AE Order Number Banner

Application Number: pMSG2404037386

SWD-2591

Avant Operating, LLC [330396]

RECEIVED:	REVIEWER:	TYPE:	APP NO:	
		al & Engineerin	/ATION DIVISION g Bureau –	ON NEW MORO
THIS	ADMINISTRA CHECKLIST IS MANDATORY FOR ALL , REGULATIONS WHICH REQU	ADMINISTRATIVE APPLIC		
Applicant: Avant C Well Name: Alpha Pool: SWD; Silurian	Operating, LLC	JIRE PROCESSING ALTH	OGR API:	ID Number: 330396
SUBMIT ACCUR	ATE AND COMPLETE INFO	RMATION REQUINDICATED BEL		THE TYPE OF APPLICATION
A. Location	ICATION: Check those w n – Spacing Unit – Simulta NSL NSP(PROJ	hich apply for [/neous Dedication	A] on	SD
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administrative understand the	N: I hereby certify that the approval is accurate are and the notaction will be take are submitted to the Division.	nd complete to n on this applic	the best of my kn	owledge. I also
N	ote: Statement must be complete	d by an individual wit	h managerial and/or su	pervisory capacity.
Brian Wood Print or Type Name	Blood		1-12-24 Date 505 466-8120 Phone Number	
Signature	V	3	brian@permitsw e-mail Address	vest.com

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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

FORM C-108 Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I.	PURPOSE: Secondary Recovery Pressure Maintenance XXX Disposal Storage Application qualifies for administrative approval? XXX Yes No
II.	OPERATOR: AVANT OPERATING, LLC
	ADDRESS: 1515 WYNKOOP ST., SUITE 700, DENVER CO 80202
	CONTACT PARTY: BRIAN WOOD (PERMITS WEST, INC.) PHONE: 505 466-8120
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. ALPHA WOLF SWD 1
IV.	Is this an expansion of an existing project? Yes XXX No SWD; SILURIAN 98249 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.
*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: BRIAN WOOD TITLE: CONSULTANT
	SIGNATURE: DATE: 1-9-24
*	E-MAIL ADDRESS: brian@permitswest.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:

Side 2

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

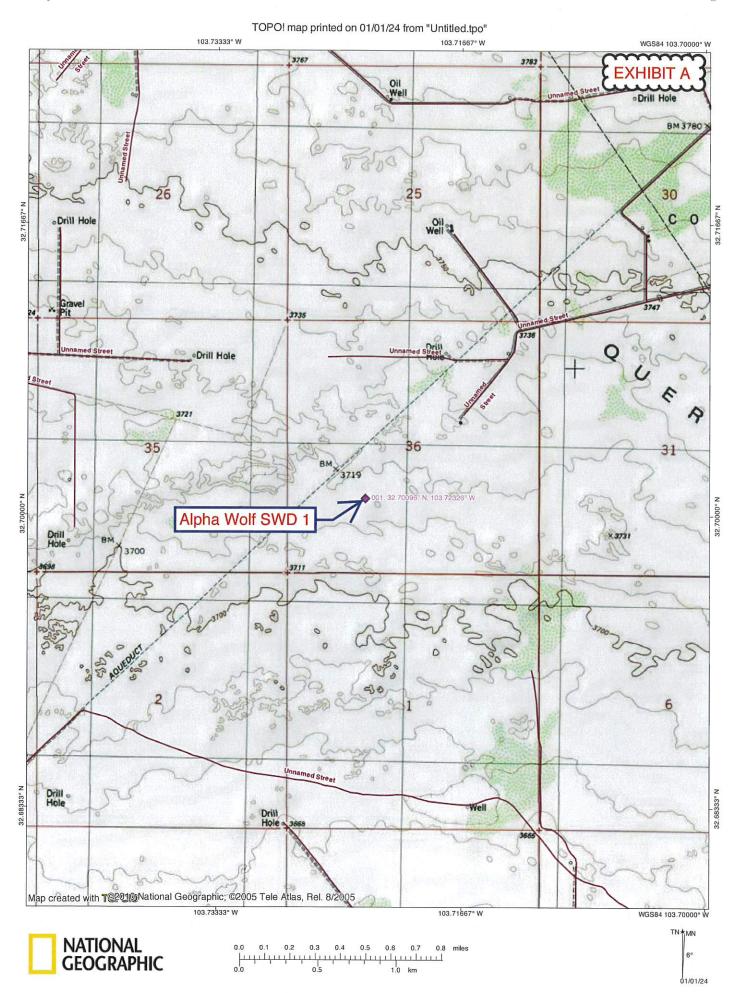
All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

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.



Received by OCD: 2/9/2024 10:46:19 AM

DISTRICT | 1625 N. French Dr., Hobbs, N.M. 68240 Phone: (575) 393-6161 Fax: (575) 393-0720

DISTRICT II 811 S. First St., Artesia, N.M. 88210 Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III 1000 Rio Brazos Rd., Aztec, N.M. 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV 1220 S. St. Francis Dr., Santa Fe, N.M. 87505 Phone: (505) 478-3480 Fax: (505) 476-3482

Released to Imaging: 2/9/2024 10:48:22 AM

State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, N.M. 87505

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

O = FENCE CORNER

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-	Pool Code 98249	Pool Name SWD; SILURIA	N	
*Property Code	Property Name ALPHA WOLF SWD		Well Number	
OGRID No.	Operator Name			
330396	AVANT OPERATING, LLC		* Elevation 3711	

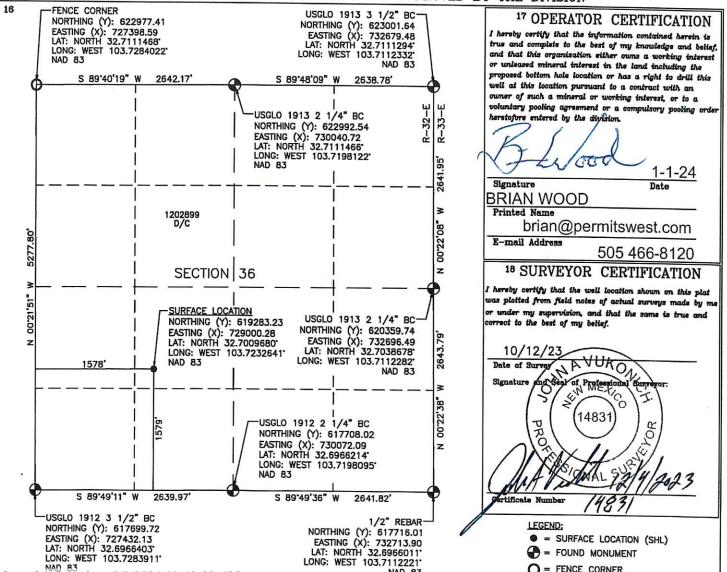
Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	36	18 S	32 E		1579	SOUTH	1578	WEST	LEA
			400				1005/507500 05/5 #		

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B Dedicated Acres	,				18 Joint or Infill	¹⁴ Consolidation Code	15 Order 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



Side 1

INJECTION WELL DATA SHEET

OPERATOR: AVANT OPERATING, LLC

WELL NAME & NUMBER: ALPHA WOLF SWD 1

WELL LOCATION: 1579' FSL & 1578' FWL **FOOTAGE LOCATION**

K UNIT LETTER

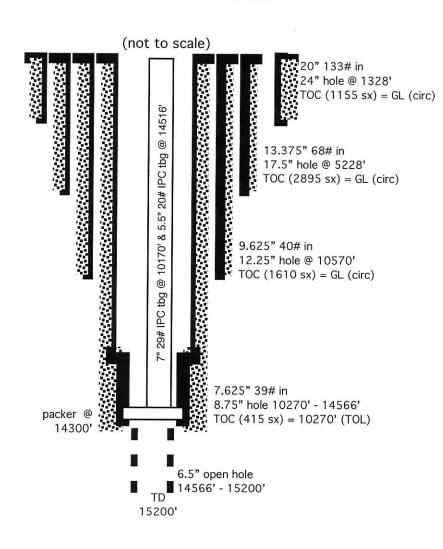
36 **SECTION**

18 S **TOWNSHIP**

32 E **RANGE**

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA Surface Casing



Hole Size: <u>24"</u>	Casing Size: 20"				
Cemented with: 1155 sx.	<i>or</i> ft ³				
Top of Cement: GL	Method Determined: CIRC.				
Intermediate	Casing				
Hole Size: 17.5" & 12.25"	Casing Size: 13.375" & 9.625"				
Cemented with: <u>2895 & 1610</u> sx.	<i>or</i> ft ³				
Top of Cement: GL	Method Determined: CIRC.				
<u>Production</u> 6	Casing				
Hole Size: 8.75"	Casing Size: 7.625"				
Cemented with: 415 sx.	<i>or</i> ft ³				
Top of Cement: 10810'	Method Determined: TOL				
Total Depth: CSG @ 14566' & TD @ 15200'					
Injection Interval					
6.5" OPEN HOLE 14566 feet	to 15200'				

(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEET

Гubing Size: 7"	_Lining Material: IPC						
Type of Packer: NICKEL PLATED							
Packer Setting Depth: 14516'							
Other Type of Tubing/Casing Seal (if applicabl	e):						
	itional Data						
1. Is this a new well drilled for injection?	XXX YesNo						
If no, for what purpose was the well original	ally drilled?						
2. Name of the Injection Formation: SILURI	AN						
B. Name of Field or Pool (if applicable): SW	Name of Field or Pool (if applicable): SWD; SILURIAN (98249)						
Has the well ever been perforated in any ot intervals and give plugging detail, i.e. sacks	her zone(s)? List all such perforated s of cement or plug(s) used. NO						
Give the name and depths of any oil or gas injection zone in this area:	zones underlying or overlying the proposed						
OVER: YATES (3425'), QUEEN (4115') WOLFCAMP (10370'), STRAWN (1199), <u>BONE SPRING (8549'),</u> 8') & MORROW (13275')						
UNDER: NONE							

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 December 19, 2023 and ending with the issue dated December 19, 2023.

LEGAL NOTICE December 19, 2023

Avant Operating, LLC is applying to drill the Alpha Wolf SWD 1 as a saltwater disposal well. The well is staked at 1579' FSL & 1578' FWL, Sec. 36, T. 18 S., R. 32 E., Lea County, NM. This is 11 mlles south-southeast of Maljamar, NM. Water will be injected at a maximum pressure of 2913 psi into the Silurian formation from 14566' to 15200'. Maximum disposal rate will be 30,000 bwpd. Interested parties must file objections, protests, or requests for hearing with the NM Oil Conservation Division, 1220 South Saint Francis Dr., Santa Fe, NM 87505 or OCD.Engineer@emnrd.nm.gov within 15 days. NMOCD Engineering Bureau phone is 505 476-3441. Additional information can be obtained by contacting: Brian Wood, Permits West, Inc., 37 Verano Loop, Santa Fe, NM 87508. Phone number is (505) 466-8120. #00285873

Publisher

Sworn and subscribed to before me this 19th day of December 2023.

Business Manager

My commission expires

January 29, 2027

(Seal)

NOTARY PUBLIC

NOTARY PUBLIC

GUSSIE RUTH BLACK

COMMISSION # 1087526

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.

02108485

00285873

BRIAN WOOD PERMITS WEST 37 VERANO LOOP SANTA FE, NM 87508





January 9, 2024

NMSLO P. O. Box 1148 Santa Fe NM 87504

TYPICAL NOTICE

Avant Operating, LLC is applying (see attached application) to drill the Alpha Wolf SWD 1 as a saltwater disposal well. As required by NM Oil Conservation Division (NMOCD) rules, I am notifying you of the following proposed saltwater disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Well Name: Alpha Wolf SWD 1 (NMSLO lease)

TD = 15.200'

Proposed Disposal Zones: Silurian (14,566' - 15,200')

Location: 1579' FSL & 1578' FWL Sec. 36, T. 18 S., R. 32 E., Lea County, NM

Approximate Location: 11 air miles SSE of Maljamar, NM

Applicant Name: Avant Operating, LLC

(720) 854-9020

Applicant's Address: 1515 Wynkoop St., Suite 700, Denver CO 80202

<u>Submittal Information:</u> Application for a saltwater disposal well will be filed with the NMOCD. If you have an objection, or wish to request a hearing, then it must be filed with the NMOCD within 15 days of receipt of this letter. NMOCD address is 1220 South St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3441. Their e-mail address is: ocd.engineer@emnrd.nm.gov.

Please call me if you have any questions.

Sincerely,

Brian Wood

Adult Signature Required 5

City, State, 2/0440

Burgundy Oil & Gas of NM Fotal Postage and Fees 505 N Big Spring St

Suite 603

PS Form 3800, April 2015 PSN 7530-02-003-9317 See Reverse for instructions

Street and Apt. No., or PO AVANY Alpha Wolf SWD1

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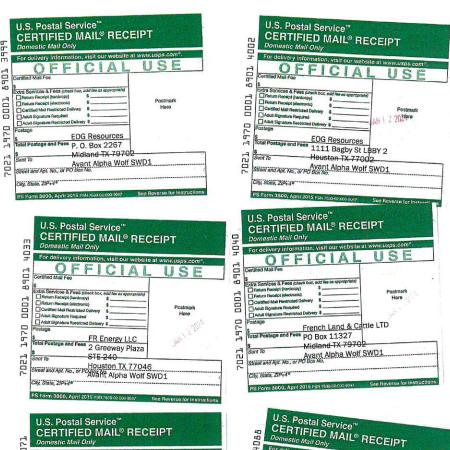
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Avant Alpha Wolf SWD1



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Explorers Petroleum Corp

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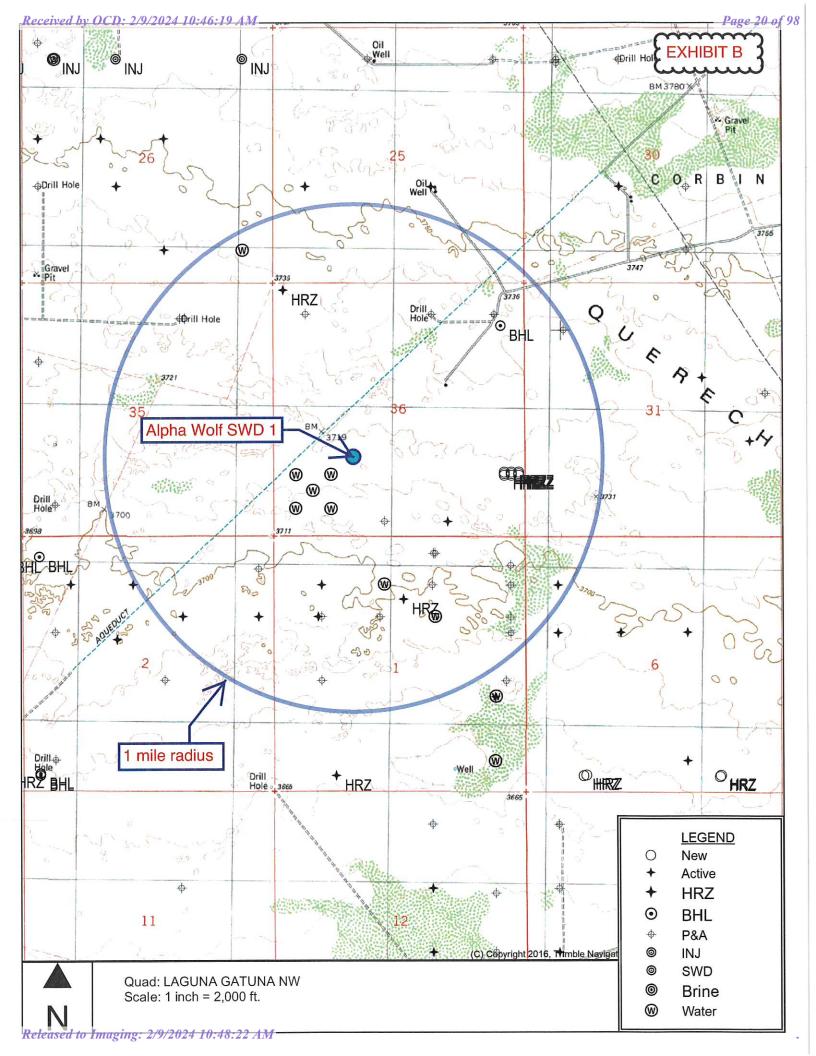
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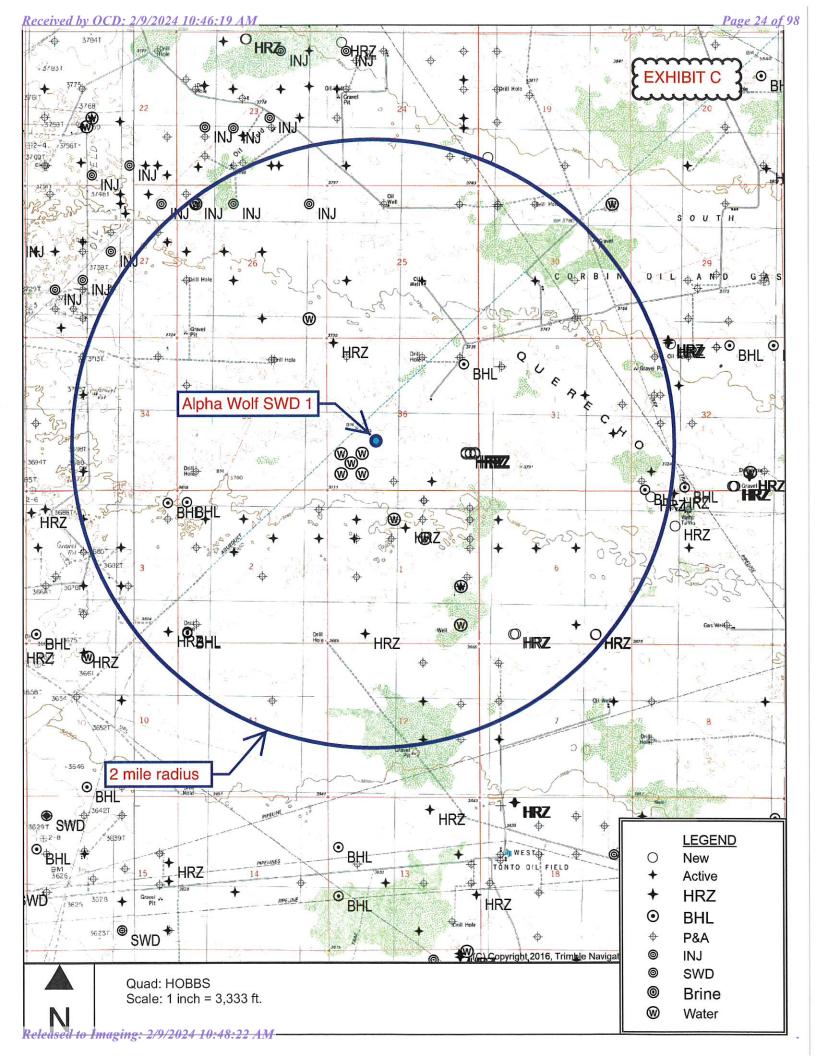


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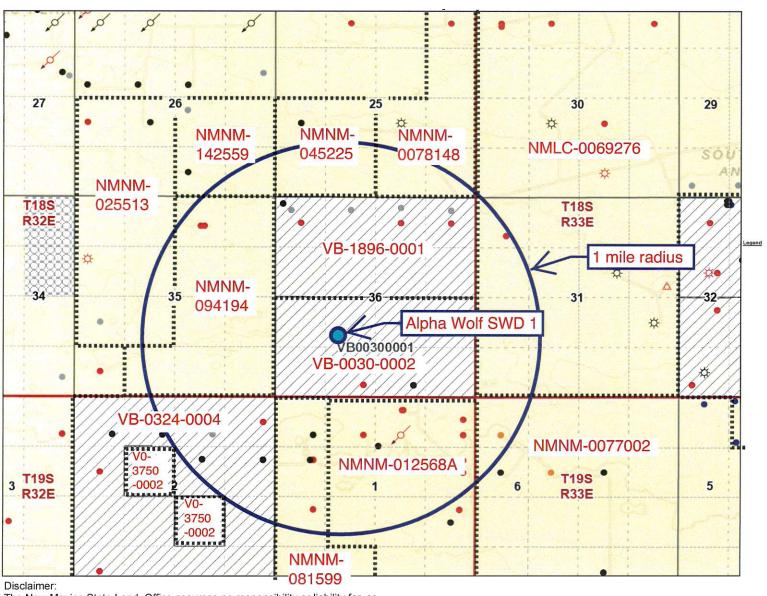
АРІ	OPERATOR	WELL	ТҮРЕ	UNIT- SECTION	TVD	ZONE @ TVD	FEET FROM ALPHA WOLF SWD 1
3002551787	Avant	Alpha Wolf 36 Fed Com 601H	0	I-36	10350 plan	Bone Spring	3409
3002551786	Avant	Alpha Wolf 36 Fed Com 602H	0	P-36	10350 plan	Bone Spring	3411
3002551789	Avant	Alpha Wolf 36 Fed Com 603H	0	P-36	10350 plan	Bone Spring	3414
3002524185	French	Nephew 001	P&A	B-36	13600	Strawn	3472
3002551784	Avant	Alpha Wolf 36 Fed Com 501H	0	I-36	9550 plan	Bone Spring	3559
3002551785	Avant	Alpha Wolf 36 Fed Com 502H	0	P-36	9550 plan	Bone Spring	3561
3002551785	Avant	Alpha Wolf 36 Fed Com 503H	0	P-36	9550 plan	Bone Spring	3563
3002542695	Mewbourne	Lone Wolf 36 B2DM State Com 001 H	0	D-36	9580	Bone Spring	3662
3002531326	Cimarex CO	Bondurant Federal 007	P&A	G-1	3740	Yates	3722
3002531605	Walsh & Watts	Cochise 2 State 001	0	H-2	3700	Seven Rivers	3759
3002531218	Cimarex CO	Bondurant Federal 003	P&A	A-1	4559	Queen	4028
3002532432	Cimarex CO	Bondurant Federal 011	P&A	A-1	3700	Yates	4265
3002520398	Lovelady	Humble State 001	P&A	A-36	4377	Penrose	4283
3002527470	Hendon	New Mexico 35 Federal 002	P&A	B-35	3406	Queen	4539
3002531628	Devon	Cochise 1 Federal 004	P&A	L-1	3725	Seven Rivers	4604
3002522800	Union	New Mexico 35 Federal 001	P&A	B-35	13701	Barnett	4617
3002530972	Special	Bondurant Federal Com 002	P&A	H-1	9100	Bone Spring	4697
3002531670	Walsh & Watts	Cochise 2 State 004	0	G-2	3685	Seven Rivers	4773

WELLS WITHIN 1 MILE RADIUS OF ALPHA WOLF SWD 1 - SORTED BY DISTANCE FROM ALPHA WOLF SWD 1 $\,$

АРІ	OPERATOR	WELL	ТҮРЕ	UNIT- SECTION	TVD	ZONE @ TVD	FEET FROM ALPHA WOLF SWD 1
3002531192	Cimarex CO	Bondurant Federal 004	P&A	H-1	3800	Seven Rivers	4932
3002531608	Legacy	Nellis Federal 006	P&A	D-6	3724	Yates	5089
3002531671	Walsh & Watts	Cochise 2 State 005	0	C-2	3680	Seven Rivers	5210
3002532829	Basin	Hudson Federal 31 002	P&A	D-31	13606	Morrow	5241
3002531331	Burlington	Bondurant Federal 006	P&A	I-1	3800	Seven Rivers	5634

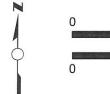


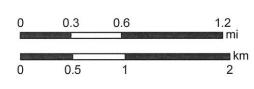
New Mexico State Land Office



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ALPHA WOLF SWD 1 AREA OF REVIEW LEASES

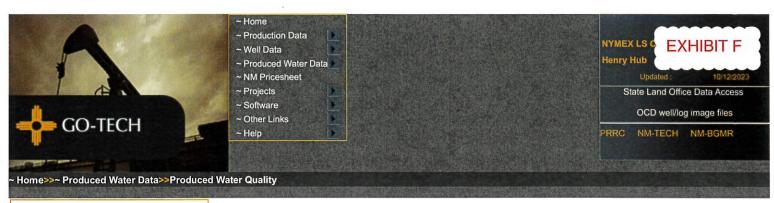
Aliquot Parts in Area of Review	Lessor	Lease	Lessee(s) of Record	Well Operators (all shallower than Silurian)	
SW4 25-18S-32E	BLM	NMNM-045225	F Petroleum	V-F	
NWSE & S2SE4 25-18S-32E	BLM	NMNM-0078148	BTA Oil, L R French Jr., French Land & Cattle, Viersen Oil & Gas	Burgundy	
S2SE4 26-18S-32E	BLM	NMNM-142559	Mewbourne	Mewbourne	
E2 & SESW 35-18S-32E	BLM	Lewis Burleson, Katherine Crews, Susie Crews, Jack Huff, Courtney Johnson, O H B Inc.		Avant	
E2NE4 & NESW 35-18S-32E	BLM	NMNM-025513	Lewis Burleson, Jack Huff, O H B Inc.	Avant	
N2 36-18S-32E	NMSLO	VB-1896-0001	Mewbourne	Mewbourne	
S2 36-18S-32E	NMSLO	VB-0030-0002	Avant	Avant	
SWSW 30-18S-33E	BLM	NMLC-0069276	Hudson Trust 4, Frost Bank Trustee J T Hudson fbo J T Ard, S J Iverson Trust, Javelina Partners, L.D. Hudson, Lindy's Living Trust, M. W. Iverson Trust, Zorro Partners	Special Energy	
W2NW4, SENW, & SW4 31-18S-33E	BLM	NMLC-0069276	ditto	Legacy Reserves	
NE4, E2NW4, NESW, & N2SE4 1-19S- 32E	BLM	NMNM- 012568A	ХТО	Mewbourne, Permian Resources	
W2NW4 & NWSW 1-19S-32E	BLM	NMNM-081599	Mammoth	Permian Resources, Walsh & Watts	

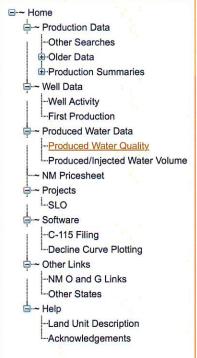
ALPHA WOLF SWD 1 AREA OF REVIEW LEASES

Aliquot Parts in Area of Review	Lessor Lease		Lessee(s) of Record	Well Operators (all shallower than Silurian)
NE4, NENW, NESE 2-19S-32E	NMSLO	VB-0324-0004	Walsh & Watts	Mewbourne, Permian Resources, Walsh & Watts
SENW & NWSE 2-19S-32E	NMSLO	V0-3750-0002	GVC Ventures	GVC, Permian Resources
N2NE4 & SWNW 6-19S-33E	BLM	NMNM-0077002	ConocoPhillips & Occidental Permian	Legacy Reserves

PARAMETERS IN MG/L

АРІ	T. 18 S., R. 32 E., Section	Formation	TDS	Sodium	Calcium	Iron	Magnesium	Chloride	Bicarbonate	Sulfate
3002500835	4	Artesia	382423					232500	396	1205
3002500836	4	Artesia	373378					230100	368	1350
3002500839	4	Artesia	301760					189000	100	500
3002508072	16	Artesia	316512					198400	166	484
3002508074	16	Artesia	300541					189200	189	440
3002508097	20	Artesia	195231							
3002500869	24	Artesia	24662					12520	284	2586
3002500872	27	Artesia	26967					14760	640	1427
3002520489	35	Artesia	210927							
3002528400	3	Bone Spring	149906	55439	5787	81	1360	98373	337	3013
3002532288	3	Bone Spring	121381	44379	4623	36	807	78561	332	1916
3002539365	30	Bone Spring 1st Sand	187542	69124	2305	6	789	114000	502	245
3002539579	30	Bone Spring 1st Sand	168552	71302	2547	9	698	112000	1008	237
3002539365	30	Bone Spring 1st Sand		111804	6030	0	712	189272	305	410
3002539579	30	Bone Spring 1st Sand		116728	6286	2	783	197641	293	440
3002539365	30	Bone Spring 1st Sand	194660	73631	1655	0	425	117773	463	230
3002539579	30	Bone Spring 1st Sand	181992	68165	1918	2	517	110075	463	302
3002529887	19	Delaware	253000	93741	15347	4	2813	181043	242	618
3002508072	16	Queen		98373	7563		11519	198440	166	484
3002508074	16	Queen		91218	7642		11863	189228	189	440
3002531756	17	Wolfcamp	187007	66744	10171	10	2103	127936	175	970





PRODUCED WATER QUALITY DATA SEARCH

Data in the New Mexico Produced Water Quality Database v.2 was updated in 2016 for the first time in many years. Data should be used for general informational purposes only. The uncertainties in data collection procedures, analysis quality and specific sample sources make it unsuitable as basis for any significant business or policy decisions. Data was gathered from many sources and about 5400 distinct wells in NM are represented. More data exists for most samples than is provided by the results screen; the downloadable spreadsheet contains more information including field, formation, sample source (where available), and latitude/longitude.

Funding for the database was provided by the U.S. DOE, various New Mexico State agencies, NMT, and WRRI.

SEARCH PANEL

 API NUMBER
 3002502431
 Example: 3004511439

 WELL NAME
 TOWNSHIP
 ➡
 RANGE
 ➡
 SECTION

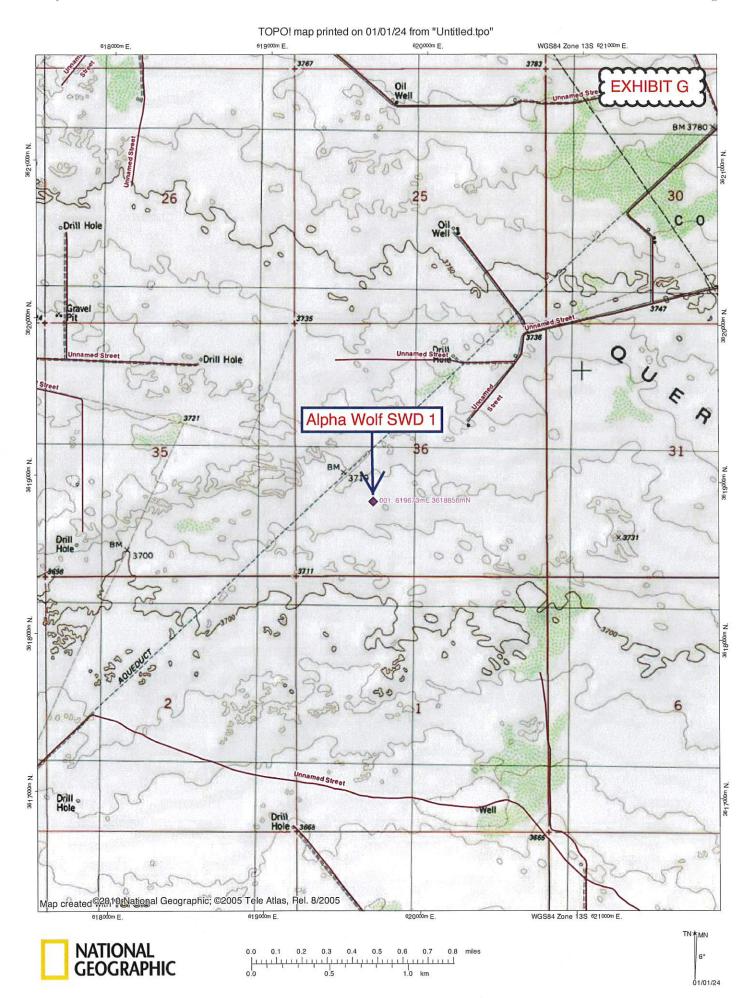
 Submit
 Export to Excel

Too many or not enough results? Change your search criteria and press the **Submit** button to improve results. There may be more information for these samples. For all available data including lat/long location, press **EXPORT to EXCEL** to create a downloadable file.

RESULT PANEL

WELLNAME	API	TOWNSHIP	RANGE	SECTION	TDS(mg/L)	Chlorides(mg/L)	Sample Year	Field	Formation
LEA UNIT #008	3002502431	20\$	34E	12	44800	25320		LEA	PENNSYLVANIAN
LEA UNIT #008	3002502431	20S	34E	12	35094	19020		LEA	PENNSYLVANIAN
LEA UNIT #008	3002502431	20S	34E	12	33414	18570		LEA	DEVONIAN
LEA UNIT #008	3002502431	20S	34E	12	42216	24000		LEA	PENNSYLVANIAN
LEA UNIT #008	3002502431	208	34E	12	147229	89640		LEA	BONE SPRING

PETROLEUM RECOVERY RESEARCH CENTER, SOCORRO, NM-87801



Water



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



(A CLW#### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced,

O=orphaned,

C=the file is closed)

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD

Sub-

QQQ

basin County 64 16 4 Sec Tws Rng 620623

3616973*

DistanceDepthWellDepthWater Column

2109

POD Number CP 00812 POD1 Code

4 4 01 198 32E

3621373*

X

700

CP 00677

CP LE

18S 32E 1 1 26

617750

3167

Average Depth to Water:

Minimum Depth:

Maximum Depth:

Record Count: 2

UTMNAD83 Radius Search (in meters):

Easting (X): 619673

Northing (Y): 3618856

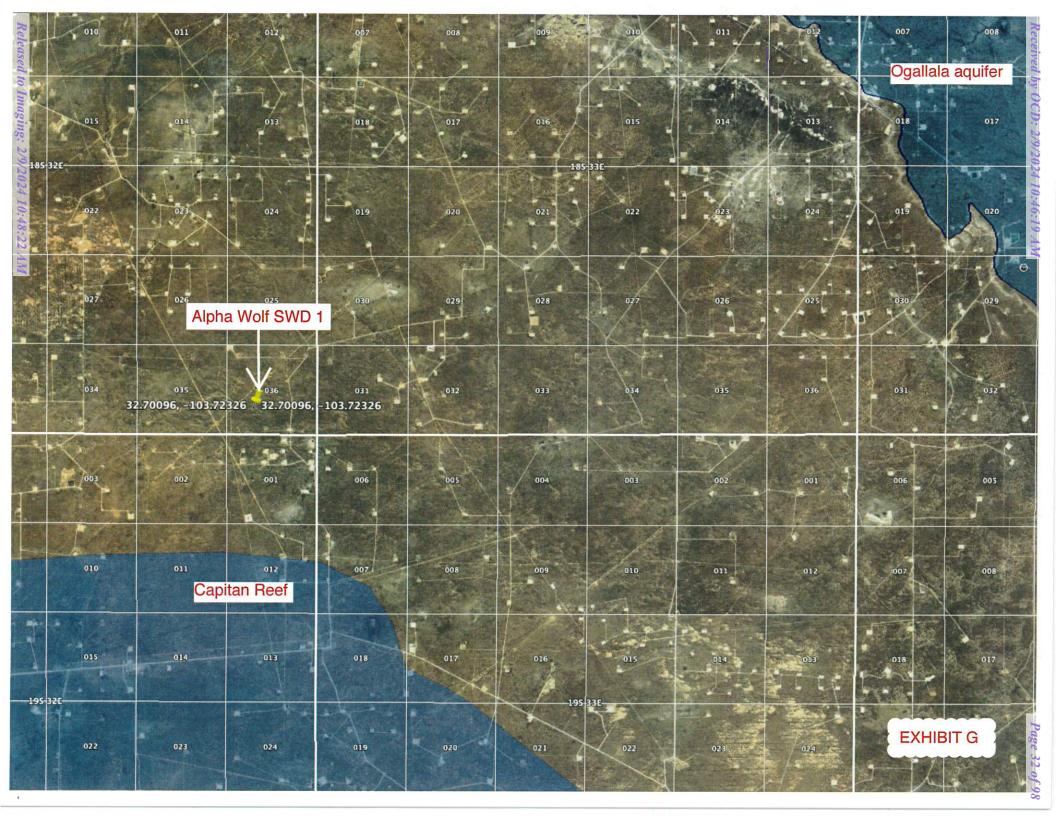
Radius: 3220

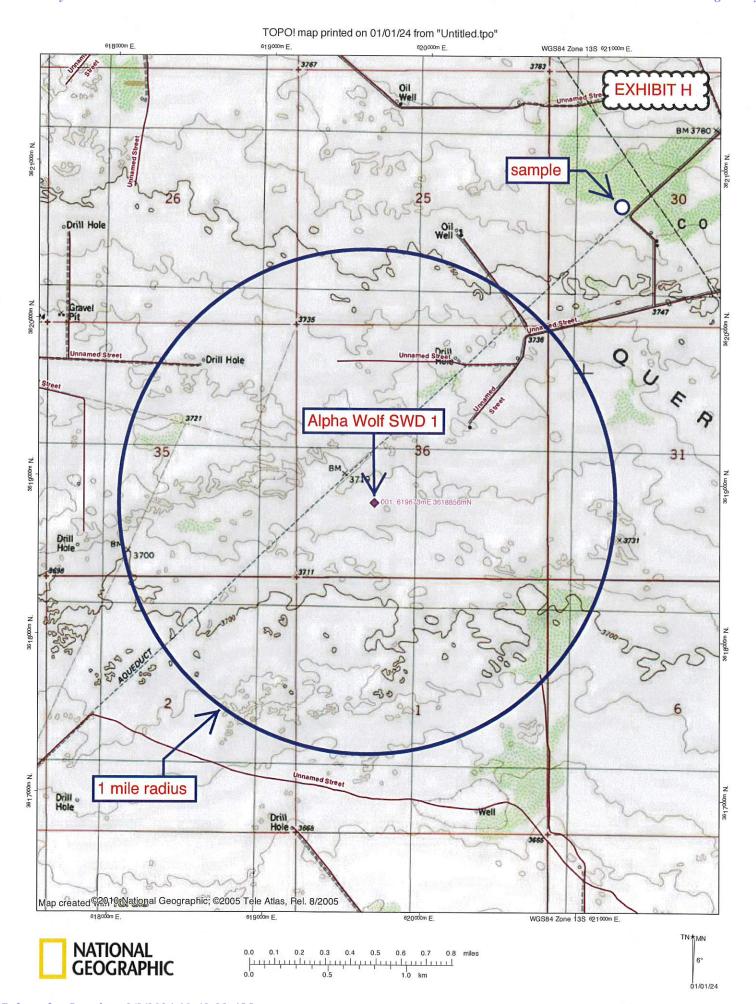
*UTM location was derived from PLSS - see Help

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.

1/7/24 2:41 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER







Date Reported: 8/16/2023

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: Cut

CLIENT: Permits West

Project: Cut Alpha Collection Date: 7/19/2023 11:30:00 AM 2307931-001 Matrix: AQUEOUS Lab ID: Received Date: 7/20/2023 10:10:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 1664B			=		Analys	t: ejn
N-Hexane Extractable Material	ND	9.81	mg/L	1	8/7/2023 3:14:00 PM	76694
EPA METHOD 300.0: ANIONS					Analys	t: SNS
Chloride	54	10	mg/L	20	7/20/2023 3:56:47 PM	R98395
SM2540C MOD: TOTAL DISSOLVED SOLIDS					Analys	t: JAG
Total Dissolved Solids	343	50.0	mg/L	1	7/24/2023 3:35:00 PM	76375

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

Qualifiers:

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

Page 1 of 4



Date Reported: 8/16/2023

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: Alpha

CLIENT: Permits West Project: Cut Alpha

Collection Date: 7/19/2023 1:05:00 PM

Lab ID: 2307931-002 Matrix: AQUEOUS Received Date: 7/20/2023 10:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 1664B					Analys	t: ejn
N-Hexane Extractable Material	ND	9.77	mg/L	1	8/7/2023 3:14:00 PM	76694
EPA METHOD 300.0: ANIONS					Analys	t: SNS
Chloride	50	10	mg/L	20	7/20/2023 4:21:28 PM	R98395
SM2540C MOD: TOTAL DISSOLVED SOLIDS					Analys	t: JAG
Total Dissolved Solids	341	50.0	mg/L	1	7/24/2023 3:35:00 PM	76375

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

Holding times for preparation or analysis exceeded H

Not Detected at the Reporting Limit

% Recovery outside of standard limits. If undiluted results may be estimated.

Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

Analyte detected below quantitation limits

Sample pH Not In Range

RL Reporting Limit Page 2 of 4

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

Page 36 of 98

16-Aug-23

Client:

Permits West

Project:

Cut Alpha

Sample ID: MB-76694

SampType: MBLK

TestCode: EPA Method 1664B

Client ID:

PBW

Batch ID: 76694

RunNo: 98776

Prep Date:

8/7/2023

Analysis Date: 8/7/2023

SeqNo: 3598139

Units: mg/L

Analyte

Result

SPK value SPK Ref Val

%REC LowLimit HighLimit

%RPD **RPDLimit** Qual

N-Hexane Extractable Material

ND

PQL 10.0

TestCode: EPA Method 1664B

Sample ID: LCS-76694 Client ID:

LCSW

SampType: LCS Batch ID: 76694

PQL

10.0

RunNo: 98776

%REC

Units: mg/L

HighLimit

114

Prep Date: Analyte

8/7/2023

Analysis Date: 8/7/2023

Result

Result

39.0

37.2

SeqNo: 3598140

78

LowLimit

RPDLimit

Qual

N-Hexane Extractable Material

Sample ID: LCSD-76694

LCSS02

SampType: LCSD Batch ID: 76694 TestCode: EPA Method 1664B RunNo: 98776

93.0

LowLimit

SeqNo: 3598141

Units: mg/L HighLimit

%RPD

%RPD

RPDLimit

Qual

Prep Date: Analyte

Client ID:

N-Hexane Extractable Material

Analysis Date: 8/7/2023 8/7/2023

PQL

10.0

SPK value SPK Ref Val

40.00

SPK value SPK Ref Val

40.00

%REC 97.5

0

78

114

4.72

20

Qualifiers: Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit ND Practical Quanitative Limit POL

% Recovery outside of standard limits. If undiluted results may be estimated.

В Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

Analyte detected below quantitation limits Sample pH Not In Range

Reporting Limit

Page 3 of 4

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

Page 37 of 98 WO#:

16-Aug-23

Client:

Permits West

Project:

Cut Alpha

Sample ID: MB

SampType: MBLK

TestCode: EPA Method 300.0: Anions

LowLimit

Client ID:

Batch ID: R98395

POL

Batch ID: R98395

RunNo: 98395

Result

Analysis Date: 7/20/2023

SeqNo: 3581614

%REC

Units: mg/L

HighLimit

%RPD

RPDLimit

Qual

Analyte Chloride

Prep Date:

ND 0.50

Sample ID: LCS

SampType: LCS

TestCode: EPA Method 300.0: Anions RunNo: 98395

Client ID: LCSW Prep Date:

Analysis Date: 7/20/2023

SeqNo: 3581615

Units: mg/L

Analyte

Result 4.7

Result

ND

PQL SPK value

5.000

SPK Ref Val

0

SPK value SPK Ref Val

%REC 93.5

LowLimit 90

TestCode: EPA Method 300.0: Anions

LowLimit

TestCode: EPA Method 300.0: Anions

90

HighLimit %RPD 110

RPDLimit

Qual

Chloride

Sample ID: MB Client ID:

PBW

SampType: MBLK Batch ID: R98395

Analysis Date: 7/20/2023

PQL

0.50

0.50

RunNo: 98395

%REC

SeqNo: 3581660

Units: mg/L

HighLimit

RPDLimit

Qual

Analyte Chloride

Prep Date:

Sample ID: LCS

LCSW

SampType: LCS

Analysis Date: 7/20/2023

0.50

Batch ID: R98395

RunNo: 98395

SeqNo: 3581661

Units: mg/L

%RPD

%RPD

Analyte Chloride

Client ID:

Prep Date:

POL Result

4.5

SPK value

SPK Ref Val 5.000

SPK value SPK Ref Val

%REC 90.3

LowLimit

HighLimit 110

RPDLimit

Qual

Qualifiers:

Value exceeds Maximum Contaminant Level

D Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit Practical Quanitative Limit POL

% Recovery outside of standard limits. If undiluted results may be estimated.

В Analyte detected in the associated Method Blank

Above Quantitation Range/Estimated Value E

Analyte detected below quantitation limits Sample pH Not In Range

Reporting Limit

Page 4 of 4





NM Oil Conservation Division 1220 S. St. Francis Dr. Santa Fe, NM 87505

> Re: Geology Statement Avant Operating, LLC Alpha Wolf SWD #1 Section 36, T. 18S, R. 32E Lea County, New Mexico

To whom it may concern:

Publicly available geologic and engineering data related to the proposed well have been thoroughly reviewed, and no evidence for open faults or any other hydrologic connection between the proposed Silurian injection zone and any underground sources of drinking water has been found. Please see the attached seismic risk assessment for additional information.

Sincerely,

Cory Walk Geologist



Seismic Risk Assessment

Avant Operating, LLC

Alpha Wolf SWD No. 1

Section 36, Township 18 South, Range 32 East

Lea County, New Mexico

Cory Walk, M.S.

Geologist

Cory Walk

Permits West Inc.

December 21, 2023



GENERAL INFORMATION

Alpha Wolf SWD #1 is located in the SW 1/4, section 36, T.18S, R.32E, about 11 miles south of Maljamar, NM in the Permian Basin. Avant Operating, LLC proposes to dispose produced water within the Silurian Formation through an open hole from 14,566'-15,200' below ground surface. This report assesses any potential concerns relating to induced seismicity along deep rooted Precambrian faults or the connection between the injection zone and known underground potable water sources.

SEISMIC RISK ASSESSMENT

Historical Seismicity

Searching the USGS earthquake catalog resulted in no (0) earthquakes above a magnitude 2.5 within 6 miles (9.7 km) of the proposed deep disposal site since 1970 (Fig. 1). The nearest earthquake occurred on June 30, 2020 about 15.5 miles (25.0 km) northeast of the proposed SWD site and had a magnitude of 2.7.

Basement Faults and Subsurface Conditions

A structure contour map (Fig. 1) of the Precambrian basement shows the Alpha Wolf SWD #1 is approximately 10.9 miles (17.5 km) from the nearest basement-rooted fault inferred by Horne et al (2021). Information about known nearby faults based on GIS data from Horne et al. (2021) is listed in Table 1.

Snee and Zoback (2018) state, "In the western part of Eddy County, New Mexico, S_{Hmax} is ~north-south (consistent with the state of stress in the Rio Grande Rift; Zoback and Zoback, 1980) but rotates to ~east-northeast-west-southwest in southern Lea County, New Mexico and the northernmost parts of Culberson and Reeves counties, Texas." Around the Alpha Wolf SWD #1 site, Snee and Zoback indicate a S_{Hmax} direction of N060°E and an A_{ϕ} of 0.65, indicating an extensional (normal) stress regime.

Fault Slip Potential (FSP) Modeling

Induced seismicity is a growing concern of deep SWD wells. Software developed by the Stanford Center for Induced and Triggered Seismicity allows for the probabilistic screening of deeply penetrating faults near the proposed injection zone (Walsh et al., 2016; Walsh et al., 2017). This software uses parameters such as stress orientations, fault strike/dip, injection rates, fault friction coefficients, etc. to estimate the potential for fault slip. Using the best available data as input parameters (Table 2) including the subject well injecting at the proposed maximum of 30,000 bbls/day and all other existing SWDs within a 6 mile radius injecting at their individual historical peak annual volume and the proposed SWDs injecting at their proposed maximum rates (3 total SWD wells), the Fault Slip Potential (FSP) models suggest a one (0.01) percent chance of slip on a nearby fault, inferred by Horne et al. (2021), through the year 2044 (Fig. 2; Table 1). This model also suggests a pore pressure increase of 8.2 psi on the nearest publicly known fault (Fault 54; Fig. 3; Table 1) by the year 2044. Geomechanical modeling shows that the primary fault of concern (fault 39) would need a pressure increase of 1833 psi to reach a 100% probability of slip on the



fault. A 50% probability requires an increase of 412 psi which is 60x greater than the modeled increase of 6.7 psi (Fig. 3).

GROUNDWATER SOURCES

Quaternary Alluvium acts as the principal aquifer used for potable ground water near the Alpha Wolf SWD #1 location (Hendrickson and Jones, 1952). Nicholson and Clebsch (1961) state, "Potable ground water is not available below the Permian and Triassic unconformity but, because this boundary is not easily defined, the top of the Rustler anhydrite formation is regarded as the effective lower limit of 'potable' ground water." Around the Alpha Wolf SWD #1, the top of the Rustler Formation lies at an estimated depth of 1,360' bgs.

VERTICAL MIGRATION OF FLUIDS

Permeability barriers exist above (Woodford shale; 110 ft thick) and below (Simpson Group; 325 ft thick) the targeted Silurian injection zone (Plate 2, Comer et al., 1991; Fig. 8, Frenzel et al., 1988). Precambrian structure contours (Ruppel, 2009) show the basement to be at a depth of approximately 16,220' in this area. Therefore, the injection zone lies approximately 1,000' above the Precambrian basement and approximately 13,200' below the previously stated lower limit of potable water at the top of the Rustler formation.

CONCLUDING STATEMENTS

After examination of publicly available geologic and engineering data, there is no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

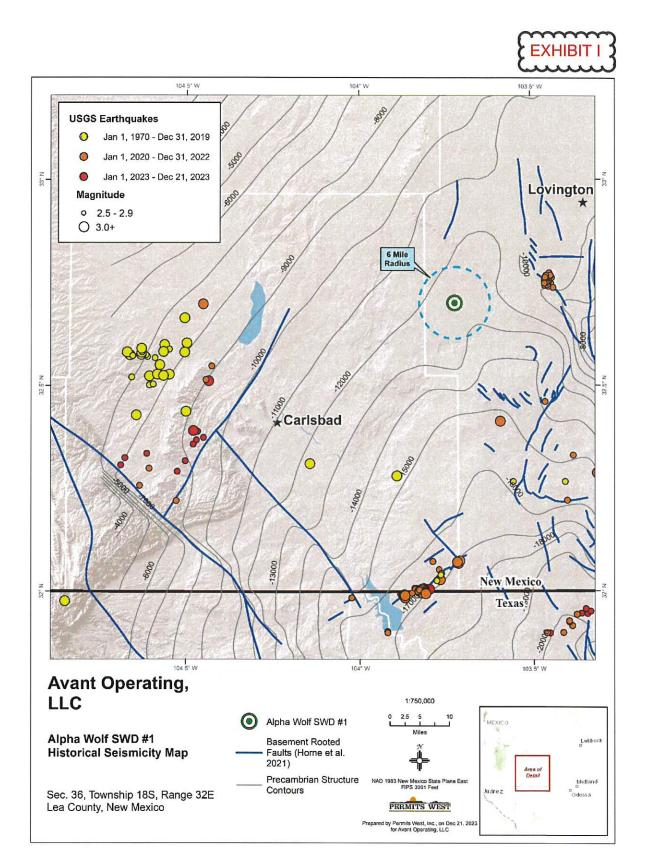


Figure 1. Structural contour map of the Precambrian basement in feet below sea level. Blue lines represent the locations of Precambrian basement-rooted faults (Horne et al., 2021). Alpha Wolf SWD #1 well lies ~10.9 miles south of the closest deeply penetrating fault and 15.5 miles southwest from the closest historic earthquake.



Table 1: Nearby Basement Fault Model Results

Fault Number	Distance to proposed SWD (mi)	Strike (°)	Dip (°)	FSP (2044)	Δ Pore Pressure after 20 years (psi)	Δ Pore Pressure needed for 100% FSP (psi)	Δ Pore Pressure needed for 50% FSP (psi)
Fault 54	10.9	204	60	0.00	8.2	3025	842
Fault 39	14.2	79	67	0.01	6.7	1833	412

Table 2: Fault Slip Potential model input parameters

Table 2. Fault Sup 1 otential model input parameters							
Faults	Value	Notes					
Friction Coefficient	0.58	Ikari et al. (2011)					
Dip Angle (deg)	60-75	Horne et al. (2021)					
Stress							
Vertical stress gradient (psi/ft)	1.1	Hurd and Zoback (2012)					
Max Horizontal Stress Direction (deg)	60	Snee and Zoback (2018)					
Depth for calculations (ft)	15200	Proposed injection zone					
Initial Reservoir Pressure Gradient (psi/ft)	0.7	calculated from mud wt (ppg) used in drilling at these depths					
A Phi Parameter	0.65	Snee and Zoback (2018)					
Reference Friction Coefficient	0.58	Ikari et al. (2011)					
Hydrology							
Aquifer thickness (ft)	630	Proposed injection zone					
Porosity (%)	6						
Permeability (mD)	150						
Injection Rate (bbl/day)	30000	Maximum proposed injection rate					



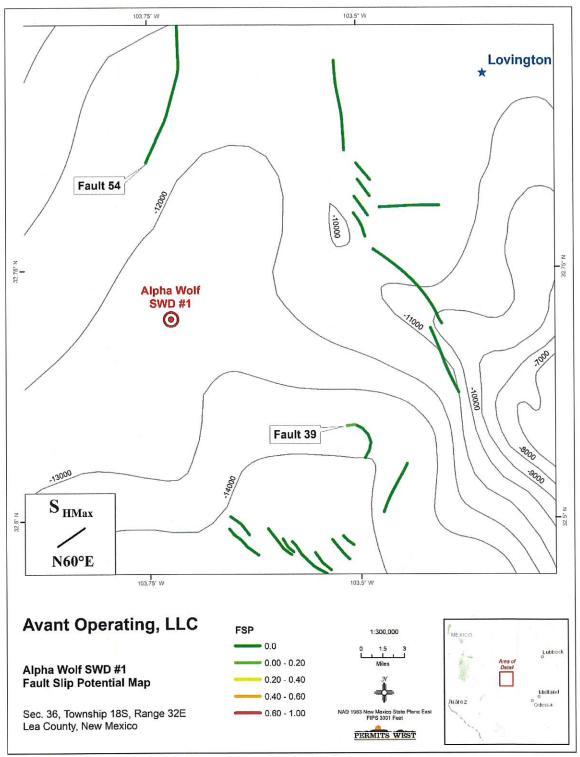


Figure 2. Precambrian fault map of the Alpha Wolf SWD #1 area as mapped by Horne et al. (2021). Faults are colored based on probability of fault slip as modeled using Fault Slip Potential software (Walsh and Zoback, 2016). Labeled values represent the calculated fault slip potential using the parameters indicated in Table 2. Contours show the top of the Precambrian basement in feet below sea level.



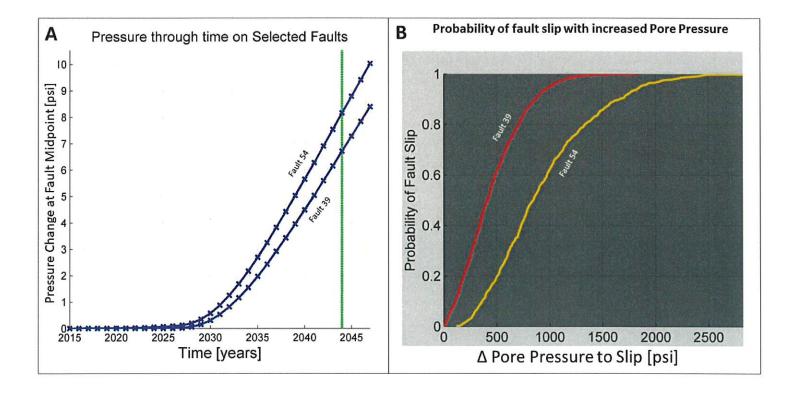


Figure 3. A) Plot showing the modeled change of pore pressure on nearby faults through time as a response to the proposed SWD well. B) Plot showing the required pore pressure increase needed to produce specific probabilities of fault slip on nearby faults.



References Cited

- Comer, J. B., 1991, Stratigraphic Analysis of the Upper Devonian Woodford Formation, Permian Basin, West Texas and Southeastern New Mexico: The University of Texas at Austin, Bureau of Economic Geology, Report of Investigations No. 201, 63 p.
- Frenzel, H. N., Bloomer, R. R., Cline, R. B., Cys, J. M., Galley, J. E., Gibson, W. R., Hills, J. M., King, W. E., Seager, W. R., Kottlowski, F. E., Thompson, S., III, Luff, G. C., Pearson, B. T., and Van Siclen, D. C., 1988, The Permian Basin region, in Sloss, L. L., ed., Sedimentary cover—North American Craton, U.S.: Boulder, Colorado, Geological Society of America, The Geology of North America, v. D-2, p. 261–306.
- Hendrickson, G. E., and Jones, R. S., 1952, Geology and Ground-Water Resources of Eddy County, New Mexico: New Mexico Bureau of Mines and Mineral Resources, Ground-Water Report 3, 179 pp., 6 plates.
- Horne, E. A., Hennings, P. H., and Zahm, C. K., 2021, Basement-rooted faults of the Delaware Basin and Central Basin Platform, Permian Basin, West Texas and southeastern New Mexico, in Callahan, O. A., and Eichhubl, P., eds., The geologic basement of Texas: a volume in honor of Peter T. Flawn: The University of Texas, Bureau of Economic Geology Report of Investigations No. 286, doi:10.23867/RI0286C6.
- Hurd, O; Zoback, MD, 2012, Intraplate earthquakes, regional stress and fault mechanics in the Central and Eastern U.S. and Southeastern Canada. Tectonophysics, 581:182-92.
- Ikari, M. J.; C. Marone, and D. M. Saffer, 2011, On the relation between fault strength and frictional stability, Geology, 39, 83–86.
- Nicholson, A., Jr., and Clebsch, A., Jr., 1961, Geology and ground-water conditions in southern Lea County, New Mexico: New Mexico Bureau of Mines and Mineral Resources, Ground-Water Report 6, 123 pp., 2 plates.
- Ruppel, S.C., 2009, Integrated synthesis of the Permian basin: data and models for recovering existing and undiscovered oil resources from the largest oil-bearing basin: U.S. Oil & Natural Gas Technology, Bureau Economic Geology, The University of Texas at Austin, p. 1-959.
- Snee, J.-E.L., Zoback, M.D., 2018, State of stress in the Permian Basin, Texas and New Mexico: Implications for induced seismicity: Leading Edge, v. 37, p. 127–134.
- Walsh, F. R., and Zoback, M. D., (2016) Probabilistic assessment of potential fault slip related to injection induced earthquakes: Application to north central Oklahoma, USA, Geology, Data Repository item 2016334, doi:10.1130/G38275.1
- Walsh, F. R., Zoback, M. D., Pais, D., Weingarten, M., and Tyrrell, T. (2017) FSP 1.0: A Program for Probabilistic Estimation of Fault Slip Potential Resulting From Fluid Injection, User Guide from the Stanford Center for Induced and Triggered Seismicity, available at SCITS.Stanford.edu/software
- Zoback, M. L., and M. D. Zoback, 1980, State of stress in the conterminous United States: Journal of Geophysical Research, 85, no. B11, 6113–6156, https://doi.org/10.1029/JB085iB11p06113.

PAGE 1

l. Goal is to drill a 15,200' deep saltwater disposal well. Proposed disposal interval will be 14,566'-15,200' in the SWD; Silurian (98249). See Exhibit A for C-102 and map. The well is on NM State Land Office surface and minerals.

II. Operator: Avant Operating, LLC [OGRID 330396]

Operator phone number: (720) 746-5045

Operator address: 1515 Wynkoop St., Suite 700, Denver CO 80202

Contact for Application: Brian Wood (Permits West, Inc.)

Phone: (505) 466-8120

III. A. (1) Lease name: Alpha Wolf (NMSLO VB-0030-0002)
Lease area: S2 Sec. 36, T. 18 S., R. 32 E.
Well name and number: Alpha Wolf SWD 1
Location: 1579' FSL & 1578' FWL Section 36, T. 18 S., R. 32 E.

A. (2) Surface casing (20", 133#, K-55, BTC) will be set at 1,328' in a 24" hole and cemented to GL (>20% excess) with 1,155 sacks.

Intermediate casing 1 (13.375", 68#, HCP-110, LTC) will be set at 5,228' in a 17.5" hole and cemented to GL (>20% excess) with 2,895 sacks.

Intermediate casing 2 (9.625", 40#, HCL-80, BTC) will be set at 10,570' in a 12.25" hole and cemented to GL (>20% excess) with 1,610 sacks.

Liner (7.625", 39#, HCP-110, LTC) will be set from 10,270' to 14,566' in an 8.75" hole and will be cemented to 10,270' (20% excess) with 415 sacks.

A 6.5" open hole will be drilled from 14,566' to 15,200'.

A. (3) IPC 7" 29# HCP-110 Ultra FJ injection string will be run from GL to 10,170'. IPC 5.5" 20# HCP-110 Ultra FJ injection string will be run



PAGE 2

from 10,170' to $\approx 14,516$ '. (Disposal interval will be 14,566' to 15,200'.)

- A. (4) A nickel-plated packer will be set at ≈14,516', or within 100' of the top of the open hole. (Top of the open hole will be 14,566'.)
- B. (1) Disposal zone will be the Silurian (SWD; Silurian (98249) pool). Estimated fracture gradient is ≈ 0.92 psi per foot.
- B. (2) Disposal interval will be open hole from 14,566' to 15,200'.
- B. (3) Well will be drilled as a SWD; Silurian well.
- B. (4) No perforated interval is in the well. Well will be completed open hole from 14,566' to 15,200'.
- B. (5) Potentially productive zones in the area of review and above the Silurian (14,541') are the Yates (3,425'), Queen (4,115'), Bone Spring (8,549'), Wolfcamp (10,370'), Strawn (11,998'), and Morrow (13,275'). No oil or gas zone is below the Silurian in the area of review.
- IV. This is not an expansion of an existing injection project. It is disposal only.
- V. Exhibit B shows and tabulates the 40 existing, or approved but not yet drilled, wells within a one-mile radius. Twenty-one of the wells are P&A. The remaining 19 wells are oil wells. Deepest of the 40 wells is 13,701' TVD (Barnett). Exhibit C shows all 105 existing wells (52 oil or gas + 48 P&A + 3 WIW + 2 water) within a two-mile radius. The water injectors are Bone Spring.

All leases within a one-mile radius are BLM or NMSLO. Exhibit D shows and tabulates all leases within a one-mile radius. Two-mile radius leases are BLM or NMSLO (Exhibit E).



PAGE 3

- VI. No Silurian penetrator is within a mile. Deepest (13,701' TVD) well within a mile bottomed in the Barnett, 840' above the Silurian (14,541'). An estimated 30' of Woodford shale is between the bottom of the Mississippian and the top of the Silurian. Closest partially approved (SWD-2473; but APD 30-025-45391 expired) is 2-1/2 miles southeast. Closest fully approved Silurian or Devonian well (SWD-2369; 30-025-51764) is 4 miles southeast.
- VII. 1. Average injection rate will be ≈25,000 bwpd. Maximum injection rate will be 30,000 bwpd.
 - 2. System will be open and closed. Water will both be trucked and piped.
 - 3. Average injection pressure will be $\approx 2,500$ psi. Maximum injection pressure will be 2,913 psi (= 0.2 psi/ft x 14,566' (top of open hole)).
 - 4. Disposal water will be produced water, mainly Bone Spring, but also Delaware, Morrow, Strawn, Wolfcamp, Yates, et al. Avant has 9 approved wells in T. 18 S., R. 32 E., 8 of which are Bone Spring. Abstracts from the NM Produced Water Quality Database v.2 for wells in T. 18 S., R. 32 E. are in Exhibit F. A table of TDS ranges from those wells is below. Devonian samples (Exhibit F) from T. 20 S., R. 34 E. found TDS at 33,414 mg/l and 45,778 mg/l.

Formation	TDS range (mg/l)				
Artesia	24,662 - 382,423				
Bone Spring	121,381 – 187,542				
Delaware	25,300				
Wolfcamp	187,007				

No compatibility problems have been reported from the closest (14 miles southeast) active Devonian-Silurian; SWD well. At least 25,347,005 barrels have been disposed in 30-025-45334 since 2019.

5. No Silurian oil or gas well is within 5 miles.

VIII. The Silurian interval (≈737' thick) is composed of limestone and dolomite. Confining strata are the Woodford shale above and Sylvan shale below. Closest



PAGE 4

possible underground source of drinking water above the proposed disposal interval are the red beds above the Rustler anhydrite. According to State Engineer records (Exhibit G), closest water well is 1.31 miles southeast, but it could not be found during a July 19, 2023, field inspection. Deepest water well within 2-miles is 700'. A stock tank was found 1.57 miles northeast in NESW Section 30 and sampled. Capitan Reef is 1.7 miles south. Ogallala aquifer is 7 miles northeast. No underground source of drinking water is below the proposed disposal interval.

Estimated formation tops (TVD) are:

Red Beds = 0'Rustler = 1,303' Salt = 1,600'Salt (base) = 2.865' Yates = 3,425'Queen = 4,115'Delware = 5,328 1^{st} Bone Spring = 8,549' 3rd Bone Spring = 10,092' Wolfcamp = 10,370' Strawn = 11,198'Mississippian Limestone = 13,891' Woodford Shale = 14,426' Silurian = 14.541top disposal interval = 14,566' bottom disposal interval = 15,200' TD = 15,200'Fusselman = 15.279'

According to State Engineer records (Exhibit G), the deepest water well within 2-miles is 700'. There will be >13,000' of vertical separation including multiple layers of shale, salt, and anhydrite between the bottom of the only likely underground water source (red beds) and the top of the Silurian.

IX. Well will be stimulated with acid as needed.



PAGE 5

- X. GR, bulk density, neutron density, and sonic logs will be run.
- XI. According to State Engineer records (Exhibit G), 2 water wells are within a 2-mile radius, closest of which is 1.31 miles southeast. Neither were found during a field inspection. A stock tank (Exhibit H) not in the State records was found 1.57 miles northeast and sampled. Its location and analyses are in Exhibit H.
- XII. Avant Operating, LLC (Exhibit I) is not aware of any geologic or engineering data that may indicate the Silurian is in hydrologic connection with any underground sources of water. Deepest water well within a 2-mile radius is 700'. There are 26 active Silurian SWD wells in New Mexico.
- XIII. A legal ad (Exhibit J) was published on December 19, 2023. Notice (Exhibit K) and this application has been sent to the surface owner (NMSLO), all well operators regardless of depth, government lessors, lessees, and operating right holders within a mile.



Protested SWD Application

By Apache Corporation Recieved 01/24/2024



1/24/2024

Energy, Minerals & Natural Resources Department Oil Conservation Division Attention: Phillip Goetze, P.G. 1220 South St. Francis Drive Santa Fe. New Mexico 87505

Re: Protest of C108-Application for Authorization to Inject:

Avant Operating, LLC Alfa Wolf SWD Well #1 1579' FSL & 1578' FWL Section 36, T.18 S., R. 32 E. Lea County, New Mexico

Engineering Unit,

Apache Corporation hereby gives notice of its intent to protest the referenced SWD application. Should a formal hearing be called, Apache Corporation will appear and present any relevant evidence and testimony in support of our position. By copy of this letter the applicant is being notified of our intent.

Thank you for your assistance, and if you need additional information, please contact me via email at: dean.gaines@apachecorp.com or direct at: (432) 818-1803.

Sincerely,

Dean Gaines

EH&S Sr. Advisor-Regulatory

cc: brian@permitswest.com

Released to Imaging: 2/9/2024 10:48:22 AM



37 Verano Loop, Santa Fe, New Mexico 87508 505-466-8120

RECEIVED
Apache Corp

JAN 16 2024

Permian-Midland Regulatory

January 10, 2024

Apache Corporation 303 Veterans Airpark Lane Suite 1000 Midland TX 79705

Avant Operating, LLC is applying (see attached application) to drill the Alpha Wolf SWD 1 as a saltwater disposal well. As required by NM Oil Conservation Division (NMOCD) rules, I am notifying you of the following proposed saltwater disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Well Name: Alpha Wolf SWD 1 (NMSLO lease) TD = 15,200'

Proposed Disposal Zones: Silurian (14,566' – 15,200')

Location: 1579' FSL & 1578' FWL Sec. 36, T. 18 S., R. 32 E., Lea County, NM

Approximate Location: 11 air miles SSE of Maljamar, NM

<u>Applicant Name:</u> Avant Operating, LLC (720) 854-9020 <u>Applicant's Address:</u> 1515 Wynkoop St., Suite 700, Denver CO 80202

<u>Submittal Information:</u> Application for a saltwater disposal well will be filed with the NMOCD. If you have an objection, or wish to request a hearing, then it must be filed with the NMOCD within 15 days of receipt of this letter. NMOCD address is 1220 South St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3441. Their e-mail address is: ocd.engineer@emnrd.nm.gov.

Please call me if you have any questions.

Sincerely,

Brian Wood

Received by OCD: 2/9/2024 10:46:19 AM

BiWard

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

FORM C-108 Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

	ATT BICKTION FOR ACTION 20 HOLE
I.	PURPOSE: Secondary Recovery Pressure Maintenance XXX Disposal Storage Application qualifies for administrative approval? XXX Yes No
II.	OPERATOR: AVANT OPERATING, LLC
	ADDRESS: 1515 WYNKOOP ST., SUITE 700, DENVER CO 80202
	CONTACT PARTY: BRIAN WOOD (PERMITS WEST, INC.) PHONE: 505 466-8120
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. ALPHA WOLF SWD 1
IV.	Is this an expansion of an existing project? Yes XXX No SWD; SILURIAN 98249 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.
*Y	Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be result mitted)

- - iate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
 - 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.
 - 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: BRIAN WOOD	TITLE: CONSULTANT
SIGNATURE:	DATE: 1-9-24
E-MAIL ADDRESS: brian@permitswest.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:

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.

INJECTION WELL DATA SHEET

OPERATOR: AVANT OPERATING, LLC

WELL NAME & NUMBER: ALPHA WOLF SWD 1

RANGE 32 E WELL CONSTRUCTION DATA TOWNSHIP 18 S Surface Casing SECTION 36 UNIT LETTER \mathbf{X} 1579' FSL & 1578' FWL FOOTAGE LOCATION WELLBORE SCHEMATIC WELL LOCATION:

Ę. \mathbb{H}^3 f, Casing Size: 13.375" & 9.625" Method Determined: CIRC. Method Determined: CIRC. Method Determined: TOL Casing Size: 7.625" Casing Size: 20" 6.5" OPEN HOLE 14566 feet to 15200' Intermediate Casing @ 15200 Production Casing Injection Interval or 0 or SX. SX. SX. Total Depth: CSG @ 14566' & TD Cemented with: 2895 & 1610 Hole Size: 17.5" & 12.25" Top of Cement: 10810' Cemented with: 1155 Cemented with: 415 Top of Cement: GL Top of Cement: GL Hole Size: 8.75" Hole Size: 24" 24" hole @ 1328' TOC (1155 sx) = GL (circ) TOC (2895 sx) = GL (circ)TOC (1610 sx) = GL (circ)TOC (415 sx) = 10270' (TOL)17.5" hole @ 5228' 20" 133# in 8.75" hole 10270' - 14566' 12.25" hole @ 10570' 13.375" 68# in 9.625" 40# in 7.625" 39# in 14566' - 15200' 6.5" open hole (not to scale) 15200 7" 29# IPC tbg @ 10170' & 5.5" 20# IPC tbg @ 14516'

(Perforated or Open Hole; indicate which)

14300' packer @

INJECTION WELL DATA SHEET

Tut	Tubing Size: 7" Lining Material: IPC
T_{Y}	Type of Packer: NICKEL PLATED
Рас	Packer Setting Depth: 14516'
Ott	Other Type of Tubing/Casing Seal (if applicable):
	Additional Data
-:	1. Is this a new well drilled for injection? XXX Yes No
	If no, for what purpose was the well originally drilled?
~	Name of the Injection Formation. SILURIAN
i %	Name of Field or Pool (if applicable): SWD; SILURIAN (98249)
4.	Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. NO
5.	Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:
	OVER: YATES (3425'), QUEEN (4115'), BONE SPRING (8549'), WOLFCAMP (10370'), STRAWN (11998') & MORROW (13275')
	UNDER: NONE

Received by OCD: 2/9/2024 10:46:19 AM

Received by OCD: 2/9/2024 10:46:19 AM

AVANT OPERATING, LLC ALPHA WOLF SWD 1 1579' FSL & 1578' FWL SEC. 36, T. 18 S., R. 32 E., LEA COUNTY, NM

PAGE 1

I. Goal is to drill a 15,200' deep saltwater disposal well. Proposed disposal interval will be 14,566' – 15,200' in the SWD; Silurian (98249). See Exhibit A for C-102 and map. The well is on NM State Land Office surface and minerals.

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PAGE 4

possible underground source of drinking water above the proposed disposal interval are the red beds above the Rustler anhydrite. According to State Engineer records (Exhibit G), closest water well is 1.31 miles southeast, but it could not be found during a July 19, 2023, field inspection. Deepest water well within 2-miles is 700'. A stock tank was found 1.57 miles northeast in NESW Section 30 and sampled. Capitan Reef is 1.7 miles south. Ogallala aquifer is 7 miles northeast. No underground source of drinking water is below the proposed disposal interval.

Estimated formation tops (TVD) are:

Red Beds = 0' Rustler = 1.303' Salt = 1,600'Salt (base) = 2.865' Yates = 3,425'Queen = 4,115'Delware = 5.3281st Bone Spring = 8,549' 3^{rd} Bone Spring = 10,092' Wolfcamp = 10,370' Strawn = 11.198'Mississippian Limestone = 13,891' Woodford Shale = 14,426' Silurian = 14,541top disposal interval = 14,566' bottom disposal interval = 15,200' TD = 15.200'Fusselman = 15.279'

According to State Engineer records (Exhibit G), the deepest water well within 2-miles is 700'. There will be >13,000' of vertical separation including multiple layers of shale, salt, and anhydrite between the bottom of the only likely underground water source (red beds) and the top of the Silurian.

IX. Well will be stimulated with acid as needed.



- X. GR, bulk density, neutron density, and sonic logs will be run.
- XI. According to State Engineer records (Exhibit G), 2 water wells are within a 2-mile radius, closest of which is 1.31 miles southeast. Neither were found during a field inspection. A stock tank (Exhibit H) not in the State records was found 1.57 miles northeast and sampled. Its location and analyses are in Exhibit H.
- XII. Avant Operating, LLC (Exhibit I) is not aware of any geologic or engineering data that may indicate the Silurian is in hydrologic connection with any underground sources of water. Deepest water well within a 2-mile radius is 700'. There are 26 active Silurian SWD wells in New Mexico.
- XIII. A legal ad (Exhibit J) was published on December 19, 2023. Notice (Exhibit K) and this application has been sent to the surface owner (NMSLO), all well operators regardless of depth, government lessors, lessees, and operating right holders within a mile.





0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 mile

DISTRICT J 1625 N. French Dr., Hobbs, N.M. 88240 Phone: (675) 393-6161 Fax: (675) 393-0720

DISTRICT II 811 S. First St., Artesia, N.M. 88210 Phone: (675) 748–1283 Fax: (675) 748–9720

DISTRICT III 1000 Rio Brazos Rd., Aztec, N.M. 87410 Phone: (505) 334-8178 Fax: (505) 334-8170 DISTRICT IV

<u>DISTRICT IV</u> 1220 S. St. Francis Dr., Santa Fe, N.M. 87505 Phone: (505) 478-3480 Fax: (505) 478-3482 State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, N.M. 87505 Form C-102
August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

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WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-	Pool Code 98249	*Pool Name SWD; SILURI	AN
Property Code	Property N		Well Number
*ogrid no. 330396	AVANT OPERAT		^e Elevation 3711

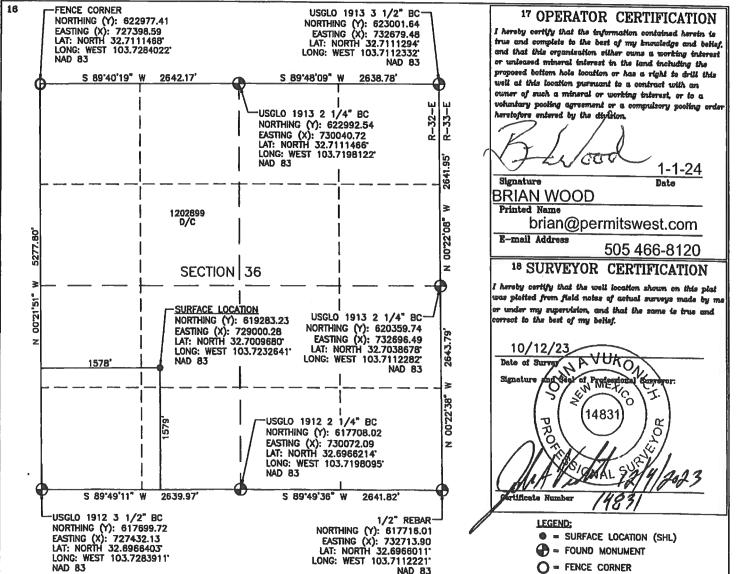
¹⁰ Surface Location

	UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
1	K	36	18 S	32 E		1579	SOUTH	1578	WEST	LEA	

11 Bottom Hole Location If Different From Surface

						2111010111 110			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹⁸ Dedicated Acre	•				19 Joint or Infill	¹⁴ Consolidation Code	¹⁸ Order 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



Received by OCD: 2/9/2024 10:46:19 AM

АРІ	OPERATOR	WELL	ТҮРЕ	UNIT- SECTION	TVD	ZONE @ TVD	FEET FROM ALPHA WOLF SWD 1
3002531349	Strata	Paloma State 003	P&A	N-36	3654	Yates	1477
3002531153	Avant	Paloma State 001	0	O-36	9075	Bone Spring	2417
3002531325	Cimarex CO	Bondurant Federal 005	P&A	B-1	3800	Seven Rivers	2611
3002540182	Cimarex CO	Bondurant Federal 012H	P&A	B-1	9878	Bone Spring	2634
3002531627	Walsh & Watts	Cochise 1 Federal 003	0	D-1	3700	Seven Rivers	2651
3002531440	Cimarex CO	Bondurant Federal 008	P&A	C-1	3700	Seven Rivers	2699
3002531668	Devon	Cochise 2 State 002	P&A	A-2	3680	Seven Rivers	2948
3002532431	Cimarex CO	Bondurant Federal 010	P&A	B-1	3650	Yates	3115
3002542793	Mewbourne	Crazy Wolf 1-2 B2CD Federal Com 001H	0	B-1	9533	Bone Spring	3116
3002530058	Yates	French 36 State 001	P&A	D-36	10250	Bone Spring	3161
3002551781	Avant	Alpha Wolf 36 Fed Com 301H	0	I-36	8600 plan	Bone Spring	3259
3002551782	Avant	Alpha Wolf 36 Fed Com 302H	0	P-36	8600 plan	Bone Spring	3262
3002551783	Avant	Alpha Wolf 36 Fed Com 303H	0	P-36	8600 plan	Bone Spring	3265
3002531604	Ralph C Bruton	Cochise 1 Federal 001	P&A	E-1	11370	Wolfcamp	3298
3002531626	Walsh & Watts	Cochise 1 Federal 002	0	E-1	3634	Yates	3312
3002531439	Cimarex CO	Bondurant Federal 009	P&A	F-1	3720	Seven Rivers	3316

API	OPERATOR	WELL	ТҮРЕ	UNIT- SECTION	₩D	ZONE @ TVD	FEET FROM ALPHA WOLF SWD 1
3002551787	Avant	Alpha Wolf 36 Fed Com 601H	0	I-36	10350 plan	Bone Spring	3409
3002551786	Avant	Alpha Wolf 36 Fed Com 602H	0	P-36	10350 plan	Bone Spring	3411
3002551789	Avant	Alpha Wolf 36 Fed Com 603H	0	P-36	10350 plan	Bone Spring	3414
3002524185	French	Nephew 001	Р&А	B-36	13600	Strawn	3472
3002551784	Avant	Alpha Wolf 36 Fed Com 501H	0	I-36	9550 plan	Bone Spring	3559
3002551785	Avant	Alpha Wolf 36 Fed Com 502H	0	P-36	9550 plan	Bone Spring	3561
3002551785	Avant	Alpha Wolf 36 Fed Com 503H	0	P-36	9550 plan	Bone Spring	3563
3002542695	Mewbourne	Lone Wolf 36 B2DM State Com 001 H	0	D-36	9580	Bone Spring	3662
3002531326	Cimarex CO	Bondurant Federal 007	P&A	G-1	3740	Yates	3722
3002531605	Walsh & Watts	Cochise 2 State 001	0	H-2	3700	Seven Rivers	3759
3002531218	Cimarex CO	Bondurant Federal 003	P&A	A-1	4559	Queen	4028
3002532432	Cimarex CO	Bondurant Federal 011	P&A	A-1	3700	Yates	4265
3002520398	Lovelady	Humble State 001	P&A	A-36	4377	Penrose	4283
3002527470	Hendon	New Mexico 35 Federal 002	P&A	B-35	3406	Queen	4539
3002531628	Devon	Cochise 1 Federal 004	P&A	L-1	3725	Seven Rivers	4604
3002522800	Union	New Mexico 35 Federal 001	P&A	B-35	13701	Barnett	4617
3002530972	Special	Bondurant Federal Com 002	P&A	H-1	9100	Bone Spring	4697
3002531670	Walsh & Watts	Cochise 2 State 004	0	G-2	3685	Seven Rivers	4773

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WELLS WITHIN 1 MILE RADIUS OF ALPHA WOLF SWD 1 - SORTED BY DISTANCE FROM ALPHA WOLF SWD 1

АРІ	OPERATOR	WELL	TYPE	UNIT- SECTION	TVD	ZONE @ TVD	FEET FROM ALPHA WOLF SWD 1
3002531192	Cimarex CO	Bondurant Federal 004	P&A	H-1	3800	Seven Rivers	4932
3002531608	Legacy	Nellis Federal 006	P&A	D-6	3724	Yates	5089
3002531671	Walsh & Watts	Cochise 2 State 005	0	C-2	3680	Seven Rivers	5210
3002532829	Basin	Hudson Federal 31 002	P&A	D-31	13606	Morrow	5241
3002531331	Burlington	Bondurant Federal 006	P&A	I-1	3800	Seven Rivers	5634

New Mexico State Land Office



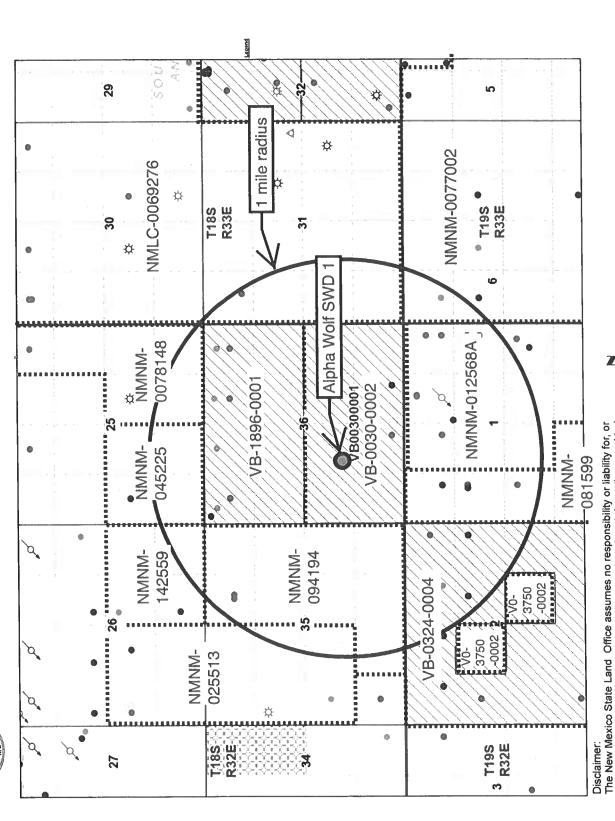
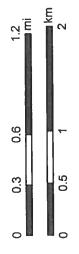


EXHIBIT D





Data pertaining to New Mexico State Trust Lands are provisional and subject to revision, and do not constitute an official record of title. Official records may be reviewed at the New Mexico State Land Office in Santa Fe, New Mexico.

in connection with the accuracy, reliability or use of the information provided herein with respect to State Land Office data or data from other sources.

ALPHA WOLF SWD 1 AREA OF REVIEW LEASES

Aliquot Parts in Area of Review	Lessor	Lease	Lessee(s) of Record	Well Operators (all shallower than Silurian)
SW4 25-18S-32E	BLM	NMNM-045225	F Petroleum	V-F
NWSE & S2SE4 25-18S-32E	BLM	NMNM-0078148	Cattle, Viersen Oil & Gas	Burgundy
S2SE4 26-18S-32E	BLM	NMNM-142559	Mewbourne	Mewbourne
E2 & SESW 35-18S-32E	BLM	NMNM-094194	Lewis Burleson, Katherine Crews, Susie Crews, Jack Huff, Courtney Johnson, O H B Inc.	Avant
E2NE4 & NESW 35-18S-32E	BLM	NMNM-025513	Lewis Burleson, Jack Huff, O H B Inc.	Avant
N2 36-18S-32E	NMSLO	VB-1896-0001	Mewbourne	Mewbourne
S2 36-18S-32E	NMSLO	VB-0030-0002	Avant	Avant
SWSW 30-18S-33E	BLM	NMLC-0069276	Hudson Trust 4, Frost Bank Trustee J T Hudson fbo J T Ard, S J Iverson Trust, Javelina Partners, L.D. Hudson, Lindy's Living Trust, M. W. Iverson Trust, Zorro Partners	Special Energy
W2NW4, SENW, & SW4 31-18S-33E	BLM	NMLC-0069276	ditto	Legacy Reserves
NE4, E2NW4, NESW, & N2SE4 1-19S- 32E	BLM	NMNM- 012568A	хто	Mewbourne, Permian Resources
W2NW4 & NWSW 1-19S-32E	BLM	NMNM-081599	Mammoth	Permian Resources, Walsh & Watts

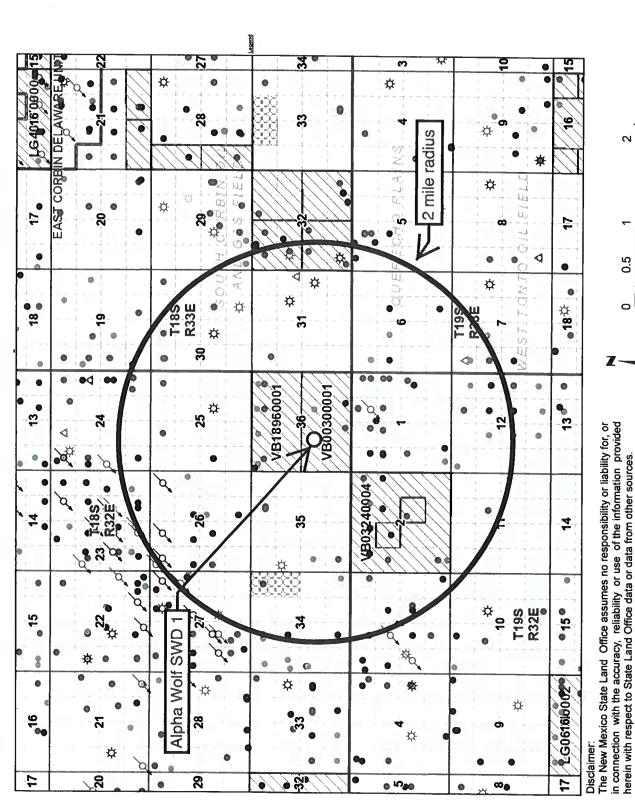
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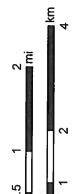
Received by OCD: 2/9/2024 10:46:19 AM

ALPHA WOLF SWD 1 AREA OF REVIEW LEASES

Aliquot Parts in Area of Review	Lessor	Lease	Lessee(s) of Record	Well Operators (all shallower than Silurian)
NE4, NENW, NESE 2-19S-32E	NMSLO	VB-0324-0004	Walsh & Watts	Mewbourne, Permian Resources, Walsh & Watts
SENW & NWSE 2-19S-32E	NMSLO	V0-3750-0002	GVC Ventures	GVC, Permian Resources
N2NE4 & SWNW 6-19S-33E	BLM	NMNM-0077002	ConocoPhillips & Occidental Permian	Legacy Reserves







مست **EXHIBIT** Received by OCD: 2/9/2024 10:46:19 AM



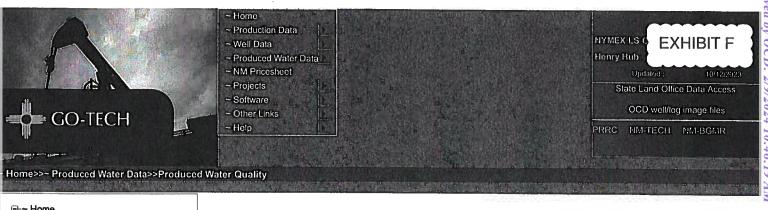
Data pertaining to New Mexico State Trust Lands are provisional and subject to revision, and do not constitute an official record of title. Official records may be reviewed at the New Mexico State Land Office in Santa Fe, New Mexico. A 14 1000 A

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PARAMETERS IN MG/L

Sulfate	1205	1350	200	484	440		2586	1427		3013	1916	245	237	410	440	230	302	618	484	440	
Chloride Bicarbonate	396	368	100	166	189		284	640		337	332	205	1008	305	293	463	463	242	166	189	
Chloride	232500	230100	189000	198400	189200		12520	14760		98373	78561	114000	112000	189272	197641	117773	110075	181043	198440	189228	
Magnesium										1360	807	189	869	712	783	425	517	2813	11519	11863	
Iron										81	36	9	6	0	2	0	2	4			
Calcium										5787	4623	2305	2547	0809	6286	1655	1918	15347	7563	7642	
Sodium										55439	44379	69124	71302	111804	116728	73631	68165	93741	98373	91218	
TDS	382423	373378	301760	316512	300541	195231	24662	26967	210927	149906	121381	187542	168552			194660	181992	253000			
T. 18 S., R. 32 E., Formation Section	Artesia	Bone Spring	Bone Spring	Bone Spring 1st Sand	Delaware	Queen	Queen														
T. 18 S., R. 32 E., Section	4	4	4	16	16	20	24	27	35	3	3	30	30	30	30	30	30	19	16	16	
API	3002500835	3002500836	3002500839	3002508072	3002508074	3002508097	3002500869	3002500872	3002520489	3002528400	3002532288	3002539365	3002539579	3002539365	3002539579	3002539365	3002539579	3002529887	3002508072	3002508074	

EXHIBIT F



E-~ ⊓ome
-∼ Production Data
Other Searches
⊕-Older Data
⊞-Production Summaries
ᅾ┈~ Well Data
Well Activity
First Production
与 − Produced Water Data
Produced Water Quality
Produced/Injected Water Volume
NM Pricesheet
Projects
-slo
- Software
C-115 Filing
L-Decline Curve Plotting
⇔- Other Links
NM O and G Links
Other States
Ġ~~ Help
-Land Unit Description
L-Acknowledgements

PRODUCED WATER QUALITY DATA SEARCH

Data in the New Mexico Produced Water Quality Database v.2 was updated in 2016 for the first time in many years. Data should be used for general informational purposes only. The uncertainties in data collection procedures, analysis quality and specific sample sources make it unsuitable as basis for any significant business or policy decisions. Data was gathered from many sources and about 5400 distinct wells in NM are represented. More data exists for most samples than is provided by the results screen; the downloadable spreadsheet contains more information including field, formation, sample source (where available), and fatitude/longitude.

Funding for the database was provided by the U.S. DOE, various New Mexico State agencies, NMT, and WRRI.

SEARCH PANEL

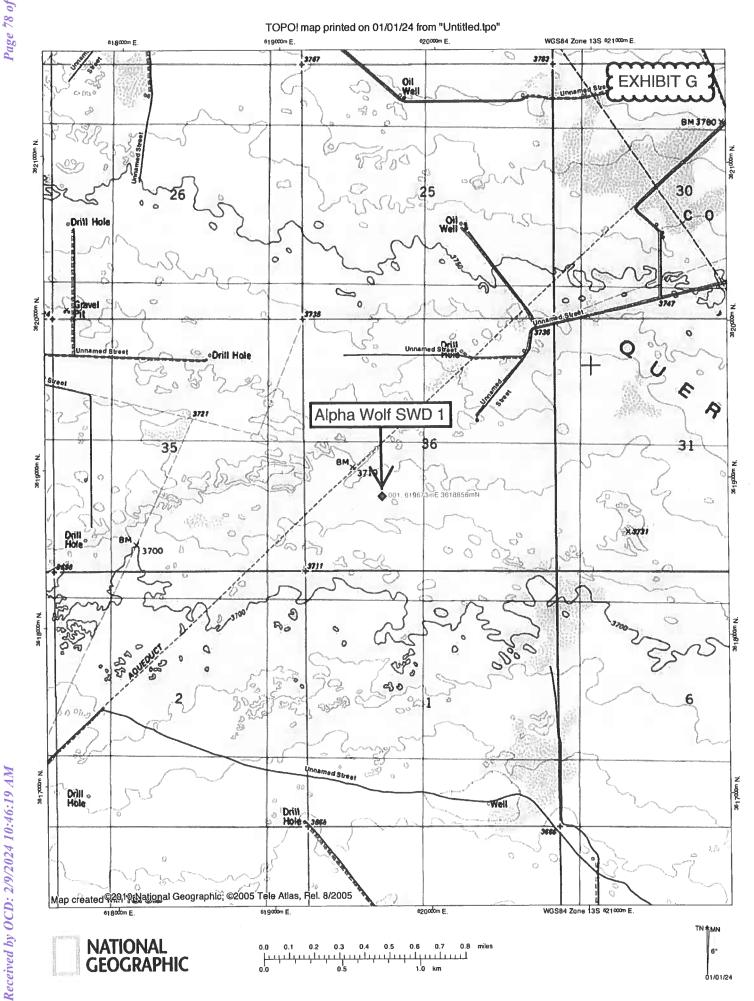
API NUMBER | 3002502431 Example: 3004511439 WELL NAME TOWNSHIP **RANGE** SECTION ٥ Submit Export to Excel

Too many or not enough results? Change your search criteria and press the Submit button to improve results. There may be more information for these samples. For all available data including lat/long location, press EXPORT to EXCEL to create a downloadable file.

RESULT PANEL

WELLNAME	API	TOWNSHIP	RANGE	SECTION	TDS(mg/L)	Chlorides(mg/L)	Sample Year	Fleid	Formation
LEA UNIT #008	3002502431	208	34E	12	44800	25320		LEA	PENNSYLVANIAN
LEA UNIT #008	3002502431	208	34E	12	35094	19020		LEA	PENNSYLVANIAN
LEA UNIT #008	3002502431	20\$	34E	12	33414	18570		LEA	DEVONIAN
LEA UNIT #008	3002502431	208	34E	12	42216	24000		LEA	PENNSYLVANIAN
LEA UNIT #008	3002502431	20\$	34E	12	147229	89640		LEA	BONE SPRING

PETROLEUM RECOVERY RESEARCH CENTER, SOCORRO, NM-87801





New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced,

O=orphaned,

C=the file is closed)

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD

POD Number Code CP 00812 POD1

Sub- $\mathbf{0} \mathbf{0} \mathbf{0}$ LE

basin County 64 16 4 Sec Tws Rng 4 4 01 32E

X 620623 3616973* 🍇 DistanceDepthWellDepthWater Column 200

2109

CP 00677

CP LE

26 18S 32E

617750 3621373* 🟭 3167

700

Average Depth to Water:

Minimum Depth:

Maximum Depth:

Record Count: 2

UTMNAD83 Radius Search (in meters):

Easting (X): 619673

Northing (Y): 3618856

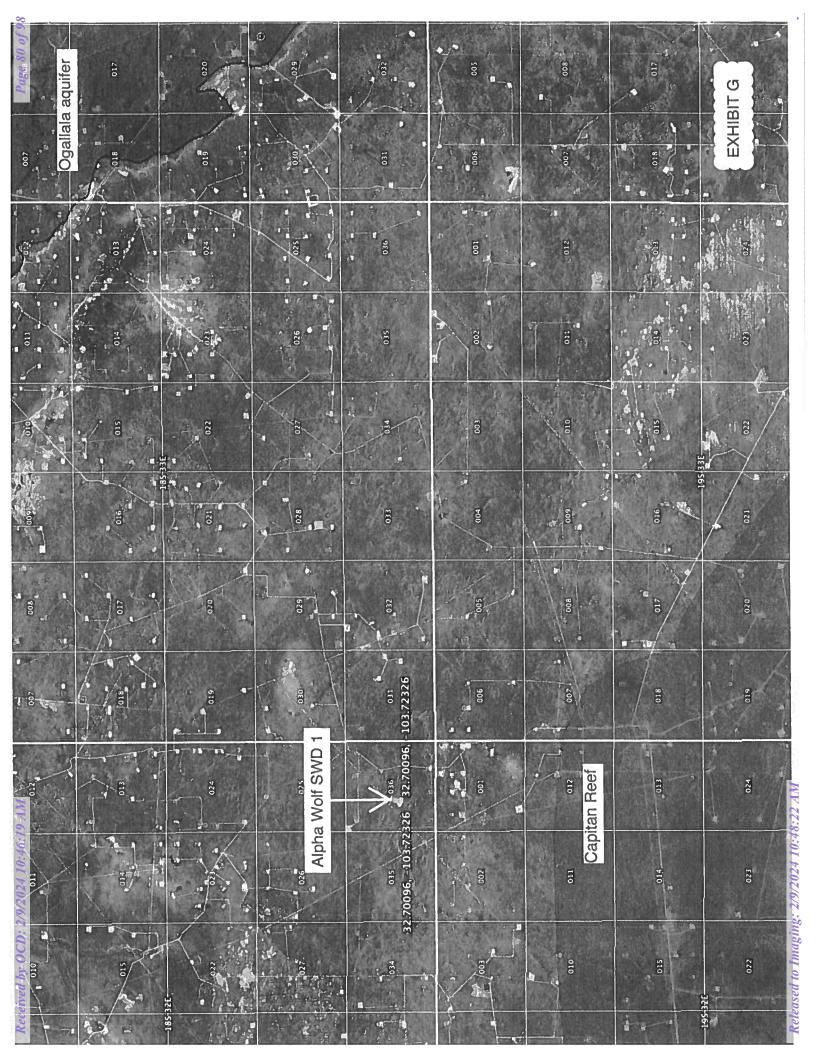
Radius: 3220

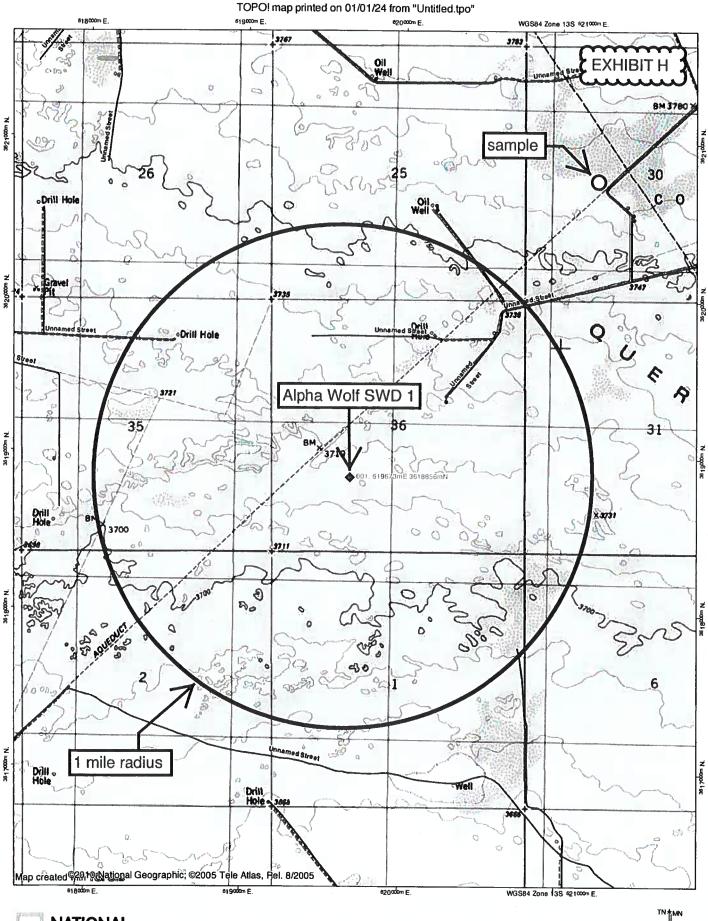
*UTM location was derived from PLSS - see Help

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.

1/7/24 2:41 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER







0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 mil





Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/16/2023

CLIENT: Permits West

Client Sample ID: Cut

Project: Cut Alpha Collection Date: 7/19/2023 11:30:00 AM

Lab ID: 2307931-001 Received Date: 7/20/2023 10:10:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 1664B					Analys	t: ejn
N-Hexane Extractable Material	ND	9.81	mg/L	1	8/7/2023 3:14:00 PM	76694
EPA METHOD 300.0: ANIONS					Analys	t: SNS
Chloride	54	10	mg/L	20	7/20/2023 3:56:47 PM	R98395
SM2540C MOD: TOTAL DISSOLVED SOLIDS					Analys	it: JAG
Total Dissolved Solids	343	50.0	mg/L	1	7/24/2023 3:35:00 PM	76375

Matrix: AQUEOUS

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

Qualifiers:

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

Received by OCD: 2/9/2024 10:46:19 AM

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/16/2023

CLIENT: Permits West

Project: Cut Alpha

Client Sample ID: Alpha

Collection Date: 7/19/2023 1:05:00 PM

Lab ID: 2307931-002 Matrix: AQUEOUS Received Date: 7/20/2023 10:10:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 1664B					Analys	t: ejn
N-Hexane Extractable Material	ND	9.77	mg/L	1	8/7/2023 3:14:00 PM	76694
EPA METHOD 300.0: ANIONS					Analys	t: SNS
Chloride	50	10	mg/L	20	7/20/2023 4:21:28 PM	R98395
SM2540C MOD: TOTAL DISSOLVED SOLIDS					Analys	t: JAG
Total Dissolved Solids	341	50.0	mg/L	1	7/24/2023 3:35:00 PM	76375

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 Quantitative 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
- RI. Reporting Limit

Page 2 of 4

©C SUMMARY REPORT



Hall Environmental Analysis Laboratory, Inc.

16-Aug-23

Client:

Permits West

Project:

Cut Alpha

Sample ID: MB-76694

SampType: MBLK

TestCode: EPA Method 1664B

Client ID: **PBW**

Batch ID: 76694

RunNo: 98776

Prep Date: 8/7/2023 Analysis Date: 8/7/2023

SeqNo: 3598139

LowLimit

Units: mg/L HighLimit

RPDLimit %RPD

RPDLimit

RPDLimit

Qual

Analyte N-Hexane Extractable Material Result **PQL**

Result

37.2

10.0 ND

TestCode: EPA Method 1664B

Sample ID: LCS-76694 Client ID: **LCSW**

SampType: LCS Batch ID: 76694

RunNo: 98776

SPK value SPK Ref Val %REC

SeqNo: 3598140

78

Units: mg/L

114

Analyte

Prep Date:

8/7/2023

Analysis Date: 8/7/2023 POL

10.0

10.0

SPK value

40.00

SPK Ref Val %REC 0

93.0

LowLimit HighLimit %RPD

Qual

N-Hexane Extractable Material

LCSS02

Sample ID: LCSD-76694

SampType: LCSD Batch ID: 76694 TestCode: EPA Method 1664B

RunNo: 98776

SeqNo: 3598141

Units: mg/L

Qual

Prep Date: Analyte

Client ID:

8/7/2023

N-Hexane Extractable Material

Analysis Date: 8/7/2023

39.0

SPK value SPK Ref Val **PQL**

40.00

%REC 97.5

LowLimit

78

HighLimit 114 %RPD 4.72

20

Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded Not Detected at the Reporting Limit

Practical Quantitative Limit

% Recovery outside of standard limits. If undiluted results may be estimated

Analyte detected in the associated Method Blank В

Above Quantitation Range/Estimated Value E

J Analyte detected below quantitation limits

Sample pH Not In Range Reporting Limit

Page 3 of 4

QC SUMMARY REPORT

WO#: 2307931

Hall Environmental Analysis Laboratory, Inc.

16-Aug-23

Client:

Permits West

Project:

Cut Alpha

Sample ID: MB

SampType: MBLK

TestCode: EPA Method 300.0: Anions

LowLimit

Client ID:

PBW Batch ID: R98395 RunNo: 98395

Prep Date:

Analysis Date: 7/20/2023

Analyte

SPK value SPK Ref Val **PQL**

SeqNo: 3581614 %REC

Units: mg/L HighLimit

RPDLimit Qual

Chloride

0.50 ND

Sample ID: LCS

SampType: LCS

TestCode: EPA Method 300.0: Anions

Client ID: **LCSW** Batch ID: R98395

RunNo: 98395

Prep Date:

Analysis Date: 7/20/2023

SeqNo: 3581615

Units: mg/L

Analyte

Result **PQL** SPK value SPK Ref Val

0.50

5.000

%REC

HighLimit LowLimit

90

%RPD **RPDLimit**

Qual

Chloride

Sample ID: MB

SampType: MBLK

4.7

TestCode: EPA Method 300.0: Anions

93.5

Client ID:

PBW

Batch ID: R98395 Analysis Date: 7/20/2023

RunNo: 98395

SeqNo: 3581660

Units: mg/L

%RPD

Analyte

Prep Date:

Result PQL SPK value SPK Ref Val %REC

LowLimit

HighLimit

%RPD **RPDLimit**

Qual

Qual

Chloride

0.50 ND

0

TestCode: EPA Method 300.0: Anions

LowLimit

Sample ID: LCS Client ID: **LCSW** SampType: LCS Batch ID: R98395

Result

4.5

RunNo: 98395

Prep Date:

PQL

Analysis Date: 7/20/2023

SeqNo: 3581661

Units: mg/L

Analyte

%REC

HighLimit

%RPD **RPDLimit**

Chloride

0.50 5.000

SPK value SPK Ref Val

90.3

110

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

% Recovery outside of standard limits. If undiluted results may be estimated

Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

1 Analyte detected below quantitation limits

Sample pH Not In Range RL. Reporting Limit

Page 4 of 4





NM Oil Conservation Division 1220 S. St. Francis Dr. Santa Fe, NM 87505

> Re: Geology Statement Avant Operating, LLC Alpha Wolf SWD #1 Section 36, T. 18S, R. 32E Lea County, New Mexico

To whom it may concern:

Publicly available geologic and engineering data related to the proposed well have been thoroughly reviewed, and no evidence for open faults or any other hydrologic connection between the proposed Silurian injection zone and any underground sources of drinking water has been found. Please see the attached seismic risk assessment for additional information.

Sincerely,

Cory Walk Geologist Released to Imaging: 2/9/2024 10:48:22 AM



Seismic Risk Assessment

Avant Operating, LLC

Alpha Wolf SWD No. 1

Section 36, Township 18 South, Range 32 East

Lea County, New Mexico

Cory Walk, M.S.

Coay Walk

Geologist

Permits West Inc.

December 21, 2023



GENERAL INFORMATION

Alpha Wolf SWD #1 is located in the SW 1/4, section 36, T.18S, R.32E, about 11 miles south of Maljamar, NM in the Permian Basin. Avant Operating, LLC proposes to dispose produced water within the Silurian Formation through an open hole from 14,566'-15,200' below ground surface. This report assesses any potential concerns relating to induced seismicity along deep rooted Precambrian faults or the connection between the injection zone and known underground potable water sources.

SEISMIC RISK ASSESSMENT

Historical Seismicity

Searching the USGS earthquake catalog resulted in no (0) earthquakes above a magnitude 2.5 within 6 miles (9.7 km) of the proposed deep disposal site since 1970 (Fig. 1). The nearest earthquake occurred on June 30, 2020 about 15.5 miles (25.0 km) northeast of the proposed SWD site and had a magnitude of 2.7.

Basement Faults and Subsurface Conditions

A structure contour map (Fig. 1) of the Precambrian basement shows the Alpha Wolf SWD #1 is approximately 10.9 miles (17.5 km) from the nearest basement-rooted fault inferred by Horne et al (2021). Information about known nearby faults based on GIS data from Horne et al. (2021) is listed in Table 1.

Snee and Zoback (2018) state, "In the western part of Eddy County, New Mexico, S_{Hmax} is ~north-south (consistent with the state of stress in the Rio Grande Rift; Zoback and Zoback, 1980) but rotates to ~east-northeast-west-southwest in southern Lea County, New Mexico and the northernmost parts of Culberson and Reeves counties, Texas." Around the Alpha Wolf SWD #1 site, Snee and Zoback indicate a S_{Hmax} direction of N060°E and an A_{ϕ} of 0.65, indicating an extensional (normal) stress regime.

Fault Slip Potential (FSP) Modeling

Induced seismicity is a growing concern of deep SWD wells. Software developed by the Stanford Center for Induced and Triggered Seismicity allows for the probabilistic screening of deeply penetrating faults near the proposed injection zone (Walsh et al., 2016; Walsh et al., 2017). This software uses parameters such as stress orientations, fault strike/dip, injection rates, fault friction coefficients, etc. to estimate the potential for fault slip. Using the best available data as input parameters (Table 2) including the subject well injecting at the proposed maximum of 30,000 bbls/day and all other existing SWDs within a 6 mile radius injecting at their individual historical peak annual volume and the proposed SWDs injecting at their proposed maximum rates (3 total SWD wells), the Fault Slip Potential (FSP) models suggest a one (0.01) percent chance of slip on a nearby fault, inferred by Horne et al. (2021), through the year 2044 (Fig. 2; Table 1). This model also suggests a pore pressure increase of 8.2 psi on the nearest publicly known fault (Fault 54; Fig. 3; Table 1) by the year 2044. Geomechanical modeling shows that the primary fault of concern (fault 39) would need a pressure increase of 1833 psi to reach a 100% probability of slip on the



fault. A 50% probability requires an increase of 412 psi which is 60x greater than the modeled increase of 6.7 psi (Fig. 3).

GROUNDWATER SOURCES

Quaternary Alluvium acts as the principal aquifer used for potable ground water near the Alpha Wolf SWD #1 location (Hendrickson and Jones, 1952). Nicholson and Clebsch (1961) state, "Potable ground water is not available below the Permian and Triassic unconformity but, because this boundary is not easily defined, the top of the Rustler anhydrite formation is regarded as the effective lower limit of 'potable' ground water." Around the Alpha Wolf SWD #1, the top of the Rustler Formation lies at an estimated depth of 1,360' bgs.

VERTICAL MIGRATION OF FLUIDS

Permeability barriers exist above (Woodford shale; 110 ft thick) and below (Simpson Group; 325 ft thick) the targeted Silurian injection zone (Plate 2, Comer et al., 1991; Fig. 8, Frenzel et al., 1988). Precambrian structure contours (Ruppel, 2009) show the basement to be at a depth of approximately 16,220' in this area. Therefore, the injection zone lies approximately 1,000' above the Precambrian basement and approximately 13,200' below the previously stated lower limit of potable water at the top of the Rustler formation.

CONCLUDING STATEMENTS

After examination of publicly available geologic and engineering data, there is no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

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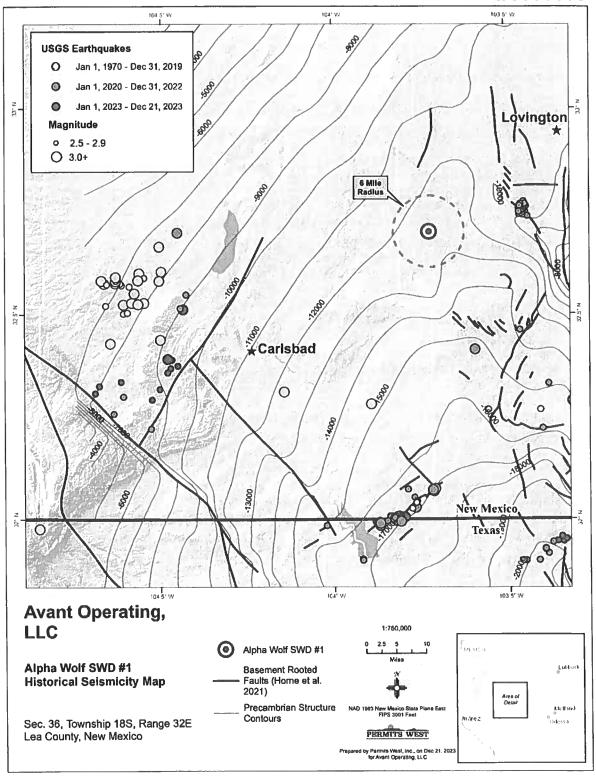


Figure 1. Structural contour map of the Precambrian basement in feet below sea level. Blue lines represent the locations of Precambrian basement-rooted faults (Horne et al., 2021). Alpha Wolf SWD #1 well lies ~10.9 miles south of the closest deeply penetrating fault and 15.5 miles southwest from the closest historic earthquake.



Table 1: Nearby Basement Fault Model Results

Fault Number	Distance to proposed SWD (mi)	Strike (°)	Dip (°)	FSP (2044)	Δ Pore Pressure after 20 years (psi)	Δ Pore Pressure needed for 100% FSP (psi)	Δ Pore Pressure needed for 50% FSP (psi)
Fault 54	10.9	204	60	0.00	8.2	3025	842
Fault 39	14.2	79	67	0.01	6.7	1833	412

Table 2: Fault Slip Potential model input parameters

Table 2. Pat	are output	Actival model input parameters
Faults	Value	Notes
Friction Coefficient	0.58	Ikari et al. (2011)
Dip Angle (deg)	60-75	Home et al. (2021)
Stress		
Vertical stress gradient (psi/ft)	1.1	Hurd and Zoback (2012)
Max Horizontal Stress Direction (deg)	60	Snee and Zoback (2018)
Depth for calculations (ft)	15200	Proposed injection zone
Initial Reservoir Pressure Gradient (psi/ft)	0.7	calculated from mud wt (ppg) used in drilling at these depths
A Phi Parameter	0.65	Snee and Zoback (2018)
Reference Friction Coefficient	0.58	Ikari et al. (2011)
Hydrology		
Aquifer thickness (ft)	630	Proposed injection zone
Porosity (%)	6	
Permeability (mD)	150	
Injection Rate (bbl/day)	30000	Maximum proposed injection rate

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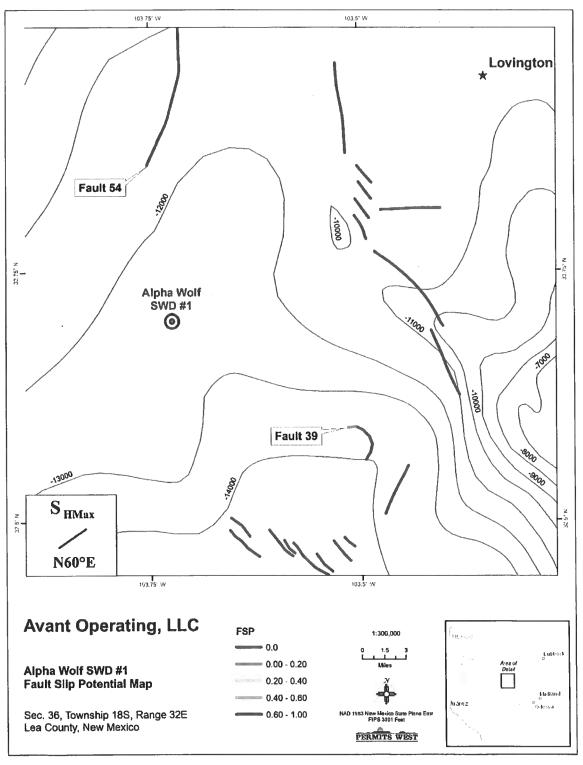


Figure 2. Precambrian fault map of the Alpha Wolf SWD #1 area as mapped by Horne et al. (2021). Faults are colored based on probability of fault slip as modeled using Fault Slip Potential software (Walsh and Zoback, 2016). Labeled values represent the calculated fault slip potential using the parameters indicated in Table 2. Contours show the top of the Precambrian basement in feet below sea level.



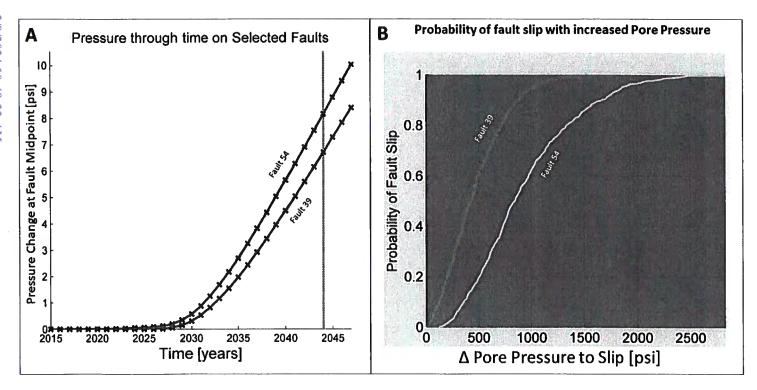


Figure 3. A) Plot showing the modeled change of pore pressure on nearby faults through time as a response to the proposed SWD well. B) Plot showing the required pore pressure increase needed to produce specific probabilities of fault slip on nearby faults.



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References Cited

- Comer, J. B., 1991, Stratigraphic Analysis of the Upper Devonian Woodford Formation, Permian Basin, West Texas and Southeastern New Mexico: The University of Texas at Austin, Bureau of Economic Geology, Report of Investigations No. 201, 63 p.
- Frenzel, H. N., Bloomer, R. R., Cline, R. B., Cys, J. M., Galley, J. E., Gibson, W. R., Hills, J. M., King, W. E., Seager, W. R., Kottlowski, F. E., Thompson, S., III, Luff, G. C., Pearson, B. T., and Van Siclen, D. C., 1988, The Permian Basin region, in Sloss, L. L., ed., Sedimentary cover—North American Craton, U.S.: Boulder, Colorado, Geological Society of America, The Geology of North America, v. D-2, p. 261–306.
- Hendrickson, G. E., and Jones, R. S., 1952, Geology and Ground-Water Resources of Eddy County, New Mexico: New Mexico Bureau of Mines and Mineral Resources, Ground-Water Report 3, 179 pp., 6 plates.
- Horne, E. A., Hennings, P. H., and Zahm, C. K., 2021, Basement-rooted faults of the Delaware Basin and Central Basin Platform, Permian Basin, West Texas and southeastern New Mexico, in Callahan, O. A., and Eichhubl, P., eds., The geologic basement of Texas: a volume in honor of Peter T. Flawn: The University of Texas, Bureau of Economic Geology Report of Investigations No. 286, doi:10.23867/RI0286C6.
- Hurd, O; Zoback, MD, 2012, Intraplate earthquakes, regional stress and fault mechanics in the Central and Eastern U.S. and Southeastern Canada. Tectonophysics, 581:182-92.
- Ikari, M. J.; C. Marone, and D. M. Saffer, 2011, On the relation between fault strength and frictional stability, Geology, 39, 83–86.
- Nicholson, A., Jr., and Clebsch, A., Jr., 1961, Geology and ground-water conditions in southern Lea County, New Mexico: New Mexico Bureau of Mines and Mineral Resources, Ground-Water Report 6, 123 pp., 2 plates.
- Ruppel, S.C., 2009, Integrated synthesis of the Permian basin: data and models for recovering existing and undiscovered oil resources from the largest oil-bearing basin: U.S. Oil & Natural Gas Technology, Bureau Economic Geology, The University of Texas at Austin, p. 1-959.
- Snee, J.-E.L., Zoback, M.D., 2018, State of stress in the Permian Basin, Texas and New Mexico: Implications for induced seismicity: Leading Edge, v. 37, p. 127–134.
- Walsh, F. R., and Zoback, M. D., (2016) Probabilistic assessment of potential fault slip related to injection induced earthquakes: Application to north central Oklahoma, USA, Geology, Data Repository item 2016334, doi:10.1130/G38275.1
- Walsh, F. R., Zoback, M. D., Pais, D., Weingarten, M., and Tyrrell, T. (2017) FSP 1.0: A Program for Probabilistic Estimation of Fault Slip Potential Resulting From Fluid Injection, User Guide from the Stanford Center for Induced and Triggered Seismicity, available at SCITS.Stanford.edu/software
- Zoback, M. L., and M. D. Zoback, 1980, State of stress in the conterminous United States: Journal of Geophysical Research, 85, no. B11, 6113–6156, https://doi.org/10.1029/JB085iB11p06113.

Affidavit of Publication

STATE OF NEW MEXICO COUNTY OF LEA

News-Sun, a newspaper published at 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 December 19, 2023 and ending with the issue dated December 19, 2023.

Publisher

Sworn and subscribed to before me this 19th day of December 2023.

Business Manager

My commission expires

January 29, 2027

(Seal)

NOTARY PUBLIC
NOTARY PUBLIC
GUSSIE RUTH BLACK
COMMISSION # 1087526
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.

EXHIBIT J

LEGAL NOTICE December 19, 2023

Avant Operating, LLC is applying to drill the Alpha Wolf SWD 1 as a saltwater disposal well. The well is staked at 1579' FSL & 1578' FWL, Sec. 36, T. 18 S., R. 32 E., Lea County, NM. This is 11 miles south-southeast of Maljamar, NM. Water will be injected at a maximum pressure of 2913 psi into the Silurian formation from 14566' to 15200'. Maximum disposal rate will be 30,000 bwpd. Interested parties must fille objections, protests, or requests for hearing with the NM Oil Conservation Division, 1220 South Saint Francis Dr., Santa Fe, NM 87505 or OCD.Engineer@emnrd.nm.gov within 15 days. NMOCD Engineering Bureau phone is 505 476-3441. Additional information can be obtained by contacting: Brian Wood, Permits West, Inc., 37 Verano Loop, Santa Fe, NM 87508. Phone number is (505) 466-8120.

02108485

00285873

BRIAN WOOD PERMITS WEST 37 VERANO LOOP SANTA FE, NM 87508







January 9, 2024

NMSLO P. O. Box 1148 Santa Fe NM 87504

TYPICAL NOTICE

Avant Operating, LLC is applying (see attached application) to drill the Alpha Wolf SWD 1 as a saltwater disposal well. As required by NM Oil Conservation Division (NMOCD) rules, I am notifying you of the following proposed saltwater disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Well Name: Alpha Wolf SWD 1 (NMSLO lease)

TD = 15.200'

Proposed Disposal Zones: Silurian (14,566' - 15,200')

Location: 1579' FSL & 1578' FWL Sec. 36, T. 18 S., R. 32 E., Lea County, NM

Approximate Location: 11 air miles SSE of Maljamar, NM

Applicant Name: Avant Operating, LLC

(720) 854-9020

Applicant's Address: 1515 Wynkoop St., Suite 700, Denver CO 80202

<u>Submittal Information</u>: Application for a saltwater disposal well will be filed with the NMOCD. If you have an objection, or wish to request a hearing, then it must be filed with the NMOCD within 15 days of receipt of this letter. NMOCD address is 1220 South St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3441. Their e-mail address is: ocd.engineer@emnrd.nm.gov.

Please call me if you have any questions.

Sincerely,

Brian Wood

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

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

Action 313069

CONDITIONS

Operator:	OGRID:
Avant Operating, LLC	330396
1 ' '	Action Number:
Denver, CO 80202	313069
	Action Type:
	[IM-SD] Admin Order Support Doc (ENG) (IM-AAO)

CONDITIONS

Created By	Condition	Condition Date
mgebremichael	None	2/9/2024