

OCD Artesia  
**NM OIL CONSERVATION**

ARTESIA DISTRICT

MAR 14 2016

FORM APPROVED  
OMB No. 1004-0137  
Expires October 31, 2014

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**APPLICATION FOR PERMIT TO DRILL OR REENTER**

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMLC-029415B
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Burnett Oil Co., Inc.		7. If Unit or CA Agreement, Name and No.
3a. Address 801 Cherry Street, Suite 1500 Fort Worth, Texas 76102	3b. Phone No. (include area code) 817-583-8730	8. Lease Name and Well No. Burnett 25 J#1 SWD (316067)
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 1350' FSL & 1650' FEL, Unit J At proposed prod. zone Same		9. API Well No. 30-015-43682-
14. Distance in miles and direction from nearest town or post office* Approximately 3.3 Miles West of Maljamar, NM		10. Field and Pool, or Exploratory Sub Wolfcamp 96135
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1350'	16. No. of acres in lease 1920	11. Sec., T. R. M. or Blk. and Survey or Area Section 25 T. 17S, R. 31E
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 4235'	19. Proposed Depth 9700' TVD 9700' MD	12. County or Parish Eddy
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3882' GL	22. Approximate date work will start* 11/15/2015	13. State NM
17. Spacing Unit dedicated to this well 40		
20. BLM/BIA Bond No. on file NM-B000197 & NM-B000699		
23. Estimated duration 30 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.
2. A Drilling Plan.
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).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the BLM.

25. Signature <i>Leslie M. Garvis</i>	Name (Printed/Typed) Leslie M. Garvis	Date 09/21/2015
--	--	--------------------

Title Regulatory Coordinator
---------------------------------

Approved by (Signature) <i>STEPHEN J. CAFFEY</i>	Name (Printed/Typed)	Date MAR 09 2016
--	----------------------	---------------------

Title FOR FIELD MANAGER	Office BLM-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)

**APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED**

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

**Roswell Controlled Water Basin**

Witness Surface Casing

Must have approved C-108, MIT, and all regulatory requirements in place prior to injecting

KJ  
3/24/16



## FINAL CERTIFICATION MEMO

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access road proposed herein; that I am familiar with the conditions that presently 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 Burnett Oil Co. Inc. is 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 21<sup>st</sup> day of Sept 2015.

Signed: Walter M. Glasgow

Printed Name: Walter Glasgow

Position: VP of Operations - Permian Basin/New Mexico

Company: Burnett Oil Co., Inc.

Address: 801 Cherry Street, Suite 1500, Unit #9, Fort Worth, Texas 76108

Telephone: 817.332.5108

Email: wglasgow@burnettoil.com

DISTRICT I  
1825 N. French Dr., Hobbs, NM 88240  
Phone (575) 393-6181 Fax: (575) 393-0720

DISTRICT II  
811 S. First St., Artesia, NM 88210  
Phone (505) 748-1253 Fax: (505) 748-0720

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

DISTRICT IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone (505) 478-3460 Fax: (505) 478-3462

State of New Mexico  
Energy, Minerals and Natural Resources Department

NM OIL CONSERVATION

ARTESIA DISTRICT

Form C-102

Revised August 25, 2011

MAR 14 2016

Submit one copy to appropriate  
District Office

OIL CONSERVATION DIVISION

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

RECEIVED

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number <b>30015 43682</b>	Pool Code <b>96135</b>	Pool Name <b>SWD; WOLFCAMP</b>
Property Code <b>5314 316067</b>	Property Name <b>BURNETT 25 J SWD</b>	Well Number <b>1</b>
OGRID No. <b>03080</b>	Operator Name <b>BURNETT OIL CO, INC.</b>	Elevation <b>3863</b>

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	FEET from the	SOUTH/NORTH LINE	FEET from the	East/WEST LINE	County
J	25	17 S	31 E		1350	SOUTH	1650	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	FEET from the	SOUTH/NORTH LINE	FEET from the	East/WEST LINE	County

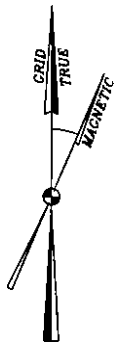
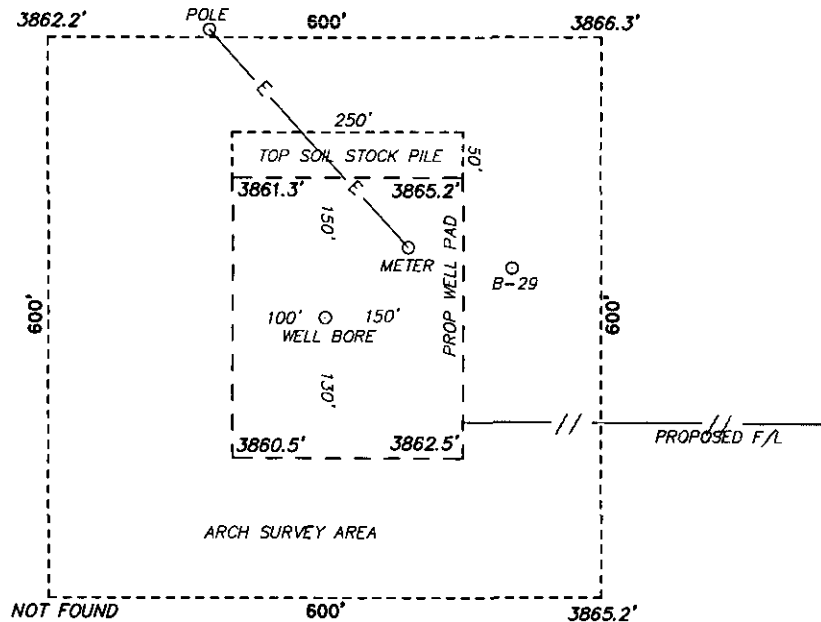
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

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

N: 659764.3 E: 654276.3 NAD 27	N: 659782.6 E: 656921.9 NAD 27	N: 659799.0 E: 659563.4 NAD 27	<p><b>OPERATOR CERTIFICATION</b></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 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.</p> <p><i>Leslie Garvis</i> 10/23/15 Signature Date</p> <p>Leslie Garvis Printed Name lgarvis@burnettoil.com Email Address</p>
<p><b>SURFACE LOCATION</b></p> <p>Lot - N 32.801989 Long - W 103.819332 NMSPCE- N 655858.3 E 657936.2 (NAD-27)</p> <p>3862.2' 3866.3' 3865.2'</p> <p>S.L.</p> <p>1650'</p> <p>1350'</p>			
N: 654483.0 E: 654311.3 NAD 27	N: 654519.3 E: 659593.1 NAD 27		

# EXHIBIT A

SECTION 25, TOWNSHIP 17 SOUTH, RANGE 31 EAST. N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.

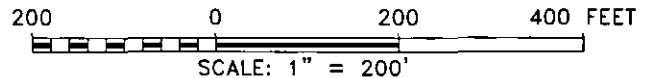


BURNETT OIL CO  
BURNETT 25 J SWD #1  
ELEV. - 3863'  
Lat - N 32.801989  
Long - W 103.819332  
NMSPCE- N 655858.3  
E 657936.2  
(NAD-27)

Directions to Location:

ON STATE 529, MILE MARKER 3 CONTINUE EAST 0.2  
MILES, THEN NORTH THROUGH CATTLE GUARD  
APPROX 100', THEN EAST 0.6 MILES, WEST TO B-29  
PAD.

LOCO HILLS, NM IS ±9 MILES TO THE WEST OF LOCATION.



Burnett Oil Co., Inc.  
6666

REF: BURNETT 25 J SWD #1 / WELL PAD TOPO

THE BURNETT 25 J SWD #1 LOCATED 1350' FROM  
THE SOUTH LINE AND 1650' FROM THE EAST LINE OF  
SECTION 25, TOWNSHIP 17 SOUTH, RANGE 31 EAST.

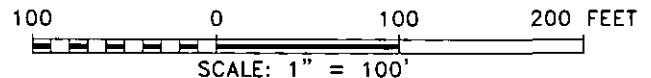
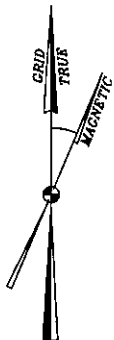
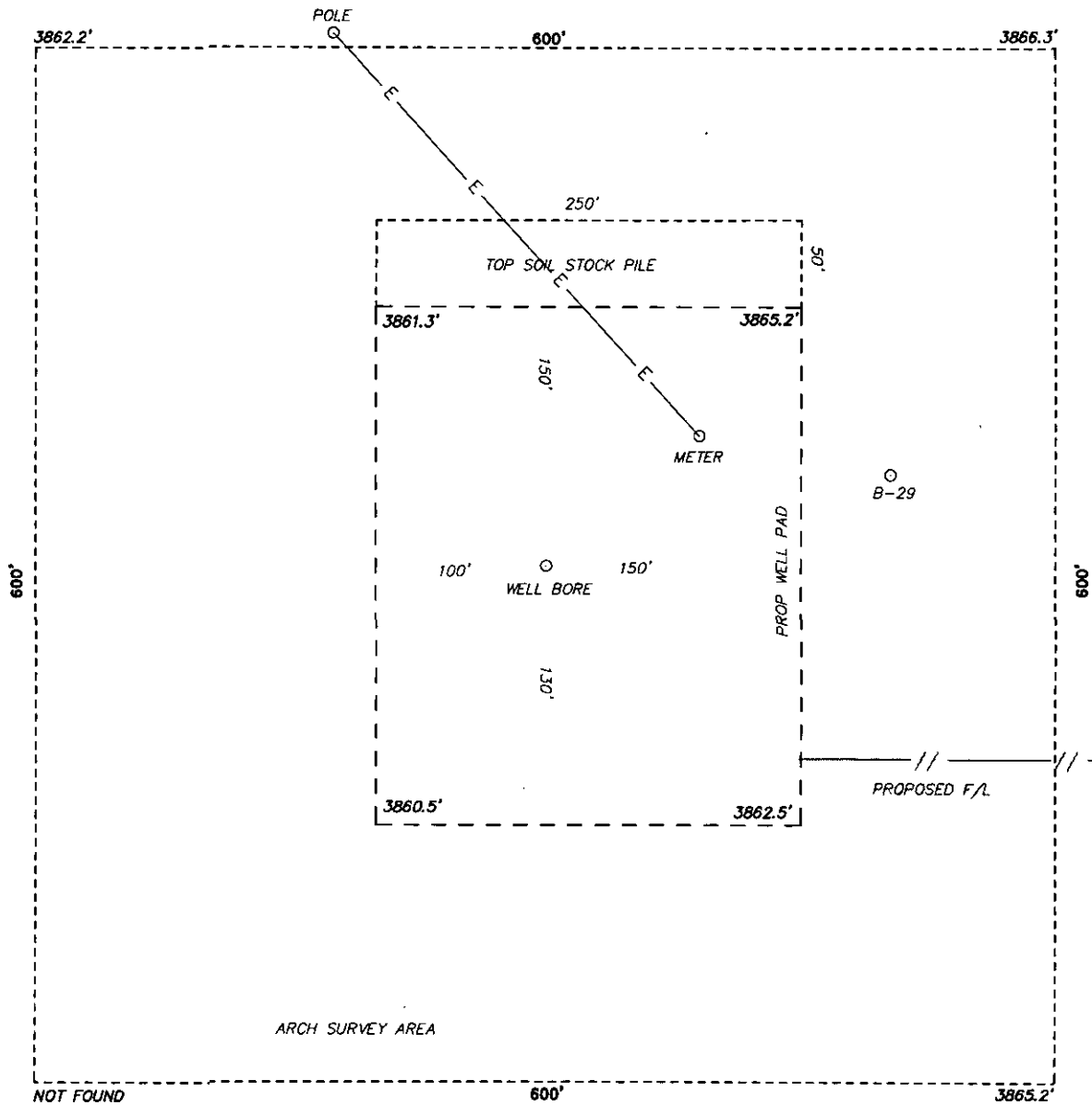
N.M.P.M., EDDY COUNTY, NEW MEXICO.

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1120 N. West County Rd. (575) 392-2206 - Fax  
Hobbs, New Mexico 88241 basin-surveys.com

# EXHIBIT B

SECTION 25, TOWNSHIP 17 SOUTH, RANGE 31 EAST. N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.



Burnett Oil Co., Inc.  
6666

REF: BURNETT 25 J SWD #1 / WELL PAD TOPO

THE BURNETT 25 J SWD #1 LOCATED 1350' FROM  
THE SOUTH LINE AND 1650' FROM THE EAST LINE OF  
SECTION 25, TOWNSHIP 17 SOUTH, RANGE 31 EAST.

N.M.P.M., EDDY COUNTY, NEW MEXICO.

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W.O. Number: 31966

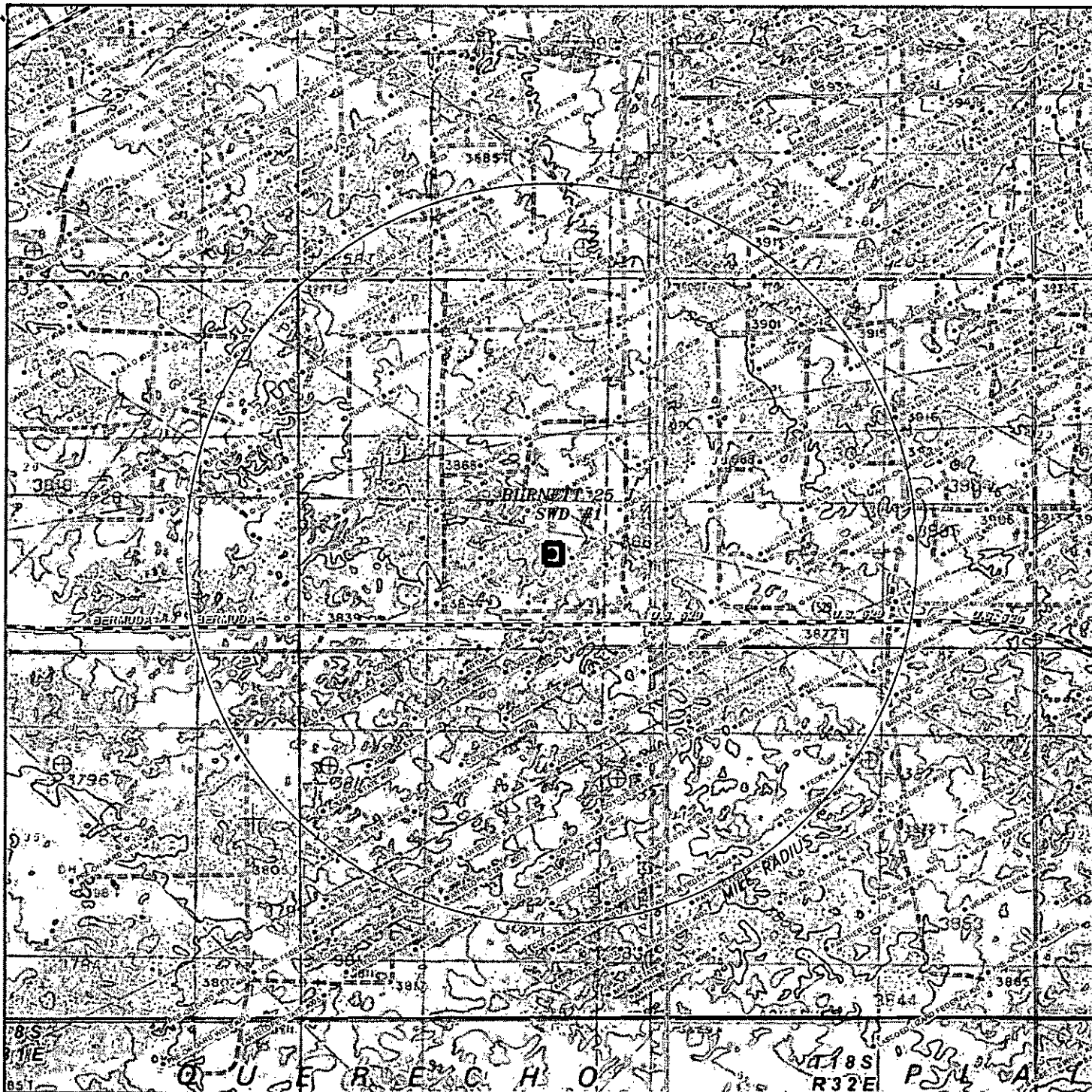
Drawn By: K. NORRIS

Date: 10-14-2015

Survey Date: 10-07-2015

Sheet 1 of 1 Sheets

# EXHIBIT C



## BURNETT 25 J SWD #1

Located 1350' FSL and 1650' FEL  
Section 25, Township 17 South, Range 31 East,  
N.M.P.M., Eddy County, New Mexico.

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0' 1000' 2000' 3000' 4000'  
SCALE: 1" = 2000'

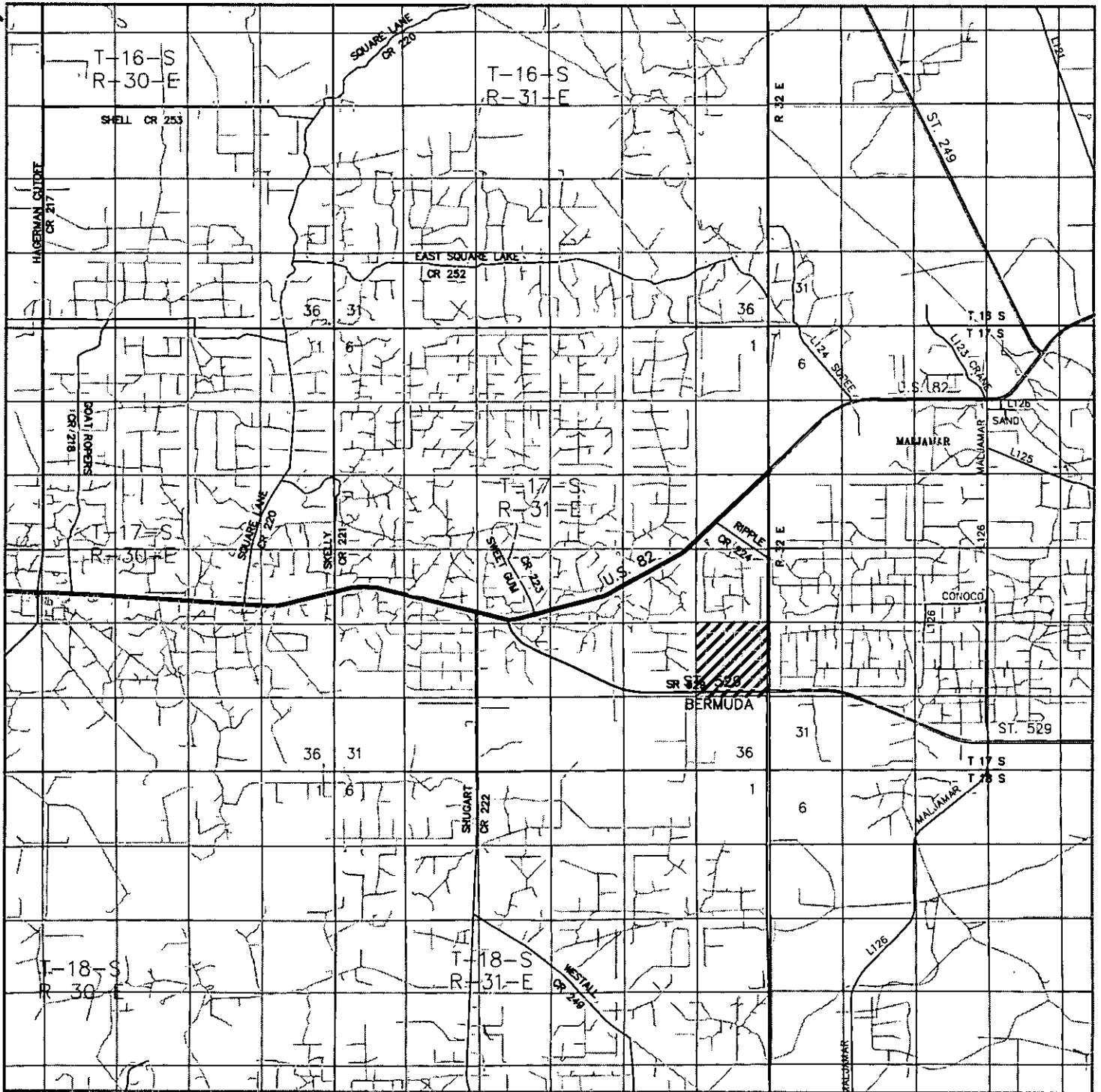
W.O. Number: KAN 31966

Survey Date: 10-07-2015

YELLOW TINT - USA LAND  
BLUE TINT - STATE LAND  
NATURAL COLOR - FEE LAND

**Burnett Oil Co., Inc.**  
**6666**

# EXHIBIT D



## BURNETT 25 J SWD #1

Located 1350' FSL and 1650' FEL  
Section 25, Township 17 South, Range 31 East,  
N.M.P.M., Eddy County, New Mexico.

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0 1 MI 2 MI 3 MI 4 MI  
SCALE: 1" = 2 MILES

W.O. Number: KAN 31966

Survey Date: 10-07-2015

YELLOW TINT - USA LAND  
BLUE TINT - STATE LAND  
NATURAL COLOR - FEE LAND

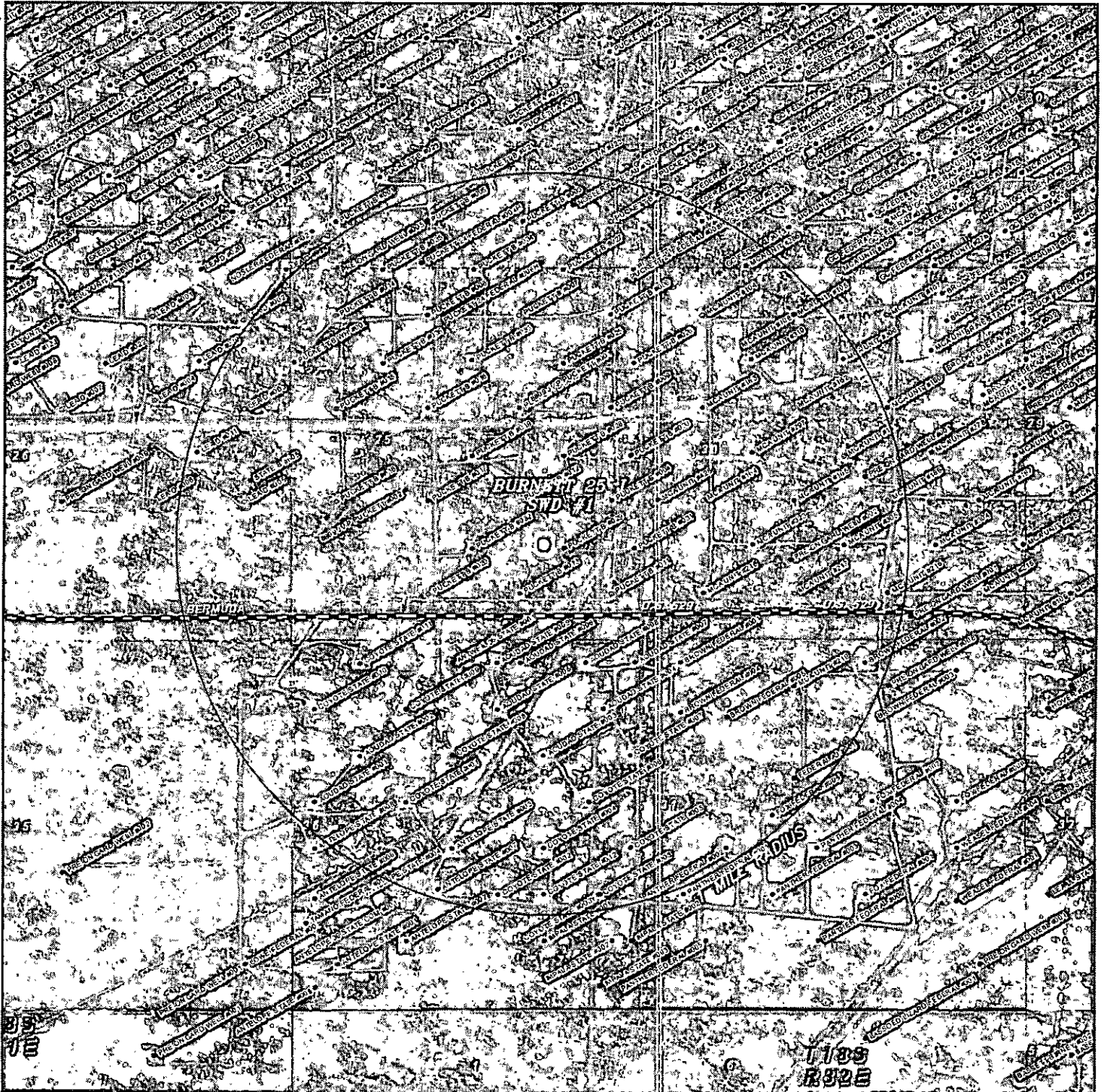
**Burnett Oil Co., Inc.**  
**6666**

EXHIBIT D-1





# EXHIBIT E



**BURNETT 25 J SWD #1**  
 Located 1350' FSL and 1650' FEL  
 Section 25, Township 17 South, Range 31 East,  
 N.M.P.M., Eddy County, New Mexico.

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0' 1000' 2000' 3000' 4000'  
 SCALE: 1" = 2000'

W.O. Number: KAN 31966

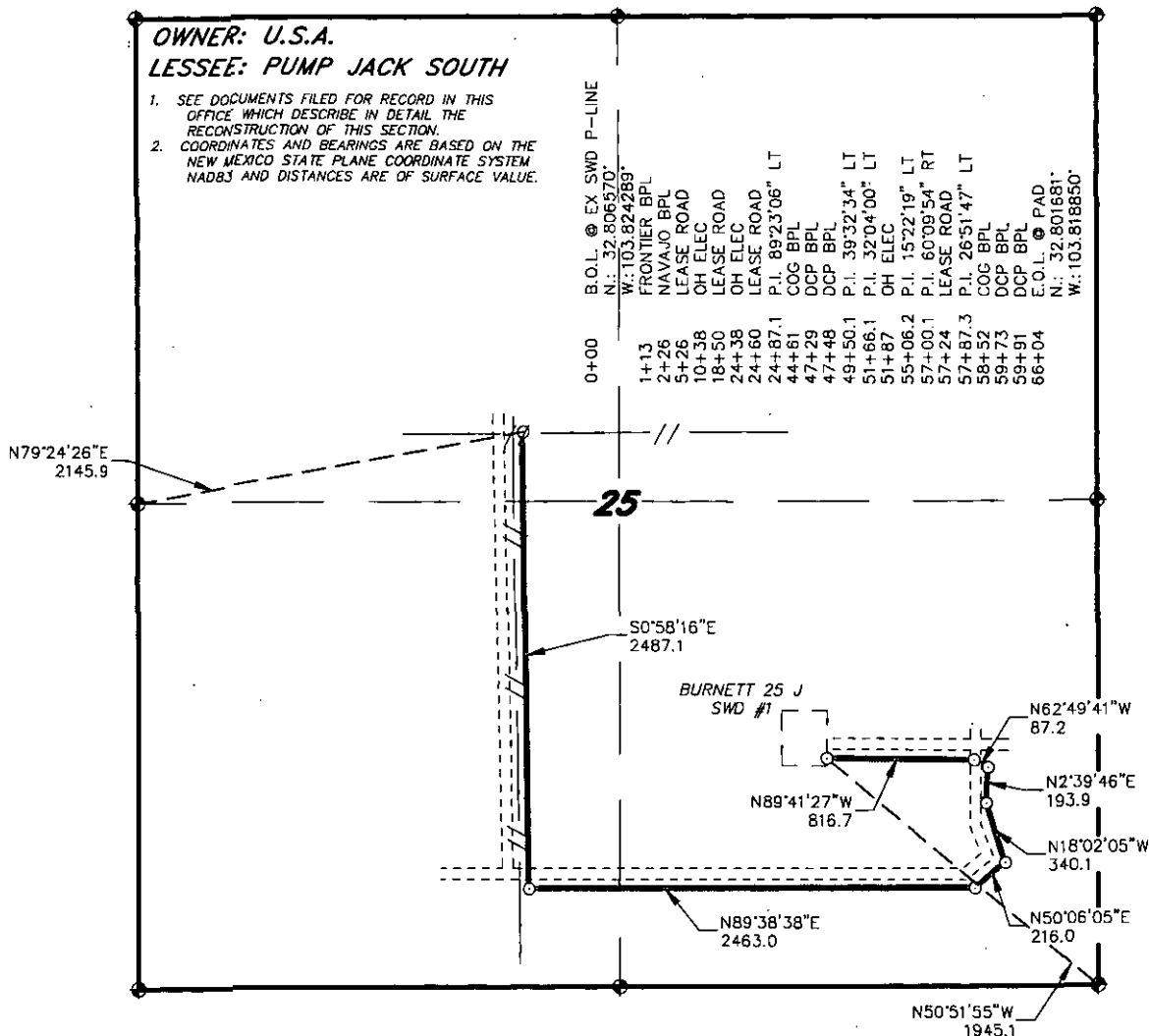
Survey Date: 10-07-2015

YELLOW TINT - USA LAND  
 BLUE TINT - STATE LAND  
 NATURAL COLOR - FEE LAND

**Burnett Oil Co., Inc.**  
**6666**

# EXHIBIT F

SECTION 25, TOWNSHIP 17 SOUTH, RANGE 31 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.

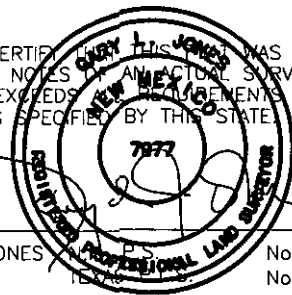


## LEGAL DESCRIPTION

A STRIP OF LAND 30.0 FEET WIDE, LOCATED IN SECTION 25, TOWNSHIP 17 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO AND BEING 15.0 FEET LEFT AND RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.

SECTION 25 = 6604.0 FEET = 400.24 RODS = 1.25 MILES = 4.55 ACRES

I HEREBY CERTIFY THAT THIS SURVEY WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY AND MEETS OR EXCEEDS THE REQUIREMENTS FOR LAND SURVEYS AS SPECIFIED BY THIS STATE.



GARY L. JONES, P.S.  
TEXAS FIRM  
No. 7977  
No. 5074  
No. 10119700

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bcasinsurveys.com

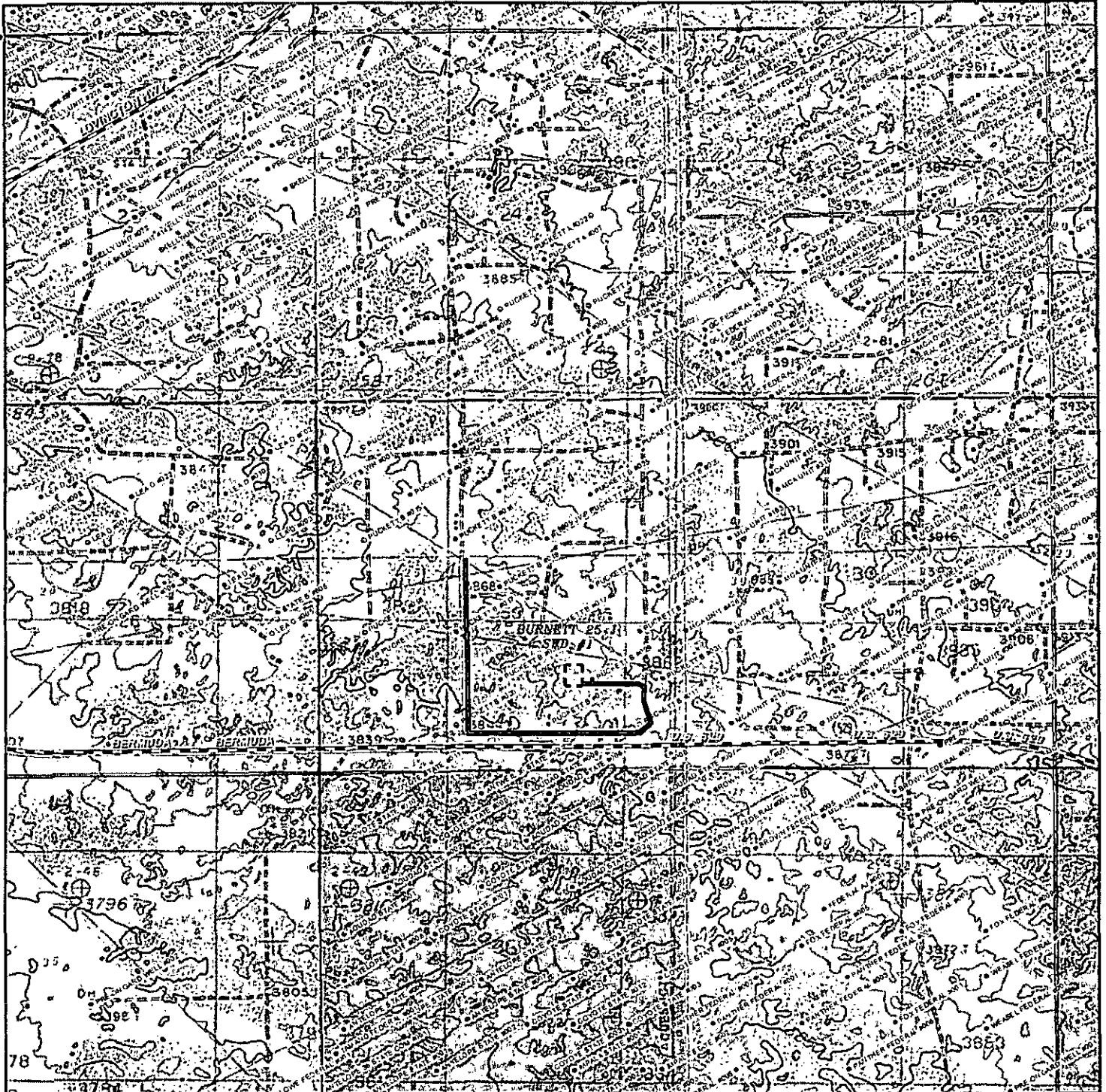
1000 0 1000 2000 FEET

**Burnett Oil Co., Inc. 6666**

REF: PROPOSED 8" POLY SWD TO BURNETT 25 J SWD #1

A PIPELINE CROSSING USA LAND IN  
SECTION 25, TOWNSHIP 17 SOUTH, RANGE 31 EAST,  
N.M.P.M., EDDY COUNTY, NEW MEXICO.

# EXHIBIT G



PROPOSED 8" POLY SWD TO BURNETT 25 J SWD #1  
SECTION 25, Township 17 South, Range 31 East,  
N.M.P.M., Eddy County, New Mexico.

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0' 1000' 2000' 3000' 4000'

SCALE: 1" = 2000'

W.O. Number: KAN 31985

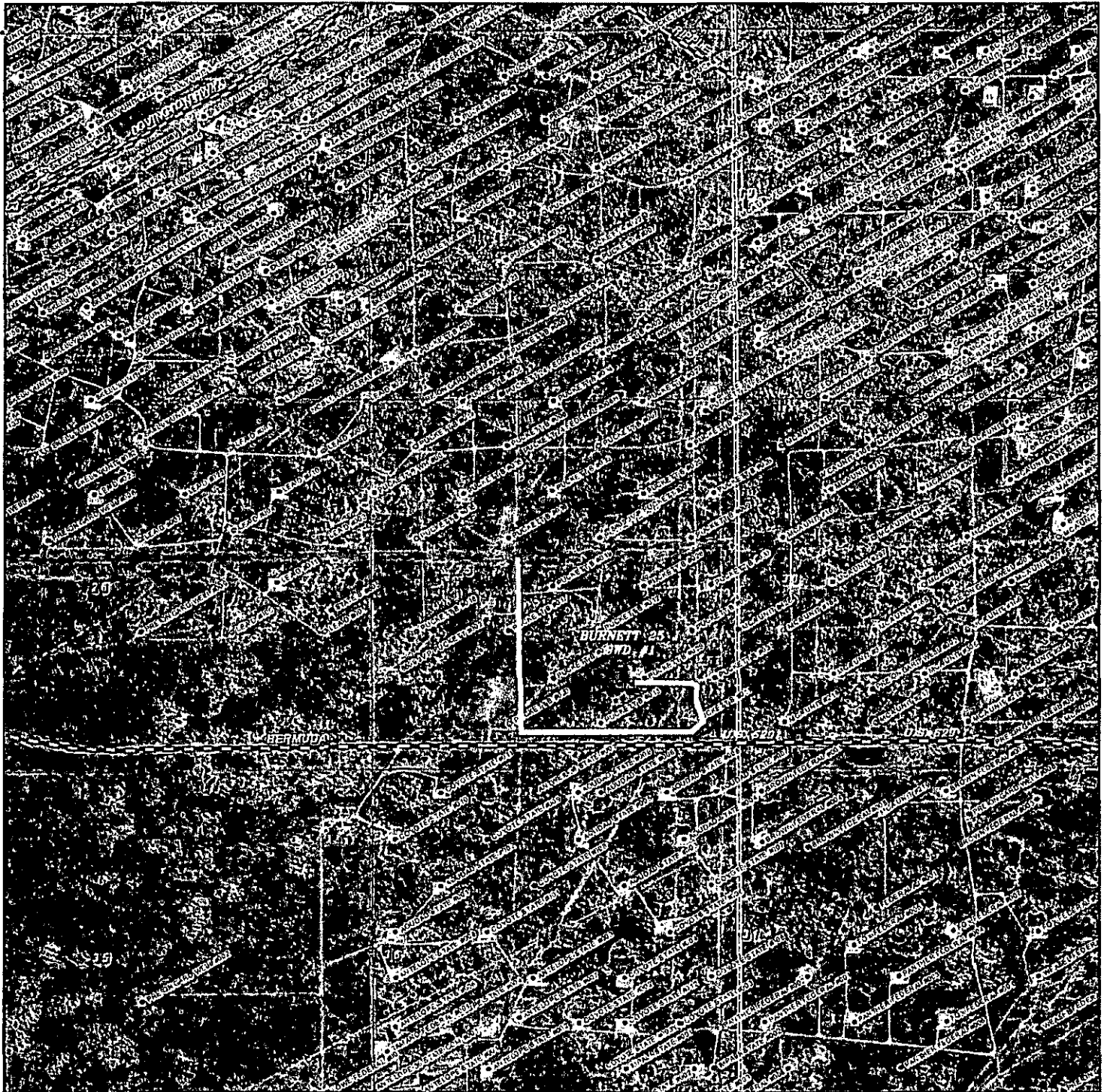
Survey Date: 10-09-2015

YELLOW TINT - USA LAND  
BLUE TINT - STATE LAND  
NATURAL COLOR - USA LAND

**Burnett Oil Co., Inc.**

6666

# EXHIBIT H



PROPOSED 8" POLY SWD TO BURNETT 25 J SWD #1  
SECTION 25, Township 17 South, Range 31 East,  
N.M.P.M., Eddy County, New Mexico.

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1120 N. West County Rd.  
Hobbs, New Mexico 88241  
(575) 393-7316 - Office  
(575) 392-2206 - Fax  
basinsurveys.com

0' 1000' 2000' 3000' 4000'  
SCALE: 1" = 2000'

W.O. Number: KAN 31985

Survey Date: 10-09-2015

YELLOW TINT - USA LAND  
BLUE TINT - STATE LAND  
NATURAL COLOR - USA LAND

**Burnett Oil Co., Inc.**  
**6666**



**NM OIL CONSERVATION**  
ARTESIA DISTRICT

MAR 14 2016

**DRILLING PLAN**  
**Burnett 25 J #1 SWD**  
**VERTICAL WOLFCAMP SWD WELL**

RECEIVED

**1. Geological Name of Surface Formation with Estimated Depth:**

<u>Geological Name</u>	<u>Estimate Top</u>	<u>Anticipated Fresh Water, Oil or Gas</u>
a. Quaternary	Surface	Fresh Water, Sand
b. Rustler	800'	
c. Salt	975'	
d. Base Salt	2075'	
e. Yates	2215'	
f. Seven Rivers	2550'	
g. Queen	3190'	
h. Grayburg	3540'	Oil/Gas
i. San Andres	3975'	Oil/Gas
j. Glorieta	5560'	Oil/Gas
k. ABO	7960'	
l. Wolfcamp	8970'	
m. Cisco	9990'	
n. Total Depth	Refer to Form 3160-3	

No interval expected of producing fresh water at any point in the well. We will set 13 3/8" casing @ approx. +/- 850' in the Rustler, above the salt and circulate cement to surface.

Any salt and/or hydrocarbons bearing intervals will be protected by setting 9 5/8" casing to 4500' and circulating cement back to surface. All other zones above TD will be cased with 7" casing and cement circulated to surface.

**2. Casing Program: (ALL CASING WILL BE NEW API APPROVED MATERIAL.)**

**(MW = 10 PPG IN DESIGN FACTOR CALCULATIONS.)**

**a. Design Safety Factors:**

<u>Type</u>	<u>Hole Size</u>	<u>Interval</u>	<u>OD Csg</u>	<u>Weight</u>	<u>Collar</u>	<u>Grade</u>	<u>Collapse Design Factor</u>	<u>Burst Design Factor</u>	<u>Tension Design Factor</u>
Conductor	24"	0'-40'	20"	Contractor Discretion			---	---	---
Surface	17 1/2"	0' - +/- 850'	13 3/8"	48#	ST & C	H40	1.125	1.00	2.00



## DRILLING PLAN VERTICAL WOLFCAMP SWD WELL

Intermediate	12 1/4"	0'-4500'	9 5/8"	3400' of 36.00#	ST & C	J55	1.125	1.00	2.00
				1100' of 40.00#					
Production	8-3/4"	0' – 9700'	7"	26.00#	LT & C	L80	*1.125	1.00	2.00

**\* While running each casing string, the pipe will be kept at a minimum of 1/3 full at all times to avoid approaching the collapse pressure of the casing.**

### b. Surface Casing Info

The proposed casing setting depth is +/- 850' based on cross sections which show the estimated top of the rustler and top of salt. Drilling times will be plotted to find the hard section just above the salt. A mud logger will be on location to evaluate drill and cutting samples as long as circulation is maintained. If salt is penetrated, it will be obvious by the sudden increase in water salinity and surface casing will then be set above the top of salt. Our highly experienced drilling personnel has drilled many wells in this area and is able to easily identify the hard streak on the top of the salt.

## 3. Cementing Program

**BLM to be notified prior to all cementing and tag operations in order to observe the operation if desired.**

### a. 17 1/2" Surface (0-850') Cement to surface

- Pump 20 bbl Fresh Water with Rhodamine red dye (0.1lbm/bbl). Lead with 390 sx Extendacem CZ System cement with Poly-E-Flake (0.125 lbm/sx) , 13.5 ppg, 1.75 CF/sx Yield.
- Tail with 200 sxs HalCem-C + 2% CaCl<sub>2</sub>-Flake, 14.8 ppg, 1.35 CF/sx yield. TOC Surface. Excess cement 100%.

**If cement does not circulate to surface, BLM will be notified of same, plus the plans to bring the cement to surface so BLM may witness tagging and cementing. If surface pressures when circulating indicate cement is low in the annulus, temperature survey results will be reviewed with BLM representative to determine the remediation needed.**

### b. 9 5/8" Intermediate Casing (0-4500')

- Pump 20 bbl WG-19 Gel Spacer (2.5 lbm/bbl) w/Rhodamine Red Dye (0.1 lbm/bbl). Lead with 1,230 sxs EconoCem HLC system cement w/5% Salt, Kol-Seal (5 lbm/sx) and Poly-E-Flake (0.125 lbm/sx) , 12.9 ppg, 1.88 CF/sx Yield.
- Tail with 300 sxs HalCem System cement, 14.8 ppg, 1.32 CF/sx yield. TOC Surface. Excess cement 50%.

## DRILLING PLAN VERTICAL WOLFCAMP SWD WELL

### c. 7" Production Casing (0-9700')

- Pump 40 bbl Fresh Water then pump 500 gallons (11.9 bbls) Super Flush 102, followed by pumping 20 bbls WC-19 Gel Spacer (2.5 lbm/bbl) with Rhodamine Red Dye (0.1 lbm/bbl). Lead with 480 sx Ecnocem H System Cement w/ .5% Halad -322, Kol-Seal (3lbm/sx), Poly-E-Flake (0.125 lbm/sx) and D-AIR 5000 (.25 lbm/sx) , 11.9 ppg, 2.47 CF/sx Yield.
- Tail with 630 sxs VersaCem H + 0.4% LAP-1, 0.3% CFR-3, Kol-Seal (3 lbm/sx), Poly-E-Flake (0.125 lbm/sx) and D-AIR 5000 (0.25 lbm/sx). 14.2 ppg, Yield 1.28 CF/sx. , TOC Surface. 35% excess cement.

The above cement volumes may be revised pending the caliper measurement from the open hole logs. **Casing/cementing design is to bring cement to the surface.**

### 4. Pressure Control Equipment:

The blowout prevention equipment (BOPE) will consist of a 2,000 PSI and a 5,000 PSI Hydril Unit (annular) with hydraulic closing equipment and Rams (on 5,000 PSI BOP). The surface casing will have an Annular (2,000 PSI) and the Intermediate and Production casings will have both Annular and Double Rams (5,000 PSI). The equipment will comply with Onshore Order #2 and will be tested to 50% of rated working pressure (RWP), and maintained for at least ten (10) minutes. The 10-3/4" drilling head will be installed on the surface casing and in use continuously until total depth is reached. An independent testing company will be used for the testing. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines and choke manifold having 5,000 PSI WP rating. **(EXHIBITS Q, R & S)**

Below are notes regarding the BOPE:

- a. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOP bore.
- b. Wear ring will be properly installed in head.
- c. Blowout preventer and all associated fittings will be in operable condition to withstand a minimum 5,000 psi working pressure.
- d. All fittings will be flanged.
- e. A full bore safety valve tested to a minimum 5,000 psi WP with proper thread connections will be available on the rotary rig floor at all times.
- f. All choke lines will be anchored to prevent movement.
- g. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.
- h. Will maintain a Kelly cock attached to the Kelly.
- i. Hand wheels and wrenches will be properly installed and tested for safe operation.
- j. Hydraulic floor control for blowout preventer will be located as near in proximity to driller's controls as possible.
- k. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.

Burnett is requesting to keep the Mud/Gas Separator on location but only connect if/when needed.

**DRILLING PLAN  
VERTICAL WOLFCAMP SWD WELL**

**5. Auxiliary Well Control and Monitoring Equipment:**

- a. A Kelly cock will be in the drill string at all times.
- b. A full opening drill pipe stabbing valve with the appropriate connections on the rig floor at all times.
- c. Hydrogen Sulfide detection and breathing equipment will be installed and in operation at drilling depth of 1800' (which is more than 500' above top of Grayburg) until 7" casing is cemented.
- d. An H2S compliance package will be on all sites while drilling.

**6. Proposed Mud Circulation System**

<u>Depth</u>	<u>Mud Wt</u>	<u>Visc</u>	<u>Fluid Loss</u>	<u>Type System</u>	<u>Max Volume</u>
0' - +/-850'	8.6 - 9.5	34	N.C	Fresh Water	
850'-4500'	10.6	30	N.C.	Saturated Water	
4500' - 9700'	9.2	28	12 to log	Cut Brine	

**The necessary mud products for weight addition and fluid loss control will be on location at all times.**

**Pason equipment will be used to monitor the mud system.**

**7. Logging, Coring and Testing program:**

- a. Drill stem tests not anticipated.
- b. The open hole electrical logging program will be:
  1. Logging expected to be Dual Laterolog-Micro Laterolog, Dual Spaced Neutron, Spectral Density log, Spectral Gamma Ray and Caliper and CSNG will be run from TD to 9 5/8 casing shoe and GR from 9 5/8' to 13 3/8' shoe.
  2. No coring program is anticipated.
  3. Zones considered for injection will be perforated and acidized.

**8. Potential Hazards:**

No abnormal pressures or temperatures are expected. All personnel will be familiar with the safe operation of the equipment being used to drill this well. The maximum anticipated bottom hole pressure is 4317#. This is based upon the following formula of .445 x BH ft. estimate. The anticipated bottom hole temperature is 140°F. This is based upon logs of drilled wells surrounding this well

There is known H2S in this area. In the event that it is necessary to follow the H2S plan, a remote choke will be installed as required in Onshore Order 6. Refer to the attached H2S plan for details.

**9. Anticipated Start Date and Duration of Operation**

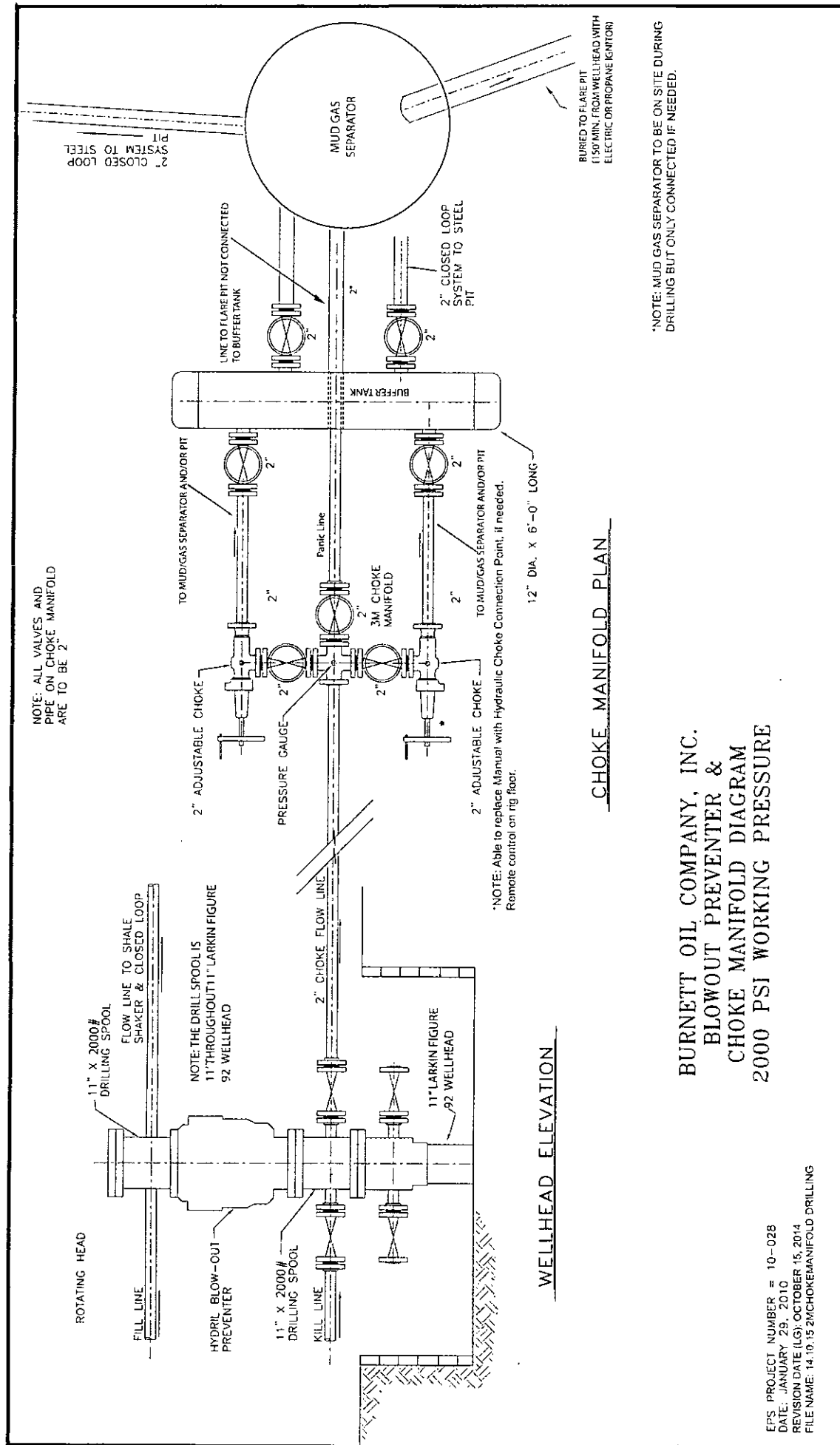
Road and location construction will begin after BLM has approved the APD and has approved the start of the location work. Anticipated spud date will be as soon as the location building work has been completed and the drilling rig is available to move to the location. Move in and drilling is



**DRILLING PLAN  
VERTICAL WOLFCAMP SWD WELL**

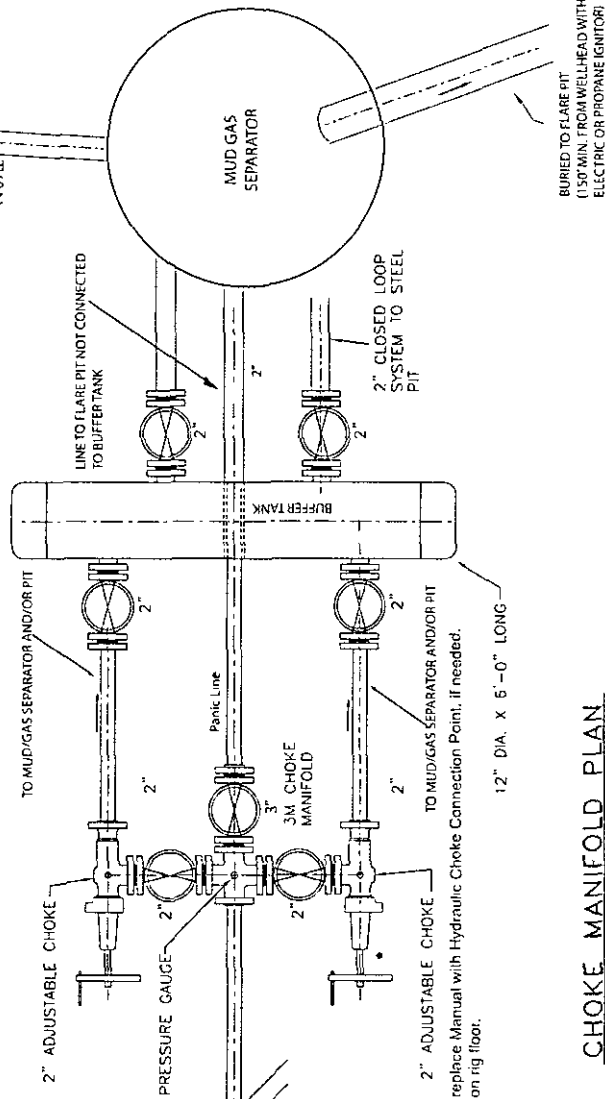
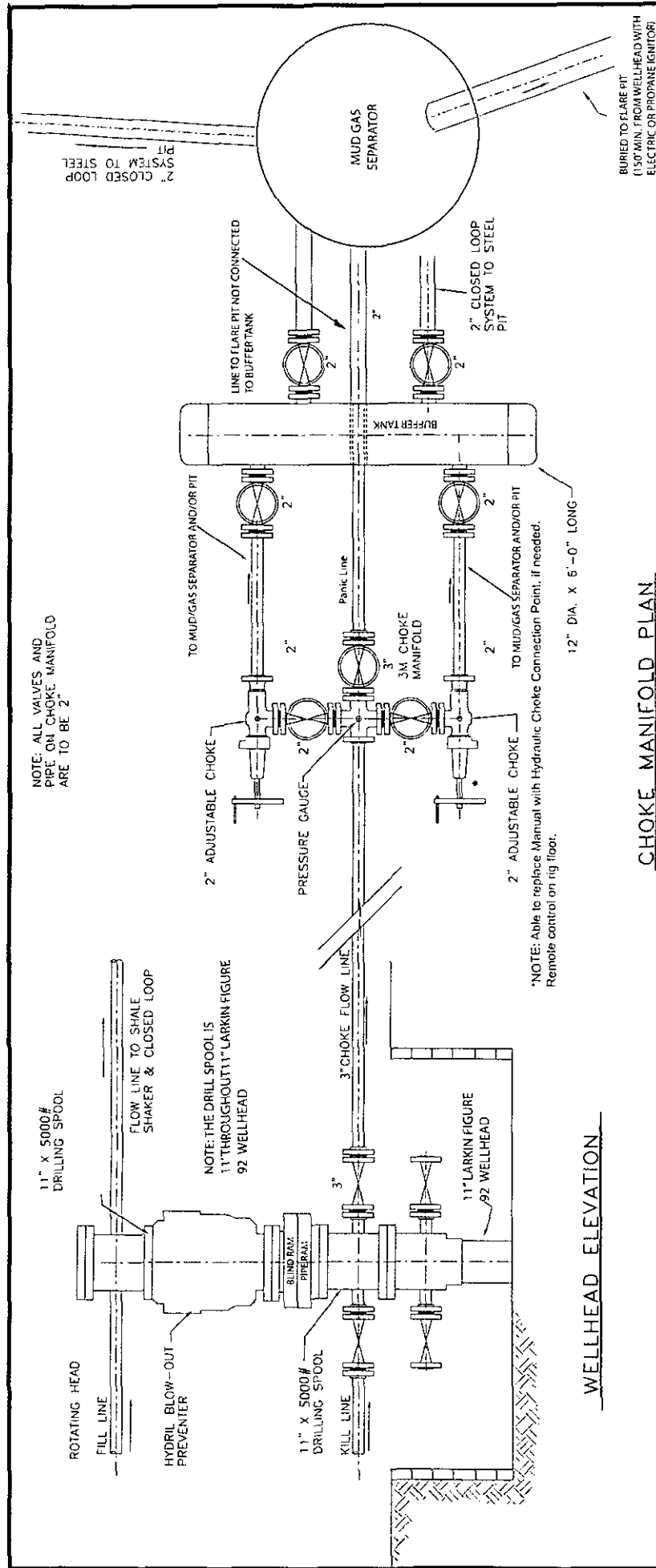
expected to take approximately 20 days. When production casing is run, an additional 60 days would be required to complete the well and install the necessary surface equipment to place the well on injection.

## EXHIBIT Q



BURNETT OIL COMPANY, INC.  
BLOWOUT PREVENTER &  
CHOKE MANIFOLD DIAGRAM  
2000 PSI WORKING PRESSURE

EPS PROJECT NUMBER = 10-028  
DATE: JANUARY 29, 2010  
REVISION DATE (LG): OCTOBER 15, 2014  
FILE NAME: 14-10-152MCHOKEMANIFOLD DRILLING



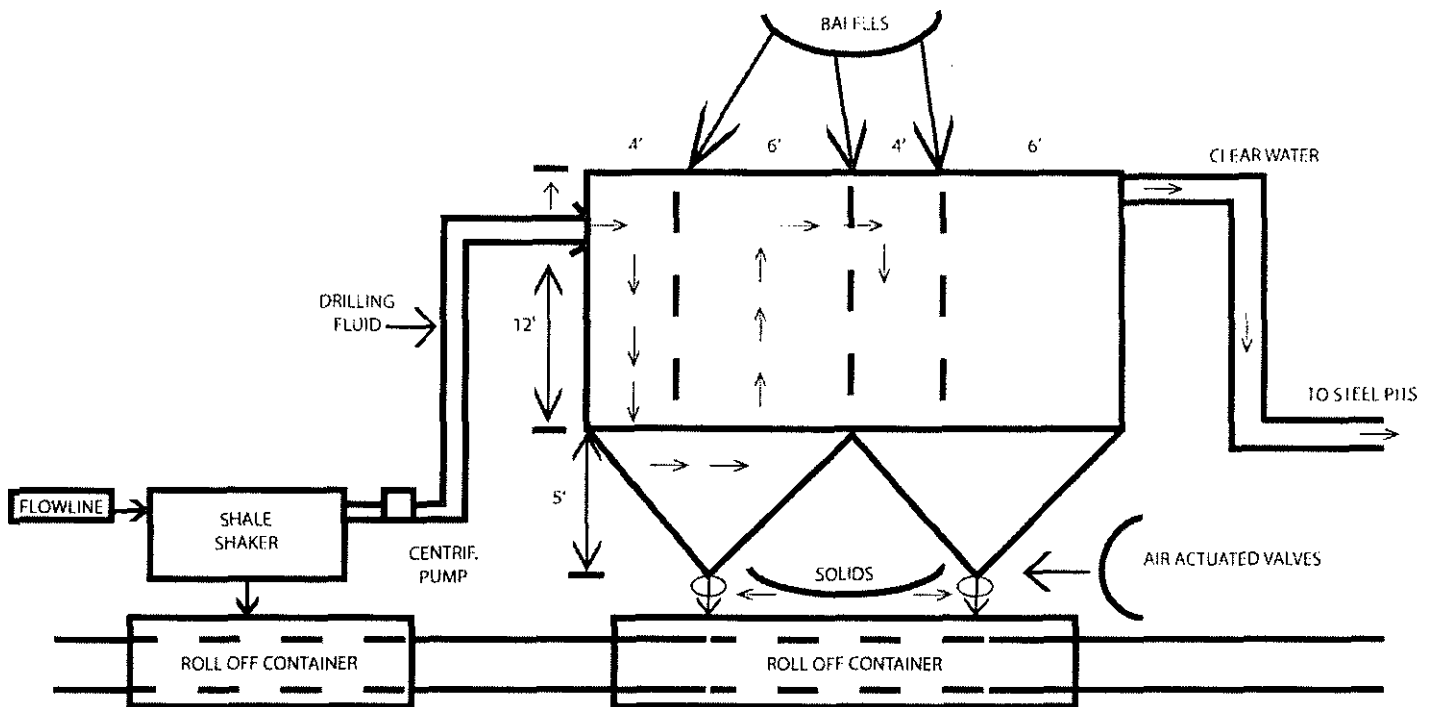
\*NOTE: MUD GAS SEPARATOR TO BE ON SITE DURING DRILLING BUT ONLY CONNECTED IF NEEDED.

EPS PROJECT NUMBER = 10-028  
DATE: JANUARY 29, 2010  
REVISION DATE(IG): OCTOBER 15, 2014  
FILE NAME: 14.10.15 2MCHOKEMANIFOLD DRILLING



BURNETT OIL CO., INC.

## EXHIBIT S



### OPERATIONS & MAINTENANCE

Drilling Fluids from the wellbore will go through the flow line across the shale shaker. Solids will drop into roll off containers with baffles as drawn above. Baffles slow fluid velocity to allow solids to fall down through 6" air actuated valves into roll off containers. Clean water goes back out to the drilling fluid steel pits. Solids and any leftover liquid will be hauled to disposal.

### INSPECTION

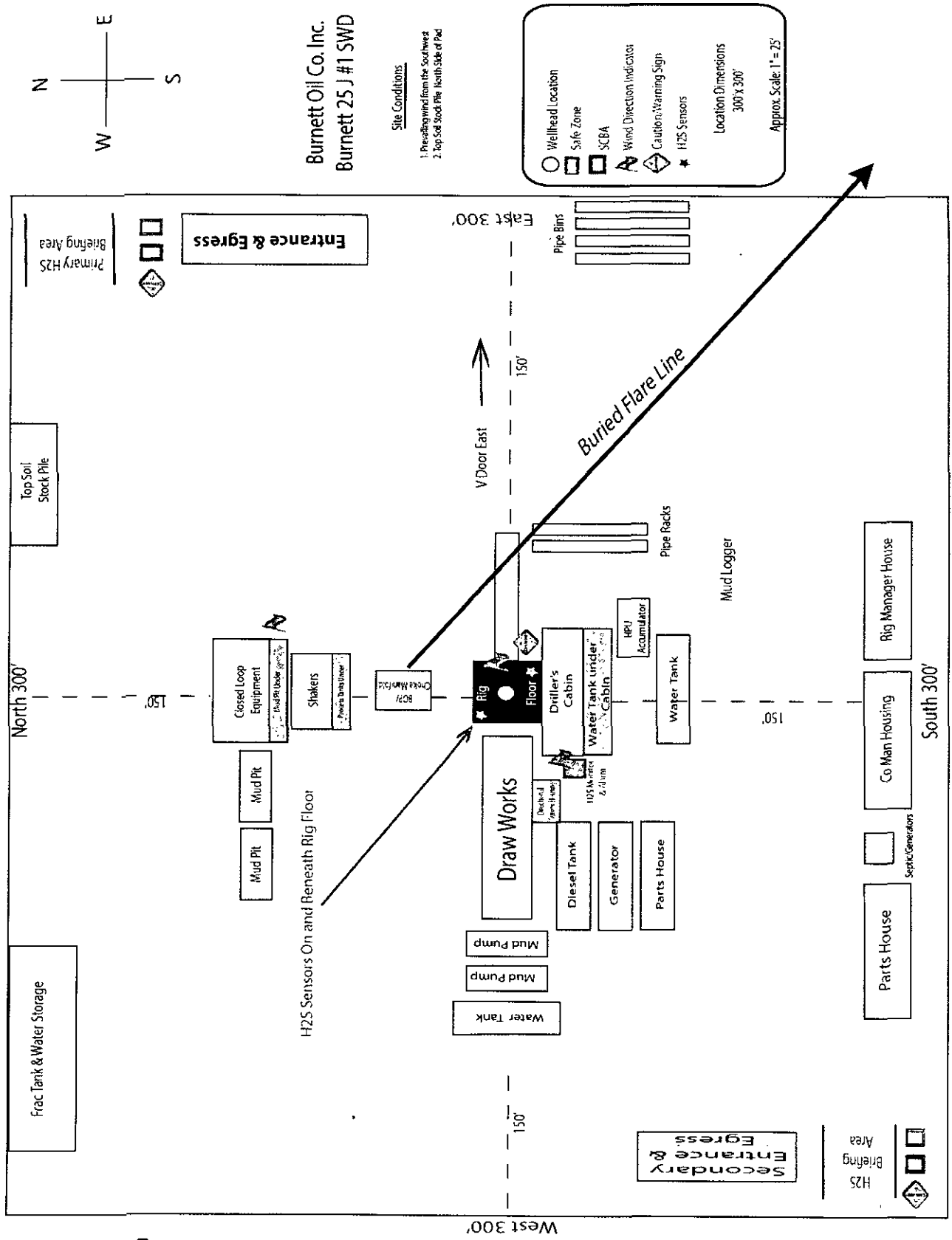
The closed loop equipment will be inspected daily by each tour and any necessary maintenance performed. Any leak in the system will be repaired and/or contained immediately. OCD will be notified within 48 hours. Remediation process started.

### CLOSURE PLAN

During drilling operations, all liquids, drilling fluids and cutting will be hauled off via CRO (Controlled Recovery Incorporated Permit R-9166)

# EXHIBIT T

## Rig Layout Closed Loop Operations H2S Briefing Areas & Alarm Locations





## **HYDROGEN SULFIDE (H<sub>2</sub>S) PLAN & TRAINING**

This plan was developed in accordance with 43 CFR 3162.3-1, section III.C, Onshore Oil and Gas Operations Order No. 6.

Based on our area testing H<sub>2</sub>S at 100 PPM has a radius of 139' and does not get off our well sites. There are no schools, residences, churches, parks, public buildings, recreation area or public within 2+ miles of our area.

### **A. Training**

#### **1. Training of Personnel**

**All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in accordance with 43 CFR 3162.3-1, section III.C.3.a. Training will be given in the following areas prior to commencing drilling operations on each well:**

- a. The hazards and characteristics of Hydrogen Sulfide (H<sub>2</sub>S).
- b. The proper use and maintenance of personal protective equipment and life support systems.
- c. The proper use of H<sub>2</sub>S detectors, alarms, warning systems, briefing areas, evacuation procedures and the prevailing wind.
- d. The proper techniques for first aid and rescue procedures.
- e. **ATTACHED HYDROGEN SULFIDE (H<sub>2</sub>S) CONTINGENCY PLAN DRILLING EXHIBIT R.**
- f. **ATTACHED EMERGENCY CALL LIST FOR ANY ON SITE EMERGENCY DRILLING EXHIBITS.**

#### **2. Training of Supervisory Personnel**

**In addition to the training above, supervisory personnel will also be trained in the following areas:**

- a. The effects of H<sub>2</sub>S on metal components. If high tensile tubulars are to be used, personnel will be trained in special maintenance requirements.
- b. Corrective action and shut-in procedures when drilling or reworking a well, blowout prevention and well control procedures.
- c. The contents and requirements of the H<sub>2</sub>S Drilling Operations Plan and the Public Protection Plan (if applicable.)

#### **3. Initial and Ongoing Training**

There will be an initial training session just prior to encountering a known or probable H<sub>2</sub>S zone (within 3 days or 500 feet) and weekly H<sub>2</sub>S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H<sub>2</sub>S Drilling Operations Plan and the Public Protection Plan (if applicable). This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

## **B. H2S Drilling Operations Plan**

### **1. Well Control Equipment**

- a. Flare line(s) and means of ignition
- b. Remote control choke
- c. Flare gun/flares
- d. Mud-gas separator

### **2. Protective equipment for essential personnel:**

- a. Mark II Surviveair (or equivalent) 30 minute units located in the dog house and at the primary briefing area (to be determined.)
- b. Means of communication when using protective breathing apparatus.

### **3. H2S detection and monitoring equipment:**

- a. Three (3) portable H2S monitors positioned on location for best coverage and response. These units have warning lights at 10 PPM and warning lights and audible sirens when H2S levels of 15 PPM is reached. A digital display inside the doghouse shows current H2S levels at all three (3) locations.
- b. An H2S Safety compliance set up is on location during all operations.
- c. We will monitor and start fans at 1- ppm or less, an increase over 10 ppm results in the shutdown and installation of the mud/gas separator.
- d. Portable H2S and SO2 monitor(s).

### **4. Visual warning systems:**

- a. Wind direction indicators will be positioned for maximum visibility.
- b. Caution/Danger signs will be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at reasonable distance from the immediate location. Bilingual signs will be used when appropriate.

### **5. Mud program:**

- a. The mud program has been designed to minimize the volume of H2S circulated to the surface Proper mud weight, safe drilling practices and the use of H2S scavengers will minimize hazards when penetrating H2S bearing zones.

### **6. Metallurgy:**

- a. All drill strings, casings, tubing, wellheads, Hydril BOPS, drilling spools, kill lines, choke manifold, valves and lines will be suitable for H2S service.
- b. All elastomers used for packing and seals shall be H2S trim.

**7. Communication:**

- a. Cellular Telephone and/or 2-way radio will be provided at well site.
- b. Landline telephone is located in our field office.





BURNETT OIL CO., INC.

## EXHIBIT U - HYDROGEN SULFIDE (H<sub>2</sub>S) CONTINGENCY PLAN

### A. Emergency Procedures

In the event of a release of gas containing H<sub>2</sub>S, the first responder(s) must

1. Isolate the area and prevent entry by other persons into the 100 PPM ROE. Assumed 100PPM ROE = 3000'.
2. Evacuate any public places encompassed by 100 PPM ROE.
3. Be equipped with H<sub>2</sub>S monitors and air packs in order to control release.
4. Use the "buddy system" to ensure no injuries occur during the response.
5. Take precautions to avoid personal injury during this operation.
6. Have received training in the following:
  - a. H<sub>2</sub>S detection
  - b. Measures for protection against this gas
  - c. Equipment used for protection and emergency response.

### B. Ignition of Gas Source

Should control of the well be considered lost and ignition considered, care will be taken to protect against exposure to Sulfur Dioxide (SO<sub>2</sub>). Intentional ignition will be coordinated with the NMOCD and local officials. Additionally, the New Mexico State Police may become involved. NM State Police shall be the incident command on scene of any major release. Care will be taken to protect downwind whenever there is an ignition of gas.

### C. Characteristics of H<sub>2</sub>S and SO<sub>2</sub>

<u>Common Name</u>	<u>Chemical Formula</u>	<u>Specific Gravity</u>	<u>Threshold Limit</u>	<u>Hazardous Limit</u>	<u>Lethal Concentration</u>
Hydrogen Sulfide	H <sub>2</sub> S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO <sub>2</sub>	2.21 Air = 1	2 ppm	NA	1000 ppm

#### **D. Contacting Authorities**

Burnett Oil Co., Inc. personnel will liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD will be notified of the release as soon as possible but no later than four (4) hours after the incident. Agencies will ask for information such as type and volume of release, wind and direction, location of release, etc. Be sure all is written down and ready to give to contact list attached. Burnett's response must be in coordination with the State of New Mexico's Hazardous Materials Emergency Response Plan.

Directions to the site are as follows:

Burnett Office  
87 Square Lake Road (CR #220)  
Loco Hills, NM 88255

Loco Hills, New Mexico (2 miles East of Loco Hills on US Hwy 82 to C #220. Then North on CR #220 approximately one (1) mile to office.



BURNETT OIL CO., INC.

## EXHIBIT V - EMERGENCY NOTIFICATION LIST

### BURNETT CONTACTS

**Burnett's New Mexico Office** 817.332.5108 x202  
87 Square Lake Road (CR #220) Loco Hills, New Mexico 88255  
**Directions: Loco Hills, NM – 2 miles east of Loco Hills on US Hwy 82 to CR#220. Then North on CR #220 approximately one (1) mile to office.**

**Belton Mathews – BOCI District Superintendent (NM)** Cell - 575.703.9601

**Burnett Oil Home Office** 817.332.5108  
Burnett Plaza – Suite 1500 | 801 Cherry Street – Unit #9| Fort Worth, Texas 76102

Walter Glasgow Office - 817.583.8871  
VP of Operations – Permian Basin/New Mexico Cell - 817.343.5567

Brady Sullivan Office – 817.583.8722  
Engineering Manager Cell – 817.727-1377

Leslie Garvis Office – 817.583.8730  
Regulatory Coordinator Cell – 713.819.4371

### SHERIFF/POLICE CONTACTS

Eddy County Sheriff 911 or 575.677.2313  
New Mexico State Police 575.746.2701

### FIRE DEPARTMENT

Loco Hills Fire Department (VOLUNTEER ONLY) 911 or 575.677.2349  
For Medical and Fire (Artesia) 575.746.2701

### AIR AMBULANCE

Flight for Life Air Ambulance	(Lubbock)	806.743.9911
Aerocare Air Ambulance	(Lubbock)	806.747.8923
Med Flight Air Ambulance	(Albuq)	505.842.4433
S B Med Svc Air Ambulance	(Albuq)	505.842.4949

### FEDERAL AND STATE

US Bureau of Land Management (Carlsbad)	575.361.2822	575.234.5972
New Mexico Oil Conservation Division (Artesia)		575.748.1283
New Mexico Emergency Response Commission (24 hour)		575.827.9126
Local Emergency Planning Operation Center (Artesia)		505.842.4949
National Emergency Response Center (Washington, DC)		800.424.8802

### OTHER IMPORTANT NUMBERS

Boots & Coots IWC	800.256.9688
Cudd Pressure Control	432.570.5300
Halliburton Services	575.746.2757
BJ Service	575.746.2293

**THIS MUST BE POSTED AT THE RIG WHILE ON LOCATION**

# EXHIBIT W

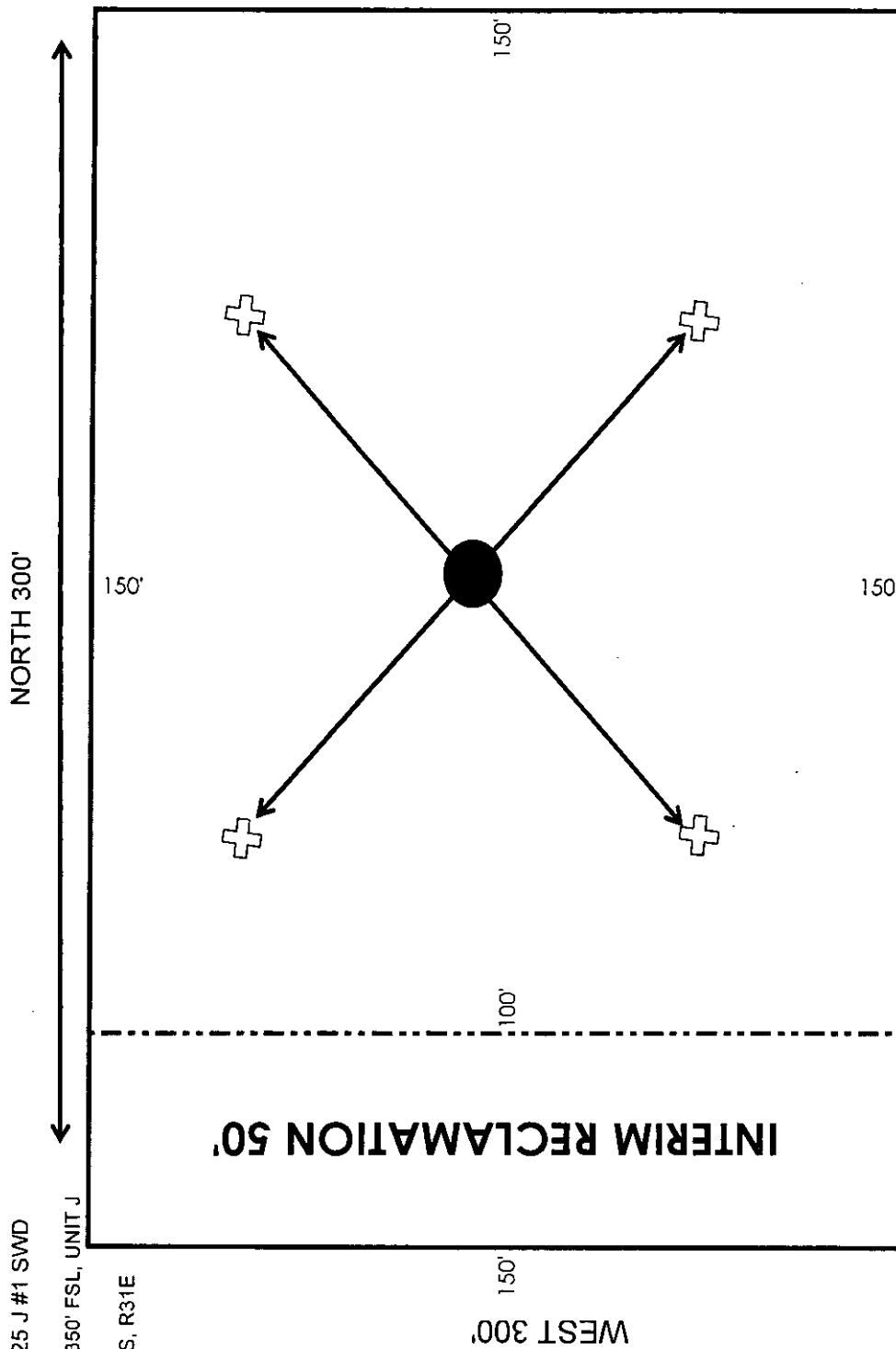
**BURNETT OIL CO., INC.**

INTERIM RECLAMATION PLAT

BURNETT 25 J #1 SWD

1650' FEL, 1350' FSL, UNIT J

SEC 25, T17S, R31E



ANCHOR 75' FROM WELLHEAD TO ANCHORS

WELLHEAD

NOT TO SCALE



## BURNETT OIL Co., INC.

### SURFACE USE PLAN

#### 1. Existing Roads:

- a. All roads into the location are shown on the Vicinity Map (**Exhibit C, D & D-1**).
- b. Directions to location: From Highway 82 and State Road 529 (Bermuda Road), Go Southeast 3.0 miles. Turning North on Lease Road (cross cattle guard), go 0.05 miles. Turn East and go 0.56 miles, then go North 0.13 miles. Turn West on Lease Road and go 0.19 miles to proposed location. (**Exhibit A, D & D-1**)
- c. In preparation for the new well site, water and a road grader is used to smooth nearby roads and patch holes. This is standard procedure used for the maintenance of existing roads. Existing roads will be improved and maintained according to the standards set forth in section 2 below.

#### 2. New or Reconstructed Access Roads:

- a. The well site layout, Form C-102 and **Exhibit A** show the existing road which will be utilized. **Exhibit C, D & D-1** shows the existing roads surrounding the location.
- b. No new road will be needed. Entry to pad will be from the West side of an existing well location.
- c. All new roads will be constructed and all existing roads maintained according to the standards below:
  1. Approximately six (6) inches of top soil will be stripped from the proposed access road in preparation for construction. The removed top soil will be spread along the edge of the road and the ditch and will be seeded with the BLM approved seed mix.
  2. All construction material will be native caliche. The driving surface will be made of 6" rolled and compacted caliche. It may be available at the proposed location. If unavailable on location or road, caliche will be hauled from nearest BLM approved caliche pit.
  3. All access roads will not exceed fourteen (14) feet in width and will disturb as little surface as possible. The maximum width of disturbance during construction shall not exceed twenty (20) feet. Where possible, no improvements will be made on un-surfaced access roads other than to remove vegetation, road irregularities, safety issues or to fill low areas to prevent standing water.
  4. Crowning shall be done on the access road driving surface and shall have an approximate grade of 2% from the tip of the crown to the edge of the driving surface.
  5. Ditching will be done on both sides of the road the entire length of the road to control drainage. The ditch will have a minimum depth of one (1) foot below and a down sloping berm of six (6) inches above the ground level. All ditching will be completed as per BLM requirements.
  6. Vehicle turnouts will be constructed on the road with an interval spacing distance less than 1,000 feet. Turnouts will be constructed on all blind curves and shall conform to with BLM standards.

## SURFACE USE PLAN

7. The access road will be constructed and maintained in a way that will prevent soil erosion and accommodate all weather traffic in accordance with BLM guidelines.
8. Fence Cuts: No; Cattle guards : No; Culverts: No; Cuts and Fills: Not significant.

### 3. Location of existing wells:

Please refer to **Exhibit C** for the location of all wells within a one (1) mile radius of the proposed well site.

### 4. Location of existing and/or proposed production facilities:

- a. Facilities will be located on the location. See **Exhibit X** for layout of the tanks on the well location.
- b. Flowline will be on lease NMLC-029415B and will connect to the existing flowline from the Nosler and Partition Batteries. (**Exhibit Y-1 & Exhibit Y-2**), leases NMLC-029415A and NMLC-029415B. The flowline(s) will be 8" poly pipe, 4472.51 ft. in length (**Refer to Exhibits F thru K**) and will transport produced water to the water tanks on the well pad (**Refer Exhibit X**). All flowlines will be low pressure 8" SDR-11 HDPE poly pipe with a typical working pressure of 75 psi. The SDR-11 HDPE poly pipe has a maximum pressure rating of 200 psi.

#### c. Operational Control Philosophy

Incoming water will be transferred through an 8" SDR-11 HDPE pipeline to two (2) each 750 bbl fiberglass water tanks. Each water tank level will be monitored by a pressure transducer, T1 and T2, shown on **Exhibit X** which will allow for high level and low level shut down and alarm.

The water disposal pump will be 100 hp single stage centrifugal with a design rating of 10,000 bbl/day at 250 psi. Pump discharge pressure will be monitored by a pressure transducer labeled P1 as on **Exhibit X**. This pressure transducer will allow for shut down of the system based on a high or low pump discharge pressure. The shut off head of this pump is 275 psi.

The casing will be fitted with a pressure transducer labeled C1 on **Exhibit X**. This transducer will have the ability to shut in and alarm the system if the casing pressure exceeds 50 psi.

### 5. Location and Type of Water Supply:

All water to be used in drilling this well will be brine or fresh water transported by truck over existing and above proposed lease road from Loco Hills, New Mexico or produced water furnished from our existing waterflood facilities in the area. We may install a pump and lay a **temporary** 2" poly line on the lease from the battery to the rig for this drilling water.

### 6. Construction Materials:

All construction material for the roadway and drilling pad will be native caliche from the nearest BLM approved pit or from existing available deposits found on the location. All will be in accordance with the drilling stipulations for this well. If caliche is flipped on location, the following process will be followed:

- a. A caliche permit will be obtained from BLM by the dirtworks vendor prior to pushing up any caliche.
- b. The top 6" of top soil will be pushed off and stockpiled on the East side the location. Once the well is drilled the stock piled top soil will be used for interim reclamation and spread along the

## **SURFACE USE PLAN**

areas where the caliche is picked up and the location size is reduced. Neither caliche nor top soil will be piled outside the well pad. Top soil will be stockpiled along the edge of the pad as depicted in the attached well diagram (**Exhibit W**).

- c. An area approximately 120'x120' is used within the proposed site to remove caliche.
- d. Subsoil is removed and piled alongside the 120' x120' area within the pad and then pushed back once the caliche has been removed.
- e. When caliche is found, material will be stock piled within the pad site to build the location and road.

### **7. Methods of Handling Waste Disposal:**

- a. Drill cuttings will be disposed of in a closed loop system using steel haul off tanks. All drilling Fluids will be hauled off location to a contracted off lease disposal location.
- b. Trash, waste paper, garbage and junk will be placed in a portable, screened trash container on location. All trash and debris will be transported to an authorized off-lease disposal station within thirty (30) days following the completion activities.
- c. A properly maintained Porto-john will be provided for the crews during drilling and completion operations. All will be removed after all completion operations have ended.
- d. Oil produced during testing will be put into steel storage tank for later sales.
- e. Water produced during testing operations will be put in the steel frac tanks pit until well is turned to the lease tank battery. All produced water will be disposed of through one of our approved disposal methods.

### **8. Ancillary Facilities:**

There are no planned ancillary facilities for this well.

### **9. Well Site Layout:**

- a. **Exhibit T** shows the relative location and dimensions of the drilling pad and related components. Only minor leveling of the drilling site is anticipated.
- b. The V-Door will be East. Entry will be on the East side of the location from an existing well pad.
- c. On site TBD.
- d. All power for the well site is provided and handled by CVE.
- e. If temporary power is needed, the lines will follow the road and tie into existing power until permanent power can be installed by CVE. All temporary power lines will be buried. The lines will be buried in a 6" wide by 6" deep trench. The trench will be open approximately 4 hours but not longer than 8 hours.
- f. Refer to **Exhibit X** for location and description of water tanks to be located on well pad after drilling has been completed.

### **10. Plans for surface Reclamation:**

- a. After drilling and successful completion operations are finished, all equipment and other materials not required for normal production operation will be removed. (**Refer to Exhibit W**)

## **SURFACE USE PLAN**

- b. **Burnett Oil respectfully requests two (2) years to downsize the drilling location in order to have room for equipment to fracture stimulate three (3) to four (4) intervals. Each one requires a large volume fracture treatment with several pumps, a large sand mover, several frac tans, a treatment can and various other vehicles and equipment. Burnett will, if all fracs are completed before the two (2) years, contact BLM to downsize the location.**

Refer to attached **Exhibit W** which shows resulting location after downsizing and showing the sides of location where the caliche would be left for use of kill trucks, hot oil trucks, foam units or whatever is needed to service unit, which is what has to happen if the location is reclaimed on all four (4) sides to the safety anchors.

- c. The pad size will be reduced to the amount required for normal operation of the producing well. This reduced portion will be restored to the BLM stipulations. **(See Exhibit W)**
- d. If a well is abandoned, the surface location and unneeded road will be restored according to BLM stipulations within ninety (90) days of final abandon and sit re-seeded with BLM (#2) seed mix.

### **11. Surface ownership:**

All lands are owned by the U.S. Government and administered by the Bureau of Land Management. The surface is multiple use with the primary use of the region for the production of oil and gas and the grazing of livestock.

### **12. Other information:**

- a. The area surrounding the well site is a sandy dunal featured area. The area is relatively flat with small hills and sand dunes. The topsoil is fine, deep sand underlain by caliche. Vegetation cover is generally sparse and consists of mesquite, yucca, shinnery oak and sparse native grasses. Wildlife in the area includes deer, coyotes, rabbits, rodents, reptiles, dove and quail.
- b. No permanent or live water is found in the general proximity of this area.
- c. No dwellings are found within two (2) miles of this location.
- d. There is intermittent cattle grazing and hunting in the area; however, the principal land use is for oil and gas production.

### **13. Bond Coverage:**

Current Bonds are BLM Bond # NMB000197. The Surety Bond is #B000863.

Both the BLM Bond #NMB000197 and the Surety Bond # B000863 are effective May 21, 2004 and remain in place.



## **SURFACE USE PLAN**

The Burnett Oil Co., Inc. representatives responsible for ensuring compliance of the surface use plan are listed below:

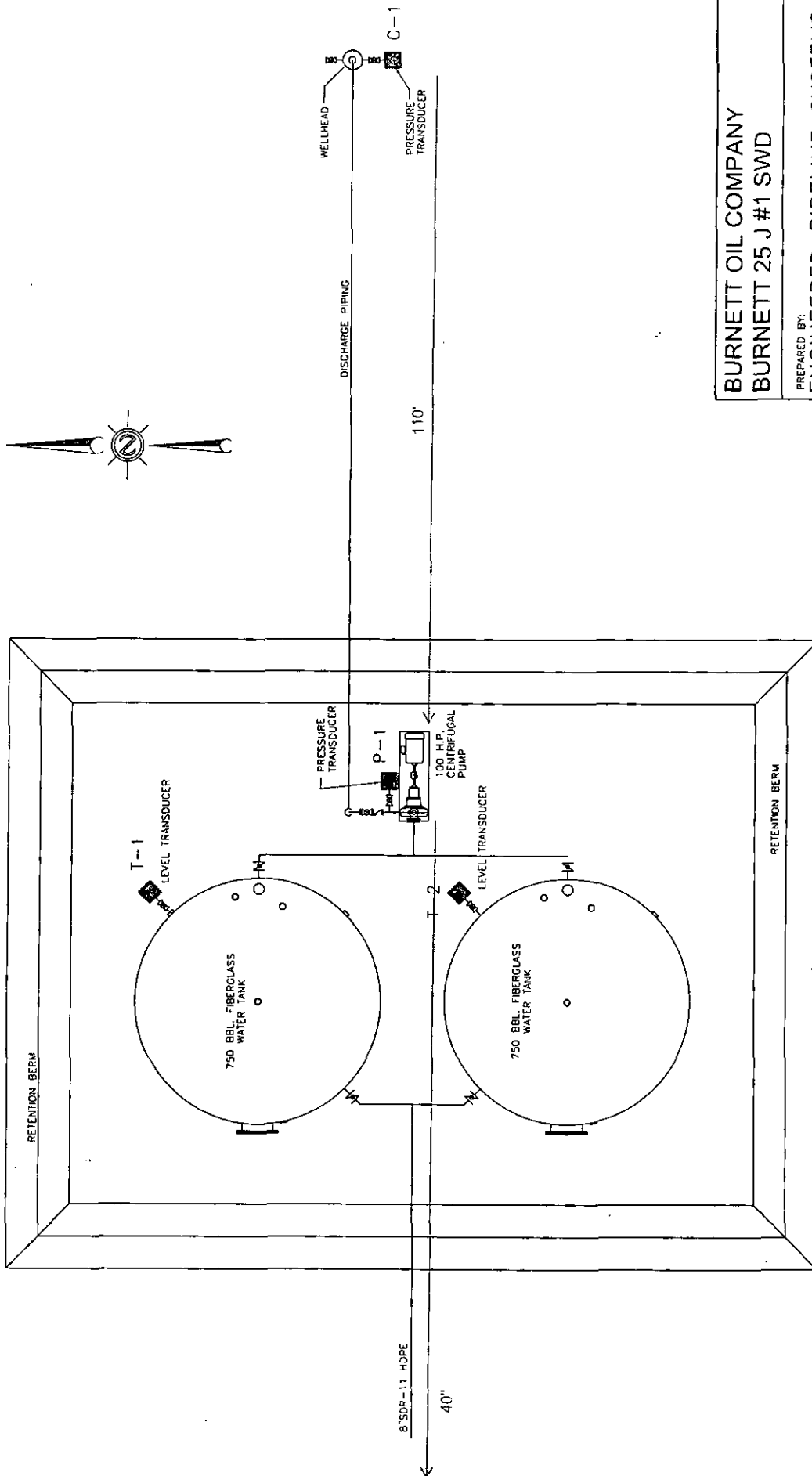
### **Regulatory**

Leslie M. Garvis  
Regulatory Coordinator  
Burnett Oil Co. Inc.  
Burnett Plaza – Suite 1500  
801 Cherry Street – Unit #9  
Fort Worth, Texas 76102-5108  
817.332.5108 (office)  
713.819.4371 (cell)  
[lgarvis@burnettoil.com](mailto:lgarvis@burnettoil.com)

### **Drilling & Production/Field Representative**

Belton Matthews  
District Superintendent  
Burnett Oil Co. Inc.  
P.O. Box 188  
Loco Hills, New Mexico 88255  
575.677.2313 (office)  
575.703.9601 (cell)  
[bmathews@burnettoil.com](mailto:bmathews@burnettoil.com)

# EXHIBIT X



**BURNETT OIL COMPANY**  
**BURNETT 25 J #1 SWD**

PREPARED BY:  
**ENGINEERED PIPELINE SYSTEMS, INC.**  
 P.O. BOX 14089  
 ODESSA, TEXAS 79768  
 PHONE: 432/367-1955  
 DATE: NOVEMBER 9, 2010  
 FAX: 432/367-1957  
 E.P.S. DRAWING NO. 10-118-CP

\*Not to Scale

**ENTRY**

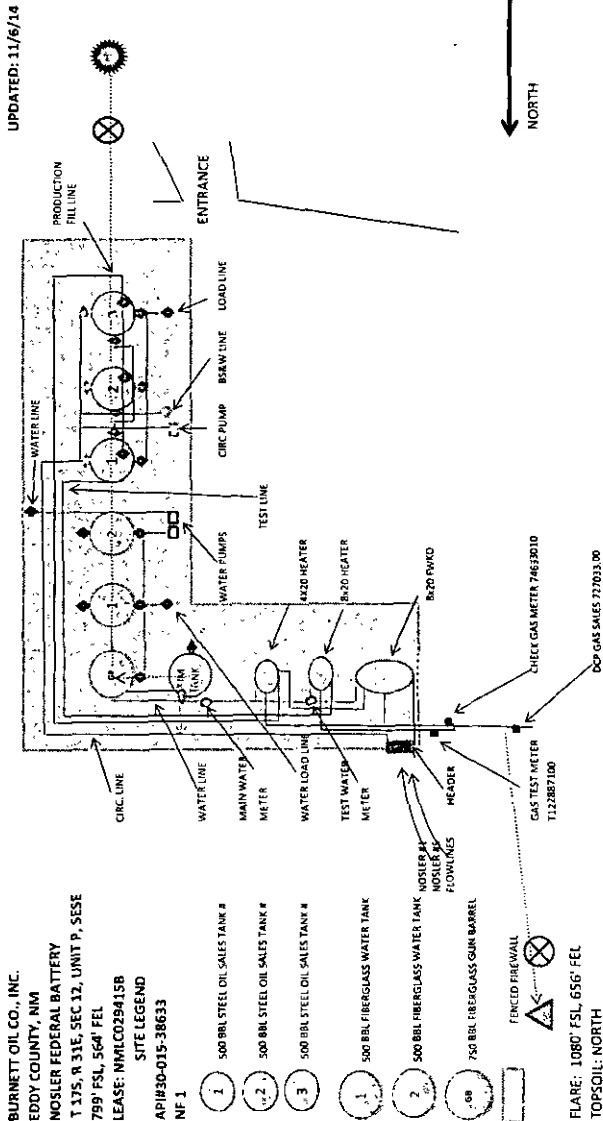
# EXHIBIT Y1

BURNETT OIL CO., INC.  
EDDY COUNTY, NM  
NOSLER FEDERAL BATTERY  
T 135, R 34E, SEC 12, UNIT P, SSE  
799' FSL, 564' FEL  
LEASE: NMIC029415B  
SITE LEGEND  
API#30-015-38633  
NF 1

- 1 500 BBL STEEL OIL SALES TANK #
- 2 500 BBL STEEL OIL SALES TANK #
- 3 500 BBL STEEL OIL SALES TANK #
- 1 500 BBL FIBERGLASS WATER TANK
- 2 500 BBL FIBERGLASS WATER TANK
- 500 BBL FIBERGLASS GUN BARREL

FLARE: 1080' FSL 656' FEL  
TOPSOIL: NORTH  
150' X 150' PAD SIZE

UPDATED: 11/6/14



- NOSLER FEDERAL BATTERY NOSLER #1 ACTIVE WELL
- 3 - 500 BBL Oil Tanks - No tank numbers yet or strappings - waiting on Holly
  - 1 - 210 BBL SNM Tank
  - 2 - 500 BBL Water Tanks
  - 1 - 750 BBL Fiberglass Gun Barrel
  - 1 - FWKO
  - 1 - DCP Gas Sales Meter (Digital) 727033.00
  - 1 - Gas Production Check Meter (Digital) 74633010
  - 1 - Gas Test Meter (Digital) T122887100
  - 1 - Production Water Meter - Digital
  - 1 - Test Water Meter - Digital
  - 1 - Production Heater Treater 8 x 20
  - 1 - Test Heater Treater 4 x 20
  - Add Heater Calc

VALVE SEALED YES/NO

VALVE LEGEND	TANK BEING HAULED	TANK BEING PRODUCED	EXCEPTIONS:
--------------	-------------------	---------------------	-------------

- LOAD LINE VALVE
- FILL LINE VALVE
- EQUALIZER LINE
- CIRC LINE VALVE
- BSAW LOAD LINE
- WATER LINE VALVE

- YES
- NO
- YES
- YES
- YES
- NO

SEAL OFF WHILE CIRCULATING PRODUCING TANKS, SEAL ON AFTER CIRCULATING COMPLETE

SEAL OFF WHILE CLEANING TANKS, SEAL ON AFTER TANKS ARE CLEAN

COMBUSTOR



COMBUSTOR LINE



COMBUSTOR GAS METER  
Meter # PAS 200F-181113



EMERGENCY FLARE



FLARE GAS METER  
Meter # 746 33010

NOTE:

PRODUCED WATER IS TRUCK HAULED TO PUBLIC DISPOSAL  
WATER PUMPS ARE SET, BUT NOT IN USE

BURNETT OIL CO., INC.  
EDDY COUNTY, NM  
NOSLER FEDERAL BATTERY  
T 17S, R 31E, SEC 12, UNIT P  
799' FSL, 564' FEL  
LEASE: NMALC029415B

NOSLER BATTERY  
NOSLER FEDERAL 1  
NOSLER FEDERAL S

ATTACHMENT TO SITE FACILITY DIAGRAM

General sealing of valves, sales by tank gauge

Production Phase:

Load Line Valves sealed closed. Fill valve to tank that is in production will be open.  
Equalizer valve to tank that is in production will be open. Circulation valves will be opened as necessary, then resealed.  
BS&W load line valve will be sealed at all times, unless cleaning tanks, then resealed once tank maintenance is complete.

Sales Phase:

The tank from which sales are being made will be isolated by sealing closed the fill line valve, circulating valve, and the equalizer valve during sales and opening the sales valve. Upon completion of the sale, the sales valve will be resealed.

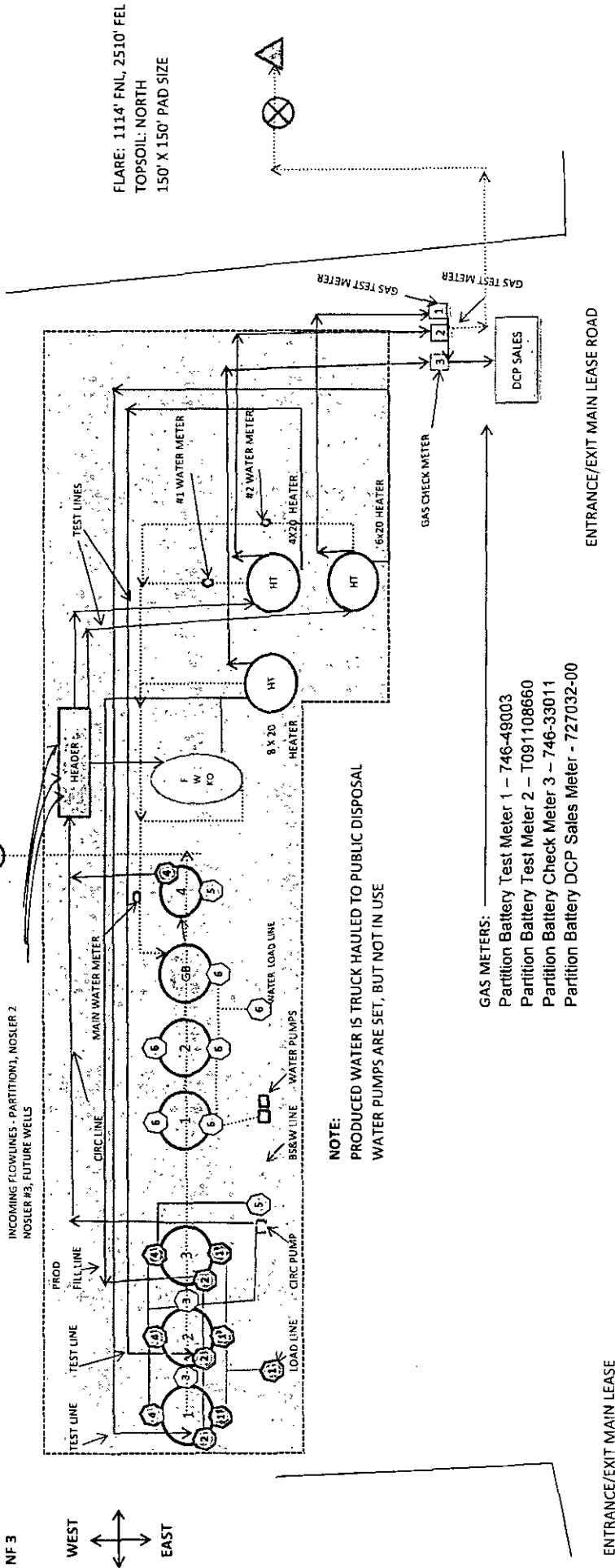
Sales by truck will be by tank gauge.

	VALVE	PRODUCTION PHASE	SALES PHASE	CIRCULATING	NOTE
1	LOAD LINE VALVE	CLOSED	OPEN	CLOSED	
2	PRODUCTION FILL LINE VALVE	OPEN OR CLOSED	CLOSED	CLOSED OR OPEN	
3	EQUALIZER LINE VALVE	OPEN	CLOSED	CLOSED OR OPEN	
4	CIRCULATING LINE VALVE	OPEN OR CLOSED	CLOSED	OPEN	RE-SEALED ONCE CIRCULATING IS COMPLETE
5	BS&W LOAD LINE VALVE	CLOSED	CLOSED	CLOSED	OPEN FOR TANK MAINTENANCE, RESEALED ONCE MAINTENANCE IS COMPLETE
6	WATER LINE VALVE	OPEN	NA	NA	WATER TANKS ARE ISOLATED FROM OIL PRODUCTION TANKS WATER IS TRUCK HAULED FROM FORWARD LOAD LINES

# EXHIBIT Y2

BURNETT OIL CO., INC.  
 EDDY COUNTY, NM  
 PARTITION FEDERAL BATTERY  
 T 175, R 31E, SEC 24, UNIT 6, SWNE  
 1395' FNL, 2550' FEL  
 LEASE: NMILC-029415A  
 API# 30-015-38635  
 NF 3

UPDATED: 11/25/14



NOTE:  
 PRODUCED WATER IS TRUCK HAULED TO PUBLIC DISPOSAL  
 WATER PUMPS ARE SET, BUT NOT IN USE

GAS METERS:  
 Partition Battery Test Meter 1 - 746-49003  
 Partition Battery Test Meter 2 - T091108660  
 Partition Battery Check Meter 3 - 746-33011  
 Partition Battery DCP Sales Meter - 727032-00

## SITE LEGEND

- 1. 500 BBL STEEL OIL SALES TANK # 67677
- 2. 500 BBL STEEL OIL SALES TANK # 67678
- 3. 500 BBL STEEL OIL SALES TANK # 67679
- 4. 210 BBL STEEL SKIM TANK
- 500 BBL FIBERGLASS WATER TANK
- 500 BBL FIBERGLASS WATER TANK
- 750 BBL FIBERGLASS GUN BARREL

## VALVE LEGEND

- 1. LOAD LINE VALVE
- 2. FILL LINE VALVE
- 3. EQUALIZER LINE VALVE
- 4. CIRC LINE VALVE
- 5. 85&W LOAD LINE VALVE
- 6. WATER LINE VALVE
- COMBUSTOR GAS METER
- COMBUSTOR
- COMBUSTOR LINE
- FLARE GAS METER
- EMERGENCY FLARE
- FLARE LINE

Meter # FMS 200-24

Meter # 746 33011

BURNETT OIL CO., INC.  
EDDY COUNTY, NM  
PARTITION FEDERAL BATTERY  
T 175, R 31E, SEC 24, UNIT G, SWNE  
1395' FNL, 2550' FEL  
LEASE: NIMLC-029415A

PARTITION BATTERY  
PARTITION FEDERAL 1  
PARTITION FEDERAL 2  
PARTITION FEDERAL 3  
NOSLER FEDERAL 2  
NOSLER FEDERAL 3

ATTACHMENT TO SITE FACILITY DIAGRAM

General sealing of valves, sales by tank guage

Production Phase:

Load Line Valves sealed closed. Fill valve to tank that is in production will be open.

Equalizer valve to tank that is in production will be open. Circulation valves will be opened as necessary, then resealed.

BS&W Load Line valve will be sealed at all times, unless cleaning tanks, then resealed once tank maintenance is complete.

Sales Phase:

The tank from which sales are being made will be isolated by sealing closed the fill line valve, circulating valve, and the

equalizer valve during sales and opening the sales valve. Upon completion of the sale, the sales valve will be resealed.

Sales by truck will be by tank gauge.

	VALVE	PRODUCTION PHASE	SALES PHASE	CIRCULATING	NOTE
1	LOAD LINE VALVE	CLOSED	OPEN	CLOSED	
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6	WATER LINE VALVE	OPEN	NA	NA	WATER TANKS ARE ISOLATED FROM OIL PRODUCTION TANKS WATER IS TRUCK HAULED FROM FORWARD LOAD LINES

MAR 14 2016

**PECOS DISTRICT  
CONDITIONS OF APPROVAL**

RECEIVED

OPERATOR'S NAME:	Burnett Oil Co
LEASE NO.:	LC029415B
WELL NAME & NO.:	1-Burnett 25 J SWD
SURFACE HOLE FOOTAGE:	1350'/S & 1650'/E
BOTTOM HOLE FOOTAGE	'/ & '/
LOCATION:	Section 25, T. 17 S., R.31 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
  - Below Ground-level Abandoned Well Marker
  - Dunes Sagebrush Lizard Trenching Monitor Stipulation
- ☐ **Fences**
- ☐ **Construction**
  - Notification
  - Topsoil
  - Closed Loop System
  - Federal Mineral Material Pits
  - Well Pads
  - Roads
- ☐ **Road Section Diagram**
- ☒ **Drilling**
  - Cement Requirements
  - H2S Requirements
  - Logging Requirements
  - Waste Material and Fluids
- ☒ **Production (Post Drilling)**
  - Well Structures & Facilities
  - Pipelines
- ☐ **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.



## **V. SPECIAL REQUIREMENT(S)**

### **Timing Limitation Stipulation / Condition of Approval for lesser prairie-chicken:**

Oil and gas activities including 3-D geophysical exploration, and drilling 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, 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. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. 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 feet from the source of the noise.

**Below Ground-level Abandoned Well Marker to avoid raptor perching:** Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

This authorization is subject to your Certificate of Participation and/or Certificate of Inclusion under the New Mexico Candidate Conservation Agreement. Because it involves surface disturbing activities covered under your Certificate, your Habitat Conservation Fund Account with the Center of Excellence for Hazardous Materials Management (CEHMM) will be debited according to Exhibit B Part 2 of the Certificate of Participation.

### **Dunes Sagebrush Lizard Trenching Monitor Stipulation**

- Pre-construction contact with a BLM wildlife biologist is required 5 days prior to any ground disturbing activities associated with the project occurs.
- Successful completion of the BLM Trench Stipulation Workshop is required for a non-agency person to be approved as a monitor.
- Any trench left open for (8) hours or less is not required to have escape ramps; however, before the trench is backfilled, an agency approved monitor shall walk the entire length of the open trench and remove all trapped vertebrates. The bottom surface of the trench will be disturbed a minimum of 2 inches in order to arouse any buried vertebrates. All vertebrates will be released a minimum of 100 yards from the trench.
- For trenches left open for eight (8) hours or more the following requirements apply:

- Earthen escape ramps and/or structures (built at no more than a 30 degree slope and spaced no more than 500 feet apart) shall be placed in the trench. Metal structures will not be authorized. Options will be discussed in detail at the required Trench Stipulation Workshop.
  - One approved monitor shall be required to survey up to three miles of trench between the hours of 11 AM-2 PM. A daily report (consolidate if there is more than one monitor) on the vertebrates found and removed from the trench shall be provided to the BLM (email/fax is acceptable) the following morning.
  - Prior to backfilling of the trench all structures used as escape ramps will be removed and the bottom surface of the trench will be disturbed a minimum of 2 inches in order to arouse any buried vertebrates. All vertebrates will be released a minimum of 100 yards from the trench.
- This stipulation shall apply to the entire length of the project in the DSL habitat polygon regardless of land ownership or CCA/CCAA enrollment status.
  - A project closeout will be required within three business days of the completion of the project.

### **Fences**

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.

## **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) 234-5909 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 strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (below six inches) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area 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. EXCLOSURE FENCING (CELLARS & PITS)**

##### **Exclosure Fencing**

The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the pit is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

#### **G. 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-five (25) 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.

### **Ditching**

Ditching shall be required on both sides of the road.

### **Turnouts**

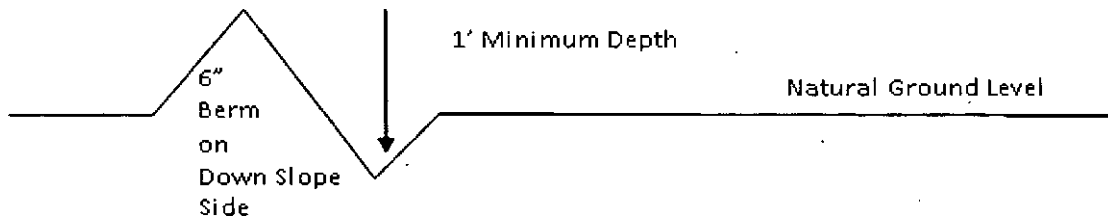
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

### **Drainage**

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outslowing 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:

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

#### **Cattleguards**

An appropriately sized cattleguard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattleguards on the access road route 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 cattleguards that are in place and are utilized during lease operations.

#### **Fence Requirement**

Where entry is granted 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 fences.

#### **Public Access**

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

### Construction Steps

1. Salvage topsoil
2. Construct road

3. Redistribute topsoil
4. Revegetate slopes

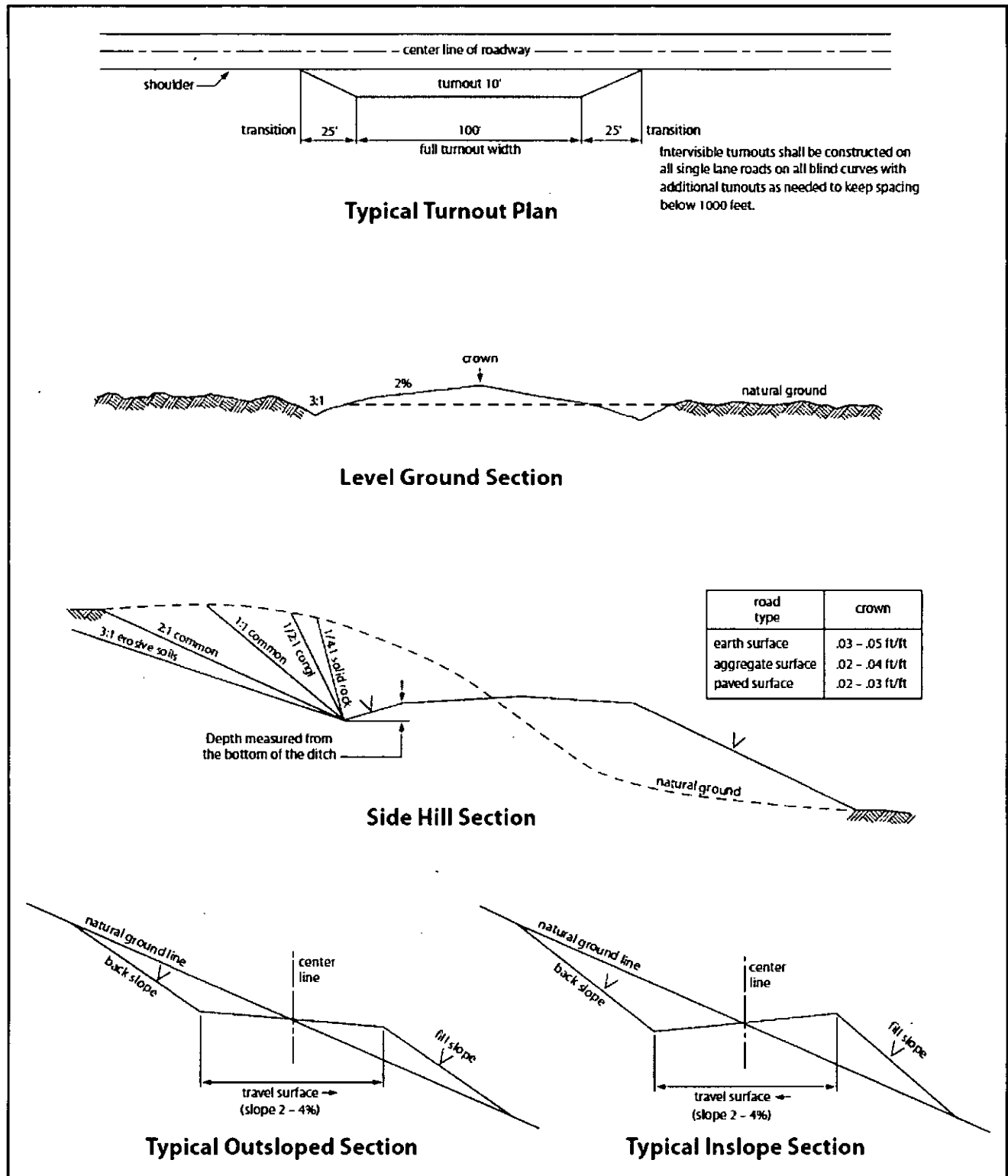


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

## VII. DRILLING

### A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

☒ **Eddy County**

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

1. A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Plan shall be activated 500 feet prior to drilling into the **Grayburg** formation. **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. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works is located, this does not include the dog house or stairway area.
4. **The record of the drilling rate along with the GR/N well log run from TD to surface shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.**

### B. CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.).

**Centralizers required on surface casing per Onshore Order 2.III.B.1.f.**

**Wait on cement (WOC) for Water Basin:**

After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least **8 hours**. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements.

**Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.**

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

**Possibility of water flows in the Salado and Queen.**

**Possibility of lost circulation in the Rustler, Artesia Group, San Andres, Red Beds and Grayburg.**

**Abnormal pressures may be encountered within the Wolfcamp formation.**

1. The 13-3/8 inch surface casing shall be set at approximately **850 feet** (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. **If salt is encountered, set casing at least 25 feet above the salt.**
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.**
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.

**Intermediate casing shall be kept fluid filled while running into hole to meet BLM minimum collapse requirements.**



2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:

☒ Cement to surface. If cement does not circulate see B.1.a, c-d above.

**Formation below the 9-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office:**

3. The minimum required fill of cement behind the 7 inch production casing is:

☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office.

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. **In the case where the only BOP installed is an annular preventer, it shall be tested to a minimum of 2000 psi (which may require upgrading to 3M or 5M annular).**
3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M) psi.**
4. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 9-5/8 intermediate casing shoe shall be **5000 (5M) psi. 5M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.**
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after

installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

- b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**.
- c. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- d. The results of the test shall be reported to the appropriate BLM office.
- e. 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.**
- f. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- g. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the **Wolfcamp** formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

#### **D. DRILL STEM TEST**

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

#### **E. WELL COMPLETION**

**A NOI sundry with the completion procedure for this well shall be submitted and approved prior to commencing completion work. The procedure will be reviewed to verify that the completion proposal will allow the operator to:**

1. Properly evaluate the injection zone utilizing open hole logs, swab testing and/or any other method to confirm that hydrocarbons cannot be produced in paying quantities. This evaluation shall be reviewed by the BLM prior to injection commencing.
2. Restrict the injection fluid to the approved formation.

If off-lease water will be disposed in this well, the operator shall provide proof of right-of-way approval.

## **F. WASTE MATERIAL AND FLUIDS**

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

**CLN 030316**

## **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.

#### **Exclosure Netting (Open-top Tanks)**

Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

#### **Chemical and Fuel Secondary Containment and Exclosure Screening**

The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and

maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock enclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

#### **Open-Vent Exhaust Stack Enclosures**

The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended enclosure structures on open-vent exhaust stacks are in the shape of a cone.*) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

#### **Containment Structures**

Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

#### **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** from the BLM Standard Environmental Color Chart (CC-001: June 2008).

### **B. PIPELINES**

#### **BURIED PIPELINE STIPULATIONS**

A copy of the application (Grant, APD, or Sundry Notice) and attachments, including conditions of approval, 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. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil 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 or other pollutant, wherever found, shall be the responsibility of holder, regardless of fault. Upon failure of 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 holder of any responsibility as provided herein.

5. All construction and maintenance activity will be confined to the authorized right-of-way.

6. The pipeline will be buried with a minimum cover of 36 inches between the top of the pipe and ground level.

7. The maximum allowable disturbance for construction in this right-of-way will be 30 feet:

- Blading of vegetation within the right-of-way will be allowed: maximum width of blading operations will not exceed 20 feet. The trench is included in this area. (*Blading is defined as the complete removal of brush and ground vegetation.*)
- Clearing of brush species within the right-of-way will be allowed: maximum width of clearing operations will not exceed 30 feet. The trench and bladed area are included in this area. (*Clearing is defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface.*)
- The remaining area of the right-of-way (if any) shall only be disturbed by compressing the vegetation. (*Compressing can be caused by vehicle tires, placement of equipment, etc.*)

8. The holder shall stockpile an adequate amount of topsoil where blading is allowed. The topsoil to be stripped is approximately 6 inches in depth. The topsoil will be segregated from other spoil piles from trench construction. The topsoil will be evenly distributed over the bladed area for the preparation of seeding.

9. 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.

10. Vegetation, soil, and rocks left as a result of construction or maintenance activity will be randomly scattered on this right-of-way and will not be left in rows, piles, or berms, unless otherwise approved by the Authorized Officer. The entire right-of-way shall be recontoured to match the surrounding landscape. The backfilled soil shall be compacted and a 6 inch berm will be left over the ditch line to allow for settling back to grade.

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. The holder will reseed all disturbed areas. Seeding will be done according to the attached seeding requirements, using the following seed mix.

- |  |  |
|--|--|
| <input type="checkbox"/> seed mixture 1                | <input type="checkbox"/> seed mixture 3          |
| <input type="checkbox"/> seed mixture 2                | <input type="checkbox"/> seed mixture 4          |
| <input checked="" type="checkbox"/> seed mixture 2/LPC | <input type="checkbox"/> Aplomado Falcon Mixture |

13. All above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2.

14. 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. All signs and information thereon will be posted in a permanent, conspicuous manner, and will be maintained in a legible condition for the life of the pipeline.

15. 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 before maintenance begins. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway. As determined necessary during the life of the pipeline, the Authorized Officer may ask the holder to construct temporary deterrence structures.

16. Any cultural and/or paleontological resources (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 actions to prevent the loss of significant 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.

17. 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 associated roads, 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.

18. Escape Ramps - The operator will construct and maintain pipeline/utility trenches [that are not otherwise fenced, screened, or netted] to prevent livestock, wildlife, and humans from becoming entrapped. At a minimum, the operator will construct and maintain escape ramps, ladders, or other methods of avian and terrestrial wildlife escape in the trenches according to the following criteria:

- a. Any trench left open for eight (8) hours or less is not required to have escape ramps; however, before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them at least 100 yards from the trench.
- b. For trenches left open for eight (8) hours or more, earthen escape ramps (built at no more than a 30 degree slope and spaced no more than 500 feet apart) shall be placed in the trench.

19. 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.

This authorization is subject to your Certificate of Participation and/or Certificate of Inclusion under the New Mexico Candidate Conservation Agreement. Because it involves surface disturbing activities covered under your Certificate, your Habitat Conservation Fund Account with the Center of Excellence for Hazardous Materials Management (CEHMM) will be debited according to Exhibit B Part 2 of the Certificate of Participation.

### **VIII. INTERIM RECLAMATION**

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.



Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

## **X. FINAL ABANDONMENT & RECLAMATION**

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Below Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well.

## Seed Mixture for LPC Sand/Shinnery Sites

Holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)\* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed shall be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed shall be either certified or registered seed. The seed container shall 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). 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. Seeding shall be repeated until a satisfactory stand is established as determined by the Authorized Officer. Evaluation of growth may 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