

672-2017	SUSPENSE	ENGINEER	6-7-2-2017	SWD	PMAM 1716358339
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ABOVE THIS LINE FOR DIVISION USE ONLY

# NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

220 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:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]  
 [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]  
 [PC-Pool Commingling] [OLS -Off-Lease Storage] [OLM-Off-Lease Measurement]  
 [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]  
 [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]  
 [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

### [1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication  
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] 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] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or ☐ Does Not Apply

[A] ☐ 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  
 U.S. 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,

[F] ☐ Waivers are Attached

### [3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE 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

Chris Weyand

Print or Type Name

*Chris Weyand*  
 Signature

Consulting Engineer

Title

6/6/2017

Date

chris@lonquist.com

e-mail Address

# LONQUIST & CO. LLC

PETROLEUM  
ENGINEERS

ENERGY  
ADVISORS

AUSTIN · HOUSTON · WICHITA · DENVER · CALGARY

June 6, 2017

New Mexico Energy, Minerals, and Natural Resources Department  
Oil Conservation Division District IV  
1220 South St Francis Drive  
Santa Fe, New Mexico 87505  
(505) 476-3440

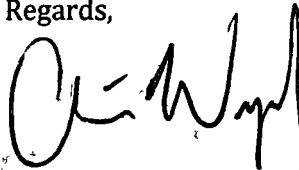
**RE: ALPHA SWD NO. 1 AUTHORIZATION TO INJECT**

To Whom It May Concern:

Attached for your review is Form C-108, Application for Authorization to Inject, and its supplemental documents prepared for Alpha SWD Operating LLC's Alpha SWD No. 1. In addition, Forms C-101 and C-102 have also been included with this package. Notices have been sent to offset leaseholders and the surface owner. Proof of notice will be sent to the OCD upon receipt.

Any questions should be directed towards Alpha SWD Operating LLC's agent Lonquist & Co., LLC.

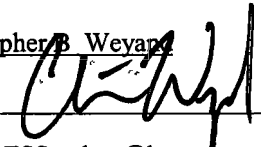
Regards,



Christopher B. Weyand  
Staff Engineer  
Lonquist & Co., LLC

(512) 600-1764  
[chris@lonquist.com](mailto:chris@lonquist.com)

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I PURPOSE \_\_\_\_\_ Secondary Recovery \_\_\_\_\_ Pressure Maintenance   X   Disposal \_\_\_\_\_ Storage \_\_\_\_\_  
Application qualifies for administrative approval?   X   Yes \_\_\_\_\_ No \_\_\_\_\_
- II OPERATOR ALPHA SWD OPERATING LLC  
ADDRESS 4436 STERLING LN // PLANO, TX 75093  
CONTACT PARTY KURT KNEWITZ PHONE (214) 418-1177
- 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? \_\_\_\_\_ Yes   X   No \_\_\_\_\_  
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
- 1 Proposed average and maximum daily rate and volume of fluids to be injected,
  - 2 Whether the system is open or closed,
  - 3 Proposed average and maximum injection pressure,
  - 4 Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water, and,
  - 5 If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc )
- \*VIII Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval
- IX Describe the proposed stimulation program, if any
- \*X Attach appropriate logging and test data on the well (If well logs have been filed with the Division, they need not be resubmitted)
- \*XI Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken
- XII Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water
- XIII Applicants must complete the "Proof of Notice" section on the reverse side of this form
- XIV Certification I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief
- NAME Christopher B Weyant TITLE Consulting Engineer  
SIGNATURE  DATE 6/6/2017  
E-MAIL ADDRESS chris@lonquist.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

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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: ALPHA SWD OPERATING LLCWELL NAME & NUMBER: ALPHA SWD #1

WELL LOCATION:	<u>1,457' FSL &amp; 2,093' FEL</u>	<u>J</u>	<u>10</u>	<u>24S</u>	<u>28E</u>
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface CasingHole Size 26 000"Casing Size 20 000"Cemented with 1,420 sxor \_\_\_\_\_ ft<sup>3</sup>Top of Cement surfaceMethod Determined circulation1<sup>st</sup> Intermediate CasingHole Size 17 500"Casing Size 13 375"Cemented with 1465 sxor \_\_\_\_\_ ft<sup>3</sup>Top of Cement surfaceMethod Determined circulation2<sup>nd</sup> Intermediate CasingHole Size 12 250"Casing Size 9.625"Cemented with 1840 sxor \_\_\_\_\_ ft<sup>3</sup>Top of Cement surfaceMethod Determined circulation

Production Liner

Hole Size 8 500"

Casing Size 7 625"

Cemented with 370 sx

*or* \_\_\_\_\_ ft<sup>3</sup>

Top of Cement 9,400'

Method Determined calculation

Total Depth 15,200'

Injection Interval

14,000 feet to 15,200 feet

(Open Hole)

### INJECTION WELL DATA SHEET

Tubing Size: 5 500", 17 lb/ft, P-110, BT&C from 0'- 9,400' and 5.500", 17 lb/ft, P-110 UFJ from 9,400'- 13,950'

Lining Material: Duoline

Type of Packer D&L Oil Tools 7.625" Permapack Packer – Single Bore

Packer Setting Depth: 13,950'

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

#### Additional Data

1. Is this a new well drilled for injection?        X   Yes             No

If no, for what purpose was the well originally drilled? N/A

2. Name of the Injection Formation Devonian, Silurian, Fusselman and Montoya (Top 100')

3. Name of Field or Pool (if applicable): SWD; Silurian-Devonian

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, new drill.

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:

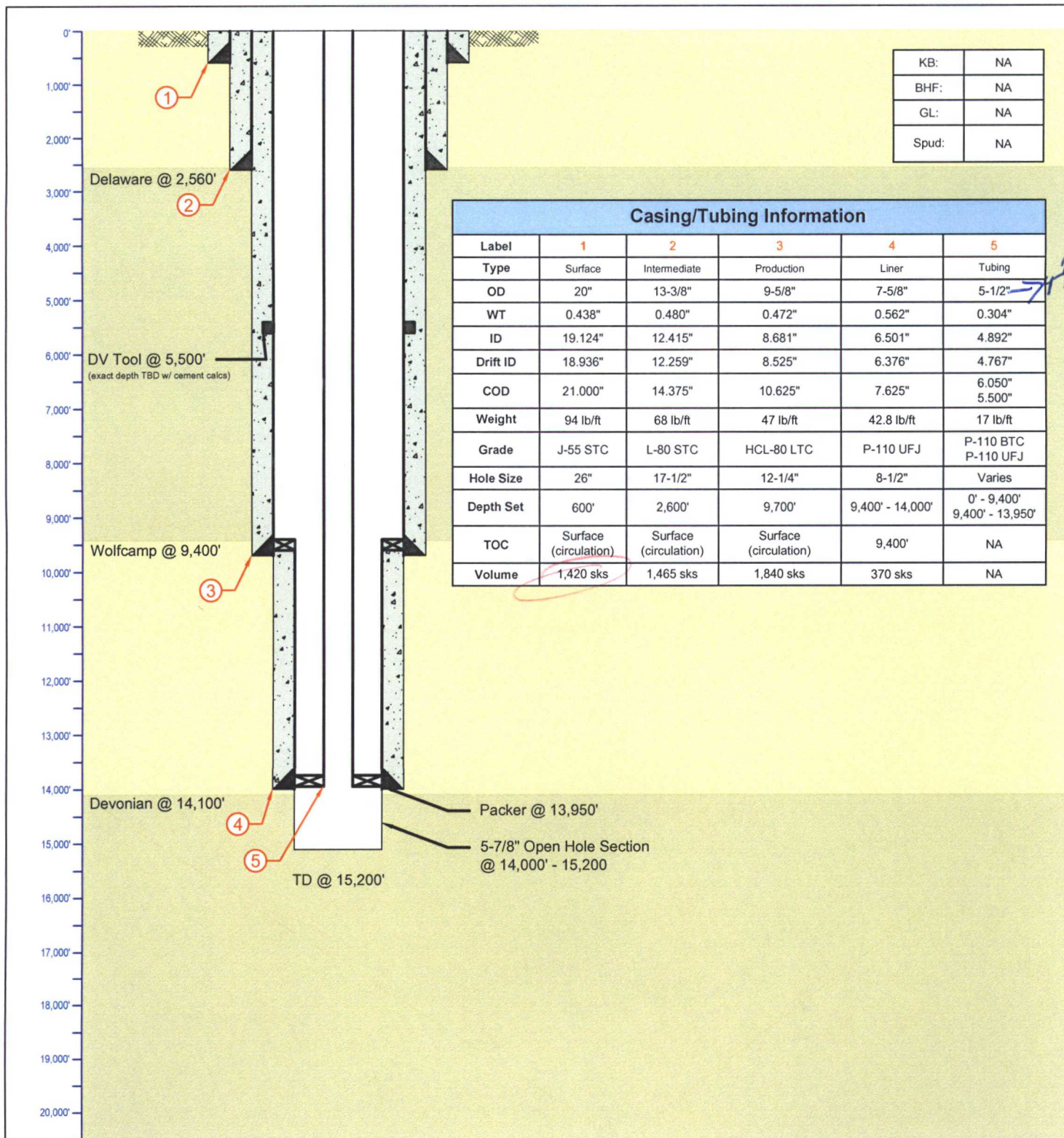
Cherry Canyon: 4,800'

Bone Spring: 6,299'

Wolfcamp: 9,400'

Atoka: 11,617'

Morrow: 12,190'



<b>LONQUIST</b> <b>FIELD SERVICE</b> AUSTIN WICHITA HOUSTON CALGARY	Alpha SWD		Alpha SWD #1 - Proposed	
	Country: USA		State/Province: New Mexico	County/Parish: Eddy
	Location: Malaga, NM		Site:	Survey/STR: Sec. 10-24S-28E
	API No:		Field:	Well Type/Status: SWD
	Texas License F-9147		Project No:	Date: 5/19/17
3345 Bee Cave Road, Suite 201 Austin, Texas 78746 Tel: 512.732.9812 Fax: 512.732.9816	Drawn: CBW		Reviewed: CBW	Approved: SLP
	Rev No: 1		Notes:	



Alpha SWD Operating LLC

Alpha SWD No. 1

FORM C-108 Supplemental Information

III Well Data

A Wellbore Information

1

Well information	
Lease Name	Alpha SWD
Well No.	1
Location	S-10 T-24S R-28E
Footage Location	1,457' FSL & 2,093' FEL

2

a Wellbore Description

Casing Information				
Type	Surface	Intermediate	Production	Liner
OD	20"	13 3/8"	9 5/8"	7.625"
WT	0.438"	0.480"	0.472"	0.562"
ID	19.124"	12.415"	8.681"	6.501"
Drift ID	18.936"	12.259"	8.525"	6.376"
COD	21.00"	14.375"	10.625"	7.625"
Weight	94 lb/ft	68 lb/ft	47 lb/ft	42.8 lb/ft
Grade	J-55	L-80	HCL-80	P-110
Hole Size	26"	17.5"	12.25"	8.5"
Depth Set	600'	2,600'	9,700'	9,400' – 14,000'

b Cementing Program

Cement Information				
Casing String	Surface	Intermediate	Production	Liner
Lead Cement	C	C	NeoCem	H
Lead Cement Volume	1,420 sx	1,100 sx	Stage 1 530 sx Stage 2 770 sx	370 sx
Tail Cement		C	NeoCem/HALCEM	
Tail Cement Volume		365 sx	Stage 1 390 sx Stage 2. 150 sx	
Cement Excess	100%	25%	25%	25%
TOC	Surface	Surface	Surface	9,400'
Method	Circulate to Surface	Circulate to Surface	Circulate to Surface	Logged

3 Tubing Description

Tubing Information		
OD	5 5"	5.5"
WT	0 304"	0 304"
ID	4 892"	4 892"
Drift ID	4.767"	4.767"
COD	6 050"	5 500"
Weight	17 lb/ft	17 lb/ft
Grade	P-110 BTC	P-110 UFJ
Depth Set	0'-9,400'	9,400'-13,950'

Tubing will be lined with Duoline

4 Packer Description

D&L Oil Tools 7 625" Permapack Packer – Single Bore

## B Completion Information

1 Injection Formation Devonian, Silurian, Fusselman, Montoya (Top 100')

2 Gross Injection Interval 14,000' – 15,200'

Completion Type Open Hole

3 Drilled for injection

4. See the attached wellbore schematic

5 Oil and Gas Bearing Zones within area of well:

Formation	Depth
Cherry Canyon	4,800'
Bone Spring	6,299'
Wolfcamp	9,400'
Atoka	11,617'
Morrow	12,190'

## VI Area of Review

No wells within the area of review penetrate the proposed injection zone

## VII Proposed Operation Data

1 Proposed Daily Rate of Fluids to be Injection

Average Volume: 25,000 BPD

Maximum Volume 32,000 BPD

2 Closed System

3 Anticipated Injection Pressure

Average Injection Pressure 2,100 PSI (surface pressure)

Maximum Injection Pressure 2,800 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 and Morrow formations

5 The disposal interval is non-productive No water samples are available from the surrounding area.

## VIII Geological Data

The Devonian formation is a dolomitic ramp carbonate that occurs below the Woodford shale and above the Fusselman formation. Strata found in the Devonian formation include two major groups, the Wristen Buildups and the Thirtyone Deepwater Chert, with the Wristen being more abundant. The Wristen Group is composed of mixed limestone and dolomites with mudstone to grainstone and boundstone textures. Porosity in the Wristen group is a result of both primary and secondary development. Present are moldic, vugular, karstic (including collapse breccia) features that allow for higher porosities and permeabilities. The Thirtyone Formation contains two end-member reservoir facies, skeletal packstones/grainstones and spiculitic chert, with most of the porosity and permeability found in the coarsely crystalline cherty dolomite. These particular characteristics allow for this formation to be a tremendous Salt Water Disposal horizon.

### A Injection Zone. Siluro-Devonian Formation

Formation	Depth
Rustler	Eroded, not present
Salado	1,095'
Delaware	2,566'
Cherry Canyon	4,800'
Bone Spring	6,299'
Wolfcamp	9,400'
Strawn	11,383'
Atoka	11,617'
Morrow	12,190'
Mississippian Lime	13,630'
Woodford	13,922'
Devonian	14,100'

### B Underground Sources of Drinking Water

Within 1-mile of the proposed Alpha SWD #1 location, water wells range in depth from 50' to 123'. Reported depths to fresh water range from 8' to 32' (18' on average). This is not a known fresh water aquifer, but rather represents a sporadic alluvial source.

#### 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

Quite a few fresh water wells exist within one mile of the well location. Fresh water samples will be obtained from two of the wells (yet to be determined) and analysis of these samples, a map, and the Water Right Summary from the New Mexico Office of the State Engineer will be provided to the OCD as soon as they are available.

#### 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.

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 Road, Aztec, NM 87410  
Phone (505) 334-6178 Fax (505) 334-6170  
District IV  
1220 S St. Francis Dr., Santa Fe, NM 87505  
Phone (505) 476-3460 Fax (505) 476-3462

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-015-44237		<sup>2</sup> Pool Code 96101		<sup>3</sup> Pool Name SWD, Silurian-Devonian	
<sup>4</sup> Property Code 317792		<sup>5</sup> Property Name Alpha SWD			<sup>6</sup> Well Number #1
<sup>7</sup> OGRID No. 372180		<sup>8</sup> Operator Name Alpha SWD Operating LLC			<sup>9</sup> Elevation 3008.69'

<sup>10</sup> Surface Location

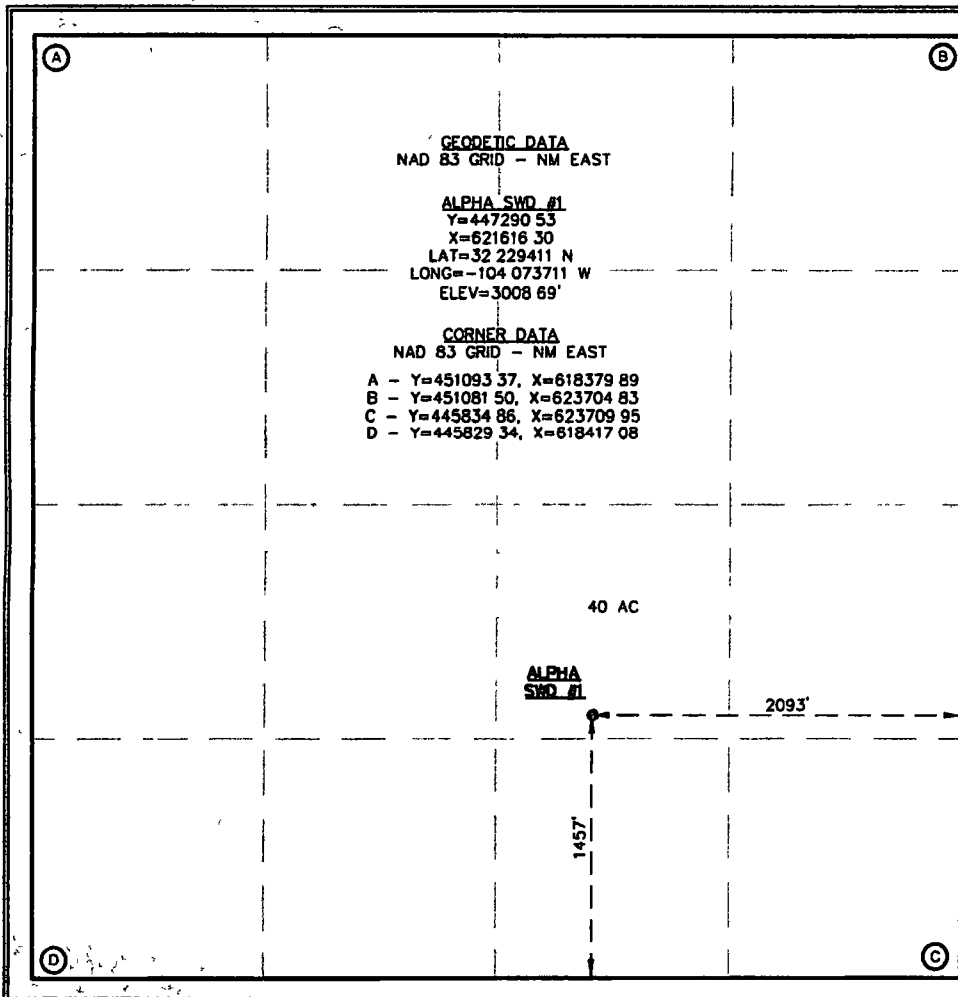
UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	10	24 S	28 E		1457'	SOUTH	2093'	EAST	EDDY

<sup>11</sup> 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
	-	-	-	-	-	-	-	-	-

<sup>12</sup> Dedicated Acres	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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



<sup>17</sup> OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature: *Christopher Weyand* Date: 6/6/2017

Christopher Weyand  
Printed Name

chns@longquist.com  
E-mail Address

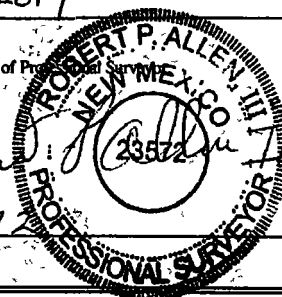
<sup>18</sup> SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief

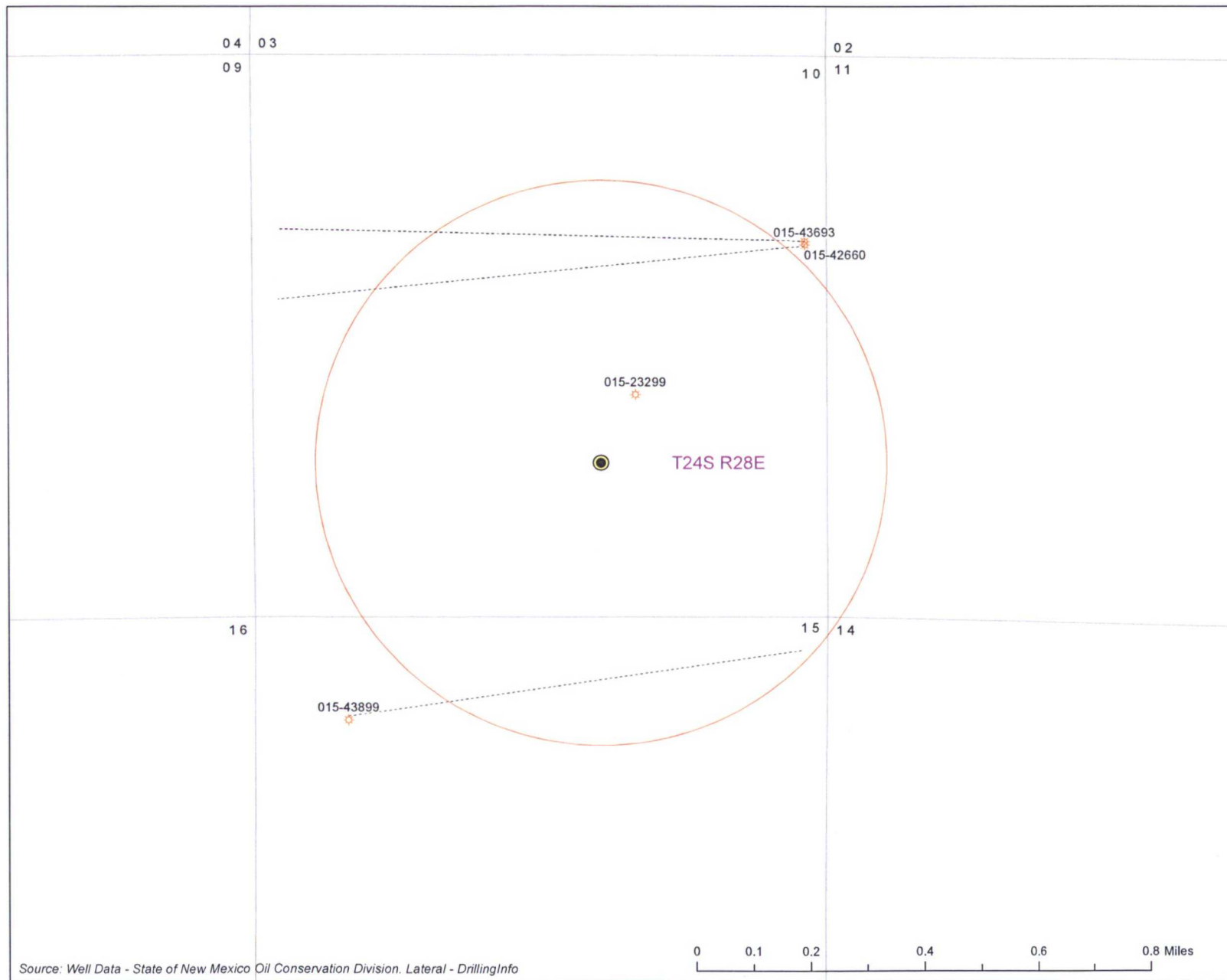
Date of Survey: 6/5/2017

Signature and Seal of Professional Surveyor

23572  
Certificate Number







**Alpha SWD #1**  
**1/2 mile Area of Review**  
Eddy County, NM  
Alpha SWD Operating LLC

Projection: NAD 1983 State Plane NM East FIPS 3001  
Drawn by: SAH    Date: 6/5/2017    Approved by: NLB

**LONQUIST & CO. LLC**

<b>PETROLEUM ENGINEERS</b>	<b>ENERGY ADVISORS</b>
AUSTIN	HOUSTON WICHITA DENVER CALGARY

- Alpha SWD #1
- ★ Gas Well
- Lateral
- 1/2 mile Radius
- Section Boundary





Half-Mile AOR  
Alpha SWD #1

API (30-015-)	Well Name	Well Type	Status	Operator	TD (TVD)	Location	Date Drilled
23299	KIRKES COM #001	Gas	Active	MATADOR PRODUCTION COMPANY	12,800	J-10-24S-28E	4/28/1980
42660	GUIAR 10 24 28 RB #202H	Gas	Active	MATADOR PRODUCTION COMPANY	9,475	H-10-24S-28E	12/3/2014
43693	GUIAR 10 24 28 RB #222H	Gas	Active	MATADOR PRODUCTION COMPANY	10,238	H-10-24S-28E	4/24/2016
43899	ANNE COM 15 24S 28E RB #221H	Gas	Active	MATADOR PRODUCTION COMPANY	10,614	D-15-24S-28E	9/26/2016

4-2

09

10

11

16

15

14

Matador Production  
Company

T24S R28E

Matador Production Company  
& COG Operating LLC

**Alpha SWD #1  
Offset Leases**  
Eddy County, NM  
Alpha SWD Operating LLC

Projection: NAD 1983 State Plane NM East FIPS 3001

Drawn by: SAH Date: 6/5/2017 Approved by: NLB

**LONQUIST & CO. LLC**

PETROLEUM  
ENGINEERS

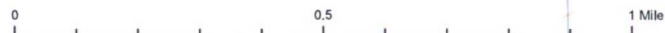
ENERGY  
ADVISORS

AUSTIN HOUSTON WICHITA DENVER CALGARY

- Alpha SWD #1
- 1/2 mile Radius
- Section Boundary

**Lessee**

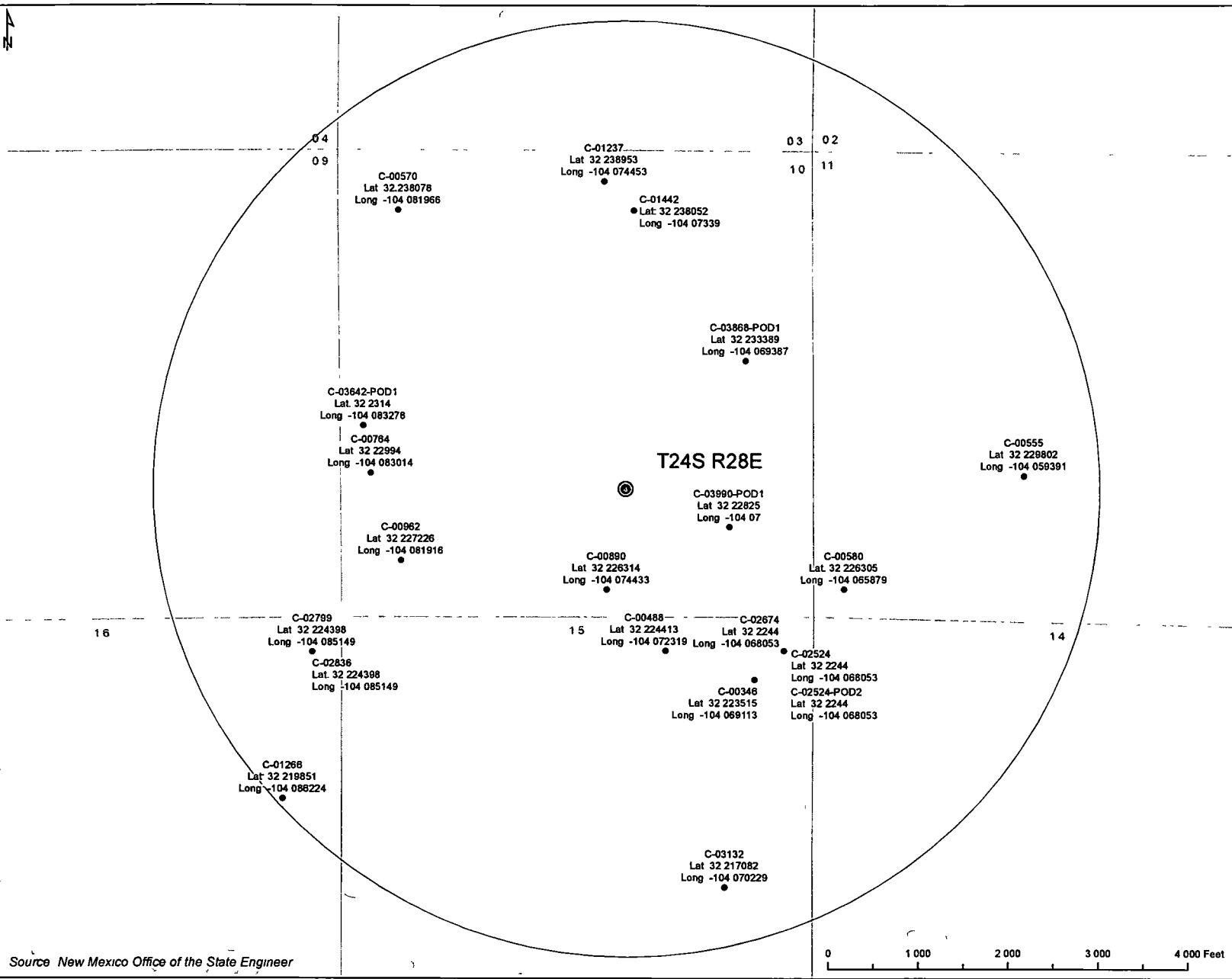
- Matador Production Company
- Matador Production Company & COG Operating LLC



Alpha SWD No. 1 Notice List			
Notice	Address	Phone Number	Date Noticed
Oil Conservation Division District IV	1220 South St Francis Drive, Santa Fe, NM 87505	(505) 476-3440	6/7/2017
Oil Conservation Division District II	811 S First St, Artesia, NM 88210	(575) 748-1283	6/7/2017
Mr James N Phillips and Mr & Mrs James R Phillips	PO Box 148, Malaga, NM 88263		6/6/2017
COG Operating LLC	One Concho Center, 600 W Illinois Ave, Midland, TX 79701		6/6/2017
Matador Production Company	One Lincoln Center, 5400 LBJ Freeway, Suite 1500, Dallas, TX 75240		6/6/2017

Alpha SWD #1 Offset Produced Water Analysis Wolfcamp																									
wellname	api	latitude	longitude	section	township	range	unit	trgs	trgsw	county	state	formation	sampledate	ph	tds_mgl	resistivity_ohm_cm	sodium_mgl	calcium_mgl	iron_mgl	magnesium_mgl	manganese_mgl	chloride_mgl	bicarbonate_mgl	sulfate_mgl	co2_mgl
HABANERO 17 FEDERAL COM #001H	3001536108	32 2218475	104 2062683	17	24S	27E	A	990N	660E	EDDY	NM	WOLFCAMP	4/7/2015 0 00	6.5	108205	0.07392	35110.8	4480.2	28.5	627.9	0.61	65927.2	146	0	300
SERRANO 29 FEDERAL #001H	3001537763	32 1898842	104 2062149	29	24S	27E	H	1980N	660E	EDDY	NM	WOLFCAMP	4/7/2015 0 00	6.9	102136.2	0.07961	30415.1	5311.5	40.2	643.7	1.47	62812.7	183	0	350
SERRANO 29 FEDERAL #001H	3001537763	32 1898842	104 2062149	29	24S	27E	H	1980N	660E	EDDY	NM	WOLFCAMP	1/12/2015 0 00	6.5	100994.9		28702.1	5341.9	46.2	619.5	1.46	63450.1	268	0	350

Alpha SWD #1 Offset Produced Water Analysis																												
wellname	apl	latitude	longitude	section	township	range	unit	ftgns	ftgew	county	state	field	formation	depth	sampledate	ph	specificgravity	tds_mgl	sodium_mgl	calcium_mgl	iron_mgl	magnesium_mgl	manganese_mgl	chloride_mgl	bicarbonate_mgl	sulfate_mgl	co2_mgl	
GUY A REED #001	3001510872	32 2050591	104 0471802	24	24S	28E	E	1980N	660W	EDDY	NM	MALAGA	DELAWARE		10/26/1966 0 00	6 1		130273						78600	14	605		
MALAGA UNIT #001	3001502494	32 2241287	104 0375977	13	24S	28E	B	330N	1650E	EDDY	NM	MALAGA	DELAWARE					148288						91050	182	400		
DOUBLE DALE FEE COM #001	3001535539	32 2440033	104 0173264	6	24S	29E	I	1600S	660E	EDDY	NM		ATOKA		12/4/2012 0 00	7 2		53851 1	19476 6		871	2		31304	1512 8	161	20	
GAINES 21 #001	3001528638	32 1984482	103 9862366	21	24S	29E	O	990S	1650E	EDDY	NM	CEDAR CANYON DELAWAR	BONE SPRING	7850	12/17/1996 0 00	8.48		8856	0	601 2	0	72 915	0 7	62858 2	260504	0		
H B 11 FEDERAL #008H	3001537900	32 2385559	103 951973	11	24S	29E	B	330N	1650E	EDDY	NM		AVALON UPPER		3/12/2013 0 00	6 8		190214 1	69189 7		3114	127	501	2 5	114114	1000 4	643	110
KNOLL AOK FEDERAL #001	3001528127	32 2485847	103 970253	9	24S	29E	G	1980N	1980E	EDDY	NM	CEDAR CANYON	BONE SPRING		11/27/2000 0 00	6 15				2162	0	775		84981	381	600		
CORRAL DRAW AQH FEDERAL #001	3001529396	32 2166748	103 9455948	13	24S	29E	L	2310S	330W	EDDY	NM	LIVINGSTON RIDGE	BONE SPRING		12/27/2000 0 00	5 59	1 183			25552	175	4471		164963	73	190		
H B 11 FEDERAL #008H	3001537900	32 2385559	103 951973	11	24S	29E	B	330N	1650E	EDDY	NM		AVALON UPPER		6/21/2011 0 00	7		174708 9	64668 1	2184	20	358	0 4	104800	878 4	575	50	
H B STATE #001	3001525653	32 2485619	103 9617157	2	24S	29E	E	1980N	660W	EDDY	NM		MORROW		5/29/2013 0 00	6 9		30772 5	8812	1108	912	116	26	14600	329 4	3992	90	



### Alpha SWD #1 Offset Water Wells

Eddy County, NM  
Alpha SWD Operating Inc

Projection NAD 1983 State Plane NM East FIPS 3001		
Drawn by SAH	Date 6/1/2017	Approved by NLB

#### LONQUIST & CO LLC

PETROLEUM  
ENGINEERS

ENERGY  
ADVISORS

— AUSTIN HOUSTON WICHITA DENVER CALGARY —

© Alpha SWD #1

• Water Well (NAD 83)

1 mile Radius

Section Boundary

**Map Extent  
(Eddy County, NM)**

0 1 000 2 000 3 000 4 000 Feet

This legal notice will appear in the Carlsbad Current-Argus on Tuesday, June 6, 2017, and run in the paper for one day. The affidavit of publication will be forwarded to the New Mexico Oil Conservation Division upon receipt.

#### Legal Notice

Alpha SWD Operating LLC, 4436 Sterling Ln, Plano, Texas 75093 is filing Form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division for administrative approval for its salt water disposal well Alpha SWD No. 1. The proposed well will be located 1,457' FSL & 2,093' FEL in Section 10, Township 24S, Range 28E in Eddy County, New Mexico. Disposal water will be sourced from area production, and will be injected into the Siluro-Devonian Formation (determined by offset log analysis) through an open hole completion between a maximum applied for top of 14,000 feet to a maximum depth of 15,200 feet. The maximum surface injection pressure will not exceed 2,800 psi with a maximum rate of 32,000 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) 600-1764.

**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 Road, Aztec, NM 87410  
Phone (505) 334-6178 Fax (505) 334-6170

**District IV**  
1220 S St Francis Dr , Santa Fe, NM 87505  
Phone (505) 476-3460 Fax (505) 476-3462

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

Form C-101  
Revised July 18, 2013

☐ AMENDED REPORT

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

<sup>1</sup> Operator Name and Address ALPHA SWD OPERATING LLC 4436 STERLING LN PLANO, TX 75093		<sup>2</sup> OGRID Number 372180
		<sup>3</sup> API Number 30-015-44237
<sup>4</sup> Property Code 317792	<sup>5</sup> Property Name ALPHA SWD	<sup>6</sup> Well No 1

**<sup>7</sup> Surface Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
J	10	24S	28E		1,457	SOUTH	2,093	EAST	EDDY

**<sup>8</sup> Proposed Bottom Hole Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
-	-	-	-	-	-	-	-	-	-

**<sup>9</sup> Pool Information**

Pool Name SWD, Silurian-Devonian	Pool Code 96101
-------------------------------------	--------------------

**Additional Well Information**

<sup>11</sup> Work Type N	<sup>12</sup> Well Type SWD	<sup>13</sup> Cable/Rotary R	<sup>14</sup> Lease Type Private	<sup>15</sup> Ground Level Elevation 3,013'
<sup>16</sup> Multiple N	<sup>17</sup> Proposed Depth 15,200'	<sup>18</sup> Formation Siluro-Devonian	<sup>19</sup> Contractor TBD	<sup>20</sup> Spud Date ASAP
Depth to Ground water 25'	Distance from nearest fresh water well 500'	Distance to nearest surface water 2300'		

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

**<sup>21</sup> Proposed Casing and Cement Program**


Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	26"	20"	94 lb/ft	600'	1,420	Surface
Intermediate	17 5"	13 3/8"	68 lb/ft	2,600'	1,465	Surface
Production	12 25"	9 625"	47 lb/ft	9,700'	1,840	Surface
Prod Liner	8 5"	7 625"	42 8 lb/ft	9,400' - 14,000'	370	9,400'
Tubing	N/A	5 5"	17 lb/ft	13,950'	N/A	N/A

**Casing/Cement Program: Additional Comments**

See attached schematic
------------------------

**<sup>22</sup> Proposed Blowout Prevention Program**

Type	Working Pressure	Test Pressure	Manufacturer
Double Hydraulic/Blinds, Pipe	5,000 psi	8,000 psi	TBD - Schaffer/Cameron

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief I further certify that I have complied with 19 15 14.9 (A) NMAC <input type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> if applicable Signature:  Printed name: Chris Weyand Title: Consulting Engineer E-mail Address: chris@lonquist.com Date: June 6, 2017	<b>OIL CONSERVATION DIVISION</b>	
	Approved By	
	Title	
	Approved Date	Expiration Date
	Conditions of Approval Attached	

Phone 512-600-1764



## **McMillan, Michael, EMNRD**

---

**From:** McMillan, Michael, EMNRD  
**Sent:** Monday, June 12, 2017 4 24 PM  
**To:** 'chris@lonquist.com', 'Steve Pattee'  
**Cc:** Jones, William V, EMNRD, Goetze, Phillip, EMNRD  
**Subject:** Alpha SWD Operating, LLC Alpha SWD Well No 1

Steve

Your application that was received on June 12, 2017 will not be placed into the administrative application review process

The following information is required

- Return receipt for surface owner
- Return receipt for operator of record,
- Affidavit of publication
- Signed statement from either a geologist or engineer that there is no connection between groundwater and injection interval (a signed statement from the form C-108)

If the required information is not received within 10-days, your application will be cancelled

Michael McMillan  
1220 South St Francis  
Santa Fe, New Mexico  
505-476-3448  
Michael.mcmillan@state.nm.us

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY	SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<p>1. Complete items 1, 2, and 3.</p> <p>2. Print your name and address on the reverse so that we can return the card to you.</p> <p>3. Attach this card to the back of the mailpiece, or on the front if space permits.</p> <p>Article Addressed to:</p> <p>New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division District II 811 S First Street Artesia New Mexico 88210</p> <p>9590 9402 2913 7094 7233 55</p> <p>Article Number (Transfer from service label) 7015 1660 0000 4377 9660</p> <p>PS Form 3811, July 2015 PSN 7530-02-000-9053</p>	<p>A. Signature <i>[Signature]</i></p> <p>B. Received by (Printed Name) LAREN SHARP</p> <p>C. Date of Delivery 6-12-11</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes <input type="checkbox"/> No If YES, enter delivery address below</p> <p>3. Service Type <input type="checkbox"/> Adult Signature <input type="checkbox"/> Priority Mail Express® <input type="checkbox"/> Adult Signature Restricted Delivery <input type="checkbox"/> Registered Mail™ <input type="checkbox"/> Certified Mail® <input type="checkbox"/> Registered Mail Restricted Delivery <input type="checkbox"/> Certified Mail Restricted Delivery <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Collect on Delivery <input type="checkbox"/> Signature Confirmation™ <input type="checkbox"/> Collect on Delivery Restricted Delivery <input type="checkbox"/> Signature Confirmation Restricted Delivery <input type="checkbox"/> Mail Restricted Delivery <input type="checkbox"/> Restricted Delivery</p>	<p>1. Complete items 1, 2 and 3</p> <p>2. Print your name and address on the reverse so that we can return the card to you.</p> <p>3. Attach this card to the back of the mailpiece or on the front if space permits</p> <p>Article Addressed to:</p> <p>New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division District IV 1220 South Street Francis Drive Santa Fe New Mexico 87505</p> <p>9590 9403 0963 5223 5496 30</p> <p>2. Article Number (Transfer from service label) 7015 1660 0000 4377 9677</p> <p>PS Form 3811, July 2015 PSN 7530-02-000-9053</p>	<p>A. Signature <i>[Signature]</i></p> <p>B. Received by (Printed Name) Mike</p> <p>C. Date of Delivery JUN 12 2017</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes <input type="checkbox"/> No If YES, enter delivery address below</p> <p>3. Service Type <input type="checkbox"/> Adult Signature <input type="checkbox"/> Priority Mail Express® <input type="checkbox"/> Adult Signature Restricted Delivery <input type="checkbox"/> Registered Mail™ <input type="checkbox"/> Certified Mail® <input type="checkbox"/> Registered Mail Restricted Delivery <input type="checkbox"/> Certified Mail Restricted Delivery <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Collect on Delivery <input type="checkbox"/> Signature Confirmation™ <input type="checkbox"/> Collect on Delivery Restricted Delivery <input type="checkbox"/> Signature Confirmation Restricted Delivery <input type="checkbox"/> Mail Restricted Delivery <input type="checkbox"/> Restricted Delivery</p>
Domestic Return Receipt		Domestic Return Receipt	

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY	SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<p>1. Complete items 1, 2 and 3</p> <p>2. Print your name and address on the reverse so that we can return the card to you</p> <p>3. Attach this card to the back of the mailpiece or on the front if space permits</p> <p>Article Addressed to:</p> <p>Matador Production Company One Lincoln Center 500 LBJ Freeway Suite 1500 Dallas, Texas 75240</p> <p>9590 9403 0963 5223 5496 54</p> <p>Article Number (Transfer from service label) 7015 1660 0000 4377 9691</p> <p>PS Form 3811, July 2015 PSN 7530-02-000-9053</p>	<p>A. Signature <i>[Signature]</i></p> <p>B. Received by (Printed Name) Dane Burns</p> <p>C. Date of Delivery 6/9/17</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes <input type="checkbox"/> No If YES, enter delivery address below</p> <p>3. Service Type <input type="checkbox"/> Adult Signature <input type="checkbox"/> Priority Mail Express® <input type="checkbox"/> Adult Signature Restricted Delivery <input type="checkbox"/> Registered Mail™ <input type="checkbox"/> Certified Mail® <input type="checkbox"/> Registered Mail Restricted Delivery <input type="checkbox"/> Certified Mail Restricted Delivery <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Collect on Delivery <input type="checkbox"/> Signature Confirmation™ <input type="checkbox"/> Collect on Delivery Restricted Delivery <input type="checkbox"/> Signature Confirmation Restricted Delivery <input type="checkbox"/> Mail Restricted Delivery <input type="checkbox"/> Restricted Delivery</p>	<p>1. Complete items 1, 2 and 3</p> <p>2. Print your name and address on the reverse so that we can return the card to you</p> <p>3. Attach this card to the back of the mailpiece or on the front if space permits</p> <p>Article Addressed to:</p> <p>Mr James N Phillips &amp; Mrs James R Phillips P O Box 148 Malaga New Mexico 88263</p> <p>9590 9403 0963 5223 5495 24</p> <p>2. Article Number (Transfer from service label) 7015 1660 0000 4377 9707</p> <p>PS Form 3811, July 2015 PSN 7530-02-000-9053</p>	<p>A. Signature <i>[Signature]</i></p> <p>B. Received by (Printed Name) James Phillips</p> <p>C. Date of Delivery</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes <input type="checkbox"/> No If YES enter delivery address below</p> <p>3. Service Type <input type="checkbox"/> Adult Signature <input type="checkbox"/> Priority Mail Express® <input type="checkbox"/> Adult Signature Restricted Delivery <input type="checkbox"/> Registered Mail™ <input type="checkbox"/> Certified Mail® <input type="checkbox"/> Registered Mail Restricted Delivery <input type="checkbox"/> Certified Mail Restricted Delivery <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Collect on Delivery <input type="checkbox"/> Signature Confirmation™ <input type="checkbox"/> Collect on Delivery Restricted Delivery <input type="checkbox"/> Signature Confirmation Restricted Delivery <input type="checkbox"/> Mail Restricted Delivery <input type="checkbox"/> Restricted Delivery</p>
Domestic Return Receipt		Domestic Return Receipt	

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<p>1. Complete items 1, 2 and 3</p> <p>2. Print your name and address on the reverse so that we can return the card to you</p> <p>3. Attach this card to the back of the mailpiece or on the front if space permits</p> <p>Article Addressed to:</p> <p>COG Operating, LLC One Concho Center 600 W Illinois Avenue Midland Texas 79701</p> <p>9590 9403 0963 5223 5496 47</p> <p>2. Article Number (Transfer from service label) 7015 1660 0000 4377 9684</p> <p>PS Form 3811, July 2015 PSN 7530-02-000-9053</p>	<p>A. Signature <i>[Signature]</i></p> <p>B. Received by (Printed Name) MORCENON DAVIS</p> <p>C. Date of Delivery</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes <input type="checkbox"/> No If YES enter delivery address below</p> <p>3. Service Type <input type="checkbox"/> Adult Signature <input type="checkbox"/> Priority Mail Express® <input type="checkbox"/> Adult Signature Restricted Delivery <input type="checkbox"/> Registered Mail™ <input type="checkbox"/> Certified Mail® <input type="checkbox"/> Registered Mail Restricted Delivery <input type="checkbox"/> Certified Mail Restricted Delivery <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Collect on Delivery <input type="checkbox"/> Signature Confirmation™ <input type="checkbox"/> Collect on Delivery Restricted Delivery <input type="checkbox"/> Signature Confirmation Restricted Delivery <input type="checkbox"/> Mail Restricted Delivery <input type="checkbox"/> Restricted Delivery</p>
Domestic Return Receipt	

**Affidavit of Publication**

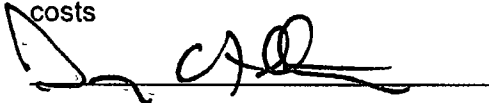
State of New Mexico,  
County of Eddy, ss

**Danny Fletcher**, being first duly  
sworn, on oath says

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

June 6 2017

That the cost of publication is **\$70.15**  
and that payment thereof has been  
made and will be assessed as court  
costs

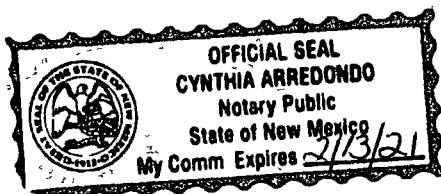


Subscribed and sworn to before me  
this 7 day of June, 2017



My commission Expires 2/13/21

Notary Public



June 6, 2017  
Legal Notice  
Alpha SWD Operating  
LLC, 4436 Sterling Ln,  
Plano, Texas 75093 is  
filing Form C-108 (Ap-  
plication for Authori-  
zation to Inject) with  
the New Mexico Oil  
Conservation Division  
for administrative ap-  
proval for its salt wa-  
ter disposal well Alpha  
SWD No. 1. The pro-  
posed well will be lo-  
cated 1,457' FSL &  
2,093' FEL in Section  
10, Township 24S,  
Range 28E in Eddy  
County, New Mexico.  
Disposal water will be  
sourced from area  
production and will  
be injected into the  
Siluro-Devonian For-  
mation (determined  
by offset log analysis)  
through an open hole  
completion between a  
maximum applied for  
top of 14,000 feet to a  
maximum depth of  
15,200 feet. The maxi-  
mum surface injection  
pressure will not ex-  
ceed 2,800 psi with a  
maximum rate of  
32,000 BWPD. Inter-  
ested parties oppos-  
ing the action must  
file objections or re-  
quests for hearing  
with the Oil Conserva-  
tion Division, 1220  
South St. Francis  
Drive, Santa Fe, New  
Mexico 87505, within  
15 days. Additional in-  
formation can be ob-  
tained from the appli-  
cant's agent, Lonquist  
& Co, LLC, at (512)  
600-1764.

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

Cardinal Laboratories in Hobbs, New Mexico was contracted to obtain water samples from fresh water wells within 1 mile and provide chemical analysis of the samples. It was determined that all wells within the area had been plugged or were not operational.

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.

  
6/19/2017



# New Mexico Office of the State Engineer

## Point of Diversion Summary

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

**POD Number****Q64 Q16 Q4 Sec TwS Rng****X****Y**

C 03824 POD1

4 1 2 16 24S 28E

585770

3565578

**Driller License:** 1566**Driller Company:** ABE DYCK PUMPING SERVICE**Driller Name:** DYCK, ABE**Drill Start Date:** 01/19/2015**Drill Finish Date:** 03/02/2015**Plug Date:****Log File Date:** 05/26/2015**PCW Rcv Date:****Source:** Shallow**Pump Type:****Pipe Discharge Size:****Estimated Yield:** 300 GPM**Casing Size:** 12 00**Depth Well:** 290 feet**Depth Water:** 60 feet**Water Bearing Stratifications:****Top Bottom Description**

56	101	Sandstone/Gravel/Conglomerate
101	150	Shale/Mudstone/Siltstone
150	187	Sandstone/Gravel/Conglomerate
187	201	Other/Unknown
201	290	Shale/Mudstone/Siltstone

**Casing Perforations:****Top Bottom**

0	290
---	-----

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

6/27/17 1 57 PM

POINT OF DIVERSION SUMMARY



C-108 Review Checklist: Received 6/14/2017 Add Request 6/14/2017 Reply Date \_\_\_\_\_ Suspended \_\_\_\_\_ [Ver 15]

ORDER TYPE WFX / PMX (SWD) Number \_\_\_\_\_ Order Date \_\_\_\_\_ Legacy Permits/Orders \_\_\_\_\_

Well No 1 Well Name(s) Alpha SWD

API 30-0 15-44237 Spud Date TBN New or Old N (UIC Class II Primacy 03/07/1982)

Footages 1457 FSL 203 FEL Lot \_\_\_\_\_ or Unit 5 Sec 10 Tsp 24S Rge 28E County Eddy

General Location 21 mile N of Maitas Pool SWD Devonian-Silurian Pool No 97865

BLM 100K Map Carlsbad Operator Alpha SWD Operating LLC OGRID 3711 Contact Chris Wendt, AECOM

COMPLIANCE RULE 5.9 Total Wells 1 Inactive 0 Fincl Assur OK Compl Order? NA TS 5.9 OK? x Date 6-27-2017

WELL FILE REVIEWED ✓ Current Status Proposed

WELL DIAGRAMS NEW Proposed ✓ or RE-ENTER Before Conv ○ After Conv ○ Logs in Imaging NA

Planned Rehab Work to Well \_\_\_\_\_

Well Construction Details		Sizes (in)	Setting	Cement		Cement Top and Determination Method
		Borehole / Pipe	Depths (ft)			
Planned ___ or Existing ___	Surface	26"/20"	600'	Stage Tool	1420	Surface / Vis GEL
Planned ___ or Existing ___	Interm/Prod	17 1/2"/13 3/8"	2600		1465	Surface / Vis GEL
Planned ___ or Existing ___	Interm/Prod	12 1/4"/9 5/8"	9700		1840	Surface / Vis GEL
Planned ___ or Existing ___	Prod/Liner	7 7/8"/6 1/2"	13450		370	9400 / CBL
Planned ___ or Existing ___	Liner					
Planned ___ or Existing ___	(OH) PERF	14000/15200		Int Length	12000	

Injection Lithostratigraphic Units				Depths (ft)	Injection or Confining Units	Tops
Adjacent Unit	Litho	Struc	Por		DV	14100
Confining Unit	Litho	Struc	Por		21400	13922
Proposed Inj Interval TOP						
Proposed Inj Interval BOTTOM						
Confining Unit	Litho	Struc	Por			
Adjacent Unit	Litho	Struc	Por			

**Completion/Operation Details**  
Drilled TD 15200 PBTD \_\_\_\_\_  
NEW TD \_\_\_\_\_ NEW PBTD \_\_\_\_\_  
NEW Open Hole ○ or NEW Perfs ○  
Tubing Size 4 1/2 in Inter Coated? \_\_\_\_\_  
Proposed Packer Depth 13952 ft  
Min Packer Depth 13902 (100-ft limit)  
Proposed Max Surface Press 2800 psi  
Admin Inj Press 2800 (0.2 psi per ft)

**AOR Hydrologic and Geologic Information**

POTASH R-111-P NA Noticed? \_\_\_\_\_ BLM Sec Ord ○ WIPP ○ Noticed? \_\_\_\_\_ Salt/Salado T 240095 NW Cliff House fm NA

FRESH WATER Aquifer Guadalupe Max Depth 140 HYDRO AFFIRM STATEMENT By Qualified Person ○

NMOSE Basin Carlsbad CAPITAN REEF thru adj NA No Wells within 1-Mile Radius? \_\_\_\_\_ FW Analysis \_\_\_\_\_

Disposal Fluid Formation Source(s) Dickinson Analysis? \_\_\_\_\_ On Lease ○ Operator Only ○ or Commercial ○

Disposal Int Inject Rate (Avg/Max BWPD) 25K/32K Protectable Waters? NA Source \_\_\_\_\_ System Closed or Open

HC Potential Producing Interval? NA Formerly Producing? \_\_\_\_\_ Method Logs/DST/P&A/Other regional 1/2-Mile Radius Pool Map ○

AOR Wells: 1/2-M Radius Map? Y Well List? \_\_\_\_\_ Total No Wells Penetrating Interval \_\_\_\_\_ Horizontals? \_\_\_\_\_

Penetrating Wells No Active Wells Y Num Repairs? \_\_\_\_\_ on which well(s)? \_\_\_\_\_ Diagrams? \_\_\_\_\_

Penetrating Wells No P&A Wells Y Num Repairs? \_\_\_\_\_ on which well(s)? \_\_\_\_\_ Diagrams? \_\_\_\_\_

NOTICE Newspaper Date June 6, 2016 Mineral Owner \_\_\_\_\_ Surface Owner Phillips N Date \_\_\_\_\_

RULE 26.7(A) Identified Tracts? Y Affected Persons CVG, Maitas N Date 6-06-2017

Order Conditions: Issues \_\_\_\_\_