

Lynda Y Muncy Secretary Direct (505) 989 7365 Email lynda muncy@gknet.com

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May 9 2017

STATE OF NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

Case 15723

Re Application

To Whom It May Concern

Enclosed please find an original and 3 copies of the application of OWL SWD Operating, LLC for authorization to inject for filing with the Oil and Conservation Division This office respectfully requests that an endorsed copy be returned via courier

Very truly yours,

GALLAGHAR & KENNEDY, P A

By

Lynda Y Muncy

LYM lym Original Application & 3 copies of Application

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION OF OWL SWD OPERATING, LLC FOR AUTHORIZATION TO INJECT, LEA COUNTY, NEW MEXICO

CASE NO [5723

APPLICATION

OWL SWD Operating, LLC ("OWL"), by and through its undersigned attorneys, applies

pursuant to 19 15 26 8 NMAC for an order authorizing the injection of water for disposal into the

Yates-Seven Rivers formation in Lea County, New Mexico In support of its Application, OWL

states

1 OWL is the operator of the following well

Bobcat SWD No 1 740 FSL & 705'FEL (Unit P) Section 25 T-25S, R 36E, NMPM Lea County, New Mexico

2 The Bobcat SWD No 1 well is a proposed new well to be drilled to a total depth of approximately 3,060 feet Applicant proposes to complete the well for injection of water into the Yates Seven Rivers formation by open hole from 2,915 to 3,060 feet

3 Injection operations through the well will be conducted at an anticipated average daily injection pressure of 550 PSI (surface pressure) and maximum injection pressure of 580 PSI (surface pressure) OWL proposes injection of water at average daily rates of approximately 25,000 bbls and a maximum daily rate of approximately 30,000 bbls The source of the injected fluids will be formation water from the Delaware, Bone Spring, Devonian, and Yates Seven Rivers formations 4 OWL's proposed injection operation can be conducted in a safe and responsible manner without causing waste, impairing correlative rights or endangering fresh water, public health or the environment

5 OWL submitted a Form C-108 for authority to inject which has been filed with the Division The Division advised OWL per letter dated April 20, 2017 that this application will have to be considered by hearing Included with this application as "Exhibit A" is the completed Form C-108 (excluding copies of files on nearby wells attached to the form)

6 OWL currently injects into the Maralo Sholes B Well No 2 under authority of Administrative Order SWD-1127 OWL intends the Bobcat SWD No 1 well to replace the Maralo Sholes B Well No 2

WHEREFORE, OWL requests that the Division set this matter for hearing before a duly appointed examiner of the Oil Conservation Division on June 8, 2017, and that after notice and hearing as required by law, enter its order approving the use of the Bobcat SWD No 1 for the injection of water into the Yates Seven Rivers formation at the intervals and the pressures, volumes and rates indicated, and making such other and further provisions as the Division determines to be appropriate in accordance with law

Respectfully submitted,

HER & KENNEDY, PA GAVLA Bv

Dalva L Moellenberg Anthony J Trujillo Rikki-Lee Chavez 1239 Paseo de Peralta Santa Fe, New Mexico 87501 (505) 982 9523 (Telephone) (505) 983-8160 (Fax)

ATTORNEYS FOR OWL SWD Operating, LLC

Application of OWL SWD Operating, LLC for Authorization to Inject, Lea County, New Mexico Applicant seeks an order authorizing the injection of water for disposal into the Yates-Seven Rivers formation in Lea County, New Mexico in the following well

Bobcat SWD No 1 740' FSL & 705 FEL (Unit P) Section 25 T-25S, R-36E, NMPM Lea County, New Mexico

Applicant proposes to drill the well at the above location and use it for injection of produced water at depths of 2,915 to 3,060 feet subsurface The well is located approximately one mile west of Jal, New Mexico

EXHIBIT "A"

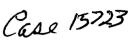
DATE IN	SUSPENSE	ENGINEER	LOGGED IN	TYPE	APP NO
			• • • • • • • • • • • • • • • • • • • •		

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -1220 South St Francis Drive, Santa Fe, NM 87505





ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms

	[DHC Dowr [PC Po	idard Location] [NSP Non-Standard Proration Unit] [SD-Simultaneous Dedication] hole Commingling] [CTB-Lease Commingling] [PLC Pool/Lease Commingling] ol Commingling] [OLS Off-Lease Storage] [OLM-Off Lease Measurement] [WFX Waterflood Expansion] [PMX Pressure Maintenance Expansion] [SWD-Salt Water Disposal] [IPI Injection Pressure Increase] ified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]
[1]	TYPE OF AP [A]	PLICATION Check Those Which Apply for [A] Location Spacing Unit Simultaneous Dedication NSL NSP SD
	Check [B]	One Only for [B] or [C] Commingling Storage Measurement DHC CTB PLC PC OLS OLM
	[C]	Injection - Disposal Pressure Increase - Enhanced Oil Recovery WFX PMX SWD IPI EOR PPR
	[D]	Other Specify
[2]	NOTIFICATI [A]	ON REQUIRED TO Check Those Which Apply or Does Not Apply Working Royalty or Overriding Royalty Interest Owners
	[B]	Offset Operators Leaseholders or Surface Owner
	[C]	Application is One Which Requires Published Legal Notice
	[D]	Notification and/or Concurrent Approval by BLM or SLO US Bureau of Land Management Commissioner of Public Lands State Land Office
	[E]	For all of the above Proof of Notification or Publication is Attached and/or,
	ſFÌ	Waivers are Attached

SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE [3] **OF APPLICATION INDICATED ABOVE**

[4] CERTIFICATION I hereby certify that the information submitted with this application for administrative approval is accurate and complete to the best of my knowledge I also understand that no action will be taken on this application until the required information and notifications are submitted to the Division

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

Stephen L Pattee, PG

Engineer – Agent for OWL	04-28-2017

Date

Print or Type Name

Signature

steve@longuist.com e mail Address

Title

District I 1625 N French D H bb NM 88240	State of New Mexico	Form C 101 Revised J by 18 2013
Phone (575) 393-6161 Fax (575) 393 0720 <u>Di.trict 11</u>	Energy Minerals and Natural Resources	Revised J by 18 2013
811 S F rst St Artesna, NM 88210 Phone (575) 748 1283 Fax (575) 748 9720 District III	Oil Conservation Division	AMENDED REPORT
1000 Rio Brazos Road Aztec NM 87410 Pho e (505) 334 6178 Fax (505) 334-6170	1220 South St Francis Dr	
District IV 1220 S St Fra c Dr Santa Fc NM 87505 Phon (505) 476 3460 Fax (505) 476 3462	Santa Fe, NM 87505	

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address							Í		² OGRID Numbe 308339	er
OWL SWD Operating, LLC 8214 Westchester Drive, Suite 850 Dallas TX 75255									³ API Number 30-025	
4 Prop	erty Code			· · · · · · · · · · · · · · · · ·	Property Name Bobcat SWD		L		° We	il No I
				⁷ Su	Irface Location	1				
UL Lot	Section	Township	Range	Lot Idn	Feet from	N/S Lune	F	et From	E/W Line	County
P	25	25\$						705	East	Lea
				* Propose	ed Bottom Hol	e Location				
UL Lot	Section	Township	Range	Lot idn	Feet from	N/S Line	F	eet From	E/W Line	County
	<u> </u>	<u> </u>		• Pc	ol Information	1			I	
				Pool	Name					Pool Code
	SWD Yates Seven Rivers							96141		
				Addition	al Well Inforn	nation				
ⁿ Wo	¹¹ Work Type ¹² Well Type ¹³ Cable/Rotary ¹⁴ Lease Type					¹³ Grou	ind Level Elevation			
	N SWD R					Private			3,307'	
	¹⁶ Multiple ¹⁷ Proposed Depth ¹⁸ Formation					¹⁹ Cont	ractor		¹⁰ Spud Date	
	<u>N</u>		3,060'	Yat	tes - Seven Riv	ers	TB			ASAP
Depth to Gro	und water		Dista	ance from nearest	fresh water well			Distance	e to nearest surface	water
448 2 328 +1 mi										

We will be using a closed loop system in lieu of lined pits

²¹ Proposed Casing and Cement Program

Туре	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	12 25"	9 625"	36 0 lb/ft	1,325'	485 sks	Surface
Production	8 75"	7 00"	26 0 lb/ft	2,915'	575 sks	Surface
Tubing	N/A	4 50"	9 50 lb/ft	2,815'	N/A	N/A

Casing/Cement Program Additional Comments

See attached schematic

²² Proposed Blowout Prevention Program

Туре	Working Pressure	Test Pressure	Manufacturer
Double Hydraulic/ Blinds, Pipe	2,000 psi	2,000 psi	Schaffer/Cameron

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief	OIL CONSERVATION DIVISION		
I further certify that I have complied with 19 15 14 9 (A) NMAC and/or 19 15 14 9 (B) NMAC I if applicable Signature	Approved By		
Printed name Stephen L Pattee P G	Tule 🦸		
Title Consulting Engineer Agent for OWL SWD Operating LLC	Approved Date	Expiration Date	
E mail Address steve@longuist com			
Date 04/28/2017 Phone 512 600 1774	Conditions of Approval Attached		

DISTRICT I 423 \ Princh Dr. Hobbs, N 1 88240 Photer (575) 3394461 Fact. (5) 539-720 DISTRICT II 81 S First Bi, Arteila, 821 Photer (5) 248-1828 F (5) 48-7720 DISTRICT III 000 Rob Braces Rd, Atter, NH 87 Theres (502) 3344417 at. (205) 3344 70 DISTRICT IV 230 Si, Franch D. Santa F | 19520 Photer (550) 276-3440 at. (205) 716-3460

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

Form C 102 Revised August 1 2011

Submit one copy to appropriate District Office CAMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

AI	PIN mber			Pool Code		Pool Nam					
Prope ty C	ode	I	. <u></u>	Well Numbe							
					BOBCAT SW	/D		00	1		
OGRID N	o		<u></u>	· · · · · · · · · · · · · · · · · · ·	Op rator Name			Elevatio	20		
			OWL SWD Operating LLC						7		
				S	Surface Locat	ion					
UL or lot o.	Section	Town h p	Rang	Lot id	Feet from the	North/South 1 ne	Feet f om the	East/West line	County		
Р	25	25S	36E		740	S	705	E	LEA		
		4	Botto	m Hole Loc	ation If Diffe	rent From Surfa	ce				
UL or lot no.	Section	Townsh p	Range	Lot Id	Feet from the	North/South lune	Feet from the	East/West line	County		
Dedicated Acres	Joint o	i r Infil	Consolidated Co	nde Order N	No			<u> </u>	<u></u>		
40											

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

	OPERATOR CERTIFICATION
	I hereby ertify that the information ontained herein is true and complet to the b ! of my knowledge and bell f and that this organization either owns a winking inlere t or unleased mineral intere t in the land netwiding the prop d b thom h is location or has a right to drill this w ll at this location pursuant to a drill this w ll at this location pursuant to a ontract with an owner of such a mineral or working intere t, or t oluntary pool ng agreement or a mpulsory pooling order heretofore entered by the d vision.
	Stephen Pattez, PG
	SURVEYORS CERTIFICATION
	I hereby hyp that the will to attom shown on this plat was pitt of from field note f actual survey made by me under my supervision, and that the ame is true and corret t th best f my belief APRIL 25 2017
BOBCAT SWD 001 NMSP E (NAD 83)	Date of Survey S gnature a d Seal of P residual survey MEX 5 15
N (Y) 400500 9' E (X) 888384 8 LAT 32 0545 95 N LONG 103 1245 52"W NMSP E (NAD 27) N (Y) 400443 2 E (NAD 27) N (Y) 400403 7 E (NAD 27) E (NAD	Cames to the
E (X) 847196 7 LAT 32 0959720 N	Job No WTC51822
LONG 103 2121867 W	JAMES E. TOMPKINS 14729 Ce t f ate Numbe

STATE OI	F NEW MEXICO
ENERGY	MINERALS AND NATURAL
RESOURC	CES DEPARTMENT

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

APPLICATION FOR AUTHORIZATION TO INJECT

I	PURPOSE Secondary Recovery Pressure Maintenance X_Disposal Storage Application qualifies for administrative approval? X_Yes No
II	OPERATOR OWL SWD Operating, LLC
	ADDRESS 8214 Westchester Drive, Suite 850, Dallas, Texas 75255
	CONTACT PARTY Preston Carr PHONE 855 695 7937
III	WELL DATA Complete the data required on the reverse side of this form for each well proposed for injection Additional sheets may be attached if necessary
IV	Is this an expansion of an existing project?YesNo 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 wells 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 Stephen L Pattee, P.G TITLE Consulting Engineer – Agent for OWL

____DATE __<u>04/28/2017</u>__

12

SIGNATURE

E MAIL ADDRESS <u>steve@longuist com</u> 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

INJECTION WELL DATA SHEET

OPERATOR: OWL SWD Operating, LLC

WELL NAME & NUMBER: Bobcat SWD No. 1

WELL LOCATION:

740' FSL & 705' FEL FOOTAGE LOCATION

WELLBORE SCHEMATIC

See attached

<u>P</u> UNIT LETTER 25 25S SECTION TOWNSHIP <u>36E</u> RANGE

<u>WELL CONSTRUCTION DATA</u> Surface Casing

Hole Size: 12.25"

Casing Size: 9.625"

Cemented with: 485 sx. (100% Excess) or 875 ft^3

Top of Cement: Surface

Method Determined: Circulation

Long String

Hole Size: 8.75"

Cemented with: 575 sx. (100% Excess)

Top of Cement: Surface

Casing Size: 7.0"

or 720 ft³

Method Determined: Circulation

Total Depth: 3,060'

Injection Interval

2,915 feet to 3,060 feet

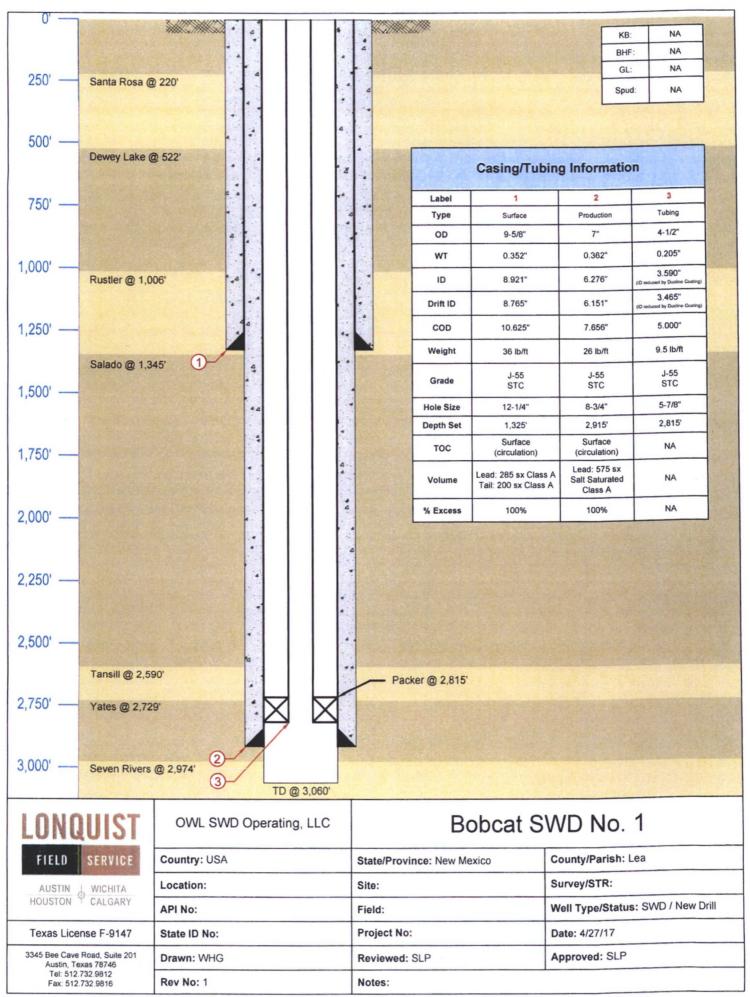
(Perforated or Open Hole; indicate which)

Side 1

INJECTION WELL DATA SHEET

Tu	Fubing Size <u>4 50" 9 50 lb/ft J-55 ST&C</u> Lining Material Duol					
Ty	pe of Packer 7 0" D&L Oil Tools Permapak Single Bore					
Pa	cker Setting Depth 2.815'					
Otl	her Type of Tubing/Casing Seal (if applicable)					
	Additional Data					
1	Is this a new well drilled for injection? <u>X</u> Yes	No				
	If no, for what purpose was the well originally drilled?					
2	Name of the Injection Formation <u>Yates- Seven Rivers</u>					
3	Name of Field or Pool (if applicable) SWD, Yates – Seven Rivers (96	141)				
4	Has the well ever been perforated in any other zone(s)? List all such p intervals and give plugging detail, i e sacks of cement or plug(s) used					
5	Give the name and depths of any oil or gas zones underlying or overly injection zone in this area <u>Tansil @ 2,590</u> ?	ing the proposed				
	<u>Yates @ 2,729'</u>					

Seven Rivers @ 2,974'



CHUSERS/WGEORGE/DOCUMENTS/I WILL DOCS/OWL/BOBCAT SWD NO HWBS_SHOLES REPLACEMENT SWD_20170427 UWG, 4/28/2017 1 29:36 PM, WGEORGE, AUTOCAD PDF (GENERAL DOCUMENTATION) PC3

OWL SWD Operating, Inc

Bobcat SWD No 1

FORM C 108 Supplemental Information

III Well Data

- A Wellbore Information
 - 1

Well information			
Lease Name	Bobcat SWD		
Well No	1		
Location	S 25 T 25S R 36E		
Footage Location	740' FSL & 705' FEL		

2

a Wellbore Description

Casing Information						
Туре	Surface	Long String				
OD	9 625″	7 0″				
WT	0 352″	0 362				
ID	8 921	6 276"				
Drift ID	8 765'	6 151'				
COD	10 625	7 656				
Weight	36 0 #/ft	26 0 #/ft				
Grade	J 55, ST&C	J 55, ST&C				
Hole Size	12 25	8 75'				
Depth Set 1 325		2 915′				

b Proposed Cementing Program

Cement Information							
Casing String	Surface	Long String					
Lead Cement	12 4 lb/gal 2 24 cf/sk	15 6 lb/gal 1 25 cf/sk					
Lead Cement Volume	285 sx	575 sx (37 2% Salt Saturated)					
Taıl Cement	15 6 lb/gal 1 25 cf/sk	N/A					
Taıl Cement Volume	200 sx	N/A					
Method	Cırculate to Surface	Circulate to Surface					
Cement Excess	100%	10% ın casıng 100% ın hole					
тос	Surface	Surface					

3 Tubing Description

Tubing			
Inform	ation		
OD	4 5'		
WT	0 205		
ID	3 590'		
Drift ID	3 465		
COD	5 00		
Weight	9 5 #/ft		
Grade	J 55, ST&C		
Depth Set	2 815		

Tubing will be lined with Duoline

4 Packer Description

D&L Oil Tools 7 0 Permapack Packer – Single Bore

- **B** Completion Information
 - 1 Injection Formation Yates Seven Rivers
 - 2 Gross Injection Interval 2,915 3 060

Completion Type Open Hole

- 3 Well drilled for injection
- 4 New drill no prior perforated intervals
- 5 Oil and Gas Bearing Zones within area of well

Formation	Depth
Tansıl	2,590
Yates	2,729
Seven Rivers	2 974'

VI Area of Review

A table and map have been attached containing information on wells that are present within the one half mile AOR For each well within the AOR records and schematics demonstrating completion and P&A, where applicable have been attached if available through the New Mexico OCD's website

VII Proposed Operation Data

1 Proposed Daily Rate of Fluids to be Injection

Average Volume 25 000 BPD Maximum Volume 30 000 BPD

- 2 Closed System
- 3 Anticipated Injection Pressure

Average Injection Pressure 550 PSI (surface pressure) Maximum Injection Pressure 580 PSI (surface pressure)

- 4 The injection fluid is to be locally produced water Attached are produced water sample analyses taken from the closest wells that feature samples from the Delaware Bone Spring, Devonian and Yates Seven Rivers formations
- 5 There is historical production from the Yates Seven Rivers formations within one mile of the proposed well location however most of the wells associated with this production have been plugged and abandoned As such, a chemical analysis of disposal zone formation water is not

required However an offset Yates Seven Rivers water sample analysis has been attached for record purposes

VIII Geological Data

The Yates Formation is a 150 to 200 ft thick siliciclastic unit in the Gauadalupian Artesia Group. The formation is composed of thick sandstone beds interbedded with thin carbonate and evaporites. It is a poorly consolidated silty fine grained rock with porosities ranging from 15 to 28 percent. The Yates is overlain by thick carbonates and evaporites of the Tansill Formation and underlain by carbonates and evaporites of the Seven Rivers Formation.

The Seven Rivers Formation is also a member of the Artesia Group with the Shattuck sandstone member of the Queen at its base and overlain by the Yates Formation. The Seven Rivers Formation is composed of thick carbonate and evaporite beds. Lower porosities are due to the amount of anhydrite and tight carbonate rocks.

Production from these formations has been depleted for decades and they are most likely under pressured Therefore they will be able to take water until reaching initial pressure. Through the higher porosities in the injection interval secondary porosity and an under pressured formation, this injection interval will able to take disposed water economically.

Formation	Depth	
Santa Rosa	220	
Dewey Lake	522	
Rustler	1 006	
Salado	1,345	
Tansıl	2,590	
Yates	2 729	
Seven Rivers	2 974	

A Injection Zone Yates – Seven Rivers Formation

B Underground Sources of Drinking Water

The lowermost underground source of drinking water (USDW) is anticipated to be approximately 448 below the surface and fresh water may be present above the Rustler formation. The top of the Rustler formation is estimated at a depth of 1,006, therefore the surface casing will be set at 1 325' which is below the Rustler and just above the top of the Salado salt formation (top of Salado @ 1 345)

IX Proposed Stimulation Program

No proposed stimulation program

X Logging and Test Data on the Well

There are no logs or test data on the well During the process of drilling and completion resistivity gamma ray, and density logs will be run

XI Chemical Analysis of Fresh Water Wells

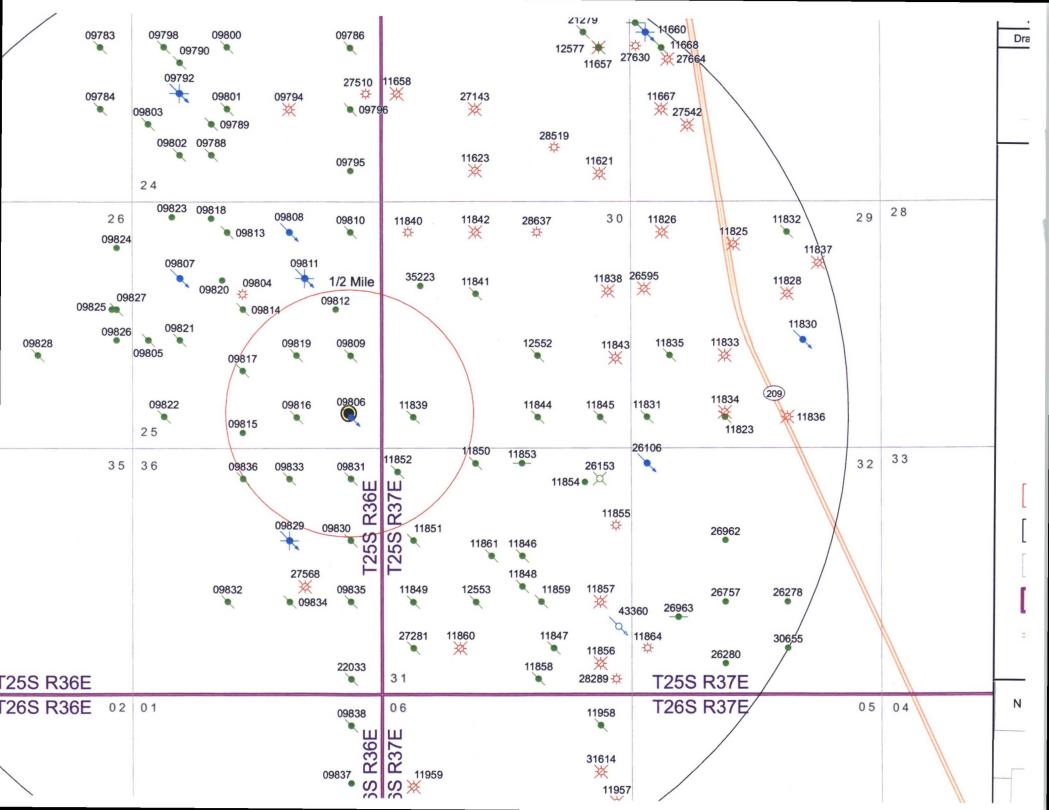
The closest fresh water well (CP 01129 POD2) is located 2 328 from the proposed well location The well served as a monitoring well for Southern Union Gas Service and is not producing water POD1 and POD2 both appear to be soil borings only which were plugged upon completion of sampling

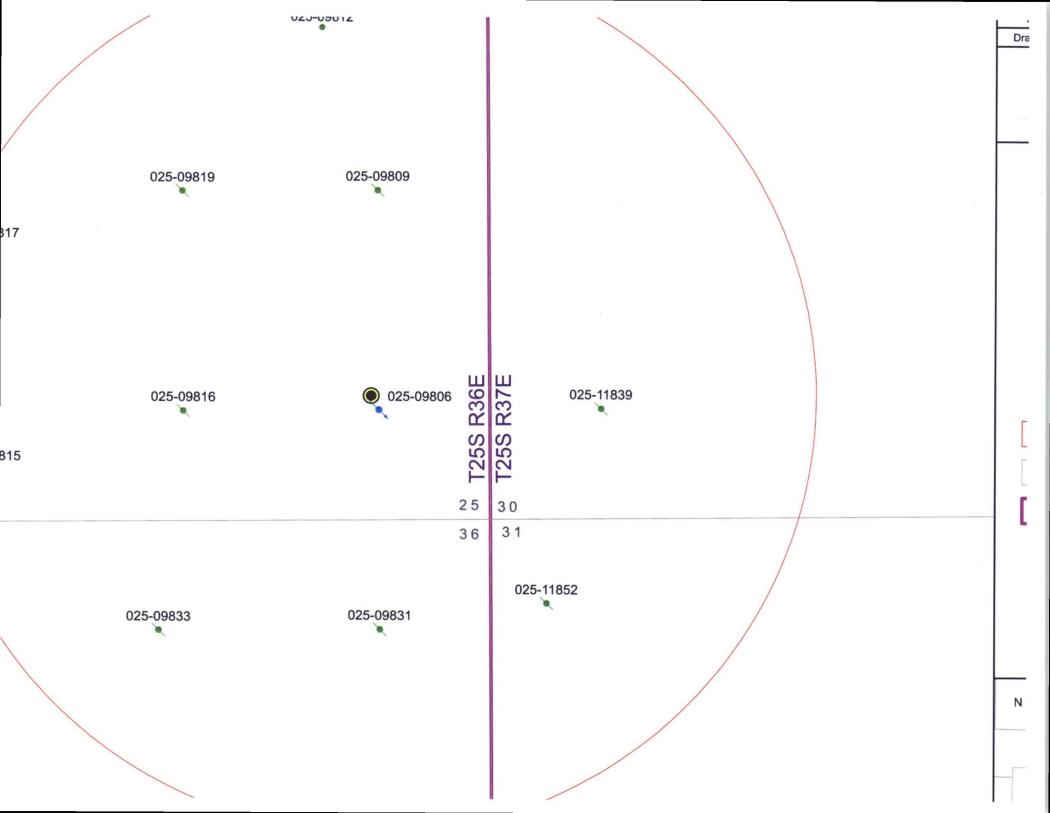
Another well CP 00790 was also found within a 1 mile AOR of the Bobcat SWD No 1 location Records indicate that this well ID has been assigned to a well permit which has expired A diligent attempt to locate and sample these locations will be made with results submitted to the OCD for record purposes

A map has been attached featuring the proposed well location for Bobcat SWD No 1 and the location of CP 01129 POD1 CP 01129 POD2 and CP 00790 In addition the transaction summaries and water right summaries from the New Mexico Office of the State Engineer have been attached for record purposes

XII Affirmative Statement of Examination of Geologic and Engineering Data

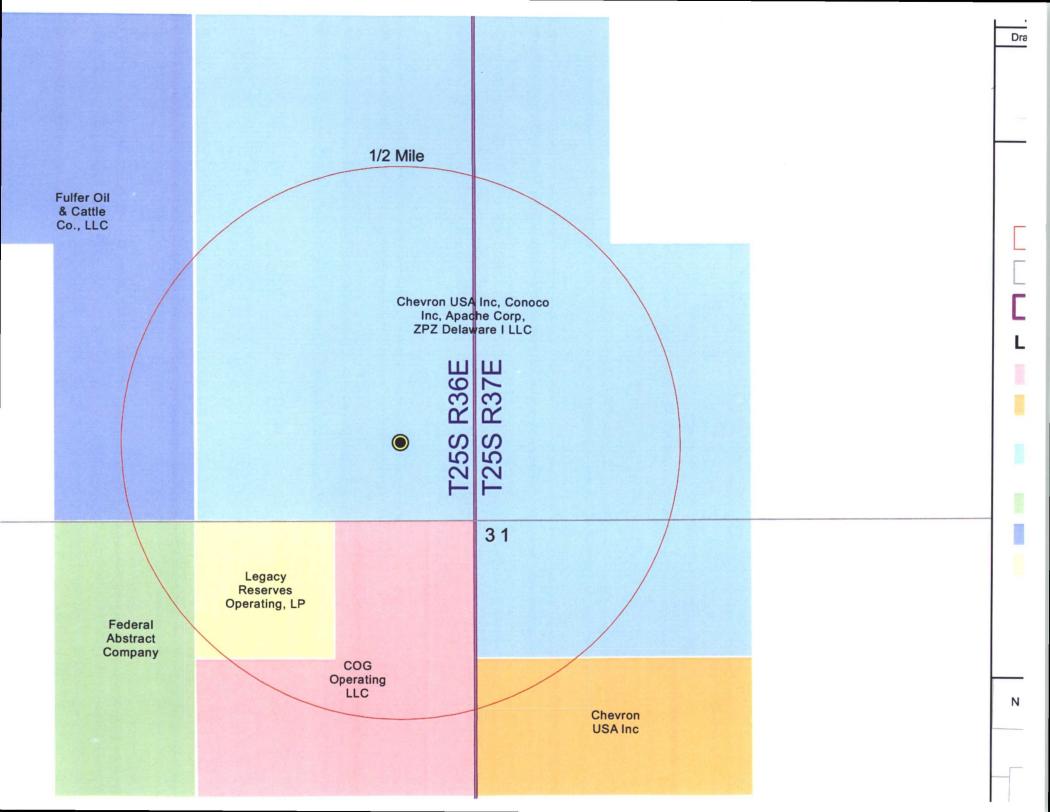
Based on the available engineering and geologic data we find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water





Half Mile AOR Bobcat SWD #1

API (30-025)	Well Name	Well Type	Status	Operator	TD (TVD)	Location	Date Drilled
09806	MARALO SHOLES B #002	SWD	Active	OWL SWD OPERATING LLC	3055	P 25 255 36E	5/25/1947
09809	SHOLES B 25 #003	Oil	Plugged	CONOCOPHILLIPS COMPANY	3035	I 25 25S-36E	8/25/1947
09812	SHOLES B 25 #001	Oil	Active	FULFER OIL & CATTLE LLC	2950	H 25 255 36E	11/5/1940
09815	HUMPHREYS #001	Oil	Active	FULFER OIL & CATTLE LLC	3255	N 25 255 36E	2/18/1945
09816	SHOLES B #001	Oil	Plugged	MARALO LLC	3220	O 25 25S-36E	7/1/1946
09817	HUMPHREYS #002	Oil	Plugged	MARALO LLC	3257	K 25 255 36E	5/14/1945
09819	SHOLES B #003	Oil	Plugged	MARALO LLC	3019	J 25 25S 36E	7/6/1947
09831	HUMBLE STATE #003	Oil	Plugged	MARALO LLC	2950	A 36-25S-36E	6/16/1945
09833	PRE-ONGARD WELL #001	Oil	Plugged	PRE ONGARD WELL OPERATOR	3138	B 36 25S-36E	12/9/1944
11839	PRE-ONGARD WELL #001	Oil	Plugged	PRE ONGARD WELL OPERATOR	3125	4-30 25S 37E	7/22/1948
11852	SHOLES B #004	Oil	Plugged	MARALO LLC	3105	1 31 25S-37E	10/9/1947



Notification Submittals

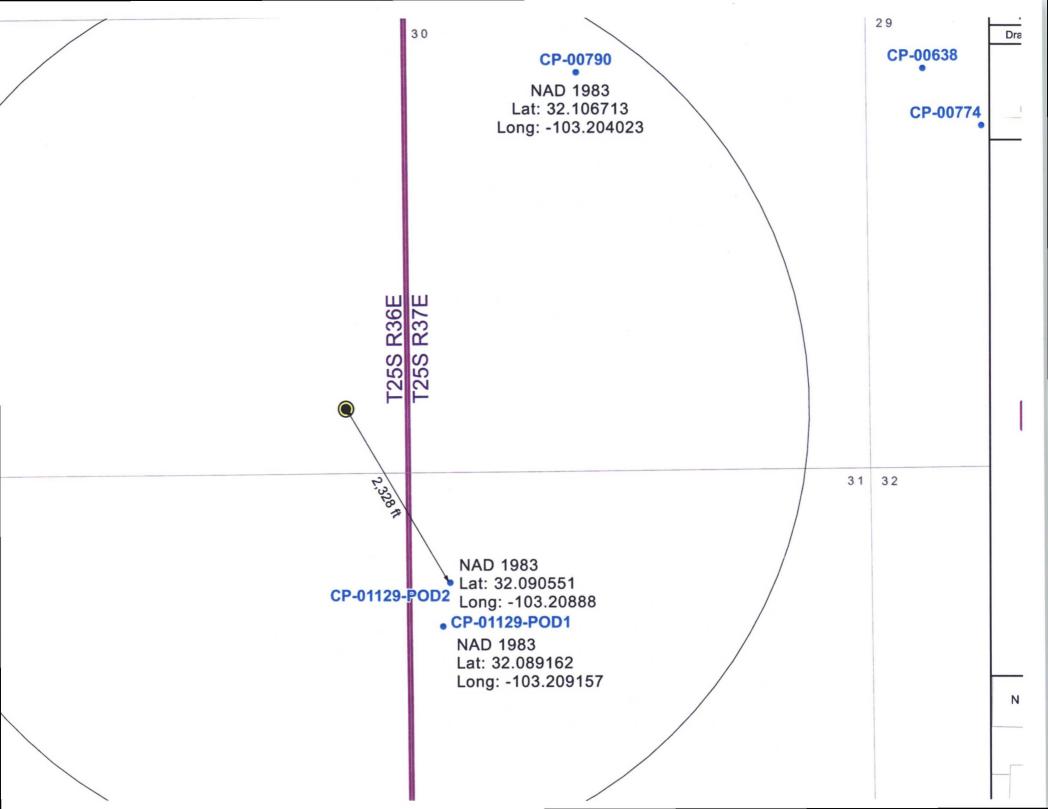
The following is a list of off set operators and surface landowner to be noticed regarding this application

Notices will be issued on Monday May 1 2017 An affidavit of notice submittals and proofs of certified mail will be submitted to the OCD under separate cover

Bobcat SWD No 1 Notice List					
Notice	Contact	Address		Phone Number	
Apache Corp		2000 POST OAK BLVD STE 100	HOUSTON TX 77056		
Chevron USA Inc		6301 DEAUVILLE	MIDLAND TX 79706		
COG Operating LLC	Kanıcıa Castillo	600 W Illinois Ave	Midland TX 79701	432 685-4332	
CONOCOPHILLIPS CO		PO BOX 7500	BARTLESVILLE OK 74005		
Federal Abstract Company		P O Box 2288	Santa Fe NM 87501	505 982 5537	
Fulfer Oil & Cattle Co LLC	Gregg Fulfer	PO BOX 1224	JAL NM 88252		
Legacy Reserves Operating LP	John Eklund	P O Box 10848	Midland TX 79702	432 221 6370	
ZPZ Delaware I LLC		2000 POST OAK BLVD STE 100	HOUSTON TX 77056		

LEGAL NOTICE May 3 2017

OWL SWD Operating LLC 8214 Westchester Dr Suite 850 Dallas Texas 7525 is filling Form C 108 (Application for Authonzation to Inject) with the New Mexico Oil Conservation Division for administrative approval for its salt water disposal well Bobcat SWD No 1 The proposed well will be located 740 FSL & 705 FEL in Section 25 Township 25S Range 36E in Lea County New Mexico Disposal water will be sourced from area production and will be injected into the Yates and Seven Rivers Formations (determined by offset log analysis) through an open hole completion between a maximum applied for top of 2 915 to a maximum depth of 3 060 The maximum surface injection pressure will be 560 psi with a maximum rate of 30 000 BWPD Interested parties opposing the action must file objections or requests for hearing with the Oil Conservation Division 1220 South St Francis Drive Santa Fe New Mexico 87505 within 15 days Additional information can be obtained from the applicant's agent Lonquist & Co LLC at (512) 600-1774 #31750



MITCHELL ANALYTICAL LABORATORY

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2638 Faudree Odessa Texas 79765 8538 561 5579

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Company I	NadeCo Spe	cialties,	LLC				
Lease C Location V	Bobcat SWD T/P DWL VC56428			D S	ample Temp ate Sampled ampled by	69 98 2/9/201 Wade Ha	
	/16/2017 7 feb h25945				mployee # nalyzed by	GR	
		l	Dissolved	Ganus			
Uudussen Culfide	(1120)				Mg/L	Eq Wt	MEq/L
Hydrogen Sulfide	(H2S)				5 00	16 00	31
Carbon Dioxide	(CO2)				900 00	22 00	40 91
Dissolved Oxygen	(02)				40	8 00	05
			Cations				
Calcium	(Ca++)				5 708 40	20 10	284 00
Magnesium	(Mg++)				790 56	12 20	64 80
Sodium	(Na+)				47 829 56	23 00	2 079 55
Barium	(Ba++)		NOT AN	ALYZED			
Manganese	(Mn+)				1 25	27 50	05
Strontium	(Sr+-)		NOT AN	ALYZED			
			Anions				
Hydroxyl	(OH)				00	17 00	00
Carbonate	(CO3=)				00	30 00	00
BiCarbonate	(HCO3)				733 20	61 10	12 00
Sulfate	(SO4=)				660 00	48 80	13 52
Chloride	(CI)				83 892 18	35 50	2 363 16
Total Iron	(Fe)				23 29	19 60	1 25
Total Dissolved Soli				1	40 543 84	18 60	1 25
Total Hardness as C					40 545 84 17 512 30		
Conductivity MICRO					174 800		
conductivity meno	11100/ 011				174 000		
рН (6 010			Specific Gra	vity 60/60 F		1 098
CaSO4 Solubility @ 8	38 551	1Eq/L	CaSO4 scale	is unlikely			
CaCO3 Scale Index							
<i>CaCO3 Scale Index</i> 70 0	125	100 0	445	130 0	1 005		
	125 215	100 0 110 0	445 705	130 0 140 0	1 005 1 005		

WadeCo Specialties, LLC

General triformation About: Sample 4091					
ASCARTA FEDERAL					
API	300250979	Sample Number	1 · · · · · · · · · · · · · · · · · · ·		
Unit/Section/ Township/Range	C 2 255/36E	Field	JALMAT		
County	<u>)</u> į	Formation	ARTESIA		
State	NM	Depth			
Lat/Long	32 2204 03.2 968	Sample Sourc	DST		
TDS (mg/L)	35753	Water Type			
Sample Date(MM/DD/YYYY)		Analy Date(MM/DD/YYYY)			
Remark /Des nption					
	Cation Information (mg/L)		Anion Inform tion (mg/L)		
Pota um (K)		Suffat (SO)	3100		
Sodium (Na)		Chlande (CI)	8400		
Catium (Ca)		Carbonat (CO ₃)			
Magnesium (Mg)		B arbonst (HCO3)	1220		
Banum (Ba)		Hydroude (OH)			
Manganes (M)		Hydrogen Suffide (H ₂ S)			
Strontium (Sr)		Carbon Dioxide (CO2)			
Iron (F)		Oxygen (O)			

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