

OCD - Artesia

11-732

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires July 31, 2010

1a. Type of work: <input type="checkbox"/> DRILL <input checked="" type="checkbox"/> REENTER		5. Lease Serial No. BN SWD-1273 LC-053259A
1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Mesquite SWD, Inc.		7. If Unit or CA Agreement, Name and No
3a. Address P.O. Box 1479 Carlsbad, NM 88221		8. Lease Name and Well No Cagney 28 Federal #1
3b. Phone No. (include area code) 575-706-1840		9. API Well No 30-015-35249
4. Location of Well (Report location clearly and in accordance with any State requirements *) At surface 660' FSL & 810' FEL At proposed prod. zone Same		10. Field and Pool, or Exploratory SWD, Wolfcamp
14. Distance in miles and direction from nearest town or post office* 1.6 miles southeast of Loco Hills intersection of CR-217 and US-82		11. Sec T R M or Blk. and Survey or Area Sec. 28, T17S-R30E
15. Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig. unit line, if any) 660'	16. No. of acres in lease NA	17. Spacing Unit dedicated to this well NA
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft 503' SE	19. Proposed Depth PB TD 9,150'	20. BLM/BIA Bond No on file NMB000612
21. Elevations (Show whether DF, KDB, RT, GL, etc.) GL 3624	22. Approximate date work will start* 06/15/2011	23. Estimated duration 10 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, must be attached to this form:

- | | |
|--|---|
| 1. Well plat certified by a registered surveyor | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the BLM |

25. Signature <i>Kay Havenor</i>	Name (Printed Typed) Kay Havenor	Date 05/27/2011
Title		

Approved by (Signature) <i>/s/ Don Peterson</i>	Name (Printed Typed)	Date JAN 13 2012
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached

APPROVAL FOR TWO YEARS

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

(Continued on page 2)

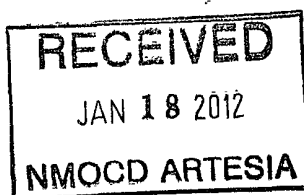
*(Instructions on page 2)

Roswell Controlled Water Basin

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Accepted for record
NMOCD

*105
1/20/2012*



Approval Subject to General Requirements
& Special Stipulations Attached

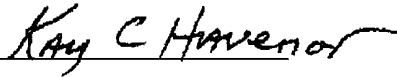
Operator Certification

Operator: Mesquite SWD, Inc.
P.O. Box 1479
Carlsbad, NM 88221
575-706-1840

Field Representative: Kay Havenor
904 Moore Ave.
Roswell, NM 88201-1144
575-626-4518

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 27st Day of May, 2011:



Name: Kay Havenor
Position Title: Agent for Mesquite SWD, Inc.
Address: 904 Moore Ave. Roswell, NM 88201-1144
Telephone: 575-626-4518
Email: KHavenor@georesources.com

Mesquite SWD, Inc.
Cagney 28 Federal #1
660' FSL & 810' FEL
Sec. 28, T17S-R30E Eddy Co., NM

API 30-015-35249

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the land or portion thereof, described below:

Date: May 27, 2011

SWD well name: Cagney 28 Federal #1

Legal description: Sec. 28, T17S-R30E
Eddy County, New Mexico

Formations: Permian

Bond coverage: Statewide

BLM Bond File number: NMB000612

Mesquite SWD, Inc.



Kay Havenor
Agent

Mesquite SWD, Inc.

API 30-015-35249

Cagney 28 Federal #1

660' FSL & 810' FEL

Sec. 28, T17S-R30E Eddy Co., NM

DISTRICT I
1000 N. Fourth St., Suite 100, NM 87501

DISTRICT II
1001 W. Second Street, Suite 100, NM 87501

DISTRICT III
1000 W. Second St., Suite 100, NM 87501

DISTRICT IV
1000 W. Second St., Suite 100, NM 87501

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form L-102
Revised October 12, 2000

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

□ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-35249		Well Name SWD, Wolf Camp	
Property Name CAGNEY "28" FEDERAL		Well Number 1	
Operator Name Mesquite SWD, Inc		Elevation 3624'	
Surface Location			
UL or Lot No. 0	Section 28	Township 17 S	Range 30 E
Lot 100	Feet from the 660	North/South Line SOUTH	Feet from the 810'
East/West Line EAST	County EDDY		
Bottom Hole Location If Different From Surface			
UL or Lot No.	Section	Township	Range
Lot 100	Feet from the	North/South Line	Feet from the
East/West Line	County		
Indicated Acres 0	Joint or Infill	Consolidation Code	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

<p>Lat - N32°48'00.1"</p> <p>Long - W103°58'15.6"</p> <p>NMSPCL - E 652668.700</p> <p>(NAD-83)</p>				<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this information either came from a reliable source or was obtained from a reliable source on the land underlying the proposed system, has been obtained from a reliable source, and that I am a mineral or working interest or a subsidiary pooling agreement in a regulatory pooling under heretofore entered by the state.</p> <p><i>Kay Havenor</i></p> <p>Signature _____ Date _____</p> <p>Kay Havenor, Agent</p> <p>Printed Name _____</p>	
				<p>SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of accurate survey made by me or under my supervision and that the same is true and correct to the best of my belief.</p> <p>SEPTEMBER 28, 2006</p> <p>Date _____</p> <p>Signature _____</p> <p>Printed Name _____</p> <p>211</p> <p>CERTIFICATE NO. 1071 L. J. 1005 7577</p> <p>HASCO SURVEYS</p>	
<p>Cagney 28 Fed. #1</p>					

Date: 01/06/2012

NMOCD Application: SWD-1273

Operator: Mesquite SWD, Inc

Well Name: Cagney 28 Federal #1 API#: 3001535249 Lease#: LC053259a

T17S-R30E, Sec 28, 660FSL – 810FEL

This well has a New Mexico Oil Conservation Division Form C108 Application for Authorization to Inject.

The source of the disposal water will be area wells.

The well seems to be structurally sound for conversion purposes.

A review of wells that penetrate the injection zone within a half mile appear to be adequately constructed or P&A. Their TDs are mostly from 3171-3700, except for Full Tank #4 API 3001535379 TD of 8500 and Full Tank Com #1 API 3001534525 TD of 11750

The BLM has no issues/objections for the conversion of this well.

as of 12/13/2011 - Twenty OFFSET WELLS found - Radius = 2700'										Total Vert Depth	web site http://www.wellpromapping.com/FPL-PET/PET-WEL/	Open Hole/Perfs Proposed for SWD w/TD of 9150	Abandoned Hole/Perfs Formations 3418-566	ELEV. 3624'	Lease # LC053259a
OPERATOR	TYPE	NAME	No.	30015	DIST	SPUD	T.A.	P & A	API						
0	CIMAREX	GAS	CAGNEY COM 1	35249	0'	03/12/07				476	17.5" hole, 13.375" csg, 48#, H40, 600sx 0sx circ, 62 TOC temp, 1" to sfc w/70 sx				
								4/20-22/07		4010	12.25" hole, 9 625" csg, 40#, J55, LTC, 970sx 0sx circ, 470 TOC temp, 1" w/104sx to				
1	CNCOPHLS	P&A	GB JACKSON 1	04376	581'	03/03/38				11,656	8 75" hole,				
										546	cable tool, 546 - 8 1/4, 32#, 50sx, TOC ???		80sx cmt plug 3000-2178, 60sx plug	3628'	LC053259a
										3250	cable tool, 3090 - 5 3/15", 17#, 100sx, TOC ????		1350-1250, perf@596 sqz to sfc w/230sx, perf@330 150sx plug tag 206, perf@200 circ70sx plug to sfc		
2	STHRN BAY	OIL	GB JACKSON 3A	31157	619'	08/22/00				517	12 1/4" hole, 8 5/8, 24#, 525sx circ cmt			3618'	NM028936
										3650	7 7/8" hole, 5 1/2", 15.5#, 1075sx circ cmt	3199-3310	Grayburg		
3	STHRN BAY	OIL	GB JACKSON 6Z	30170	831'	04/18/98				520	12 25" hole, 8 5/8", 410sx, ??? TOC			3622'	LC053259a
										3700	7 875" hole, 5 1/2", 975sx, ??? TOC CIBP 3410	3252-3365	GB, SA		
4	STHRN BAY	INJ	GB JACKSON 1M	04377	907'	7/7/1949				500	cable tool, 8 1/2", 32#, 30sx, ??? TOC			3623'	NM028936a
										1642	cable tool, 7", 20#, 7sx, ??? TOC				
										3418	cable tool, 3192 PBD 10/1991, 5 1/2" liner 1517-3171, 55sx, ??? TOC, pkr 2998	OH 3171-3418	GB, SA		
5	STHRN BAY	OIL	GB JACKSON 1A	04443	1010'	09/16/41				666	cable tool, 660 - 8 1/4", 28#, 50sx, ??? TOC			3619'	NM028936a
										3160	cable tool, 7", 20#, 100sx, ??? TOC, 5/1992 found csg leaks 1700-2321				
										3432	cable tool, 3280 PBD 5/1992	OH 3160-3432	GB, SA		
6	GNRI-AMER	OIL	GB JACKSON 3	04378	1103'	08/03/38				532	cable tool, 8 5/8", 28#, 50sx, ??? TOC			3629'	
										3025	cable tool, 7", 24#, 100sx, ??? TOC (485" 7" salvaged 1975)	OH 3207-3268	GB, SA		
										3268	cable tool, 60 qt Nitro	2900 CIBP w/75" cmt cap, 1550-1450 cmt plug, 560-410			
7	STHRN BAY	INJ	GB JACKSON 1	04359	1188'	7/7/1949				535	cable tool, 8 1/4", 32#, 50sx, ??? TOC,			3631'	NM0467934
										2900	cable tool, 7", 20#, 100sx, ??? TOC, PBD 2785 CIBP	2023-29	Fran (7 Rvrs)		
										3265		OH 2900-3265	GB, SA		
8	STHRN BAY	OIL	GB JACKSON 9	31272	1472'	08/01/00				511	12 1/4" hole, 8 5/8", 24#, 400sx TOC ???			3631'	NM028936
										3650	7 7/8" hole, 5 1/2", 15.5#, 1075sx TOC ???	3027-614	GB, SA		
9	STHRN BAY	OIL	GB JACKSON 2	04360	1514'	7/7/1949					found no useable wellbore records on nmocd			3632'	
10	STHRN BAY	P&A	GB JACKSON 1Q	04445	1516'	04/01/39				557	cable tool, 8 1/4, 28#, 50sx TOC ???			3616'	
										2947	7", 20#, 100sx, ??? TOC,				
										3360	90 qt nitro	OH 2947-3305	GB, SA		
11	STHRN BAY	OIL	GB JACKSON 13	30022	1835'	02/15/98				523	12 1/4" hole, 8 5/8, K55, 24#, 853sx ??? TOC			3620'	NM0467934
										3700	7 7/8" hole, 5 1/2", J55, 17#, 850sx TOC ???	3169-444	GB Premier		
12	CIMAREX	P&A	FULL TANK 4	35379	1948'	03/22/07				499	17 1/2" hole, 13 3/8, H40, 48#, STG, 451sx circ 58sx			3610'	NM0467934
										4010	12 1/4" hole, 9 5/8, J55, 40#, 1977sx circ 473sx				
										8500	8 3/4" hole				
13	CIMAREX	GAS	FULL TANK COM 1	34525	2031'	04/28/06				510	17 1/2" hole, 13 3/8, H40, 48#, STC, 470sx circ 23sx			3611'	NM0467934
										4030	12 1/4" hole, 9 5/8, J55, 40#, 1200sx circ 66sx				
										9500	8 3/4" hole, 7", P110, 26#, LTC, 450sx TOC 3400, DV Tool 8644	11360-402	Morrow		
										11750	6 1/8" hole, 4 1/2", P110, 11.6#, LTC, top liner 9135, 275sx TOC 3000 CBL	11556-576	Morrow		
14	STHRN BAY	INJ	GB JACKSON 2	10531	2079'	06/05/65				547	Pulled 8 5/8" csg as no water encountered			3644'	LC053259a
										3095	5 1/2", 14#, 130sx ??? TOC, 09/01/2006 sqz leak 65-105'	2998-3308	GB, SA	Has approved NOI to P&A	
										3135	open hole				
15	STHRN BAY	OIL	GB JACKSON 3	21692	2238'	12/14/75				502	12 1/4" hole, 8 5/8", 24#, 100sx			3630'	LC053259a
										3185	7 7/8" hole, 4 1/2", 9.5 & 10 5#, 700sx TOC ????. Perf @150 circ cmt to sfc	3098-102	Premier		
												2980-3133	GB, SA		
16	STHRN BAY	OIL	GB JACKSON 12	20256	2409'	10/06/69				497	11" hole, 8 5/8", J55, 24#, 100sx			3624'	NM0467934
										3240	7 7/8" hole, 5 1/2", J55, 17#, 200sx TOC ???	3161-96	GB, SA		
17	CIMAREX	GAS	CAGNEY COM 2	35250	2479'	Not drilled, afmss status is UAPD								3621'	LC0289303
18	STHRN BAY	INJ	GB JACKSON 3Q	04358	2490'	05/31/40				660	cable tool, 8 14", 24#, 50sx, ??? TOC			3627'	LC060528b
										3169	cable tool, 7", 20#, 100sx, ??? TOC				
										3252	OH	OH 3235-52			
19	STHRN BAY	OIL	GB JACKSON 6	10463	2575'	03/24/65				580	cable tool, 8 5/8", 24#, 100sx, ??? TOC			3650'	NM0467934
										3119	cable tool, 5 1/2", 14#, 150sx, ??? TOC	3087-91 3107-9			
										3171	OH	OH 3123-36	Premier		
20	STHRN BAY	INJ	GB JACKSON 2	04446	2676'	04/25/41				699	cable tool, 8", 24#, 50sx, ??? TOC			3595'	
										3198	cable tool, 7", 20#, 100sx, ??? TOC				
										3281					
													OH 3260-81	Premier	

Operator: Mesquite SWD, Inc.
Surface Lease: LC053259a
Producing Lse No: LC053259a
Unit or CA No: N. A.

Subsurface Concerns for Casing Designs:

Well Status: P&A
Spud date: 3/12/2007
Max Inj psig: 1,640
Admn Order: SWD-1273
O.O 2 III B h. MIT:
Last WK inspc: .
Inspc Tbg psig: no gauge
Inspc Csg psig: no gauge

Well: Cagney Com - 001
API: 3001535249
@ Srfce: T17S-R30E, Sec 28, 660FSL & 810FEI
@ M TD: N. A.

KB: 3634
GL: 3624
Conn: 10

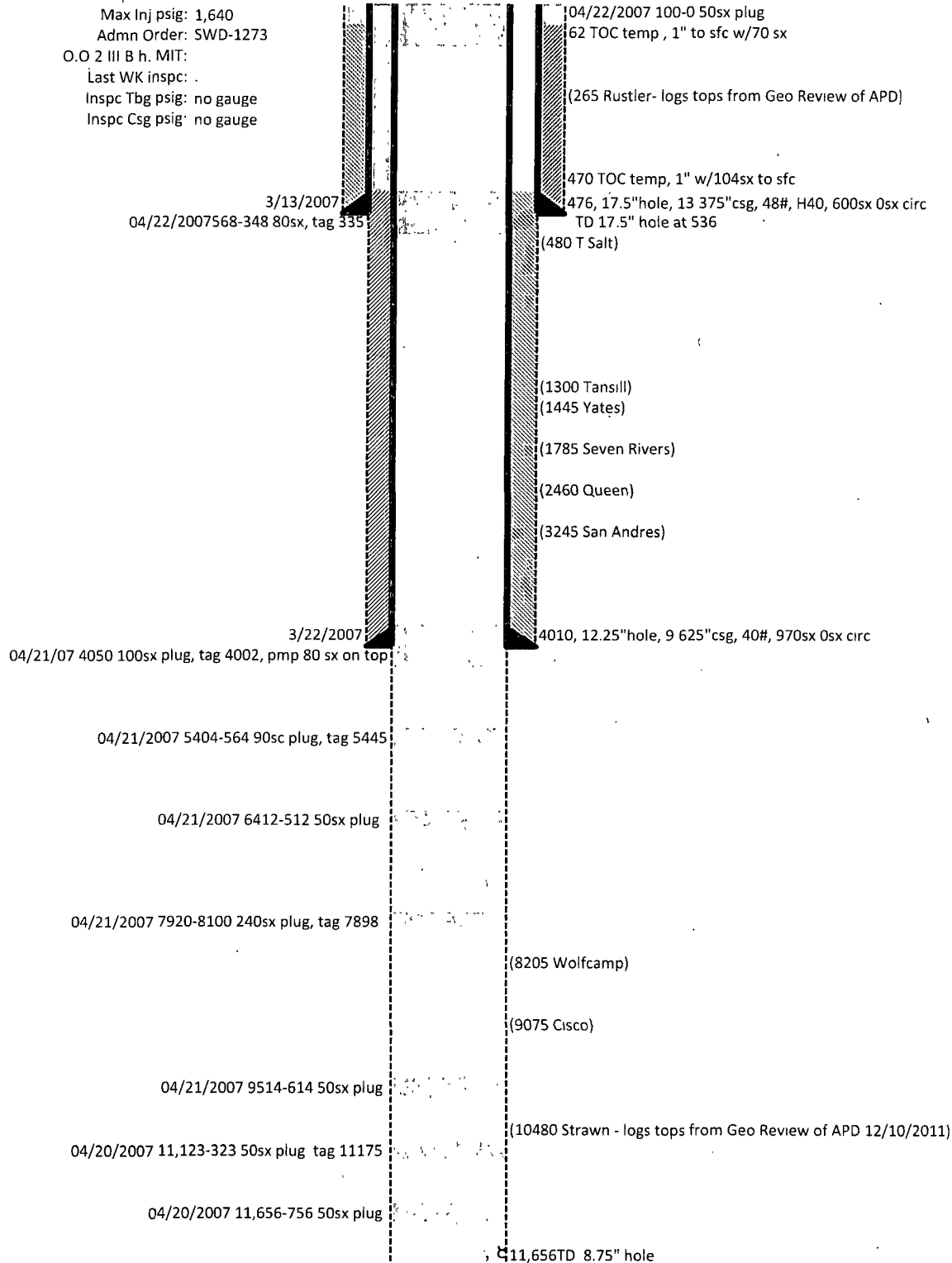


Diagram last updated: 12/13/2011

173028p APDWDW Cagney-001 3001535249 LC053259a Msqt (1.4

Mesquite SWD, Inc.
RE-ENTRY PROGRAM

Cagney 28 Federal #1 API: 30-015-35249
Sec. 28, T17S-R30E Eddy Co., NM

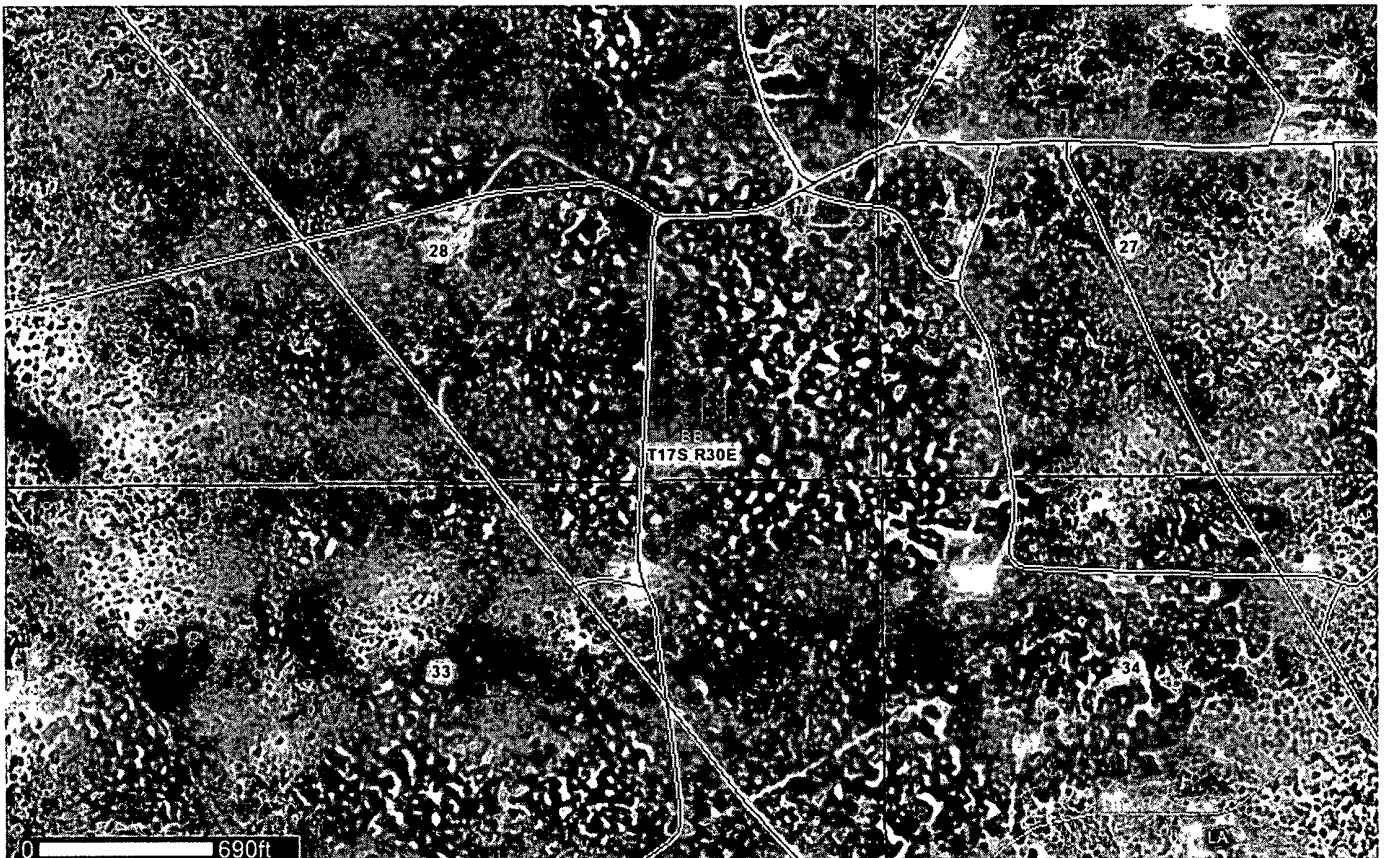
Supplemental to Form 3160-3, Application for Permit to Re-enter the subject well, Mesquite SWD, Inc submits the following information as per Bureau of Land Management requirements.

1. Geologic Name of Surface Formation

Surface is Quaternary eolian and piedmont deposits (Qep) Holocene to middle Pleistocene. (New Mexico Bureau of Geology and Mineral Resources, 2003, Geologic Map of New Mexico, 1:500,000)

Soil map with legend. Source: <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

Eddy Area, New Mexico (NM614)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BB	Berino complex, 0 to 3 percent slopes, eroded	137,949.5	5.4%



Pad location is north of soil designation "BB"

Exhibit C

2. **Formation Tops and Estimated Fresh Water:**

The of geologic markers and estimated depths at which anticipated water, oil or gas formations are expected to be encountered as follows:

Base/Rustler-T/Salt	558'
Base/Salt	1,292'
Artesia Group	1,854'
Queen	2,483'
San Andres	3,364'
Bone Springs	6,642'
2 nd BS sand	7,305'
3 rd BS sand	7,865'
Wolfcamp	8,048'
Cisco	8,987'

None of the formations beneath the Bone Springs and above the Pennsylvanian Cisco were found to be potentially productive of oil or gas in this well or other wells in the NM OCD C-108 SWD application area of review. Although no fresh water is known in the NM OCD area of review, potential shallow sands are protected by 13-3/8" casing set at 470' and cement circulated to the surface, and 9-5/8" casing set at 4,010' and cement circulated to the surface.

3. Casing:

Currently in hole, not pulled

Hole Size	Casing	Depth Set	Cement	Top Cement
17-1/2"	13-3/8" 48# H-40	470'	460 sx	Circulated
12-1/4"	9-5/8" 40# J-55	4010'	970 sx	Circulated

Proposed Casing

Hole Size	Interval	OD Casing	New Used	Wt	Connection	Grade	Collapse Design Factor	Burst Design Factor	Tension Design Factor
8-3/4"	0 - 6,450'	7"	New	23#	8 - R LTC	N-80	1.125	1.125	1.6
8-3/4"	6,450' - 7,350'	7"	New	26#	8 - R STC	K-55	1.125	1.125	1.6
8-3/4"	7,350' - 9,150'	7"	New	26#	8 - R STC	N-80	1.125	1.125	1.6

4. Cement Program:

Original completion

13-3/8" Surface @470' w/460 sx + 7 sx w/1" to surface.

9-5/8" Intermediate @4,010' w/970 sx, no circ. TS cmt @470', circ w/2-1" job w/104 sx.

Proposed Re-entry 7" Cement Program

Dv tool set approximately 8,200'.

1st stage lead

See
COA

165 sxs Class C 35/65 + 6% Bentonite + 0.6 C-15 + 0.1% C-20 + 0.25% C-45 + 0.6% FL-10 + 1# Gilsonite + 0.25% R-38. Density: 12.70 #/gal. Yield: 1.86 ft³/sx. Mixing wtr: 9.87 gal/sx. Total mix wtr: 38.76 bbls. Slurry vol: 54.77 bbls.

2nd stage lead

845 sxs Class C 35/65 + 6% Bentonite + 0.6 C-15 + 0.1% C-20 + 0.25% C-45 + 0.6% FL-10 + 1# Gilsonite + 0.25% R-38. Density: 12.70 #/gal. Yield: 1.86 ft³/sx. Mixing wtr: 9.87 gal/sx. Total mix wtr: 198.52 bbls. Slurry vol: 280.51 bbls.

2nd stage tail

100 sxs Class-H + 0.25% R-38
Density: 15.60 #/gal. Yield: 1.18 ft³/sx. Mixing wtr: 5.22 gal/sx. Total mix wtr: 12.43 bbls. Slurry vol: 21.02 bbls.

Cement calculated at 25% excess.

3. Casing:

Currently in hole, not pulled

Hole Size	Casing	Depth Set	Cement	Top Cement
17-1/2"	13-3/8" 48# H-40	470'	460 sx	Circulated
12-1/4"	9-5/8" 40# J-55	4010'	970 sx	Circulated

Proposed Casing

Hole Size	Interval	OD Casing	New Used	Wt	Connection	Grade	Collapse Design Factor	Burst Design Factor	Tension Design Factor
8-3/4"	0 - 9,150'	7"	New	26#	8 - R LTC	N-80	1.183	1.580	2.18

4. Cement Program:

Original completion

13-3/8" Surface @470' w/460 sx + 7 sx w/1" to surface.

9-5/8" Intermediate @4,010' w/970 sx, no circ. TS cmt @470', circ w/2-1" job w/104 sx.

Proposed Re-entry 7" Cement Program

Dv tool set approximately 8,200'.

1st stage lead

165 sxs Class C 35/65 + 6% Bentonite + 0.6 C-15 + 0.1% C-20 + 0.25% C-45 + 0.6% FL-10 + 1# Gilsonite + 0.25% R-38. Density: 12.70 #/gal. Yield: 1.86 ft³/sx. Mixing wtr: 9.87 gal/sx. Total mix wtr: 38.76 bbls. Slurry vol: 54.77 bbls.

2nd stage lead

845 sxs Class C 35/65 + 6% Bentonite + 0.6 C-15 + 0.1% C-20 + 0.25% C-45 + 0.6% FL-10 + 1# Gilsonite + 0.25% R-38. Density: 12.70 #/gal. Yield: 1.86 ft³/sx. Mixing wtr: 9.87 gal/sx. Total mix wtr: 198.52 bbls. Slurry vol: 280.51 bbls.

2nd stage tail

100 sxs Class-H +0.25% R-38

Density: 15.60 #/gal. Yield: 1.18 ft³/sx. Mixing wtr: 5.22 gal/sx. Total mix wtr: 12.43 bbls. Slurry vol: 21.02 bbls.

Cement calculated at 25% excess.

See
COA

5. Pressure Control Equipment:

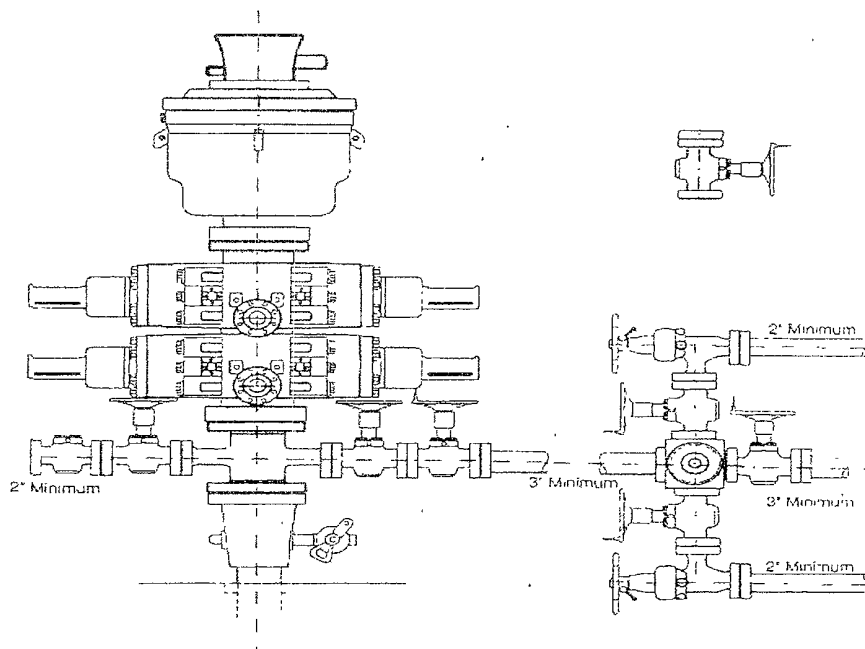
3M BOP shown on the above diagram is representative of the minimum type to be utilized by the drilling contractor. The BOP and manifold test will be used to pressure casing/tubing for 30 minutes prior to reaching 9-5/8" casing shoe at 4,010'. BOP equipment will be tested daily during re-entry.

Nipple-up on 9-5/8" casing with 3M system and test to 3000# with independent tester.

BOP will be operationally checked each 24 hour period. BOP will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. A 3" kill line and a 3" choke line will be included in the drilling spool located below the BOP. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold with 3000 psi working pressure rating.

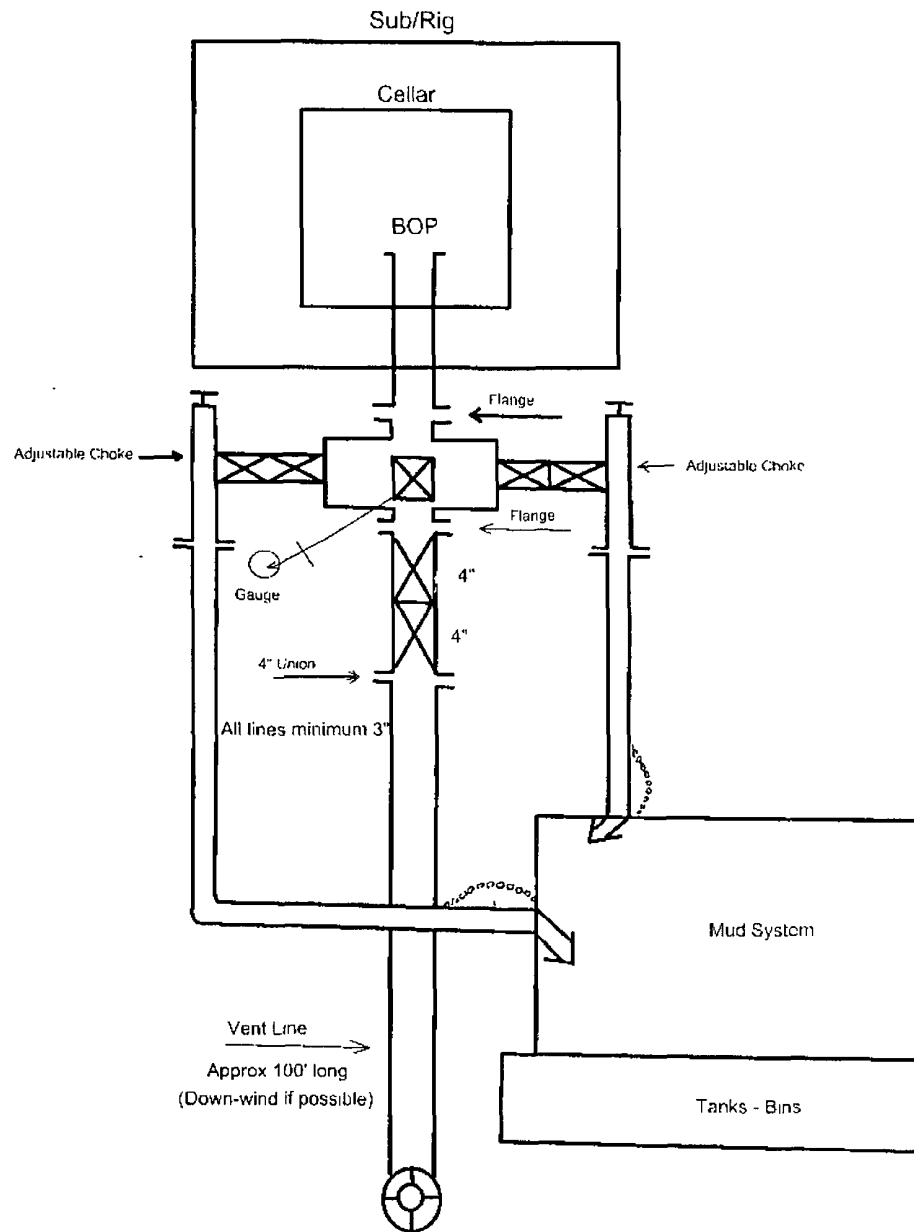
3000 psi BOP and Manifold Schematic using Townsend 81 Series

Mesquite SWD, Inc. Cagney 28 Federal #1
Sec. 28, T17S-R30E Eddy Co. NM



Note: No anomalous pressures were reported in the original drilling of this well to TD 11,756'.

Mesquite SWD, Inc.
Choke Manifold Equipment



Hydrogen Sulfide Drilling Operations Plan

Mesquite SWD, Inc.
Cagney 28 Federal Com No. 1
Unit P Section 28
T17S - R30E Eddy County, NM

1. H₂S Detection and Alarm Systems
 - A. H₂S detectors and audio alarm system to be located at bell nipple, end of flow line (mud pit) and on derrick floor or doghouse.
2. Windsock and/or wind streamers
 - A. Windsock at mudpit area should be high enough to be visible.
 - B. Windsock at briefing area should be high enough to be visible.
3. Condition Flags and Signs
 - A. Warning sign on access road to location.
 - B. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, danger, H₂S present in dangerous concentration. Only emergency personnel admitted to location.
4. Well control equipment
 - A. See "Pressure Control Equipment" above.
5. Communication
 - A. While working under masks chalkboards will be used for communication.
 - B. Hand signals will be used where chalk board is inappropriate.
 - C. Two way radio will be used to communicate off location in case emergency help is required. In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.
6. Drillstem Testing not anticipated.
7. Drilling contractor supervisor will be required to be familiar with the effects H₂S has on tubular goods and other mechanical equipment.
8. If H₂S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H₂S scavengers if necessary.

11. Anticipated Starting Date and Duration of Operations:

Road and location repair will begin after the BLM has approved the APD. Re-entry date will follow as soon as drilling rig and equipment are available. Re-entry, well preparation for injection, and lease clean-up are expected to require approximately 15 days.

12. After running and cementing 7" casing and release of drilling rig, a GR-Collar log will be run and perforations made in the over-all interval 8,284' - 8,970'. The perforations will be acidized.

EMERGENCY CALL LIST

Mesquite SWD, Inc.	575-885-3996
Clay Wilson	575-706-1840
Kay Havenor	575-626-4518

EMERGENCY RESPONSE NUMBERS

State Police	575-748-9718
Eddy County Sheriff	575-746-2701
Emergency Medical Services	911 or 575-746-2701
Artesia Fire and Ambulance	575-746-5050
Maljamar Fire and Ambulance	575-674-4100
Artesia General Hospital	
702 N. 13th St. Artesia	575-748-3333
Carlsbad Medical Center	
2430 West Pierce Street	575-887-4100
Carlsbad Police Department	575-885-2111
Eddy County Emergency Management	575-887-9511
Carlsbad Fire Department	575-885-3125

Mesquite SWD, Inc.
Cagney 28 Federal #1
660' FSL & 810' FEL
Sec. 28, T17S-R30E Eddy Co., NM

API 30-015-35249

NOTICE OF STAKING

NOTICE OF STAKING Not to be used in place of Application for Permit to Drill (Form 3160-3)	
1. Name Address, and Telephone of Operator: Mesquite SWD, Inc. P.O. Box 1479 Carlsbad, NM 88221	3. Lease Number: NMLC 053259A
2. Name & Phone # of Contact Person: Kay Havenor 575-626-4518	NMNM
4. Well Name and Number Surface Location of Well SHL: 660' FSL & 810' FEL (Anticipated) BHL: Same	5. Section, Township, Range 28, T17S-R30E
Attach: (a) Sketch showing road entry onto pad, pad dimensions, and reserve pit (b) Topographical or other acceptable map (e.g. a USGS 7 1/2" Quadrangle) showing location, access road, and lease boundaries	6. County Eddy
	7. Field Name or Wildcat:
	9. Agreement Number:
8. Oil Well Gas Well Other (Specify) SWD	
10. Estimated Well Depth: Original TD 11,756' Approx PB TD for SWD 9,150'	11. # of Acres Dedicated to this well: 0 - NA
12. Name and Depth of Formation Objective(s) Wolfcamp 8,048'	13. Operator Bond # NMB000612
14. Estimated Well Depth	15. API # (if available): 30-015-35249
17. Additional information (as appropriate; include surface owner's name, address & phone #).	
18. Signed <u>Kay Havenor</u> Title <u>Agent</u> Date <u>5/27/20011</u>	

Note: When the Bureau of Land Management receives this Notice, the agency will schedule the date of the onsite inspection. You must stake the location and flag the access road before the onsite inspection. Operators should consider the following before the onsite inspection and incorporate these considerations into the Notice of Staking Option, as appropriate:

- (a) H₂S Potential;
- (b) Cultural Resources (Archaeology); and
- (c) Federal Right-of-Way or Special Use Permit.

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Mesquite SWD Inc.
LEASE NO.:	NMLC053259A
WELL NAME & NO.:	Cagney 28 Federal 1
SURFACE HOLE FOOTAGE:	660' FSL & 810' FEL
BOTTOM HOLE FOOTAGE	
LOCATION:	Section 28, T. 17 S., R. 30 E., NMPM
COUNTY:	Eddy County, New Mexico

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☒ **Special Requirements**
 - Lesser Prairie-Chicken Timing Stipulations
 - Ground-level Abandoned Well Marker
- ☐ **Construction**
 - Notification
 - Topsoil
 - Closed Loop System
 - Federal Mineral Material Pits
 - Well Pads
 - Roads
- ☐ **Road Section Diagram**
- ☒ **Drilling**
 - H2S Requirements—Onshore Order 6
 - Production test
 - Waste Material and Fluids
- ☒ **Production (Post Drilling)**
 - Well Structures & Facilities
 - Pipelines
 - Electric Lines
- ☐ **Interim Reclamation**
- ☐ **Final Abandonment & Reclamation**

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5972 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall stockpile the topsoil in a low profile manner in order to prevent wind/water erosion of the topsoil. The topsoil to be stripped is approximately 4 inches in depth. The topsoil will be used for interim and final reclamation.

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. ON LEASE ACCESS ROADS

Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty (20) feet.

Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

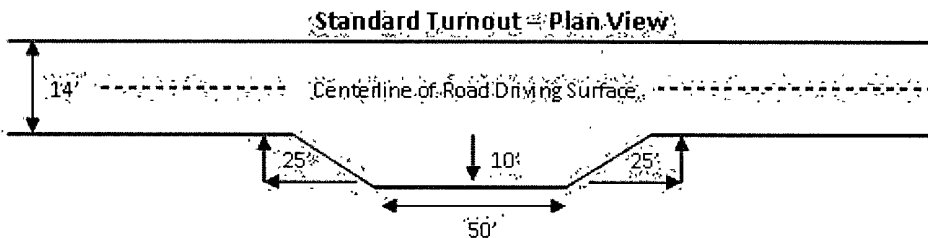
The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Turnouts

Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:

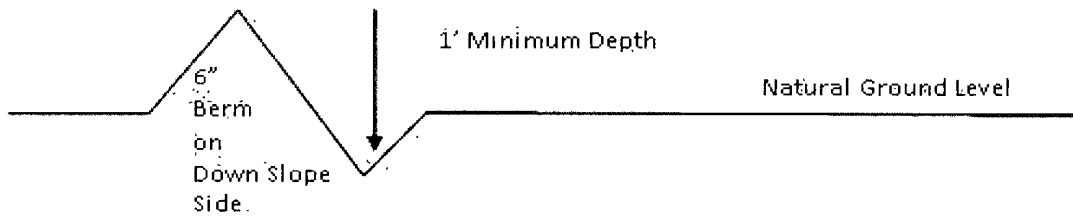


Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill out sloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

$$400 \text{ foot road with } 4\% \text{ road slope: } \frac{400'}{4\%} + 100' = 200' \text{ lead-off ditch interval}$$

Culvert Installations

Appropriately sized culvert(s) shall be installed at the deep waterway channel flow crossing.

Cattleguards

An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations.

A gate shall be constructed and fastened securely to H-braces.

Fence Requirement

Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

VII. DRILLING – Re-entry

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

- a. Spudding well
- b. BOPE tests

☒ **Eddy County**

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
(575) 361-2822

1. **A Hydrogen Sulfide (H₂S) Drilling Plan should be activated prior to drilling out the intermediate shoe. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.**
2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a “Major” violation.**
3. **Prior to commencement of injection into the Wolfcamp formation the operator shall prove the injection zone does not contain hydrocarbons capable of being produced in paying quantities.**

B. CASING – Re-entry

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.

Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

1. The **13-3/8** inch surface casing is set at 470 feet, cement did not circulate. 1” remedial job to surface.
2. The **9-5/8** inch intermediate casing is set at 4010 feet, cement did not circulate. 1” remedial job to surface.
3. The minimum required fill of cement behind the **7** inch production casing is:
 - a. First stage to DV tool:
☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.
 - b. Second stage above DV tool:
☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office. **Additional cement may be required – excess calculates to 2%.**
4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface plug shall be **3000 (3M)** psi.
3. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer.**
 - b. The results of the test shall be reported to the appropriate BLM office.
 - c. All tests are required to be recorded on a calibrated test chart. **A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**

VIII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Containment Structures

The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

Painting Requirement

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color
Shale Green, Munsell Soil Color Chart # 5Y 4/2

B. PIPELINES

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

A copy of the Grant/Sundry Notice and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the

Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. The holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. The holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:

- a. Activities of the holder including, but not limited to construction, operation, maintenance, and termination of the facility.
- b. Activities of other parties including, but not limited to:
 - (1) Land clearing.
 - (2) Earth-disturbing and earth-moving work.
 - (3) Blasting.
 - (4) Vandalism and sabotage.
- c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars (\$1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any responsibility as provided herein.

6. All construction and maintenance activity will be confined to the authorized right-of-way width of 20 feet.
7. No blading or clearing of any vegetation will be allowed unless approved in writing by the Authorized Officer.
8. The holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky or dune areas, the pipeline will be "snaked" around hummocks and dunes rather than suspended across these features.
9. The pipeline shall be buried with a minimum of 24 inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.
10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.
11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.
12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.
13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.
14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.
15. Any cultural and/or paleontological resource (historic or prehistoric site or object)

discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

16. Special Stipulations:

Lesser Prairie-Chicken

Oil and gas activities will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

C. ELECTRIC LINES

STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

A copy of the grant and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the

authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.

5. Powerlines shall be constructed in accordance to standards outlined in "Suggested Practices for Raptor Protection on Powerlines, " Raptor Research Foundation, Inc., 1981. The holder shall assume the burden and expense of proving that pole designs not shown in the above publication are "raptor safe." Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

6. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

7. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.

8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.

9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.

accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

<u>Species</u>	<u>lb/acre</u>
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A

*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed