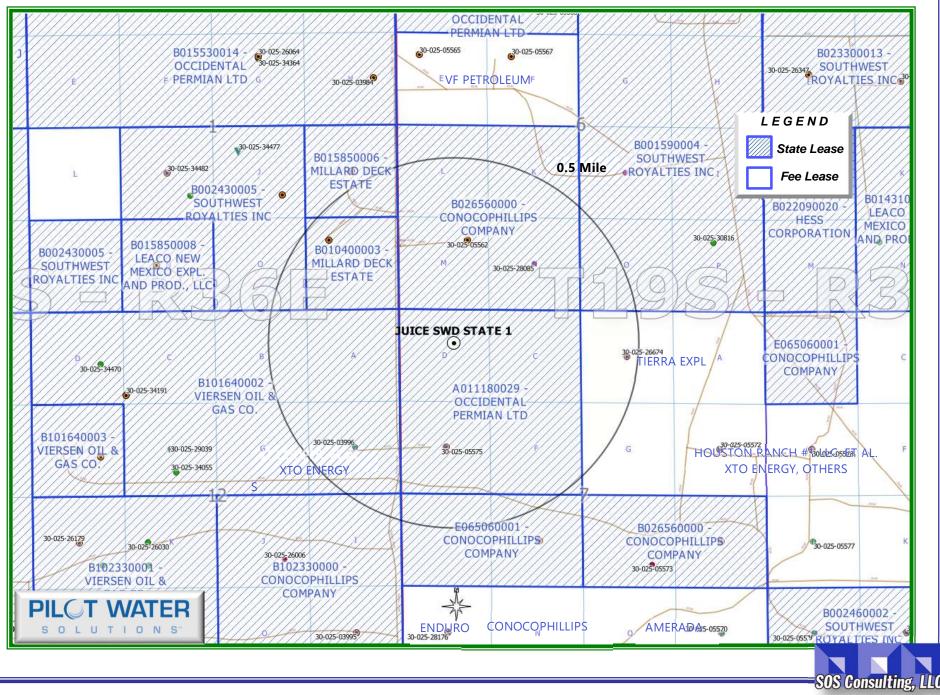




		1/2-mile A	OR Tabulation for Juice SWD State #1	(Top of Injection Int	erval: 4,40	8')		
Well Name	API#	Well Type	Operator	Status	Spud Date	Location (Sec., Tn., Rng.)	Total Vertical Depth (feet)	Penetrate Inj. Zone?
STATE YA #001	30-025-03983	0	MACK ENERGY CORP	Plugged (site released)	10/30/1958	P-01-19S-36E	4,057	No
MONUMENT #006	30-025-35265	0	SAGA PETROLEUM LIMITED LIABILITY CO.	Cancelled		A-12-19S-36E	0	No
PENROC MONUMENT #001	30-025-03996	0	FULFER OIL & CATTLE LLC	Active	3/8/1953	H-12-19S-36E	3,900	No
SHELL STATE #001	30-025-05575	G	BURLESON PETROLEUM, INC	Plugged (site released)	8/30/1953	E-07-19S-37E	3,880	No
JO #002	30-025-05562	G	LANEXCO INC	Plugged (site released)	7/23/1954	M-06-19S-37E	3,885	No
JO #001	30-025-28085	G	Energy Acumen LLC	Active	1/7/1983	N-06-19S-37E	3,950	No
GULF-HOUSTON #001	30-025-26674	G	TIERRA EXPL INC	Plugged (site released)	2/13/1980	B-07-19S-37E	4,100	No
Notes: No wells within the 1/2-	mile AOR penet	rate the injec	tion interval.					

Juice SWD State #1 – Leasehold Plat

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



Attachment 3

	Source Formation Water Analysis																						
	Well Name API Latitude Longitude Section Township Range Unit Ftgew County State Formation Sampled PH (MG/L) (MG/L) <th>Sulfate</th>															Sulfate							
Well Name	API	Latitude	Longitude	Section	Township	Range	Unit	Ftgns	Ftgew	County	State	Formation	Sampled	PH	(Mg/L)	(Mg/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)
STATE NPA #001	3002503156	32.6879654	-103.5031815	6	19S	35E	L	1980S	660W	LEA	NM	BONE SPRING	1960	7.7	25800.0						14100.0	830.0	1120.0
SHOOTING STAR STATE SWD #001	3002529805	32.7594261	-103.4270935	11	18S	35E	J	1650S	2310E	LEA	NM	BONE SPRING	2001	6.2			15600.0	2.5	981.9		148248.0	244.0	650.0
SINCLAIR STATE #002	3002503123	32.7386246	-103.4561005	21	18S	35E	Α	660N	660E	LEA	NM	WOLFCAMP	1960	7.1	60950.0						33568.0	1087.0	3049.0
IRONHOUSE 19 STATE COM #001H	3002540676	32.7266121	-103.499527	19	18S	35E	Ν	200S	1800W	Lea	NM	BONE SPRING 2ND SAND	2014	6.4	182863.9	58171.0	4944.4	49.0	1892.6	1.4	113954.0	195.2	0.0
IRONHOUSE 19 STATE COM #004H	3002541245	32.7264938	-103.5014343	19	18S	35E	Μ	150S	1215W	Lea	NM	BONE SPRING 2ND SAND	2014	6.2	189029.2	64016.2	5319.3	38.8	2044.4	1.5	113566.0	158.6	0.0
IRONHOUSE 19 STATE COM #002H	3002541094	32.7271118	-103.4903336	19	18S	35E	Р	410S	630E	Lea	NM	BONE SPRING 2ND SAND	2014	6.0	205332.0	72646.0	4828.0	39.0	2316.0	2.0	130450.0	488.0	1503.0
IRONHOUSE 20 STATE COM #001	3002540611	32.7265129	-103.4774857	20	18S	35E	0	200S	1980E	Lea	NM	BONE SPRING 2ND SAND	2014	6.1	186865.0	65638.0	4698.0	16.0	1700.0	1.0	116510.0	1098.0	1804.0
IRONHOUSE 20 STATE #002H	3002540748	32.7265129	-103.4731903	20	18S	35E	Р	200S	660E	Lea	NM	BONE SPRING 2ND SAND	2014	6.6	196865.0	66738.0	4631.0	23.0	1790.0	1.0	116580.0	1298.0	1894.0
IRONHOUSE 19 STATE COM #003H	3002541050	32.7264977	-103.4941711	19	18S	35E	0	175S	1810E	Lea	NM	BONE SPRING 2ND SAND	2014	6.2	178457.0	56874.0	6125.0	22.0	1457.0	1.0	125412.0	845.0	849.0
HAMON STATE #001	3002503140	32.7175827	-103.4464035	27	18S	35E	K	2310S	2310W	LEA	NM	BONE SPRING			154510.0						96360.0	430.0	1210.0
LEA 403 STATE #001	3002503126	32.7386093	-103.4518051	22	18S	35E	D	660N	660W	LEA	NM	BONE SPRING	1958	6.7	255451.0						156699.0	327.0	779.0

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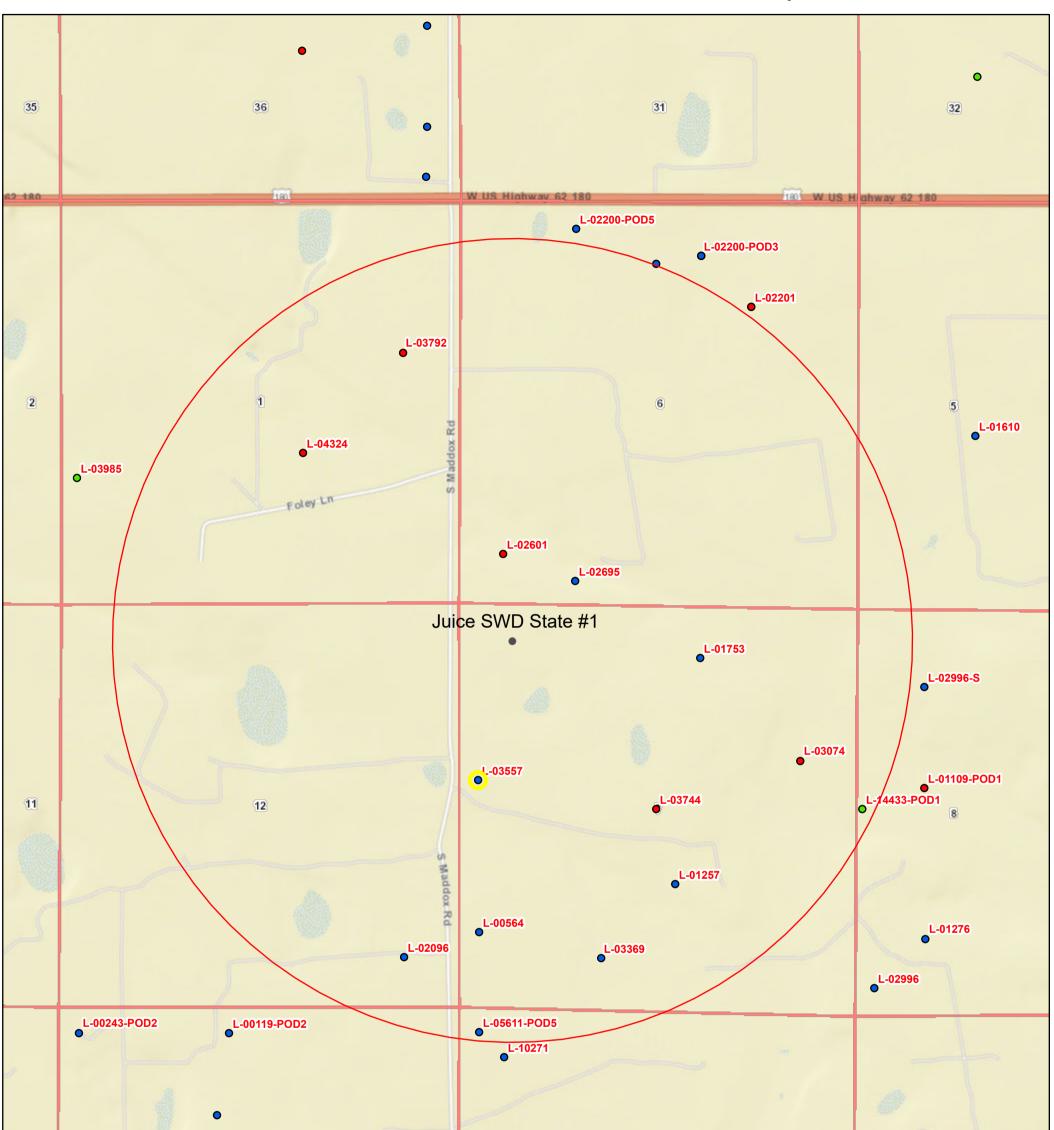
Attachment 4

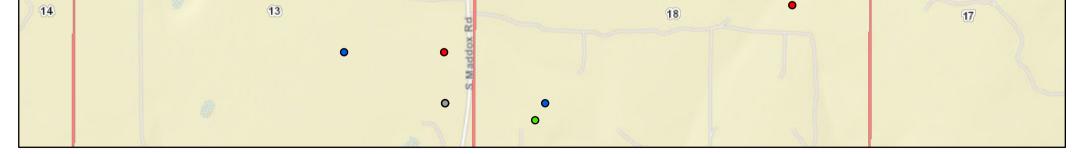
				Ir	ijection F	ormati	on W	ater A	nalysis									
															TDS	Chloride	Bicarbonate	Sulfate
Well Name	API	Latitude	Longitude	Section	Township	Range	Unit	Ftgns	Ftgew	County	State	Formation	Sampled	PH	(Mg/L)	(MG/L)	(MG/L)	(MG/L)
B V CULP NCT A #008	3002505640	32.6467896	-103.2919235	19	19S	37E	F	2310N	2239W	LEA	NM	SAN ANDRES			10905	2350	1100	3700
B V CULP NCT A #008	3002505640	32.6467896	-103.2919235	19	19S	37E	F	2310N	2239W	LEA	NM	SAN ANDRES			26735	14500	1370	1020
B V CULP NCT A #008	3002505640	32.6467896	-103.2919235	19	19S	37E	F	2310N	2239W	LEA	NM	SAN ANDRES			40250	20800	1390	3100
B V CULP NCT A #008	3002505640	32.6467896	-103.2919235	19	19S	37E	F	2310N	2239W	LEA	NM	SAN ANDRES			71110	39800	810	
B V CULP NCT A #008	3002505640	32.6467896	-103.2919235	19	19S	37E	F	2310N	2239W	LEA	NM	SAN ANDRES			156218	95130	176	
NORTH MONUMENT G/SA UNIT #001	3002505647	32.6512489	-103.2843475	19	19S	37E	Α	660N	660E	Lea	NM	SAN ANDRES	1964	6.0		10200	592	
GOODWIN #002	3002520651	32.7204323	-103.2928467	30	18S	37E	F	1980N	1980W	LEA	NM	SAN ANDRES			80467	45060	1492	
GOODWIN #002	3002520651	32.7204323	-103.2928467	30	18S	37E	F	1980N	1980W	LEA	NM	SAN ANDRES			69848	39130	1225	3114
NORTH HOBBS UNIT #001	3002505449	32.7530632	-103.21138	13	18S	37E	D	660N	660W	LEA	NM	SAN ANDRES	1960	8.0	12100	4500	504	2300
NORTH HOBBS UNIT #001	3002505449	32.7530632	-103.21138	13	18S	37E	D	660N	660W	LEA	NM	SAN ANDRES			12100	4541	509	
BOBBI STATE WF UNIT #006	3002503978	32.7231979	-103.373436	29	18S	36E	В	990N	1650E	LEA	NM	SAN ANDRES			20882	11190	645	1232
STATE NG #001	3002522795	32.7349815	-103.3057404	24	18S	36E	G	1980N	1980E	LEA	NM	SAN ANDRES	1968	6.5	265665	157000	98	5400
STATE NG #001	3002522795	32.7349815	-103.3057404	24	18S	36E	G	1980N	1980E	LEA	NM	SAN ANDRES	1968	6.3	203913	122000	110	3000
GRAHAM STATE NCT F #003	3002512476	32.6149902	-103.3056641	36	19S	36E	J	1980S	1980E	LEA	NM	SAN ANDRES	1900	6.5		16406	611	
NORTHWEST EUMONT UNIT #156	3002504099	32.617733	-103.3518143	33	19S	36E	Н	2310N	330E	Lea	NM	SAN ANDRES	1960	7.0		38119	405	4317
GRAHAM STATE NCT F #003	3002512476	32.6149902	-103.3056641	36	19S	36E	J	1980S	1980E	Lea	NM	SAN ANDRES	1964	6.5		16406	611	
GRAHAM STATE NCT F #003	3002512476	32.6149902	-103.3056641	36	19S	36E	J	1980S	1980E	LEA	NM	SAN ANDRES			26344			
E M E SWD #008	3002506017	32.5895042	-103.2725601	8	20S	37E	G	1980N	2310E	LEA	NM	SAN ANDRES	1964	8.5	65365	36905	560	1460
THEODORE ANDERSON #002	3002506139	32.5785942	-103.2758102	17	20S	37E	С	660N	1980W	Lea	NM	SAN ANDRES	1964	6.7		67245	564	489
E M E SWD #008	3002506017	32.5895042	-103.2725601	8	20S	37E	G	1980N	2310E	LEA	NM	SAN ANDRES			65361	36900	560	1460
EUNICE MONUMENT UNIT #031	3002506169	32.5531693	-103.2843781	19	20S	37E	Р	660S	660E	LEA	NM	SAN ANDRES			91120	59850	0	722

Attachment 5

Received by OCD: 9/9/2023 3:00:56 PM

Juice SWD State #1 - Water Well Map





9/1/2023, 7:40:59 AM

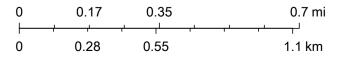
GIS WATERS PODs

Plugged

0

- Active
- Pending
- IncompleteSections
- Capped

1:18,056



OSE SLO, Bureau of Land Management, Esri, HERE, Garmin, INCREMENT P, NGA, USGS

			Water Well Sampling Table		
Water Well ID	OSE Status	Owner	Available Contact Information	Use	Notes
L 03557	Active	VERSADO GAS PROCESSORS LLC	Versado Gas Processors, Llc Po Box 1909 Eunice, NM 88235	Industrial	Industrial use - not fresh water supply well
L 01257	Active	GULF OIL CORPORATION	Gulf Oil Corporation Box 1290 Fort Worth, TX	Prospecting	O&G Prospecting - not fresh water supply well
L 02096	Active	TRINITY DRILLING COMPANY	Trinity Drilling Company Box 1906 Odessa, TX	Prospecting	O&G Prospecting - not fresh water supply well
L 02601	Plugged	CONTINENTAL OIL COMPANY	Continental Oil Company Box Cc Hobbs, NM	Prospecting	Plugged - O&G Prospecting - not fresh water supply well
L 02695	Active	THE TEXAS COMPANY	The Texas Company Box Ff Hobbs, NM	Prospecting	O&G Prospecting - not fresh water supply well
L 03074	Plugged	OSCAR BOURG DRILLING COMPANY	Oscar Bourg Drilling Company C/o O R Musslewhite Box 56 Hobbs, NM	Prospecting	Plugged - O&G Prospecting - not fresh water supply well
L 03369	Active	VELMA PETROLEUM COMPANY	Velma Petroleum Company Box 1955 Hobbs, NM	Prospecting	O&G Prospecting - not fresh water supply well
L 04324	Plugged	DONNELLY DRILLING CO INC	Donnelly Drilling Co Inc Box 433 Artesia, NM	Prospecting	Plugged - O&G Prospecting - not fresh water supply well
L 03744	Plugged	HOWARD P HOLMES DRILLING CONT.	Howard P Holmes Drilling Cont. Box 667 Hobbs, NM	Prospecting	Plugged - O&G Prospecting - not fresh water supply well
L 03792	Plugged	GACKLE DRILLING COMPANY	Gackle Drilling Company Box 1076 Hobbs, NM	Prospecting	Plugged - O&G Prospecting - not fresh water supply well
L 01753	Active	HUSTON JR.	Robert H. Huston, Jr. Box 1082 Hobbs, NM	Irrigation	OSE Records indicate water right was cancelled.
L 00564	Active	VERSADO GAS PROCESSORS LLC	Versado Gas Processors, Llc Po Box 1909 Eunice, NM 88235	Industrial	Sample collected 7/26/2023
L 05611 POD5	Active	MONUMENT WATER USERS COOP.	Monument Water Users Coop. Po Box 48 Monument, NM 88265	Municipal	Sample collected 7/26/2023
L 14433 POD1	Pending	HUSTON RANCH NO 1 LLC	Huston Ranch No 1 Llc Po Drawer 1599 Lovington, NM 88260	Livestock watering	Sample collected 7/12/2023
Notes:	L-2996 is out	side the 1-mile water sampling radius; howe	ver, the analytical results for the sample of this water well are included in the	attachments because	they were attached to the report with the results for L-14433-P

HALL ENVIRONMENTAL ANALYSIS LABORATORY Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

August 09, 2023

Brian Wood Permits West 37 Verano Loop Santa Fe, NM 87508 TEL: (505) 466-8120 FAX: (505) 466-9682 Sample ID "Pump Tank" is from Water Well L-00564 Sample ID "PWRTank" is from Water Well L-05611-POD5

RE: Pilot

OrderNo.: 2307D30

Dear Brian Wood:

Hall Environmental Analysis Laboratory received 2 sample(s) on 7/27/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2307D30

Date Reported: 8/9/2023

CLIENT:	Permits West			Cl	ient Sa	ample I	D: PV	WRTank L-05611 PC)D5				
Project:	Pilot			(Collect	tion Dat	e: 7/2	26/2023 10:10:00 AM					
Lab ID:	2307D30-001	Matrix:	rix: AQUEOUS Received Date: 7/27/2023 9:55:00 AM										
Analyses		R	esult	RL	Qual	Units	DF	Date Analyzed	Batch				
	THOD 1664B							Analyst	SMS				
N-Hexan	e Extractable Material		ND	5.06		mg/L	1	8/4/2023 5:29:00 PM	76563				
EPA ME	THOD 300.0: ANIONS							Analyst	: ЈМТ				
Chloride			29	2.5		mg/L	5	7/27/2023 2:20:37 PM	R98559				
SM25400	MOD: TOTAL DISSOLVED S	SOLIDS						Analyst	: JAG				
Total Dis	solved Solids		332	100	D	mg/L	1	7/31/2023 4:18:00 PM	76539				

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated ValueJ Analyte detected below quantitation limits
- JAnalyte detected below quantitation limitPSample pH Not In Range
- RL Reporting Limit
- KL K

Page 1 of 5

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Analytical Report

Hall Environmental Analysis Laboratory, Inc.
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Lab Order 2307D30 Date Reported: 8/9/2023

CLIENT:	Permits West		Clien	t Sample I	D: Pu	mp Tank L-00546	
Project:	Pilot		Col	lection Dat	e: 7/2	26/2023 10:30:00 AM	
Lab ID:	2307D30-002	Matrix: AQUEOUS	s Re	eceived Dat	e: 7/2	27/2023 9:55:00 AM	
Analyses	3	Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA ME	THOD 1664B					Analys	t: SMS
N-Hexan	e Extractable Material	ND	4.83	mg/L	1	8/4/2023 5:29:00 PM	76563
EPA ME	THOD 300.0: ANIONS					Analys	t: JMT
Chloride		65	2.5	mg/L	5	7/27/2023 2:46:22 PM	R98559
SM25400	C MOD: TOTAL DISSOLVE	D SOLIDS				Analys	t: JAG
Total Dis	ssolved Solids	452	50.0	mg/L	1	7/31/2023 4:18:00 PM	76539

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	
-------------	--

- * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank В
- Е Above Quantitation Range/Estimated Value

- J Analyte detected below quantitation limits Р Sample pH Not In Range
- RL Reporting Limit

Page 2 of 5

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Permits	West											
Project: Pilot												
Sample ID: MB-76563	le ID: MB-76563 SampType: MBLK					TestCode: EPA Method 1664B						
Client ID: PBW	nt ID: PBW Batch ID: 76563					3748						
Prep Date: 8/1/2023	Analysis D	Date: 8/	4/2023	S	SeqNo: 3	596785	Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
N-Hexane Extractable Material	ND	5.00										
Silica Gel Treated N-Hexane Extract	ND	5.00										
Sample ID: LCS-76563	Tes	tCode: EF	PA Method	1664B								
Client ID: BatchQC	Batch	h ID: 76	563	F	RunNo: 98	3748						
Prep Date: 8/1/2023	Analysis D	Date: 8/	4/2023	S	SeqNo: 35	596786	Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
N-Hexane Extractable Material	36.3	5.00	40.00	0	90.8	78	114					
Silica Gel Treated N-Hexane Extract	12.9	5.00	20.00	0	64.5	64	132					
Sample ID: LCSD-76563	SampT	Гуре: LC	SD-1L	Tes	tCode: EF	PA Method	1664B					
Client ID: BatchQC	Batch	h ID: 76	563	F	RunNo: 98	3748						
Prep Date: 8/1/2023	Prep Date: 8/1/2023 Analysis Date: 8/4/2023 SeqNo: 3596787 Un						Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
N-Hexane Extractable Material	35.3	5.00	40.00	0	88.3	78	114	2.79	20			
Silica Gel Treated N-Hexane Extract	13.1	5.00	20.00	0	65.5	64	132	1.54	20			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

WO#: **2307D30**

09-Aug-23

Page 3 of 5

Client:		Permits We	est									
Project:		Pilot										
Sample ID:	MB		SampT	ype: mb	olk	Tes	tCode: E	PA Method	300.0: Anions			
Client ID:	PBW		Batch	n ID: R9	8559	F	RunNo: ያ	98559				
Prep Date:			Analysis D	ate: 7/2	27/2023	5	SeqNo: ;	3589058	Units: mg/L			
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride			ND	0.50								
Sample ID:	LCS		SampT	ype: Ics	;	Tes	tCode: E	PA Method	300.0: Anions			
Client ID:	LCSW		Batch	n ID: R9	8559	F	RunNo: 🤱	98559				
Prep Date:			Analysis D	ate: 7/2	27/2023	Ş	SeqNo: :	3589059	Units: mg/L			
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride			4.9	0.50	5.000	0	97.1	90	110			
Sample ID:	МВ		SampT	уре: МЕ	BLK	Tes	tCode: E	PA Method	300.0: Anions			
Client ID:	PBW		Batch	n ID: R9	8559	F	RunNo: 🤱	98559				
Prep Date:			Analysis D	ate: 7/2	27/2023	\$	SeqNo: ;	3589173	Units: mg/L			
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride			ND	0.50								

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
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- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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2307D30

09-Aug-23

WO#:

Client: Project:	Permits Pilot	West									
Sample ID:	MB-76539	SampT	ype: ME	BLK	Tes	tCode: SI	M2540C MC	D: Total Diss	olved Soli	ids	
Client ID:	PBW	Batch	ID: 765	539	F	RunNo: 9 8	8611				
Prep Date:	7/28/2023	Analysis Da	ate: 7/3	31/2023	5	SeqNo: 3	591121	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved	I Solids	ND	50.0								
Sample ID:	LCS-76539	SampT	ype: LC	s	Tes	tCode: SI	M2540C MC	D: Total Diss	olved Soli	ids	
Client ID:	LCSW	Batch	ID: 765	539	F	RunNo: 9 8	8611				
Prep Date:	7/28/2023	Analysis Da	ate: 7/3	31/2023	5	SeqNo: 3	591122	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved	I Solids	1000	50.0	1000	0	100	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

WO#: 2307D30 09-Aug-23

ENVIRONMENTAL ANALYSIS LABORATORY	Environmental Analysis Labora 4901 Hawkin: Albuquerque, NM 87 505-345-3975 FAX: 505-345 ebsite: www.hallenvironmental.	NE 7109 Sam 9107	ple Log-In Check List
Client Name: Permits West Work O	order Number: 2307D30		RcptNo: 1
Received By: Steve McQuiston 7/27/2023	3 9:55:00 AM	the hat	-
	3 10:02:07 AM	TPZ	
Reviewed By: 7-27-23			
Chain of Custody	_	_	_
1. Is Chain of Custody complete?	Yes 🗹	No	Not Present
2. How was the sample delivered?	Client		
Log In 3. Was an attempt made to cool the samples?	Yes ✔	No 🗌	NA 🗌
4. Were all samples received at a temperature of $>0^{\circ}$ C to	o 6.0°C Yes ☑	No 🗌	NA 🗌
5. Sample(s) in proper container(s)?	Yes 🗹	No 🗌	
6. Sufficient sample volume for indicated test(s)?	Yes 🔽	No 🗌	
7. Are samples (except VOA and ONG) properly preserved	d? Yes 🗹	No 🗌	
8. Was preservative added to bottles?	Yes	No 🗹	NA 🗌
9. Received at least 1 vial with headspace <1/4" for AQ VC	DA? Yes	No 🗌	NA 🗹 🖊
10. Were any sample containers received broken?	Yes	No 🗹	# of preserved
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes 🗹	No 🗆	for pH: (<2/or >12 unless noted)
12. Are matrices correctly identified on Chain of Custody?	Yes	No 🗹	Adjusted?
13. Is it clear what analyses were requested?	Yes 🗹	No 🗌	1500 M2712
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes 🗹	No 🗌	Checked by: 2011 01010
<u>Special Handling (if applicable)</u>			/
15. Was client notified of all discrepancies with this order?	Yes	No 🗌	
Person Notified:	Date:	e tosta tir ta da	
By Whom:	Via: 🗌 eMail 🔲 F	Phone 🗌 Fax	In Person
Regarding: Client Instructions:			
16. Additional remarks:		·	
17. Cooler Information		Signed By	
Page 1 of I			

Page 30 of 50

Page 31 of 50	ANALYSTS LABORATORY		d	<pre></pre>	Tel. 505-345-3975 Fax 505-345-410/ Analysis Request		୦୨ '' ୨୮ ୧୦୪୮	08) 2 09) 2 00 00 00 00 00 00 00 00 00 0	10 ² 327 1)	\ O5 504. 1 or 8 8 9 or 8 8 8 9 or 8 8 8 9 or 8 8 8 9 or 8 8 1 or 8 8 1 or 9 8 1 or 9 9 1 or 9 1 or)(GF cide nod ! leta NO A)	15[941 97 8 8 M 31, 101 101	08: 999 f M) 8 8 A5 8 A5 7 () 0 8 (/) 0 8 () 7) 08	828 826 6 826 826 808 808										Remarks:		122	Contracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.
Turn-Around Time:		Proiod Name		41121	Project #:		Project Manager:	B Word		Sampler:	olers:	Cooler Temp(including CF): 4.6-0.2=4.41(°C			Type and # 1 ype	1001	-000-							Received by: Via: Date Time	Demokrad hur Via: Date Time	50M CDM 07/27/23 00	Contracted to other accredited laboratories. This serves as notice
	thain-of-Custody Record	Client: (YEN FLKM/75 WEA		Mailing Address: 37 / /orano	M \$7508	Dhono #: 505 466 8120	axt brian a party 12/25	- C.	Zandard Devel 4 (Full Validation)	on: 🗆 Az Compliance	□ Other				Date Time Matrix Sample Name	6 10/0	UN VEVI	- Court Sur	52.12.1					Date: Relinquished by:	A.	Date: Time: Relinquished DX:	ANN () LAN MY

Released to The generating: 279/2023 3:02:32 PM

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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

July 25, 2023

Brian Wood Permits West 37 Verano Loop Santa Fe, NM 87508 TEL: (505) 466-8120 FAX: (505) 466-9682

Sample ID "Tank 1" is from Water Well L-02996 Sample ID "WM Pond" is from Water Well L-14433-POD1

RE: Pi

OrderNo.: 2307569

Dear Brian Wood:

Hall Environmental Analysis Laboratory received 2 sample(s) on 7/13/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Case Narrative

WO#:	2307569
Date:	7/25/2023

CLIENT: Permits West **Project:** Pi

Analytical Notes Regarding EPA Method 1664:

A matrix spike was not performed with this batch of samples.

Analytical Report

Han Environmental Marysis Eaboratory, the	Hall	Environmental	Analysis	Laboratory.	Inc.
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Lab Order 2307569

Date Reported: 7/25/2023

CLIENT	Permits West			Cli	ient Sa	mple I	D: Ta	ank 1 L-02996	
Project:	Pi			(Collect	ion Dat	e: 7/	12/2023 1:30:00 PM	
Lab ID:	2307569-001	Matrix:	AQUEOUS		Receiv	ved Dat	e: 7/1	13/2023 10:18:00 AM	
Analyses	5	R	esult	RL	Qual	Units	DF	Date Analyzed	Batch
EPA ME	THOD 1664B							Analyst	SMS
N-Hexar	ne Extractable Material		ND	9.58		mg/L	1	7/19/2023 7:21:00 PM	76250
EPA ME	THOD 300.0: ANIONS							Analyst	: ЈМТ
Chloride			85	2.5		mg/L	5	7/13/2023 5:30:18 PM	R98202
SM2540	C MOD: TOTAL DISSOLVED SC	LIDS						Analyst	: JAG
Total Dis	ssolved Solids		448	50.0		mg/L	1	7/19/2023 2:20:00 PM	76283

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank В
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits Sample pH Not In Range
- Р RL Reporting Limit

Page 2 of 6

Hall Environmental Analysis Laboratory, Inc.

Analytical Report Lab Order 2307569

Date Reported: 7/25/2023

CLIENT	Permits West			Cl	ient Sø	omnle I	D∙ W	M Pond L-14433-P()D1
Project:	Pi					•		2/2023 12:45:00 PM	
Lab ID:	2307569-002	Matrix:	AQUEOUS		Recei	ved Dat	e: 7/1	3/2023 10:18:00 AM	
Analyses		R	esult	RL	Qual	Units	DF	Date Analyzed	Batch
EPA ME	[HOD 1664B							Analyst	SMS
N-Hexan	e Extractable Material		ND	10.9		mg/L	1	7/19/2023 7:21:00 PM	76250
EPA ME	THOD 300.0: ANIONS							Analyst	: ЈМТ
Chloride			160	5.0		mg/L	10	7/13/2023 5:55:00 PM	R98202
SM25400	MOD: TOTAL DISSOLVED S	OLIDS						Analyst	: JAG
Total Dis	solved Solids		910	100	*D	mg/L	1	7/19/2023 2:20:00 PM	76283

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	
-------------	--

- * Value exceeds Maximum Contaminant Level.D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method BlankE Above Quantitation Range/Estimated Value
- E Above Quantitation Range/Estimated Value J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 3 of 6

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Client:	Permits V	West									
Project:	Pi										
Sample ID:	MB-76250	O SampType: MBLK				TestCode: EPA Method 1664B					
Client ID:	PBW	Batch ID: 76250			RunNo: 98341						
Prep Date:	7/17/2023	Analysis Date: 7/19/2023			SeqNo: 3579205			Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
N-Hexane Extr	actable Material	ND	10.0								
Sample ID:	LCS-76250	LCS-76250 SampType: LCS				TestCode: EPA Method 1664B					
Client ID:	LCSW	Batch ID: 76250			RunNo: 98341						
Prep Date:	7/17/2023	Analysis Date: 7/19/2023			SeqNo: 3579206 Units			Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
N-Hexane Extr	actable Material	34.6	10.0	40.00	0	86.5	78	114			
Sample ID:	LCSD-76250	-76250 SampType: LCSD				TestCode: EPA Method 1664B					
Client ID:	LCSS02	Batch ID: 76250			RunNo: 98341						
Prep Date:	7/17/2023	Analysis Date: 7/19/2023			SeqNo: 3579207			Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
N-Hexane Extr	actable Material	36.4	10.0	40.00	0	91.0	78	114	5.07	20	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 4 of 6

WO#: 2307569 25-Jul-23

Client: Project:		Permits West Pi									
Sample ID:	MB	Sam	Type: m	blk	Tes	tCode: EF	A Method	300.0: Anions			
Client ID:	PBW	Bat	ch ID: R	98202	F	RunNo: 98	3202				
Prep Date:		Analysis	Date: 7	/13/2023	S	SeqNo: 35	573573	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	0.50								
Sample ID:	LCS	Sam	туре: Іс	s	Tes	tCode: EF	A Method	300.0: Anions			
Client ID:	LCSW	Bat	ch ID: R	98202	F	RunNo: 98	3202				
Prep Date:		Analysis	Date: 7	/13/2023	S	SeqNo: 35	573574	Units: mg/L			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		4.6	0.50	5.000	0	92.9	90	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

2307569

25-Jul-23

WO#:

Client: Project:	Perm Pi	its West							
Sample ID:	MB-76283	SampType	e: MBLK	Tes	tCode: SM2540	C MOD: Total Di	ssolved Sol	lids	
Client ID:	PBW	Batch ID	D: 76283	F	RunNo: 98335				
Prep Date:	7/18/2023	Analysis Date	e: 7/19/2023	S	SeqNo: 357890	5 Units: mg	/L		
Analyte		Result F	PQL SPK value	SPK Ref Val	%REC Low	Limit HighLimit	%RPD	RPDLimit	Qual
Total Dissolve	d Solids	ND	50.0						
Sample ID: LCS-76283 SampType: LCS			e: LCS	Tes	tCode: SM2540	C MOD: Total Di	ssolved Sol	lids	
Client ID:	LCSW	Batch ID): 76283	F	RunNo: 98335				
Prep Date:	7/18/2023	Analysis Date	e: 7/19/2023	S	SeqNo: 357890	6 Units: mg	/L		
Analyte		Result F	PQL SPK value	SPK Ref Val	%REC Low	Limit HighLimit	%RPD	RPDLimit	Qual
Total Dissolve	d Solids	1020	50.0 1000	0	102	80 120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

WO#: 2307569 25-Jul-23

HALL ENVIRONMENTAL ANALYSIS LABORATORY	TEL: 505-34	mental Analysis Labora 4901 Hawkin Albuquerque, NM 83 5-3975 FAX: 505-345 ww.hallenvironmental	s NE 7109 Sam 4107	ple Log-In Ch	eck List
Client Name: Permits West	Work Order No	umber: 2307569		RcptNo: 1	
Received By: Steve McQu Completed By: Cheyenne C Reviewed By: ブルチ(13	ason 7/13/2023 10:59		the hate		
 <u>Chain of Custody</u> 1. Is Chain of Custody complet 2. How was the sample delivered 		Yes ⊠ <u>Client</u>	No 🗌	Not Present	
Log In 3. Was an attempt made to coo	I the samples?	Yes 🔽	No 🗌		
4. Were all samples received a	a temperature of >0° C to 6.0°C	Yes 🗌 Not requi	No 🗹		
5. Sample(s) in proper containe	er(s)?	Yes 🗹	No 🗌		
6. Sufficient sample volume for	indicated test(s)?	Yes 🗹	No 🗌		
7. Are samples (except VOA an	d ONG) properly preserved?	Yes 🗹	No 🗌		
8. Was preservative added to b	ottles?	Yes 🗌	No 🗹	NA 🗌	
9. Received at least 1 vial with I	neadspace <1/4" for AQ VOA?	Yes	No 🗌	NA 🔽	
10. Were any sample containers	received broken?	Yes	No 🗹 🛛	# of preserved bottles checked	1
11. Does paperwork match bottle (Note discrepancies on chain		Yes 🗹	No 🗌	for pH:	12 unless noted)
12. Are matrices correctly identif	ed on Chain of Custody?	Yes 🗹	No 🗌	Adjusted?	
13. Is it clear what analyses were	e requested?	Yes 🗹	No 🗌		A .
14. Were all holding times able to (If no, notify customer for aut		Yes 🗹	No 🗌	Checked by:	14 7.13.23
Special Handling (if appli	cable)			U	
15. Was client notified of all disc		Yes	No 🗌	NA 🗹	
Person Notified: By Whom: Regarding: Client Instructions:		ate: 🖠 ia: 🗌 eMail 🛄 F	Phone 🗌 Fax	In Person	
16. Additional remarks:					
17. <u>Cooler Information</u> Cooler No Temp °C 1 14.3 C	Condition Seal Intact Seal N Good Not Present Morty	o Seal Date	Signed By		

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Page 40 of 50		ANALYSIS LABORATORY	www.hallenvironmental.com	4901 Hawkins NE - Albuquerque, NM 87109	Tel. 505-345-3975 Fax 505-345-4107 Analysis Position
Md S	dy Record Turn-Around Time:	Encient Name		Project #	\$ \$12 0 here

HALL ENVIRONMENTAL HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109 7el. 505-345-3975 Fax 505-345-4107 Tel. 505-345-3975 Fax 505-345-4107 Analysis Request	BTEX / MTBE / TMB's (8021) BTEX / MTBE / TMB's (8021) 8081 Pesticides/8082 PCB's B081 Pesticides/8082 PCB's EDB (Method 504.1) RCRA 8 Metals CI, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄ 8270 (Semi-VOA) 8270 (Semi-VOA) Total Coliform (Present/Absent) Total Coliform (Present/Absent)			Ia: Date Time Remarks: 20 07/13/93 10 (8) 7 cmp Angrowul ia: Date Time ia: Date Time
Turn-Around Time:	Project Manager: Project Manager: Sampler: Sampler: On Ice: Ves INO Muth # of Coolers: I Cooler Temp(metueling cr): I'J. 3 - 0. I = I'J.2. (°C) Container Type and # Type 23075.79	<u>cel</u> 12 262	-	Received by: Via: Via: Via: Via: CPO 07/13/73 10 18 Received by: Via: Date Time Received by: Via: Date Time Time Intracted to other accredited laboratories. This serves as notice of this p
ody Record	matrix Sam	5372		Date: Time: Relinquished by: Received by: V Date: Time: Relinquished by: Received by: V Received by: Received by: Received by: VI

Attachment 6

Affidavit of Publication

STATE OF NEW MEXICO COUNTY OF LEA

I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

> Beginning with the issue dated August 24, 2023 and ending with the issue dated August 24, 2023.

has Il

Publisher

Sworn and subscribed to before me this 24th day of August 2023.

th Black,

Business Manager

My commission expires January 29, 2027 STATE OF NEW MEXICO (Seal) NOTARY PUBLIC GUSSIE RUTH BLACK COMMISSION # 1087528 COMMISSION EXPIRES 01/29/2027

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said publication has been made.

67117907

00281923

NATE ALLEMAN ACE ENERGY ADVISORS 501 E. FRANK PHILLIPS BLVD. SUITE 201 BARTLESVILLE, OK 74006

LEGAL NOTICE August 24, 2023

Pilot Water Solutions SWD LLC, 20 Greenway Plaza, Suite 200, Houston, TX 77046, is filing Form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division seeking administrative approval for commercial saltwater injection into its Juice SWD State #1. This will be a new well located 497' FNL & 771' FWL in Section 7 Township 19S Range 37E in Lea County, New Mexico. The purpose of the well is to inject produced water from permitted oil and gas wells in the area for commercial disposal into the San Andres formation at depths of 4,408' – 5,510' at a maximum surface injection pressure of 882 psi and a maximum injection rate of 25,000 barrels of water per day.

Objections or requests for hearing must be filed with the New Mexico Oil Conservation Division within fifteen (15) days. Any objection or request for hearing should be mailed to the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505. Additional information may be obtained by contacting the operator contact, David Grounds, at 713-307-8752. **#00281923**

Statement of Affected Person Notification

A copy of the C-108 application has been provided to the following Affected Persons as notification of the subject Application for Authorization to Inject (C-108).

Entity Name	Entity Address	Mailing Date					
Surface Owner							
STATE LAND OFFICE	P.O. Box 1148, Santa Fe, NM 87504	09/01/2023					
Mineral Owners (BLM/SLO or Unleased Tracts)							
STATE LAND OFFICE	P.O. Box 1148, Santa Fe, NM 87504	09/01/2023					
OCD District							
OCD - DISTRICT 1	1625 N. French Drive, Hobbs, NM 88240	09/01/2023					
Applicable Affected Persons							
SOUTHWEST ROYALTIES INC	6 Desta Drive, Suite 2100 Midland, TX 79705	09/01/2023					
CONOCOPHILLIPS COMPANY	10 Desta Drive Midland, TX 79705	09/01/2023					
MILLARD DECK ESTATE	C/O Nations Bank P.O. Box 270 Midland, TX 797020270	09/01/2023					
XTO ENERGY	500 W. Illinois, Suite 100 Midland, TX 79701	09/01/2023					
VIERSEN OIL & GAS	P.O. Box 702708 Tulsa, OK 74170	09/01/2023					
TIERRA EXPLORATION	P.O. Box 56 Midland, TX 797020056	09/01/2023					
OCCIDENTAL PERMIAN LTD	P.O. Box 50250 Midland, TX 79710	09/01/2023					
FULFER OIL & CATTLE	P.O. Box 1224 Jal, NM 88252	09/01/2023					
ENERGY ACUMEN LLC	10103 Gutierrez Rd NE Albuquerque, NM 87111	09/01/2023					

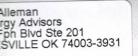
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State Land Office Po Box 1148 Santa Fe NM 87504-1148

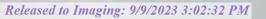




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OCD- District 1 1625 N French Dr Hobbs NM 88240-9273





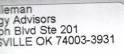
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Southwest Royalties Inc 6 Desta Dr Ste 2100 Midland TX 79705-5556





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ConocoPhillips Company 10 Desta Dr Midland TX 79705-4515



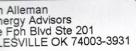
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XTO Energy 500 W Illinois Ave Ste 100 Midland TX 79701-4337







Viersen Oil & Gas Co. Po Box 702708 Tulsa OK 74170-2708



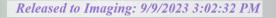
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Occidental Permian LTD Po Box 50250 Midland TX 79710-0250



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Energy Acumen LLC 10103 Gutierrez Rd NE Albuquerque NM 87111-6013



District I 1625 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 Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3470 Fax: (505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

CONDITIONS

OGRID:
331374
Action Number:
263495
Action Type:
[IM-SD] Admin Order Support Doc (ENG) (IM-AAO)

CONDITIONS

Created By	Condition	Condition Date
mgebremichael	None	9/9/2023

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Action 263495