Form 3160-3

MAY 0 3 2019

FORM APPROVED

(June 2015)	OMB No. 1004-0137 Expires: January 31, 2018				
UNITED STATES DEPARTMENT OF THE IN BUREAU OF LAND MANA	5. Lease Serial No. NMLC0029339A				
APPLICATION FOR PERMIT TO D	6. If Indian, Allotee or Tril	oe Name			
la. Type of work:	EENTER			7. If Unit or CA Agreemen	t, Name and No.
1b. Type of Well: ✓ Oil Well ☐ Gas Well ☐ Ot	her			8. Lease Name and Well N	o.
1c. Type of Completion: Hydraulic Fracturing Sin	ngle Zone	Multiple Zone		JACKSON A	
·				62 207	167
2. Name of Operator BURNETT OIL COMPANY INCORPORATED		3080		9. API Well No. 30 - 0/5-	45954
3a. Address Burnett Plaza - Suite 1500, 801 Cherry Street - Unit 9 Fort		o. (include area coa 730	le)	10. Field and Pool, or Exploratory CEDAR LAKE / GLORIETA YESO	
4. Location of Well (Report location clearly and in accordance w At surface LOT 0 / 380 FSL / 1650 FEL / LAT 32.82826 At proposed prod. zone LOT 0 / 380 FSL / 1650 FEL / LA	65 / LONG -1	103.922178	2178	11. Sec., T. R. M. or Blk. a SEC 13 / T17S / R30E /	•
14. Distance in miles and direction from nearest town or post office 2 miles	ce*			12. County or Parish EDDY	13. State
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any)	16. No of ac	res in lease	17. Spacir 20	ng Unit dedicated to this we	1
18 Distance from proposed location*	19. Proposed Depth 20. BLM			BIA Bond No. in file	
to nearest well, drilling, completed, 300 feet applied for, on this lease, ft.	7500 feet / 7500 feet FED: Nf		FED: NM	IB000197	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3722 feet	22. Approximate date work will start* 04/02/2019			23. Estimated duration 11 days	
	24. Attacl	hments		7,1	
The following, completed in accordance with the requirements of (as applicable)	Onshore Oil :	and Gas Order No. 1	l, and the H	lydraulic Fracturing rule per	43 CFR 3162.3-3
Well plat certified by a registered surveyor.     A Drilling Plan.	j	4. Bond to cover th Item 20 above).	e operation	s unless covered by an existi	ng bond on file (se
<ol> <li>A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office)</li> </ol>		5. Operator certific 6. Such other site sp BLM.		mation and/or plans as may b	e requested by the
25. Signature	Name	(Printed/Typed)		Date	

(Electronic Submission)

Name (Printed/Typed)

Leslie Garvis / Ph: (817)583-8730

Date 10/19/2018

Regulatory Coordinator

Approved by (Signature) Name (Printed/Typed) (Electronic Submission) 04/25/2019 Cody Layton / Ph: (575)234-5959 Title Office Assistant Field Manager Lands & Minerals CARLSBAD

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.

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.



\*(Instructions on page 2)

(Continued on page 2)

#### **INSTRUCTIONS**

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the wen, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionany drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

#### **NOTICES**

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

**BURDEN HOURS STATEMENT:** Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Conection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

## **Additional Operator Remarks**

#### **Location of Well**

1. SHL: LOT 0 / 380 FSL / 1650 FEL / TWSP: 17S / RANGE: 30E / SECTION: 13 / LAT: 32.828265 / LONG: -103.922178 ( TVD: 7500 feet, MD: 7500 feet ) BHL: LOT 0 / 380 FSL / 1650 FEL / TWSP: 17S / RANGE: 30E / SECTION: 13 / LAT: 32.828265 / LONG: -103.922178 ( TVD: 7500 feet, MD: 7500 feet )

#### **BLM Point of Contact**

Name: Tenille Ortiz

Title: Legal Instruments Examiner

Phone: 5752342224 Email: tortiz@blm.gov

(Form 3160-3, page 3)

### Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

(Form 3160-3, page 4)

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

# State of New Mexico Energy, Minerals and Natural Resources Department 3 2019 Submit Original to Appropriate District Office

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

#### GAS CAPTURE PLAN

Date: 12/14/2018	
☐ Amended - Reason for Amendment:	Operator & OGRID No.: Burnett Oil Co., Inc./ 03080

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomplete to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

#### Well(s)/Production Facility - Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
Jackson A 62	TBD	O-13-17S-30E	380' FSL 1650' FEL	300 MCF		Will go to gas sales line, first day of production

#### **Gathering System and Pipeline Notification**

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to <u>DCP</u> and will be connected to <u>DCP</u> low/high pressure gathering system located in Eddy County, New Mexico. It will require 0' of pipeline to connect the facility to low/high pressure gathering system. <u>Burnett Oil Co., Inc.</u> provides (periodically) to <u>DCP</u> a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, <u>Burnett Oil Co., Inc.</u> and <u>DCP</u> have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at <u>DCP Linam Ranch</u> Processing Plant located in Sec.6, Twn.19S, Rng.37E, <u>Lea</u> County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

#### Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on <u>DCP Gas</u> system at that time. Based on current information, it is <u>Burnett's</u> belief the system can take this gas upon completion of the well(s). <u>NOTE: It should be noted that Burnett does not flowback but rather sends wells to the production facility upon completion.</u>

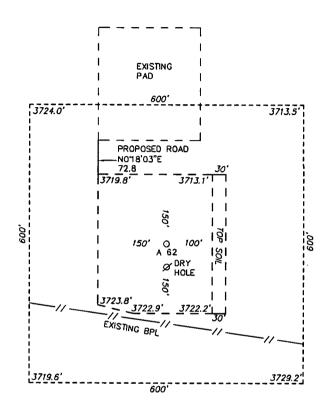
Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

#### **Alternatives to Reduce Flaring**

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation On lease
  - o Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas On lease
  - o Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal On lease
  - o Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

#### SECTION 13, TOWNSHIP 17 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY. NEW MEXICO.



BURNETT OIL COMPANY, INC. JACKSON A 62 ELEV. - 3722'

Lat - N 32.828265\* Long - W 103.922178\* NMSPCE- N 665301.4 E 667632.2 (NAD-83) (BB-CVAN)

Directions to Location:

FROM HIGHWAY 82 GO NORTH ON SQUARE LAKE ROAD 1.0 MILES. THEN GO EAST 0.6 MILES THEN SOUTH 0.2 MILES TO EXISTING PAD WITH PROPOSED ROAD.

P.O. 8ox 1786 (575) 393-7316 - Office 1120 N. West County Rd. (575) 392-2206 - Fax Habbs, New Mexico 88241 basinsurveys.com

ARTESIA, NM IS ±28 MILES TO THE WEST OF LOCATION.

200 200 400 FEET SCALE: 1" = 200'

JACKSON A 62 / WELL PAD TOPO

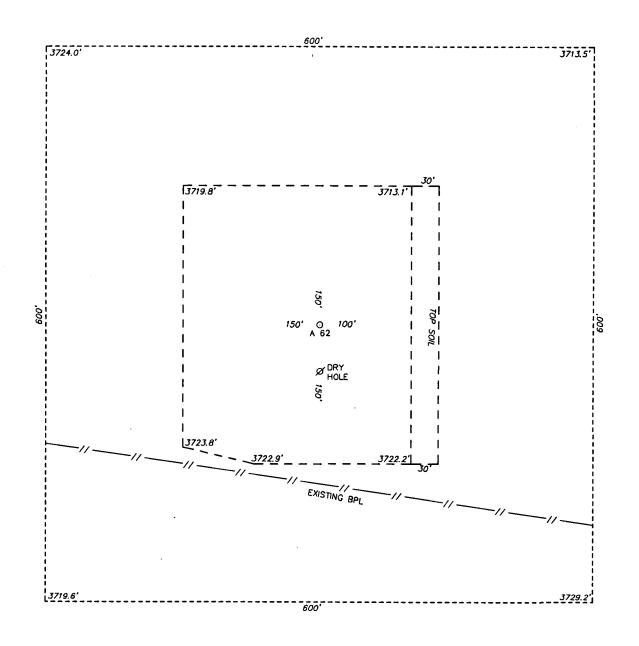
THE JACKSON A 62 LOCATED 380' FROM

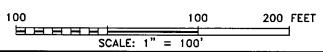
THE SOUTH LINE AND 1650' FROM THE EAST LINE OF SECTION 14, TOWNSHIP 17 SOUTH, RANGE 30 EAST,

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

W.O. Number: 33866 Drawn By: J GOAD Date: 8-2-2018 Survey Date: 7-11-2018 Sheet 1 of 1

#### SECTION 13, TOWNSHIP 17 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.





JACKSON A 62 / WELL PAD TOPO

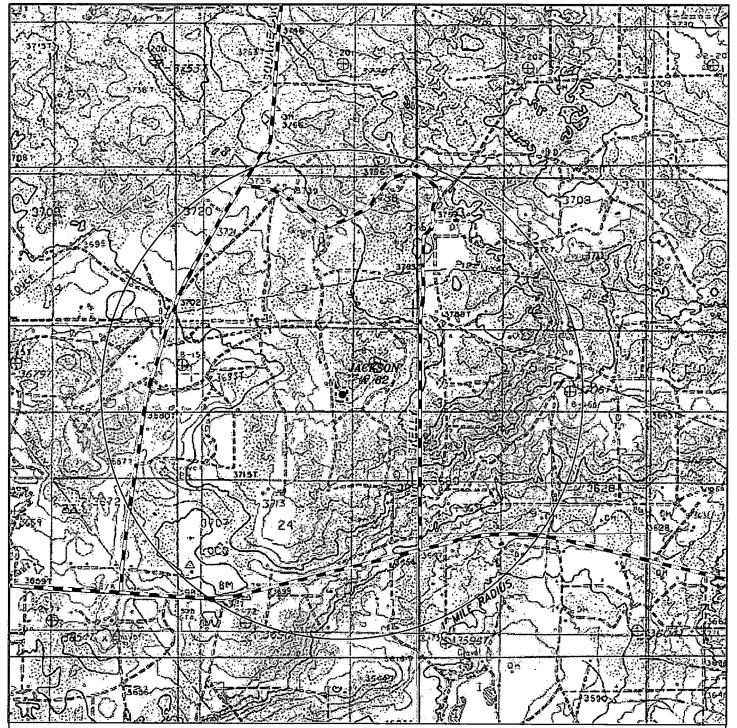
THE JACKSON A 62 LOCATED 380' FROM THE SOUTH LINE AND 1650' FROM THE EAST LINE OF SECTION 14, TOWNSHIP 17 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.



P.O. Box 1786 (575) 393-7316 - Office 1120 N. West County Rd. (575) 392-2206 - Fax Hobbs, New Mexico 88241 basinsurveys.com

W.O. Number: 33866 Drawn By: J GOAD Date: 8-2-2018 Survey Date: 7-11-2018

Sheet 1 of 1 Sheets



## JACKSON A 62

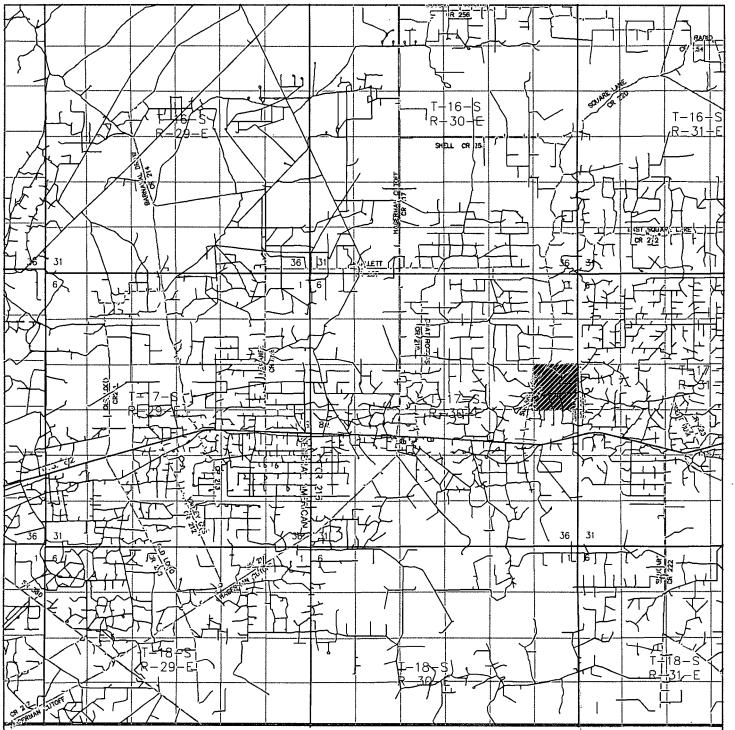
Located 380' FSL and 1650' FEL Section 13, Township 17 South, Range 30 East, N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (575) 393-7316 — Office (575) 392-2206 — Fax basinsurveys.com

o,	1000'	2000'	3000'	4000'	
	sc	ALE: 1" =	2000'		1
W.C	. Number:	JG 338	366		▮
Sur	vey Date:	7-11-	-2018		4
BLU	LOW TINT IE TINT - URAL COL	STATE LA	IND		

BURNETT OIL CO.



## JACKSON A 62

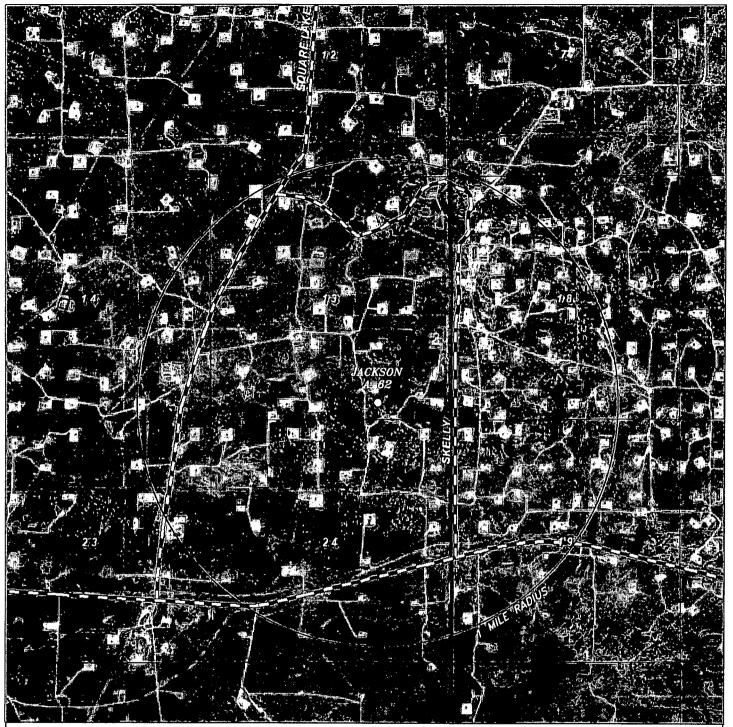
Located 380' FSL and 1650' FEL Section 13, Township 17 South, Range 30 East, N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (575) 393-7316 - Office (575) 392-2206 - Fax basinsurveys.com

1	0 1 MI 2 MI 3 MI 4 MI	1
	SCALE: 1" = 2 MILES  W.O. Number: JG 33866	1
	Survey Date: 7-11-2018	₫,
	YELLOW TINT — USA LAND BLUE TINT — STATE LAND NATURAL COLOR — FEE LAND	

BURNETT OIL CO.



## JACKSON A 62

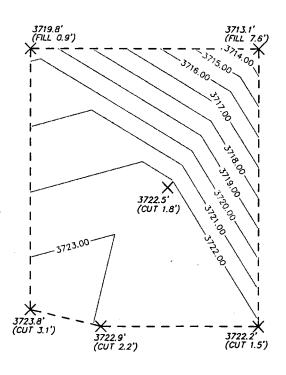
Located 380' FSL and 1650' FEL Section 13, Township 17 South, Range 30 East, N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (575) 393-7316 - Office (575) 392-2206 - Fax basinsurveys.com

`	0' 1000'	2000'	3000'	4000'	
	SCA	LE: 1" =	2000'		
	W.O. Number:	JG 338	366		4
	Survey Date:	7-11-	-2018		9
	YELLOW TINT BLUE TINT	STATE LA	ND		

BURNETT OIL CO. SECTION 13, TOWNSHIP 17 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.



100 100 200 FEET SCALE: 1" = 100'

JACKSON A 62 / CUT & FILL

THE JACKSON A 62 LOCATED 380' FROM THE SOUTH LINE AND 1650' FROM THE EAST LINE OF SECTION 14, TOWNSHIP 17 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

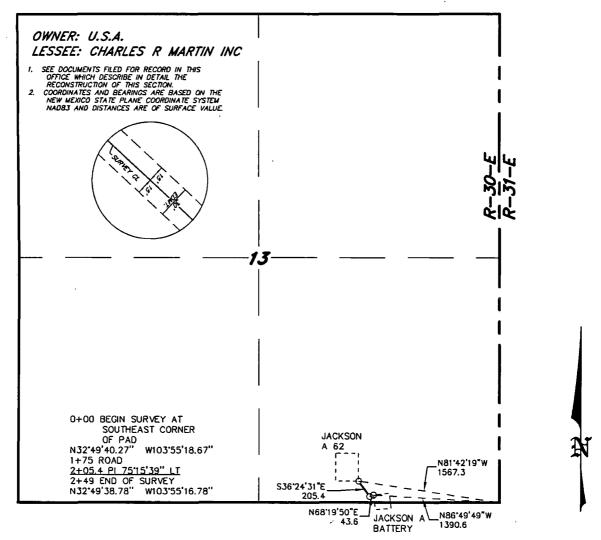
P.O. 8ox 1786 (575) 393-7316 - Office 1120 N. West County Rd. (575) 392-2206 - Fax Hobbs, New Mexico 88241 basinsurveys.com

W.O. Number: 33866 Drawn By: J GOAD Date: 8-2-2018

Survey Date: 7-11-2018

Sheet 1 of 1 Sheets

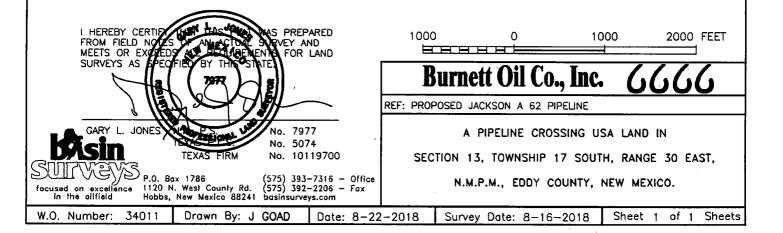
## SECTION 13, TOWNSHIP 17 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

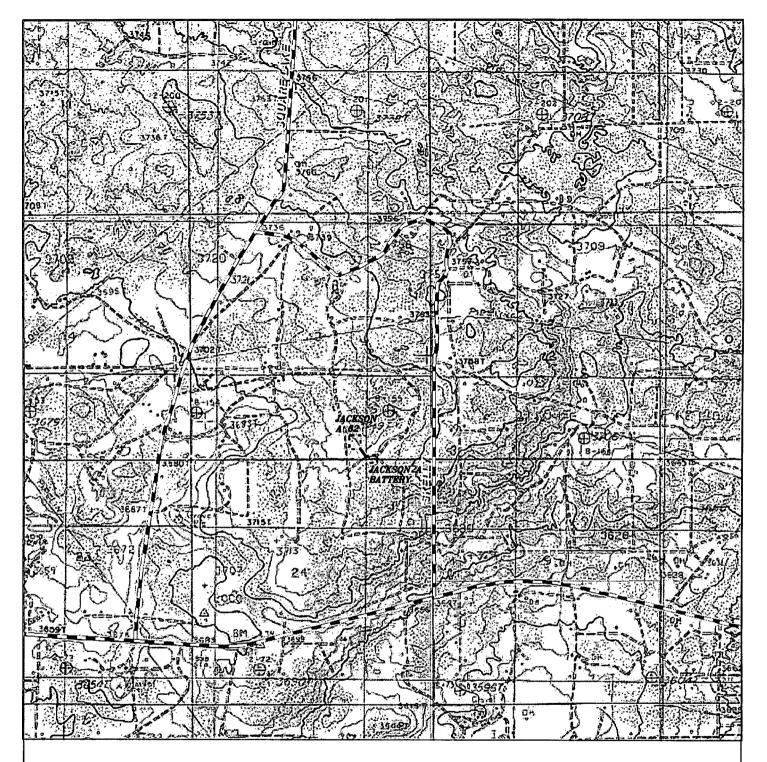


### LEGAL DESCRIPTION

A STRIP OF LAND 30.0 FEET WIDE, LOCATED IN SECTION 13, TOWNSHIP 17 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO AND BEING 15.0 FEET LEFT AND RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.

249.0 FEET = 15.09 RODS = 0.05 MILES = 0.17 ACRES





## PROPOSED JACKSON A 62 PIPELINE

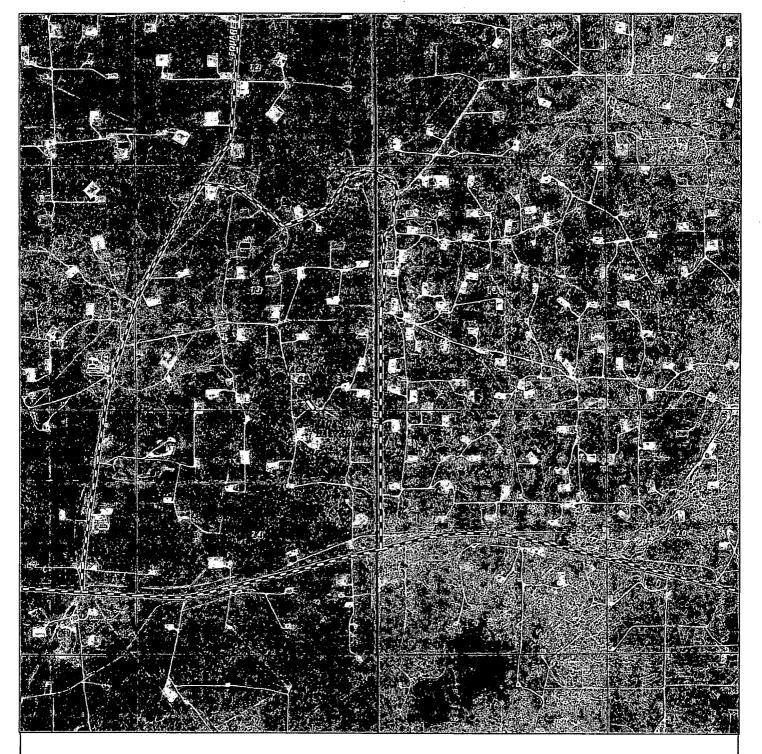
Section 13, Township 17 South, Range 30 East, N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (575) 393-7316 - Office (575) 392-2206 - Fax basinsurveys.com

0' EDELTE	1000'	2000'	3000'	4000'	
	SCA	ALE: 1" =	2000'		l
W.O.	Number:	JG 340	011		1
Surv	ey Date:	- 8-16-	-2018		0
BLUI	OW TINT TINT -	STATE LA	AND		

Burnett Oil Co., Inc.



## PROPOSED JACKSON A 62 PIPELINE Section 13, Township 17 South, Range 30 East, N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (575) 393-7316 - Office (575) 392-2206 - Fax basinsurveys.com

٦	0' 1000' 2000' 3000'	4000,	١.
	SCALE: 1" = 2000'		l
	W.O. Number: JG 34011		4
	Survey Date: 8-16-2018-		4
	YELLOW TINT — USA LAND BLUE TINT — STATE LAND NATURAL COLOR — FEE LAND		

Burnett Oil Co., Inc. しるしる

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

**OPERATOR'S NAME:** | BURNETT OIL COMPANY INC

LEASE NO.:

NMLC0029339A

WELL NAME & NO.:

JACKSON A 62

SURFACE HOLE FOOTAGE:

380'/S & 1650'/E

BOTTOM HOLE FOOTAGE

380'/S & 1650'/E

LOCATION:

SECTION 13, T17S, R30E, NMPM

COUNTY: LEDDY



H2S	• Yes	O No	
Potash	None	© Secretary	O R-111-P
Cave/Karst Potential	• Low	C Medium	C High
Variance	None	© Flex Hose	Other Other
Wellhead	Conventional	O Multibowl	O Both
Other	☐4 String Area	☐ Capitan Reef	□WIPP
Other	□Fluid Filled	Cement Squeeze	□ Pilot Hole
Special Requirements	☐ Water Disposal	□ COM	□ Unit

#### A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) 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.

#### **B. CASING**

- 1. The 8-5/8 inch surface casing shall be set at approximately 335 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface.
  - 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 will be a minimum of <u>8</u> hours or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)

- 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.
- 2. The minimum required fill of cement behind the 5-1/2 inch production casing is:

Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off
  the DV tool, contact the appropriate BLM office before proceeding with
  second stage cement job. Excess calculates to 15% additional cement
  might be required.
- b. Second stage above DV tool:
  - Cement to surface. If cement does not circulate, contact the appropriate BLM office.

#### C. PRESSURE CONTROL

1. 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.

## **GENERAL 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)
  - \( \text{Chaves and Roosevelt Counties} \)
     \( \text{Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201.} \)
     \( \text{During office hours call (575) 627-0272.} \)
     \( \text{After office hours call (575)} \)

  - ✓ Lea CountyCall the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)393-3612
- 1. 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.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with Spudder Rig
    - Notify the BLM when moving in and removing the Spudder Rig.
    - Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
- 2. 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 are located, this does not include the dog house or stairway area.

3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) 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.

#### A. CASING

- 1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. 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.). The initial wellhead installed on the well will remain on the well with spools used as needed.
- 2. Wait on cement (WOC) for Potash Areas: 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 for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log.
- 3. 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.
- 4. 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.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. 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.

8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

#### B. 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. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
- 3. 5M or higher 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.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
  - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- 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. In potash areas, 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. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time.
- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. 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.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. 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.
- g. 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.
- h. 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.

Page 6 of 7

#### KFC

8 5/8		csg in a	12 1/4	inch hole.		<u>Design</u>	<u>Factors</u>	SURI	
Segment	#/ft	Grade	و ودور و الارام	Coupling	Joint	Collapse	Burst	Length	Weigh
"A"	24.00	J	55	ST&C	30.35	8.29	0.76	335	8,040
"B"		्रक केर्ने केर का						0	0
w/8.4#/g	mud, 30min S	fc Csg Test psig:	1,500	Tail Cmt	does	circ to sfc.	Totals:	335	8,040
omparison o	of Proposed	to Minimum	Required C	ement Volum	es				
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd	Min Di
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE	Hole-C
12.1/4	0.4127	330	442	178	148	9.50	2246	3M	1.31
		for D V TooL:	i	1st Stg	2nd Stg	sum of sx	Σ CuFt	<u> </u>	1.01
•		Excess Cmt:		131 Olg	zna otg	0	0		
	/4	Excess onic.				Ü	Ū		
								_	
urst Frac Grad	lient(s) for S	egment(s) A,	B=,b All	> 0.70. OK.		ırst = 1.31 Po	re Pressure I	ower that exp	ected
					therefore 2N	VI is OK			
			=						
5 1/2		nside the	8 5/8			<u>Design</u>	Factors_	PRODU	
Segment	#/ft	Grade		Coupling	Joint	Collapse	Burst	Length	Weig
"A"	17.00	J	55	LT&C	1.94	1.26	1.37	7,500	127,5
"B"		end the service				e e e e e e e e e e e e e e e e e e e		- 0 - 1	• • 0
w/8.4#/g	mud, 30min S	fc Csg Test psig:					Totals:	7,500	127,5
The ce	ement volun	ne(s) are inte	nded to aci	hieve a top of	0	ft from su	ırface or a		overlap.
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Reg'd	Min Di
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE	Hole-C
7 7/8	0.1733	look 🕏	0	1312	/ <b>-</b> //	10.00		30.2	0.91
	0		1 -			10.00	_	لتخضضا	
V Tool(s).			2600				cum of ev	2 CHEF	Σ%ανσο
` '		45	2600				sum of sx	Σ CuFt	Σ%exce
` '		15	2600 116				1130	<u>Σ CuFt</u> 1969	Σ%exce 50
` '	1	15	1	7 H 1222 H 1223 13 1229	# 857 V CS & A.	''			
` '	casing ir		116	1 H 14 H 15 H 15 H 15 H 15 H 15 H 15 H 1	8 800 H 200 H 10 H 2007 H 1000 H 10	Design Fa	1130		
y stage % :		nside the	1	Coupling	Joint	Design Fa	1130	1969 	50
y stage % :			116 51/2	Coupling	Joint	<u>Design Fa</u> Collapse	1130	1969	50 Weigl
y stage % :  7  Segment "A"		nside the	116 51/2	and the second s			1130	1969  Length	50 Weigl
y stage % :  7  Segment "A" "B"	, #/ft	nside the Grade	116 5 1/2	Coupling			1130  ctors  Burst	Length 0	50 Weigl 0 0
7 Segment "A" "B" w/8.4#/g	#/ft mud, 30min Sl	nside the Grade	5 1/2			Collapse	ctors Burst Totals:	1969  Length 0 0 0	50 Weigl 0 0 0
7 Segment "A" "B" w/8.4#/g The ce	#/ft mud, 30min Si	nside the Grade  fc Csg Test psig: ne(s) are intel	116 5 1/2 nded to act	nieve a top of	0	Collapse  ft from su	ctors Burst Totals:	1969  Length  0 0 7500	Weigl 0 0 0 overlap.
y stage % :  7 Segment "A" "B"  w/8.4#/g The ce	#/ft mud, 30min Si ement volun Annular	fc Csg Test psig: ne(s) are inter	116 5 1/2  nded to act 1 Stage	nieve a top of	0 1 Stage	ft from su	ctors Burst Totals:	1969  Length 0 0 7500 Req'd	Weigl 0 0 0 overlap.
y stage % :  7  egment "A" "B"  w/8.4#/gu The ce Hole Size	#/ft mud, 30min Si ment volun Annular Volume	nside the Grade  fc Csg Test psig: ne(s) are intel	5 1/2  5 1/2  nded to ach 1 Stage CuFt Cmt	nieve a top of	0	ft from su T Drilling Mud Wt	ctors Burst Totals:	1969  Length 0 0 7500  Req'd BOPE	Weigl 0 0 0 overlap.
y stage % :  7 Segment "A" "B"  w/8.4#/g The ce	#/ft mud, 30min Si ement volun Annular	fc Csg Test psig: ne(s) are inter	116 5 1/2  nded to act 1 Stage	nieve a top of	0 1 Stage	ft from su	ctors Burst Totals:	1969  Length 0 0 7500 Req'd	Weigl 0 0 0 overlap.
"B" w/8.4#/g The ce	#/ft mud, 30min Si	nside the Grade  fc Csg Test psig: ne(s) are intel	116 5 1/2 nded to act	nieve a top of	0	Collapse  ft from su	ctors Burst Totals:	1969  Length  0 0 7500	We
y stage % :  7  egment "A" "B"  w/8.4#/gu The ce Hole Size	#/ft mud, 30min Si ment volun Annular Volume	fc Csg Test psig: ne(s) are inter	5 1/2  5 1/2  nded to ach 1 Stage CuFt Cmt	nieve a top of	0 1 Stage	ft from su T Drilling Mud Wt	ctors Burst Totals:	1969  Length 0 0 7500  Req'd BOPE	Weig 0 0 0 overlap.
y stage % :  7 egment "A" "B" w/8.4#/gu The ce Hole Size	#/ft mud, 30min Si ment volun Annular Volume	fc Csg Test psig: ne(s) are inter	5 1/2  5 1/2  nded to ach 1 Stage CuFt Cmt	nieve a top of	0 1 Stage	ft from su T Drilling Mud Wt	ctors Burst Totals:	1969  Length 0 0 7500  Req'd BOPE	Weig 0 0 0 overlap.
y stage % :  7 egment "A" "B" w/8.4#/gu The ce Hole Size	#/ft mud, 30min Si ment volun Annular Volume	fc Csg Test psig: ne(s) are inter	5 1/2  5 1/2  nded to ach 1 Stage CuFt Cmt	nieve a top of	0 1 Stage	ft from su T Drilling Mud Wt	ctors Burst Totals:	1969  Length 0 0 7500  Req'd BOPE	Weig 0 0 0 overlap.
y stage % :  7 egment "A" "B" w/8.4#/g The ce Hole Size 8 3/4	#/ft mud, 30min Si ment volum Annular Volume 0.1503	fc Csg Test psig: ne(s) are intel 1 Stage Cmt Sx	5 1/2  5 1/2  nded to ach 1 Stage CuFt Cmt	nieve a top of	0 1 Stage	ft from su Drilling Mud Wt	ctors Burst  Totals: Irface or a Calc MASP	1969  Length 0 0 7500  Req'd BOPE	Weigl 0 0 0 overlap.
y stage %:  7 Segment "A" "B" w/8.4#/gt The ce Hole Size 8 3/4	#/ft mud, 30min Si ment volum Annular Volume 0.1503	fc Csg Test psig: ne(s) are intel 1 Stage Cmt Sx	5 1/2  5 1/2  nded to act 1 Stage CuFt Cmt 0	nieve a top of Min Cu Ft	0 1 Stage % Excess	ft from su Drilling Mud Wt	Totals: Inface or a Calc MASP	1969  Length 0 0 7500  Req'd BOPE	Weigl 0 0 0 overlap. Min Di Hole-Cp
y stage %:  7 Segment "A" "B" w/8.4#/g The ce Hole Size 8 3/4	#/ft mud, 30min Si ment volum Annular Volume 0.1503	fc Csg Test psig: ne(s) are intel 1 Stage Cmt Sx	5 1/2  5 1/2  nded to act 1 Stage CuFt Cmt 0	nieve a top of	0 1 Stage % Excess	ft from su Drilling Mud Wt	ctors Burst  Totals: Irface or a Calc MASP	1969  Length 0 0 7500  Req'd BOPE	Weigl 0 0 0 overlap. Min Dis
y stage %:  7 Segment "A" "B" w/8.4#/gu The ce Hole Size 8 3/4	#/ft mud, 30min Si ment volum Annular Volume 0.1503	fc Csg Test psig: ne(s) are intel 1 Stage Cmt Sx	5 1/2  5 1/2  nded to act 1 Stage CuFt Cmt 0	nieve a top of Min Cu Ft	0 1 Stage % Excess	ft from su Drilling Mud Wt	Totals: Inface or a Calc MASP	1969  Length 0 0 7500  Req'd BOPE	Weigl 0 0 0 overlap. Min Di Hole-Cp
7 Segment "A" "B" w/8.4#/g The ce Hole Size 8 3/4	#/ft mud, 30min Si ment volum Annular Volume 0.1503	fc Csg Test psig: ne(s) are intel 1 Stage Cmt Sx	5 1/2  5 1/2  nded to act 1 Stage CuFt Cmt 0	nieve a top of Min Cu Ft	0 1 Stage % Excess	ft from su Drilling Mud Wt	Totals: Inface or a Calc MASP	Length 0 7500 Req'd BOPE	Weigl 0 0 0 overlap. Min Dis Hole-Cr
7 Segment "A" "B" w/8.4#/g The ce Hole Size 8 3/4	#/ft mud, 30min Si ment volum Annular Volume 0.1503	nside the Grade  fc Csg Test psig: ne(s) are inter 1 Stage Cmt Sx  dem @ Grade	5 1/2  5 1/2  nded to act 1 Stage CuFt Cmt 0	nieve a top of Min Cu Ft	0 1 Stage % Excess	ft from su Drilling Mud Wt	Totals: Inface or a Calc MASP	1969  Length 0 7500  Req'd BOPE  Length 0	Weigl 0 0 0 overlap. Min Dis Hole-Cr
y stage %:  7 Segment "A" W/8.4#/g The ce Hole Size 8 3/4  0 Segment "A" W/8.4#/g w/8.4#/g	#/ft mud, 30min Si ment volum Annular Volume 0.1503 In tand #/ft	fc Csg Test psig: ne(s) are inter Stage Cmt Sx dem @ Grade	116 5 1/2  nded to act 1 Stage CuFt Cmt 0	nieve a top of Min Cu Ft  Coupling	0 1 Stage % Excess	ft from su Drilling Mud Wt  Design Collapse	Totals:  Factors  Burst  Totals:  Inface or a  Calc  MASP  Factors  Burst  Totals:	1969  Length 0 7500  Req'd BOPE  Length 0 0	Weigl O O O O O O O Weigl O O O O O O O O O O O O O O O O O O O
y stage %:  7 Segment "A" "B" w/8.4#/g The ce Hole Size 8 3/4  0 Segment "A" "B" w/8.4#/g Cmt vo	#/ft mud, 30min Si ment volum Annular Volume 0.1503  In tand #/ft mud, 30min Si I calc include	fc Csg Test psig: ne(s) are intel 1 Stage Cmt Sx dem @ Grade	5 1/2  5 1/2  nded to ach 1 Stage CuFt Cmt 0	nieve a top of Min Cu Ft  Coupling m conn) TOC	0 1 Stage % Excess Joint	ft from su  Drilling Mud Wt  Design Collapse  ft from su	Totals: Burst  Totals: Inface or a Calc MASP  Factors Burst  Totals:	1969  Length 0 7500  Req'd BOPE  Length 0 0	Weigl 0 0 overlap. Min Di: Hole-Cp Weigl 0 0 overlap.
y stage %:  7 Segment "A" W/8.4#/g The ce Hole Size 8 3/4  0 Segment "A" W/8.4#/g w/8.4#/g	#/ft mud, 30min Si ment volum Annular Volume 0.1503 In tand #/ft	fc Csg Test psig: ne(s) are inter Stage Cmt Sx dem @ Grade	116 5 1/2  nded to act 1 Stage CuFt Cmt 0	Coupling m conn) TOC	0 1 Stage % Excess	ft from su Drilling Mud Wt  Design Collapse	Totals:  Factors  Burst  Totals:  Inface or a  Calc  MASP  Factors  Burst  Totals:	1969  Length 0 7500  Req'd BOPE  Length 0 0	Weigl O O O O O O O Weigl O O O O O O O O O O O O O O O O O O O

0

6:1/8

Cu Ft

Capitan Reef est top XXXX.

## PECOS DISTRICT SURFACE USE CONDITIONS OF APPROVAL

OPERATOR'S NAME:
LEASE NO.:
NMLC0029339A
WELL NAME & NO.:
SURFACE HOLE FOOTAGE:
BOTTOM HOLE FOOTAGE
LOCATION:
COUNTY:
BURNETT OIL COMPANY INC
NMLC0029339A
JACKSON A 62
380'/S & 1650'/E
SECTION 13, T17S, R30E, NMPM
EDDY

#### TABLE OF CONTENTS

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

General Provisions
Permit Expiration
Archaeology, Paleontology, and Historical Sites
Noxious Weeds
Special Requirements
Lesser Prairie-Chicken Timing Stipulations
Ground-level Abandoned Well Marker
Hydrology
Construction
Notification
Topsoil
Closed Loop System
Federal Mineral Material Pits
Well Pads
Roads
Road Section Diagram
☑ 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.

Page 2 of 14

### 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.

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.

#### **Timing Limitation Exceptions:**

The Carlsbad Field Office will publish an annual map of where the LPC timing and noise stipulations and conditions of approval (Limitations) will apply for the identified year (between March 1 and June 15) based on the latest survey information. The LPC Timing Area map will identify areas which are Habitat Areas (HA), Isolated Population Area (IPA), and Primary Population Area (PPA). The LPC Timing Area map will also have an area in red crosshatch. The red crosshatch area is the only area where an operator is required to submit a request for exception to the LPC Limitations. If an operator is operating outside the red crosshatch area, the LPC Limitations do not apply for that year and an exception to LPC Limitations is not required.

#### Hydrology

• A leak detection plan will be submitted to the BLM Carlsbad Field Office for approval prior to pipeline installation. The method could incorporate gauges to detect pressure drops, situating values and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.

Page 3 of 14

#### 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)

Page 4 of 14

#### **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**

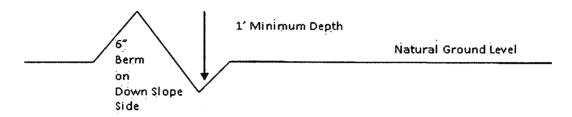
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

#### **Drainage**

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping 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 foot road with 4% road slope: 
$$\frac{400'}{4\%}$$
 + 100' = 200' lead-off ditch interval

#### Cattle guards

An appropriately sized cattle guard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattle guards 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 cattle guards 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.

Page 6 of 14

#### **Construction Steps**

- 1. Salvage topsoil
- 3. Redistribute topsoil4. Revegetate slopes
- 2. Construct road shoulder tumout 10° full turnout width Intervisible turnouts shall be constructed on all single lane roads on all blind curves with additional tunouts as needed to keep spacing below 1000 feet. **Typical Turnout Plan** natural ground **Level Ground Section** road CLOMU type earth surface .03 - .05 ft/ft .02 -- .04 ft/ft aggregate surface paved surface .02 – .03 ft/ft Depth measured from the bottom of the ditch **Side Hill Section** center line center line travel surface travel surface -(slope 2 ~ 4%) (slope 2 - 4%) **Typical Outsloped Section Typical Inslope Section**

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

#### VII. 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 exclosure 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 Exclosures**

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 exclosure 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

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

A copy of the Grant and attachments, including stipulations, survey plat(s) and/or map(s), shall be on location during construction. BLM personnel may request to review 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. 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. Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, Holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC § 2601 et seq. (1982) with regard 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 in particular, 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. Holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. § 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way Holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way Holder on the Right-of-Way. This provision applies without regard to whether a release is caused by Holder, its agent, or unrelated third parties.

Page 9 of 14

- 4. Holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. Holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:
  - a. Activities of Holder including, but not limited to: construction, operation, maintenance, and termination of the facility;
  - b. Activities of other parties including, but not limited to:
    - (1) Land clearing
    - (2) Earth-disturbing and earth-moving work
    - (3) Blasting
    - (4) Vandalism and sabotage;
  - c. Acts of God.

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

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

- 5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of 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/she 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 Holder. Such action by the Authorized Officer shall not relieve Holder of any responsibility as provided herein.
- 6. All construction and maintenance activity shall be confined to the authorized right-of-way width of <u>20</u> feet. If the pipeline route follows an existing road or buried pipeline right-of-way, the surface pipeline shall be installed no farther than 10 feet from the edge of the road or buried pipeline right-of-way. If existing surface pipelines prevent this distance, the proposed surface pipeline shall be installed immediately adjacent to the outer surface pipeline. All construction and maintenance activity shall be confined to existing roads or right-of-ways.
- 7. No blading or clearing of any vegetation shall be allowed unless approved in writing by the Authorized Officer.

Page 10 of 14

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

by the authorized officer after consulting with the holder.

- 16. 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, powerline 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.
- 17. Surface pipelines shall be less than or equal to 4 inches and a working pressure below 125 psi.
- 18. Special Stipulations:
  - a. <u>Lesser Prairie-Chicken:</u> 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 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.

#### 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).

#### IX. 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).

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.

Page 13 of 14

#### 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 <u>no</u> 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:

Species	<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	llbs/A

<sup>\*</sup>Pounds of pure live seed:

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



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

# ©perator Certification Data Report 05/01/2019

#### **Operator Certification**

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

NAME: Leslie Garvis Signed on: 10/19/2018

Title: Regulatory Coordinator

Street Address: Burnett Plaza - Suite 1500, 801 Cherry Street - Unit 9

City: Fort Worth State: TX Zip: 76102

Phone: (817)583-8730

Email address: lgarvis@burnettoil.com

### Field Representative

Representative Name	e:
Street Address:	
City:	State:
Phone:	
Email address:	



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

# Application Data Report

Submission Date: 10/19/2018

Operator Name: BURNETT OIL COMPANY INCORPORATED

Highlighted data reflects the most recent changes

Well Name: JACKSON A

Well Number: 62

Well Type: OIL WELL

APD ID: 10400034693

Well Work Type: Drill

Show Final Text

# Section 1 - General

APD ID:

10400034693

Tie to previous NOS?

Submission Date: 10/19/2018

**BLM Office: CARLSBAD** 

User: Leslie Garvis

Title: Regulatory Coordinator

Federal/Indian APD: FED

Is the first lease penetrated for production Federal or Indian? FED

Lease number: NMLC0029339A

Lease Acres: 560

Surface access agreement in place?

Allotted?

Reservation:

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? NO

**Permitting Agent? NO** 

APD Operator: BURNETT OIL COMPANY INCORPORATED

Operator letter of designation:

# **Operator Info**

Operator Organization Name: BURNETT OIL COMPANY INCORPORATED

Operator Address: Burnett Plaza - Suite 1500, 801 Cherry Street - Unit 9

**Zip**: 76102

Operator PO Box:

Operator City: Fort Worth

State: TX

**Operator Phone:** (817)583-8730

Operator Internet Address:

### Section 2 - Well Information

Well in Master Development Plan? NO

Master Development Plan name:

Well in Master SUPO? NO

Master SUPO name:

Well in Master Drilling Plan? NO

Master Drilling Plan name:

Well Name: JACKSON A

Well Number: 62

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: CEDAR LAKE

Pool Name: GLORIETA YESO

Is the proposed well in an area containing other mineral resources? NATURAL GAS

Page 1 of 3

Well Name: JACKSON A

Well Number: 62

Describe other minerals:

Is the proposed well in a Helium production area? N Use Existing Well Pad? NO

New surface disturbance?

Type of Well Pad: SINGLE WELL

Multiple Well Pad Name:

Number:

Well Class: VERTICAL

Number of Legs: 1

Well Work Type: Drill Well Type: OIL WELL

Describe Well Type:

Well sub-Type: INFILL

Describe sub-type:

Distance to town: 2 Miles

Distance to nearest well: 300 FT

Distance to lease line: 330 FT

Reservoir well spacing assigned acres Measurement: 20 Acres

Well plat:

JACKSON\_A\_62\_Combined\_20181019110456.pdf

Well work start Date: 04/02/2019

**Duration: 11 DAYS** 

# Section 3 - Well Location Table

Survey Type: RECTANGULAR

**Describe Survey Type:** 

Datum: NAD83

Vertical Datum: NAVD88

Survey number:

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
SHL	380	FSL	165	FEL	17S	30E	13	Lot	32.82826	-	EDD	NEW	NEW	F	NMLC0	372	750	750
Leg			0					0	5	103.9221	Υ	MEXI	MEXI		029339	2	0	o
#1										78		co	co		A			
BHL	380	FSL	165	FEL	17S	30E	13	Lot	32.82826	-	EDD	NEW	NEW	F	NMLC0	372	750	750
Leg			0					0	5	103.9221	Υ	MEXI	MEXI			2	0	0
#1										78		co.	co		Α			



# U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

# Drilling Plan Data Report

APD ID: 10400034693

Submission Date: 10/19/2018

Highlighted data reflects the most

Operator Name: BURNETT OIL COMPANY INCORPORATED

recent changes

Well Number: 62

**Show Final Text** 

Well Type: OIL WELL

Well Name: JACKSON A

Well Work Type: Drill

# **Section 1 - Geologic Formations**

Formation			True Vertical	Measured	,		Producing
ID	Formation Name	Elevation	Depth	Depth	Lithologies	Mineral Resources	Formation
1	RUSTLER	3485	225	225	SHALE, ANHYDRITE	NONE	No
2	SALADO	3290	420	420	SALT	NONE	No
3	BASE OF SALT	2540	1170	1170	ANHYDRITE	NONE	No
4	YATES	2360	1350	1350	SHALE, ANHYDRITE	NONE	No
5	SEVEN RIVERS	2060	1650	1650	DOLOMITE,ANHYDRIT E	OIL	No
6	QUEEN	1465	2245	2245	SANDSTONE,ANHYDRI TE	OIL	No
7	GRAYBURG	1070	2640	2640	DOLOMITE	OIL	Yes
8	SAN ANDRES	745	2965	2965	DOLOMITE	OIL	Yes
9	GLORIETA	-750	4460	4460	SHALE,SANDSTONE,D OLOMITE	OIL	No
10	YESO	-845	4555	4555	DOLOMITE	OIL	Yes

# **Section 2 - Blowout Prevention**

Pressure Rating (PSI): 2M

Rating Depth: 8000

Equipment: The blowout prevention equipment (BOPE) will consist of a 2000 PSI Hydril Unit (annular) with hydraulic closing equipment. The 8-5/8" 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 2000 PSI WP rating. Burnett is requesting to keep the Mud/Gas Separator on location but only connect if/when needed.

Requesting Variance? NO

### Variance request:

Testing Procedure: 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.

#### **Choke Diagram Attachment:**

Well Name: JACKSON A

Well Number: 62

2MBOP\_\_\_ChokeManifold\_Drilling\_20180917124152.pdf

# **BOP Diagram Attachment:**

2MBOP\_\_\_ChokeManifold\_Drilling\_20180917124206.pdf

# **Section 3 - Casing**

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	CONDUCT OR	20	14.0	NEW	API	N	0	90	0	90			I .	1	l .	OTHER - null						
2	SURFACE	12.2 5	8.625	NEW	API	N	0	520	0	520			520	J-55	24	STC	1.12 5	1	DRY	1.8	DRY	1.8
3	PRODUCTI ON	7.87 5	5.5	NEW	API	N	0	7500	0	7500			7500	J-55	17	LTC	1.12 5	1	DRY	1.8	DRY	1.8

# **Casing Attachments**

Casing ID: 1

String Type: CONDUCTOR

Inspection Document:

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

Operator Name: BURNETT OIL COMPANY INCORPORATED Well Name: JACKSON A Well Number: 62 **Casing Attachments** Casing ID: 2 String Type: SURFACE Inspection Document: Spec Document: **Tapered String Spec:** Casing Design Assumptions and Worksheet(s): Casing\_Worksheet\_20180924162322.pdf Casing ID: 3 String Type:PRODUCTION Inspection Document: **Spec Document: Tapered String Spec:** Casing Design Assumptions and Worksheet(s): Casing\_Worksheet\_20181019104516.pdf

Section	4 -	Се	me	nt.	
	-				

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
CONDUCTOR	Lead		0	0	0	0	0	0	0	0	0

SURFACE	Lead	0 -	520	330	1.34	14.8	442	100	330 sx C +2%	PF424 (Water Gelling
									PF1 (Calcium	Agent),
									Chloride)	\$

PRODUCTION	Lead	2600	- 0	7500	260	2.11	12.5	549	30	35/65 P/C	+5 %PF44
											(BWOW)(Salt )+6%

Well Name: JACKSON A Well Number: 62

	<del>,</del>									·	
String Type	Lead/Tail	Stage Tool Depth	Тор МD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
,											(Bentonite Gel) +0.2% PF153 (Anti Settling) +0.3% PF13 (Retarder) +0.1 25#/sx PF29 (Celloflake) +3#/sx PF42 (Kolseal) +0.4#/sx PF45 (Defaomer),
PRODUCTION	Tail		0	7500	330	1.33	14.8	439	30	С	+0.3%PF13 (Retarder
PRODUCTION	Lead		0	7500	340	2.11	12.5	552	140	35/65 P/C	+5 %PF44 (BWOW)(Salt )+6% PF20 (Bentonite Gel) +0.2% PF153 (Anti Settling) +0.3% PF13 (Retarder) +0.1 25#/sx PF29 (Celloflake) +3#/sx PF42 (Kolseal) +0.4#/sx PF45
PRODUCTION	Tail		0	7500	200	2.11	12.5	422	140	С	none

# **Section 5 - Circulating Medium**

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: The necessary mud products for weight addition and fluid loss will be on location at all times.

Describe the mud monitoring system utilized: Pason equipment will be used to monitor the mud system.

# **Circulating Medium Table**

Well Name: JACKSON A

Well Number: 62

Top Depth	Bottom Depth	Mud Type	Min Weight (ibs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	HH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	520	WATER-BASED MUD	8.6	9.5							
520	7500	WATER-BASED MUD	9.5	10							

# Section 6 - Test, Logging, Coring

# List of production tests including testing procedures, equipment and safety measures:

Any drill stem tests will be based on geological sample shows and planned before spudding. The open hole electrical logging program will be: Total depth to 1000': Dual Laterolog-Micro Laterolog with Compensated Neutron, Spectral Density log with Spectral Gamma Ray and Caliper. Total depth to Surface: Compensated Neutron with Spectral Gamma Ray. Additional testing will be done after setting the 5-1/2" production casing. The specific Intervals will be based on log evaluation, geological sample shows and/or drill stem tests. 4. Additional testing will be done after setting the 5-1/2" production casing. The specific Intervals will be based on log evaluation, geological sample shows and/or drill stem tests.

List of open and cased hole logs run in the well:

CALIPER, CNL, DLL, GR

Coring operation description for the well:

Coring program will be planned and submitted on a well by well basis.

#### Section 7 - Pressure

**Anticipated Bottom Hole Pressure: 2715** 

**Anticipated Surface Pressure: 1065** 

Anticipated Bottom Hole Temperature(F): 105

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

H2S\_Plan\_20180924162522.pdf

Well Name: JACKSON A Well Number: 62

# **Section 8 - Other Information**

Proposed horizontal/directional/multi-lateral plan submission:

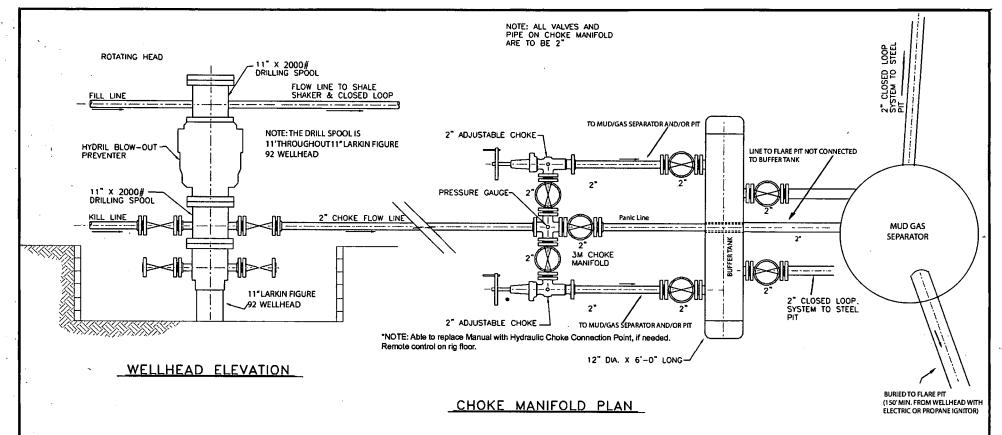
Other proposed operations facets description:

See attached vertical drilling plan

Other proposed operations facets attachment:

2018.9.25\_Jackson\_A\_62\_Vertical\_5.5in\_Csg\_Drill\_Plan\_20181019105819.pdf

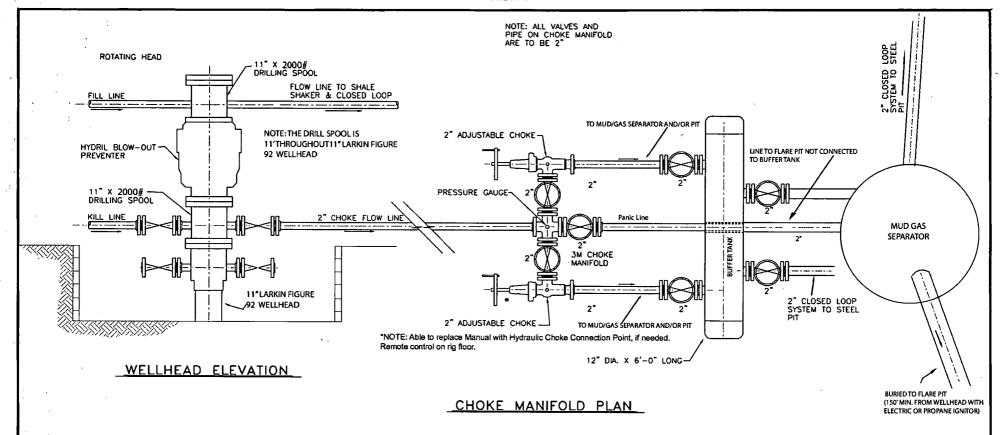
Other Variance attachment:



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

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: 14.10.15 2MCHOKEMANIFOLD DRILLING



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

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: 14.10.15 2MCHOKEMANIFOLD DRILLING

# 801 Cherry Street- Unit #9

Fort Worth, Texas

Phone: 817-332-5108

76102-6881

Fax: 817-332-2438

Collapse Safety Burst Safety Safety Pressure Factor Min Pressure Factor Min Tension Factor Min 13-3/8" 48# H-40 ST&C 770 1,730,000 322,000 351 1.125 395 351 1.0 351 36,000 1.8 64,800 9-5/8" 36# J-55 LT&C 2,000 3,520 453,000 1220 1.125 1,372 1,220 1.0 1,220 82,800 1.8 149,040 7" 26# L-80 LT&C 5,410 7,240 511,000 186,114 335,005 1.8 7" 23#L-80 LT&C 3,830 435,000 6,340 186,114 1.8 335,005 7" 26# J-55 LT&C 4,320 4,980 367,000 202,314 364,165 1.8 5-1/2" 17# L-80 LT&C 6,290 7.740 338,000 1.125 1.0 153,714 1.8 276,685 the submert of the section of the se

# 801 Cherry Street- Unit #9 Fort Worth, Texas

Phone: 817-332-5108

Fax: 817-332-2438 76102-6881 Collapse Safety Safety Burst Safety Pressure Factor Pressure Factor Min Tension Factor Min 13-3/8" 48# H-40 ST&C 770 1,730,000 322,000 351 1.125 395 351 1.0 351 36,000 1.8 64,800 9-5/8" 36# J-55 LT&C 2,000 3,520 453,000 1220 1.125 1,372 1,220 1.0 1,220 82,800 149,040 1.8 7" 26# L-80 LT&C 5,410 7,240 511,000 186,114 1.8 335,005 7" 23#L-80 LT&C 435,000 3,830 6,340 186,114 335,005 1.8 7" 26# J-55 LT&C 4,320 4,980 367,000 202,314 364,165 1.8 5-1/2" 17#L-80 LT&C 6,290 7,740 338,000 1.125 1.0 153,714 1.8 276,685

# 801 Cherry Street- Unit #9

Fort Worth, Texas

Phone: 817-332-5108

Fax: 817-332-2438 76102-6881 Collapse Safety Burst Safety Safety Pressure | Factor Pressure Factor Tension Factor Min Min Min 13-3/8" 48# H-40 ST&C 770 1,730,000 322,000 351 1.125 395 351 1.0 351 36,000 1.8 64,800 9-5/8" 36# J-55 LT&C 2,000 3,520 453,000 1220 1,220 1.125 1,372 1.0 1,220 82,800 1.8 149,040 7" 26# L-80 LT&C 5,410 7,240 511,000 186,114 1.8 335,005 7" 23# L-80 LT&C 3,830 6,340 435,000 186,114 335,005 7" 26# J-55 LT&C 4,320 4,980 367,000 202,314 364,165 1.8 5-1/2" 17# L-80 LT&C 6,290 7,740 338,000 1.125 153,714 1.0 1.8 276,685

# 801 Cherry Street- Unit #9

Fort Worth, Texas

Phone: 817-332-5108

76102-6881

Fax: 817-332-2438

Collapse Safety Burst Safety Safety Pressure Factor Min Pressure Factor Min Tension Factor Min 13-3/8" 48# H-40 ST&C 770 1,730,000 322,000 351 1.125 395 351 1.0 351 36,000 1.8 64,800 9-5/8" 36# J-55 LT&C 2,000 3,520 453,000 1220 1.125 1,372 1,220 82,800 1.0 1,220 1.8 149,040 7" 26# L-80 LT&C 5,410 7,240 511,000 186,114 1.8 335,005 7" 23#L-80 LT&C 3,830 6,340 435,000 186,114 1.8 335,005 7" 26# J-55 LT&C 4,320 4,980 367,000 202,314 1.8 364,165 5-1/2" 17# L-80 LT&C 6,290 7,740 338,000 1.125 1.0 153,714 276,685 1.8

# Burnett Oil Co., Inc. 801 Cherry Street- Unit #9 Fort Worth, Texas 76102-6881

Phone: 817-332-5108

Fax: 817-332-2438

Collapse S Pressure I	Safety Factor	Min		Burst Pressure	Safety Factor	Min			Tension	Safety Factor	A 41		
Pressure	Factor	Min		Pressure	Factor	Min			Tension	Footor	N 41	l	1
						141111	i	il	CHOISION	ractor	Min		
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,										
					•								
			·										
			13-3/8" 48# H-40 ST&C				7		=				
			ST&C										
			770				1,730,000	-				322,000	
351	1.125	395	710	351	1.0	351	1,730,000	-	36,000	1.8	64,800	322,000	
	1.120	- 000		331	1.0	331			30,000	1.0	04,000		
$\longrightarrow$												-	
								$\dashv$	<del></del> ,				
								$\dashv$					-
-			0 5/8" 26# 1 55					$\dashv$					
			9-5/8" 36# J-55					_					
			LT&C 2,000					4					
1000	4.405	4.070	2,000				3,520	╝				453,000	
1220	1.125	1,372		1,220	1.0	1,220			82,800	1.8	149,040		
						1							
								ヿ	· · · · · · · · · · · · · · · · · · ·				
							_	┪				7.4	
								$\dashv$					
								$\dashv$					
								4					
			<del></del>					_					
								4					
		1											
			· · · · ·						-				
								7					
								$\dashv$					
								-					
			7" 26# L-80					+	-				
	-		LT&C					$\dashv$				-	
-						1	7.040	4				F44.000	
			5,410				7,240	4	100 : : :			511,000	
								_	186,114	1.8	335,005		
			7" 23# L-80										
			LT&C					[					
			3,830				6,340					435,000	
						· · · · · · · · · · · · · · · · · · ·		1	186,114	1.8	335,005	· · · · · · · · · · · · · · · · · · ·	
		i i	7" 26# J-55					$\dashv$	,		,		
			LT&C					-					
+	+		4,320				4 000	$\dashv$				267 000	
	+		4,320		ŀ		4,980	4	202.244		204 405	367,000	
<del></del>			E 4 10 1 4 2 11 2 2 2					_	202,314	1.8	364,165	-	
			5-1/2" 17# L-80					_					
			LT&C										
			6,290				7,740	_T				338,000	
	1.125	-		-	1.0	-			153,714	1.8	276,685		
-													



# **HYDROGEN SULFIDE (H2S) 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 H2S 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 (H2S).
- b. The proper use and maintenance of personal protective equipment and life support systems.
- c. The proper use of H2S 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 (H2S) CONTINGENCY PLAN DRILLING EXHIBIT L.
- f. ATTACHED EMERGENCY CALL LIST FOR ANY ON SITE EMERGENCY DRILLING EXHIBIT M.

#### 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 H2S 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.
- The contents and requirements of the H2S 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 H2S zone (within 3 days or 500 feet) and weekly H2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H2S 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. <u>H2S Drilling Operations Plan</u>

#### 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:

- 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.



# **EXHIBIT L-HYDROGEN SULFIDE (H2S) CONTIGENCY PLAN**

#### A. Emergency Procedures

In the event of a release of gas containing H2S, 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 H2S 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. H2S 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 (SO2). 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 H2S and SO2

Common Name	Chemical <u>Formula</u>	Specific <u>Gravity</u>	Threshold <u>Limit</u>	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H2S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO2	2.21 Air = 1	2 ppm	NA	1000 ppm

## D. Contacting Authorities

Burnett Oil Co., Inc. personal 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.



DILL	CONT	ACTO
KUK	LLUNI	AL. 15

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.

Tyler Deans - Engineering Manager - Permian Basin / NM

Cell - 575.553.4699

**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

Leslie Garvis

Office - 817.583.8730

Regulatory & Government Affaris Manager

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)
Aerocare Air Ambulance (Lubbock)
Med Flight Air Ambulance (Albuq)
S B Med Svc Air Ambulance (Albuq)

806.743.9911 806.747.8923

505.842.4433 505.842.4949

FEDERAL AND STATE

US Bureau of Land Management (Carlsbad) 575.361.2822 New Mexico Oil Conservation Division (Artesia) New Mexico Emergency Response Commission (24 hour) Local Emergency Planning Operation Center (Artesia)

575.234.5972 575.748.1283 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
Cudd Pressure Control
Halliburton Services
BJ Service

800.256.9688 432.570.5300

575.746.2757

575.746.2293

THIS MUST BE POSTED AT THE RIG WHILE ON LOCATION



# DRILLING PLAN Jackson A 62 VERTICAL CEDAR LAKE GLORIETA YESO WELL

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

<b>Geological Name</b>	Estimate Top	Anticipated Fresh Water, Oil or Gas
a. Alluvium	Surface	Fresh water - None
b. Anhydrite	225'	
c. Salt	420'	
d. Base Salt	1170'	
e. Yates	1350'	
f. Seven Rivers	1650'	Oil
g. Queen	2245'	Oil
h. Grayburg	2640'	Oil
i. San Andres	2965'	Oil
j. Glorieta	4460'	Oil
k. Yeso	4555'	Oil
I. Total Depth	Refer to Form 3160-3	

No other formations are expected to yield oil, gas or fresh water in measurable volumes. We will set 8-5/8" casing @ approx. 520' in the Anhydrite, above the salt and circulate cement to surface.

The oil zones will be isolated by running 5-1/2" casing to total depth and circulating cement to surface.

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

(MW = 10.2 PPG IN DESIGN FACTOR CALCULATIONS.)

# a. Design Safety Factors:

<u>Type</u>	<u>Hole</u> Size	<u>Interval</u>	OD Csq	<u>Weight</u>	<u>Collar</u>	<u>Grade</u>	Collapse Design <u>Factor</u>	Burst Design <u>Factor</u>	Tension Design <u>Factor</u>
Conductor		0'-90'	14"	Contr	actor Disc	cretion			
Surface	12-1/4"	0' - +/- 520'	8-5/8"	24.00#	ST & C	J55	1.125	1.00	1.80
Production	7-7/8"	0' - TD	5-1/2"	17.00#	LT & C	J55	1.125	1.00	1.80

# DRILLING PLAN VERTICAL LOCO HILLS GLORIETA YESO WELL

### b. Surface Casing Info

The proposed casing setting depth is +/- 520' 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 have drilled many wells in this area and are able to easily identify the hard streak on the top of the salt.

#### c. Production Casing Info

Production casing will be set to TD with float shoe on bottom, float collar in first collar, centralizers throughout intervals and above and below a DV Tool set at +/-2600'. After drilling out and testing the casing to 2000 PSI, a cement bond log will be run to evaluate the cement job.

#### 3. Cementing Program (Note Yields and DV Tool Depth if Multiple Stage.)

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

# a. 8-5/8" Surface Cement to surface

- 330 sx C +2% PF1 (Calcium Chloride) + PF424 (Water Gelling Agent), mixed at 14.8 ppg, Yield 1.34 with 6.3 gal water per sack.
- Excess cement 100%.

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

#### b. 5-1/2" Production Casing

Stage 1: Lead: 260 sx 35/65 P/C +5 %PF44 (BWOW)(Salt )+6% PF20 (Bentonite Gel) +0.2% PF153 (Anti Settling) +0.3% PF13 (Retarder) +0.1 25#/sx PF29 (Celloflake) +3#/sx PF42 (Kolseal) +0.4#/sx PF45 (Defaomer), mixed at 12.5 ppg, Yield 2.11 with 11.364 gal water per sack.

Tail: 330 sx C +0.3%PF13 (Retarder), mixed at 14.8 ppg, Yield 1.33 with 6.298 gal water per sack.

30% excess cement.

Stage 2: Lead: 340 sx 35/65 P/C + 5% PF44 (BWOW)(Salt) +6% PF20 (Bentonite Gel) +0.2% PF153 (Anti Settling) +0.125#/sx PF29Celloflake) +3#/sx PF42 (Kolseal) +0.4#/sx PF45 (Defaomer), mixed at 12.5 ppg, Yield 2.11 with 11.362 gal water per sack.

Tail: 200 sx C Neat, mixed at 14.8 ppg, Yield 1.32 with 6.3 gal water per sack.

140% 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.

# DRILLING PLAN VERTICAL LOCO HILLS GLORIETA YESO WELL

#### 4. Pressure Control Equipment:

The blowout prevention equipment (BOPE) shown in **Exhibit L** will consist of a 2000 PSI Hydril Unit (annular) with hydraulic closing equipment. 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 8-5/8" 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 2000 PSI WP rating.

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

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

- a. A Kelly cock will be in the drill string at all times.
- 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 5-1/2" 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>	Fluid Loss	Type System	Max Volume
0' - +/-520'	8.6 - 9.5			Fresh Water	
+/- 520' - TD' MD	10.0 max			Brine Water	

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. Any drill stem tests will be based on geological sample shows and planned before spudding.
- b. The open hole electrical logging program will be:
  - 1. Total depth to 1000': Dual Laterolog-Micro Laterolog with Compensated Neutron, Spectral Density log with Spectral Gamma Ray and Caliper.
  - 2. Total depth to Surface: Compensated Neutron with Spectral Gamma Ray.
  - 3. Coring program will be planned and submitted on a well by well basis.
  - 4. Additional testing will be done after setting the 5-1/2" production casing. The specific Intervals will be based on log evaluation, geological sample shows and/or drill stem tests.

# DRILLING PLAN VERTICAL LOCO HILLS GLORIETA YESO WELL

#### 8. Potential Hazards:

No abnormal pressures or temperatures are expected. Lost circulation is expected in the surface hole and not expected in production Water flows can occur periodically at various depths in the production hole. 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 2715#. This is based upon the following formula of .445 x BH ft. estimate. The anticipated bottom hole temperature is 105°F. This is based upon logs of wells in this area.

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 specific 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 expected to take approximately 11 days. If production casing is run, an additional 60 days would be required to complete the well and install the necessary surface equipment (pumping unit, electricity, flowline and storage facility) to place the well on production.

#### 10. Completion Procedure

Upon completion of drilling operations, this well will be perforated and frac'd in multiple stages. Due to the completion process that Burnett utilizes, we do not anticipate any flowback. Upon completion of stimulation, the well will be put on production.



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

SUPO Data Report

Operator Name: BURNETT OIL COMPANY INCORPORATED

Well Name: JACKSON A

Well Number: 62

Well Type: OIL WELL Well Work Type: Drill

Highlighted data reflects the most recent changes

**Show Final Text** 

# Section 1 - Existing Roads

Will existing roads be used? NO

# Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

**New Road Map:** 

JACKSON\_A\_62\_New\_Roads 20181019105445.pdf

New road type: RESOURCE

Length: 72.8

Feet

Width (ft.): 20

Max slope (%): 3

Max grade (%): 2

Army Corp of Engineers (ACOE) permit required? NO

ACOE Permit Number(s):

New road travel width: 14

**New road access erosion control:** 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

New road access plan or profile prepared? NO

New road access plan attachment:

Access road engineering design? NO

Access road engineering design attachment:

Access surfacing type: NONE

Access topsoil source: ONSITE

Access surfacing type description:

Well Name: JACKSON A Well Number: 62

Access onsite topsoil source depth: 6

Offsite topsoil source description:

Onsite topsoil removal process: 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.

Access other construction information:

Access miscellaneous information:

Number of access turnouts:

Access turnout map:

# **Drainage Control**

New road drainage crossing: CULVERT

**Drainage Control comments:** 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. Road Drainage Control Structures (DCS) description: Ditching will be done on both sides of the road the entire lengthof 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. Road Drainage Control Structures (DCS) attachment:

Road Drainage Control Structures (DCS) description: 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. 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. See attached SUPO

Road Drainage Control Structures (DCS) attachment:

### **Access Additional Attachments**

Additional Attachment(s):

# Section 3 - Location of Existing Wells

**Existing Wells Map? YES** 

Attach Well map:

JACKSON\_A\_62\_Existing Wells 20181019105845.pdf

**Existing Wells description:** 

# Section 4 - Location of Existing and/or Proposed Production Facilities

Submit or defer a Proposed Production Facilities plan? SUBMIT

**Production Facilities description:** 

Production Facilities map:

Jackson\_A\_Yeso\_Battery\_Diagram\_20181019110039.pdf

Well Name: JACKSON A

Well Number: 62

# Section 5 - Location and Types of Water Supply

#### **Water Source Table**

Water source use type: STIMULATION, SURFACE CASING

Water source type: OTHER

Describe type: EOG/Yates Water lines

Source latitude:

Source longitude:

Source datum:

Water source permit type: OTHER Source land ownership: FEDERAL

Water source transport method: PIPELINE

Source transportation land ownership: FEDERAL

Water source volume (barrels): 0

Source volume (acre-feet): 0

Source volume (gal): 0

# Water source and transportation map:

Water\_Source\_20180918131709.pdf

Water source comments: 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 existing disturbance from the water stations to the rig for this drilling water. Cannot estimate water use at this time.

New water well? NO

#### **New Water Well Info**

Well latitude:

Well Longitude:

Well datum:

Well target aquifer:

Est. depth to top of aquifer(ft):

Est thickness of aquifer:

Aquifer comments:

Aquifer documentation:

Well depth (ft):

Well casing type:

Well casing outside diameter (in.):

Well casing inside diameter (in.):

New water well casing?

Used casing source:

**Drilling method:** 

Drill material:

Grout material:

Grout depth:

Casing length (ft.):

Casing top depth (ft.):

Well Production type:

**Completion Method:** 

Water well additional information:

Well Name: JACKSON A Well Number: 62

State appropriation permit:

Additional information attachment:

### **Section 6 - Construction Materials**

Construction Materials description: All construction material for the roadway and drilling pad will be native caliche from the nearest BLM approved pit located at NW ¼ SE ¼ of Section 11 in T17S, R31E, Eddy County, NM, 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 for the caliche pit located at NW ¼ SE ¼ of Section 11 in T17S, R31E, Eddy County, NM by the dirt work vendor prior to pushing up any caliche. Neither caliche nor top soil will be piled outside the well pad. When caliche is found, material will be stock piled within the pad site to build the location and road.

Construction Materials source location attachment:

# Section 7 - Methods for Handling Waste

Waste type: DRILLING

Waste content description: 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. 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. 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. Waste amount is TBD at this time.

Amount of waste: 0

barrels

Waste disposal frequency: One Time Only

Safe containment description: Oil produced during testing will be put into steel storage tank for later sales. Water produced during testing operations will be put in the steel frac tanks pit until well

Safe containment attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: PRIVATE

**FACILITY** 

Disposal type description:

Disposal location description: Off Lease Disposal

#### Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

Reserve pit length (ft.)

Reserve pit width (ft.)

Reserve pit depth (ft.)

Reserve pit volume (cu. yd.)

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

Well Name: JACKSON A Well Number: 62

# **Cuttings Area**

Cuttings Area being used? NO

Are you storing cuttings on location? NO

**Description of cuttings location** 

Cuttings area length (ft.)

Cuttings area width (ft.)

Cuttings area depth (ft.)

Cuttings area volume (cu. yd.)

Is at least 50% of the cuttings area in cut?

WCuttings area liner

Cuttings area liner specifications and installation description

# **Section 8 - Ancillary Facilities**

Are you requesting any Ancillary Facilities?: NO

**Ancillary Facilities attachment:** 

Comments:

# Section 9 - Well Site Layout

Well Site Layout Diagram:

Rig\_Layout\_JA\_62\_20181019111927.pdf

Comments: Proposed layout - subject to drilling contractor preference

# Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name:

Multiple Well Pad Number:

#### Recontouring attachment:

Drainage/Erosion control construction: All construction material for the roadway and drilling pad will be native caliche from the nearest BLM approved pit located at NW ¼ SE ¼ of Section 11 in T17S, R31E, Eddy County, NM, or from existing available deposits found on the location. All will be in accordance with the drilling stipulations for this well.

Drainage/Erosion control reclamation: After drilling and successful completion operations are finished, all equipment and other materials not required for normal production operation will be removed 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 P 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,

Well Name: JACKSON A Well Number: 62

which is what has to happen if the location is reclaimed on all four (4) sides to the safety anchors. 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. 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.

Well pad proposed disturbance

(acres): 1.72

Road proposed disturbance (acres):

0.3

Powerline proposed disturbance

(acres): 0

Pipeline proposed disturbance

(acres): 0.17

Other proposed disturbance (acres): 0

Total proposed disturbance: 2.19

Well pad interim reclamation (acres): 0.25

Road interim reclamation (acres): 0

Powerline interim reclamation (acres):

0

Pipeline interim reclamation (acres): 0

Other interim reclamation (acres): 0

Total interim reclamation: 0.25

Well pad long term disturbance

(acres): 1.47

Road long term disturbance (acres):

.0.03

Powerline long term disturbance

(acres): 0

Pipeline long term disturbance

(acres): 0.17

Other long term disturbance (acres): 0

Total long term disturbance: 1.67

#### **Disturbance Comments:**

Reconstruction method: The pad size will be reduced to the amount required for normal operation of the producing well.c. An area approximately 120'x120' is used within the proposed site to remove caliche. Subsoil is removed and piled alongside the 120' x120' area within the pad and then pushed back once the caliche has been removed. When caliche is found, material will be stock piled within the pad site to build the location and road. This reduced portion will be restored to the BLM stipulations. 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.

**Topsoil redistribution:** The top 6" of top soil will be pushed off and stockpiled on the South side the location. Once the well is drilled the stock piled top soil will be used for interim reclamation and spread along the 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

Soil treatment: As Needed

Existing Vegetation at the well pad:

Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road:

Existing Vegetation Community at the road attachment:

Existing Vegetation Community at the pipeline:

Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances:

Existing Vegetation Community at other disturbances attachment:

Non native seed used? NO

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? NO

Ope	rator Name: BURNETT	OIL COMPANY INCORPO	ORATED			
Well	Name: JACKSON A		Well Number: 62			
Seed	ling transplant descrip	tion attachment:				
Mill o	road he harvested for i	use in site reclamation? I				
		ise in site rectamation?	<b>10</b>			
	harvest description:	taah manti				
seea	harvest description at	tachment:				
_						
	Seed Managemer	<u>it</u>				
	Seed Table					
S	Seed type:		Seed source:			
S	Seed name:					
S	Source name:		Source address:			
S	Source phone:					
S	Seed cultivar:					
S	Seed use location:					
F	PLS pounds per acre:		Proposed seeding season:			
PLS pounds per acre:  Seed Summary			7			
			Total pounds/Acre:			
	Seed Type	Pounds/Acre				
Seed	reclamation attachme	nt:				
Ċ	Operator Contact/	Responsible Offici	al Contact Info			
Fire	st Name:		Last Name:			
Pho	one:		Email:			
Seed	bed prep:					
Seed	BMP:	•				
Seed	method:					
Exist	ing invasive species?	NO	•			
Exist	ing invasive species tr	eatment description:				
Exist	ing invasive species tr	eatment attachment:				
ιοίχοι	l treatment plan descri usweeds exist per EPA a I treatment plan attach	and BLM requirements.	rmed on disturbed land i.e. (roads, pads, pipeline) where			

Well Name: JACKSON A Well Number: 62

Monitoring plan description: All locations will be monitored on a monthly basis

Monitoring plan attachment:

Success standards: N/A

Pit closure description: N/A

Pit closure attachment:

# Section 11 - Surface Ownership

Disturbance type: WELL PAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

**BIA Local Office:** 

**BOR Local Office:** 

**COE Local Office:** 

**DOD Local Office:** 

NPS Local Office:

**State Local Office:** 

Military Local Office:

**USFWS Local Office:** 

Other Local Office:

USFS.Region:

USFS Forest/Grassland:

**USFS Ranger District:** 

# Section 12 - Other Information

Right of Way needed? NO

Use APD as ROW?

ROW Type(s):

**ROW Applications** 

SUPO Additional Information: See attached SUPO

Well Name: JACKSON A Well Number: 62

Use a previously conducted onsite? YES

Previous Onsite information: Location Approved by Matt Wirth.

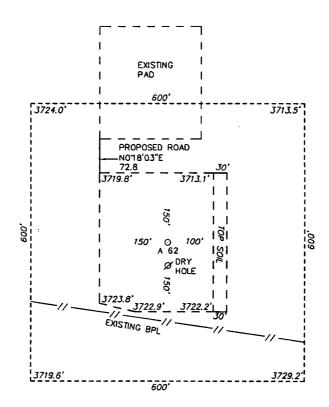
# Other SUPO Attachment

JACKSON\_A\_62\_Combined\_20181019110955.pdf

Jackson\_A\_62\_SUPO\_20181019112532.pdf

Jackson\_A\_62\_Interim\_Reclamation\_Plat\_20190121074220.pdf

SECTION 13, TOWNSHIP 17 SOUTH, RANGE 30 EAST, N.M.P.M., NEW MEXICO. EDDY COUNTY,



BURNETT OIL COMPANY, INC. JACKSON A 62 ELEV. - 3722'

Lat - N 32.828265° Long - W 103.922178° NMSPCE- N 665301.4 E 667632.2 (NAD-83) (88-DVAN)

Directions to Location:

FROM HIGHWAY 82 GO NORTH ON SQUARE LAKE ROAD 1.0 MILES. THEN GO EAST 0.6 MILES THEN SOUTH 0.2 MILES TO EXISTING PAD WITH PROPOSED ROAD.

P.O. Box 1786 (575) 393—7316 — Office 1120 N. West County Rd. (575) 392—2206 — Fax Habbs, New Mexico 88241 basinsurveys.com

ARTESIA, NM IS ±28 MILES TO THE WEST OF LOCATION.

200 0 200 400 FEET SCALE: 1" = 200'

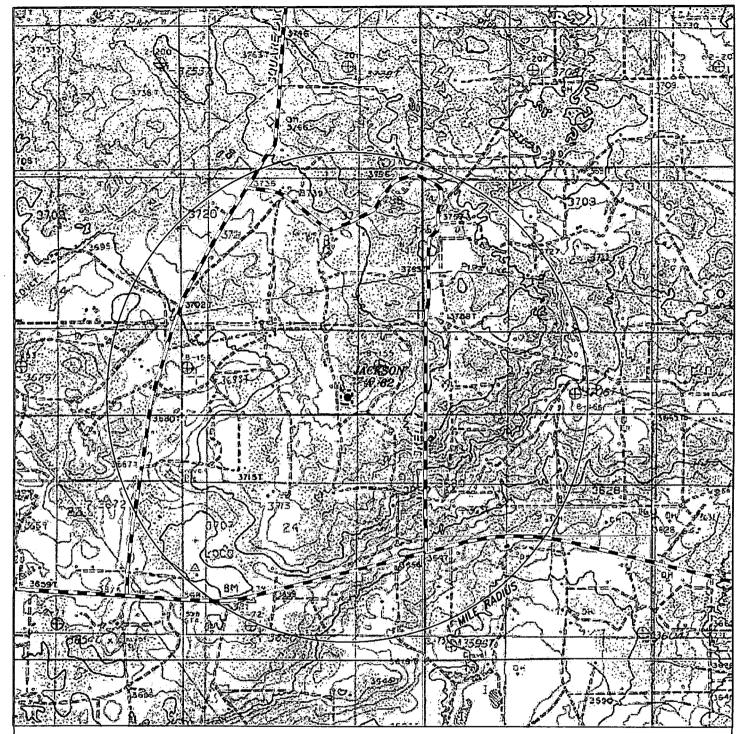
JACKSON A 62 / WELL PAD TOPO

THE JACKSON A 62 LOCATED 380' FROM

THE SOUTH LINE AND 1650' FROM THE EAST LINE OF SECTION 14, TOWNSHIP 17 SOUTH, RANGE 30 EAST,

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

W.O. Number: 33866 Sheets Drawn By: J GOAD Date: 8-2-2018 Survey Date: 7-11-2018 Sheet 1 of 1



# JACKSON A 62

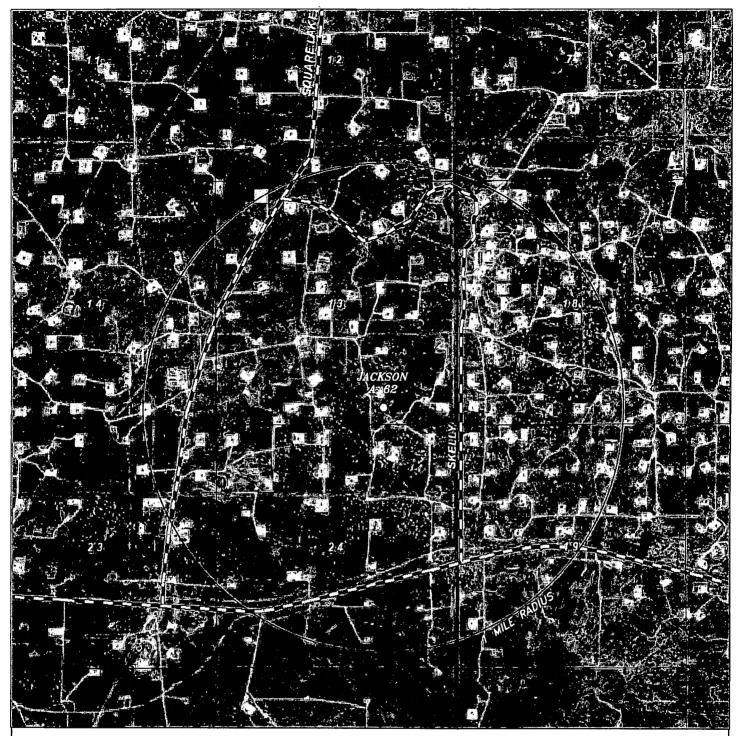
Located 380' FSL and 1650' FEL Section 13, Township 17 South, Range 30 East, N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (575) 393-7316 — Office (575) 392-2206 — Fax basinsurveys.com

6,	1000'	2000'	3000'	4000,	١,	
	SCA	LE: 1" =	2000'	••••	1	
W.O.	Number:	JG 338	366		▍▓	)
Surv	ey Date:	7-11-	-2018		4	ı
BLUE	OW TINT -	STATE LA	ND			•

BURNETT OIL CO.

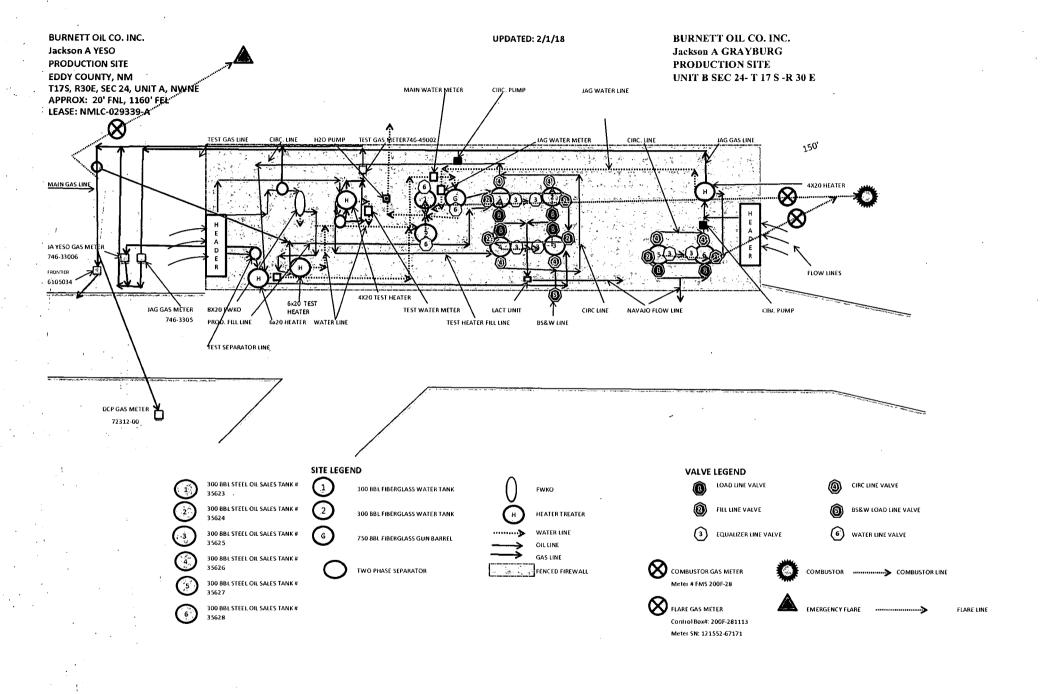


Located 380' FSL and 1650' FEL Section 13, Township 17 South, Range 30 East, N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786 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'	١,
	W.O. Number: JG 33866	1
	Survey Date: 7-11-2018	9
	YELLOW TINT — USA LAND BLUE TINT — STATE LAND NATURAL COLOR — FEE LAND	



BURNETT OIL CO. INC.
Jackson A YESO
PRODUCTION SITE
EDDY COUNTY, NM
T175, R30E, SEC 24, UNIT A, NWNE
APPROX: 20' FNL, 1160' FEL

BURNETT OIL CO. INC.
Jackson A GRAYBURG
PRODUCTION SITE
UNIT B SEC 24- T 17 S -R 30 E

ATTACHMENT TO SITE FACILITY DIAGRAM

General sealing of valves, sales by tank guage

**Production Phase:** 

LEASE: NMLC-029339-A

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.

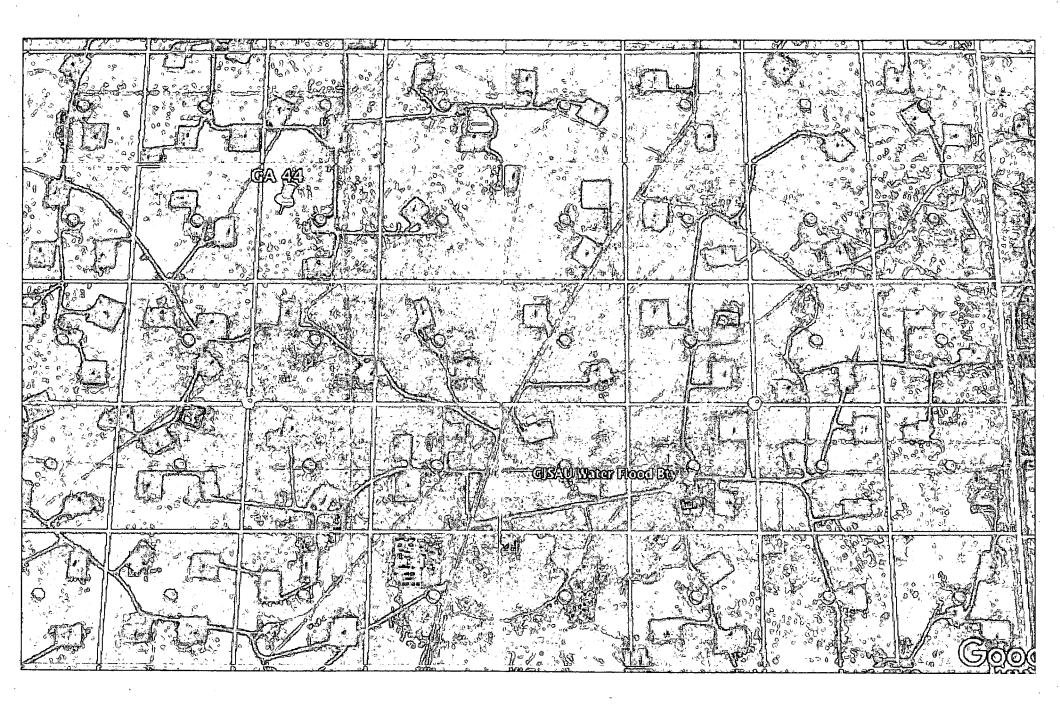
BS&W Load Line valve will be sealed at all times, unless cleaning tanks, then resealed once tank maintenance is complete.

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. Sales by LACT will be by LACT meter.

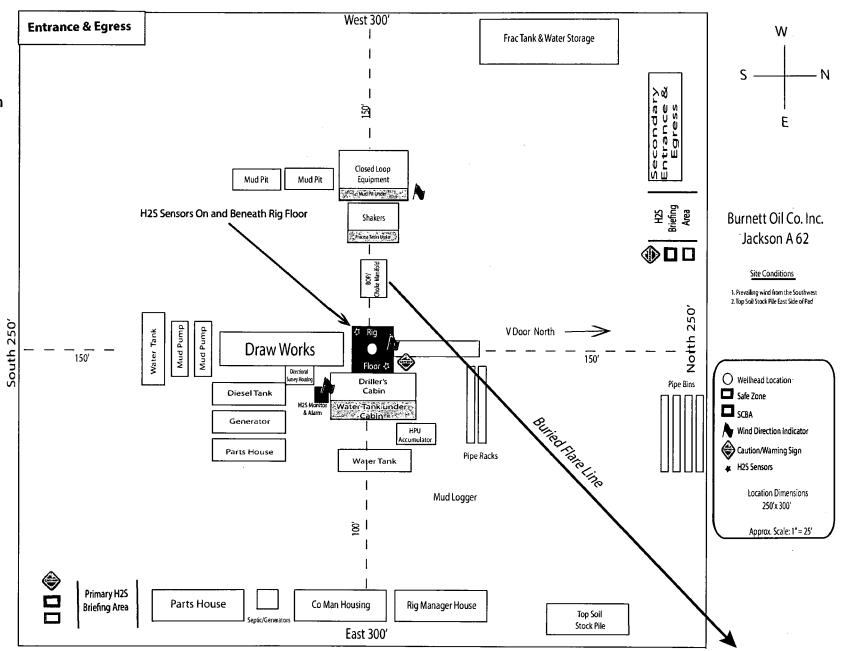
Jackson	Α	G	RAYBURG	BTRY	Jackson	Α	YESO BATTERY
Jackson	Α	#	8		Jackson	Α	# 17
Jackson	Α	#	9		Jackson	Α	# 18
Jackson	Α	#	10		Jackson	Α	# 20 & H
Jackson	Α	#	11		Jackson	Α	# 21
					Jackson	Α	# 22
					Jackson	Α	# 23
					Jackson	Α	# 24
					Jackson	Α	# 25
					Jackson	Α	# 26
					Jackson	Α	# 29
					Jackson	Α	#31H
					Jackson	Α	#34
					Jackson	Α	#35
					Jackson	Α	#36
					Jackson	A f	<del>‡</del> 42
					Jackson	A f	<del>1</del> 49

	<b>*</b>	VALVE		PRODUCTION PHASE	SALES PHASE	<u>CIRCULATING</u>	NOTE
- (	<b>@</b>	-	LOAD LINE VALVE	CLOSED	OPEN	CLOSED	
(	<b>®</b>		PRODUCTION FILL LINE VALVE	OPEN OR CLOSED	CLOSED	CLOSED OR OPEN	
	3		EQUALIZER LINE VALVE	OPEN	CLOSED	CLOSED OR OPEN	
(	<b>(9)</b>		CIRCULATING LINE VALVE	OPEN OR CLOSED	CLOSED	OPEN	RE-SEALED ONCE CIRCULATING IS COMPLETE
. (			BS&W LOAD LINE VALVE	CLOSED	CLOSED	CLOSED	OPEN FOR TANK MAINTENANCE, RESEALED ONCE MAINTENANCE IS COMPLETE
(	<b>6</b>		WATER LINE VALVE	OPEN	NA	NA	WATER TANKS ARE ISOLATED FROM OIL PRODUCTION TANKS



#### **EXHIBIT K**

Rig Layout
Closed Loop Operations
H2S Briefing Areas & Alarm
Locations



DISTRICT I 1625 N. Prench Dr., Hobbs, NM 58240 Phone (576) 593-6161 Pag: (576) 593-0720 DISTRICT II 811 S. Pirst St., Artosia, NM 88210 Phone (076) 748-1283 Pag (979) 748-9720

DISTRICT IV

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone (50f) 334-6176 Fax (506) 834-6170

1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone (605) 476-3460 Fax: (605) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-102 Revised August 13, 2011

Submit one copy to appropriate District Office

#### OIL CONSERVATION DIVISION

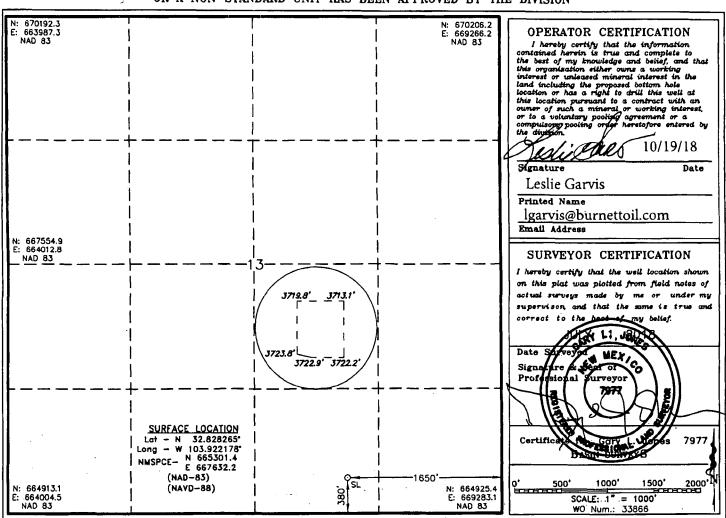
1220 South St. Francis Dr. Santa Fe, New Mexico 87505

## WELL LOCATION AND ACREAGE DEDICATION PLAT

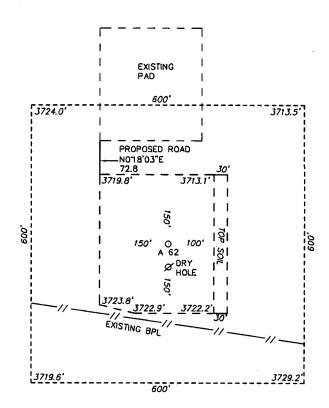
☐ AMENDED REPORT

Property Code 20767			9683	Pool Code	Ced	ar Lake Glorieta	Pool Name Yeso		
			Property Name  JACKSON A				Well Number		
ogred n 03080	o.		Operator Name BURNETT OIL COMPANY, INC.						
					Surface Loca	ation			
UL or lot No.	Section	Township	Range	Lot Idn	FEET from the	SOUTH/South line	FEET from the	East/EAST line	County
0	13	17 S	30 E		380	SOUTH	1650	EAST	EDDY
			Bottom	Hole Loc	cation If Diffe	rent From Sur	lace		
UL or lot No.	Section	Township	Range	Lot Idn	FEET from the	SOUTH/South line	FRET from the	East/EAST line	County
Dedicated Acre	s Joint	or Infill Co	nsolidation	Code Or	der No.				<u> </u>

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



#### SECTION 13, TOWNSHIP 17 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.



BURNETT OIL COMPANY, INC. JACKSON A 62 ELEV. - 3722'

Lat - N 32.828265\* Long - W 103.922178\* NMSPCE- N 665301.4 E 667632.2 (NAD-83) (NAVD-88)

Directions to Location:

FROM HIGHWAY 82 GO NORTH ON SQUARE LAKE ROAD 1.0 MILES. THEN GO EAST 0.6 MILES THEN SOUTH 0.2 MILES TO EXISTING PAD WITH PROPOSED

P.O. Box 1786 (575) 393-7316 - Office 1120 N. West County Rd. (575) 392-2206 - Fax Hobbs, New Mexico 88241 basinsurveys.com

ARTESIA, NM IS ±28 MILES TO THE WEST OF LOCATION.

200 200 400 FEET SCALE: 1" = 200

REF: JACKSON A 62 / WELL PAD TOPO

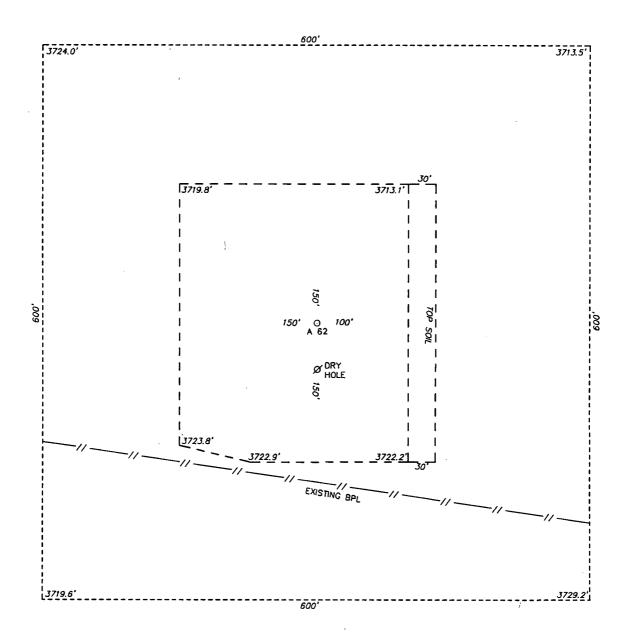
THE JACKSON A 62 LOCATED 380' FROM

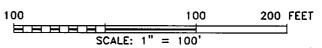
THE SOUTH LINE AND 1650' FROM THE EAST LINE OF SECTION 14, TOWNSHIP 17 SOUTH, RANGE 30 EAST,

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

W.O. Number: Date: 8-2-2018 33866 Drawn By: J GOAD Survey Date: 7-11-2018 Sheet 1

#### SECTION 13, TOWNSHIP 17 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.





REF: JACKSON A 62 / WELL PAD TOPO

THE JACKSON A 62 LOCATED 380' FROM THE SOUTH LINE AND 1650' FROM THE EAST LINE OF SECTION 14, TOWNSHIP 17 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.



P.O. Box 1786 (575) 393-7316 - Office 1120 N. West County Rd. (575) 392-2206 - Fax Hobbs, New Mexico-88241 basinsurveys.com

Drawn By: J GOAD Date: 8-2-2018 Survey Date: 7-11-2018

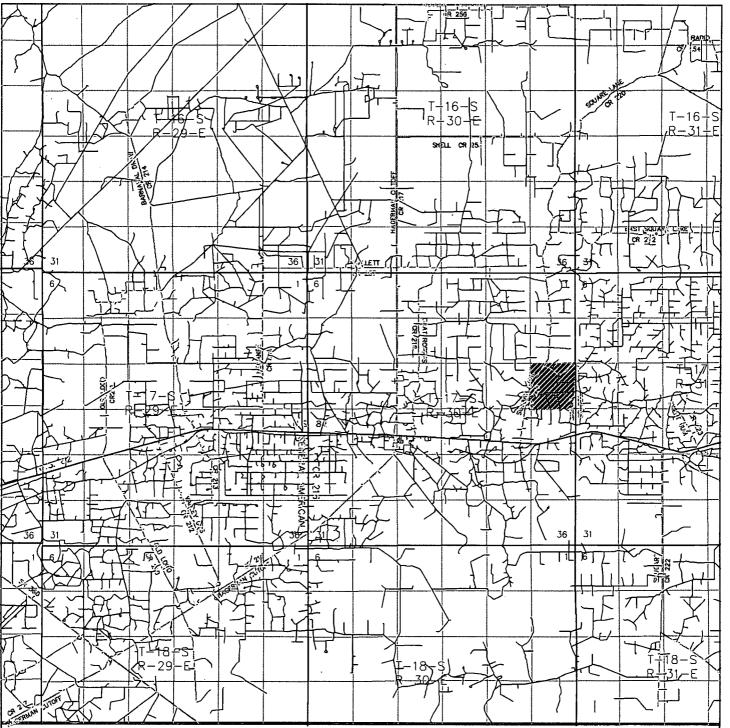


Located 380' FSL and 1650' FEL Section 13, Township 17 South, Range 30 East, N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (575) 393-7316 — Office (575) 392-2206 — Fax basinsurveys.com

۱	0' 1000' 2000' 3000' 4000'	
	SCALE: 1" = 2000'	1
	W.O. Number: JG 33866	I 【
ı	Survey Date: '7-11-2018 '	4
	YELLOW TINT - USA LAND BLUE TINT - STATE LAND NATURAL COLOR - FEE LAND	

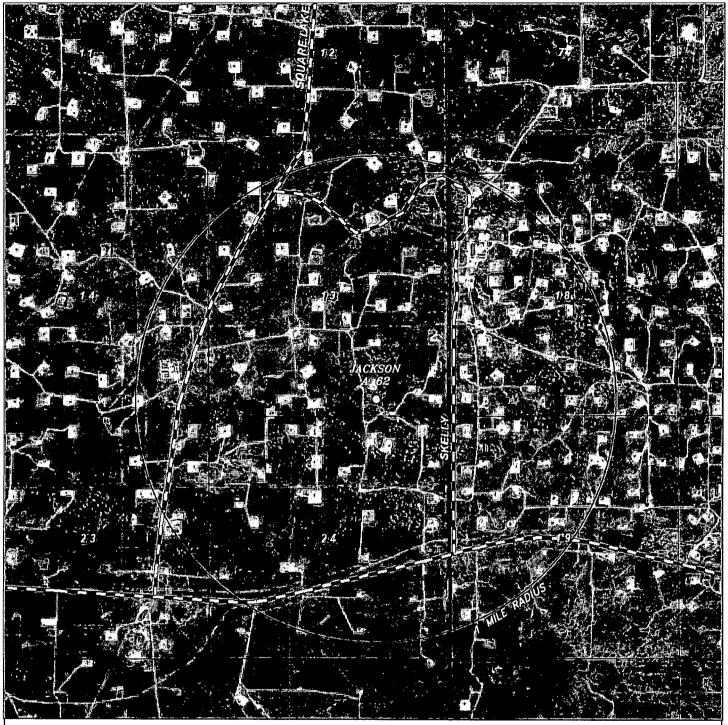


Located 380' FSL and 1650' FEL Section 13, Township 17 South, Range 30 East, N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (575) 393-7316 - Office (575) 392-2206 - Fax basinsurveys.com

١	O 1 MI 2 MI 3 MI 4 MI	,
	SCALE: 1" = 2 MILES	1
	W.O. Number: JG 33866	【 【
	Survey Date: 7-11-2018	₡,
	YELLOW TINT — USA LAND BLUE TINT — STATE LAND NATURAL COLOR — FEE LAND	



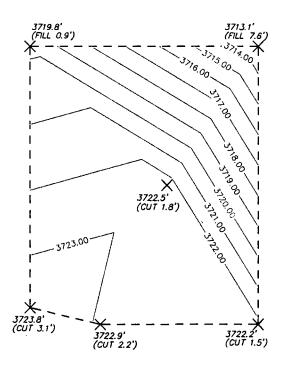
Located 380' FSL and 1650' FEL Section 13, Township 17 South, Range 30 East, N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (575) 393-7316 - Office (575) 392-2206 - Fax basinsurveys.com

١	0' 1000' 2000' 3000' 4000'	١,
	SCALE: 1" = 2000'	1
	W.O. Number: JG 33866	{
	Survey Date: 7-11-2018	₩
	YELLOW TINT — USA LAND BLUE TINT — STATE LAND NATURAL COLOR — FEE LAND	

SECTION 13, TOWNSHIP 17 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.



100 100 200 FEET
SCALE: 1" = 100'

## BURNETT OIL CO

REF: JACKSON A 62 / CUT & FILL

THE JACKSON A 62 LOCATED 380' FROM
THE SOUTH LINE AND 1650' FROM THE EAST LINE OF
SECTION 14, TOWNSHIP 17 SOUTH, RANGE 30 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

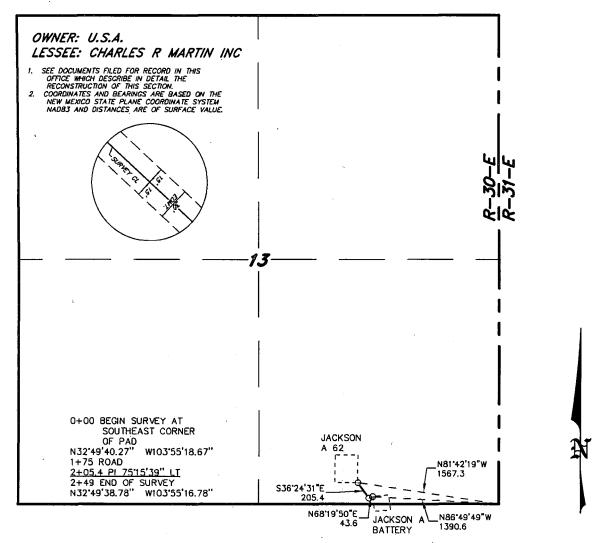


P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241

(575) 393-7316 - Offic (575) 392-2206 - Fax basinsurveys.com

W.O. Number: 33866 Drawn By: J GOAD Date: 8-2-2018 Survey Date: 7-11-2018 Sheet 1 of 1 Sheets

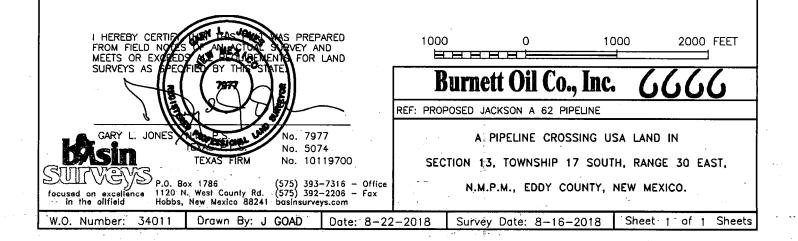
## SECTION 13, TOWNSHIP 17 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

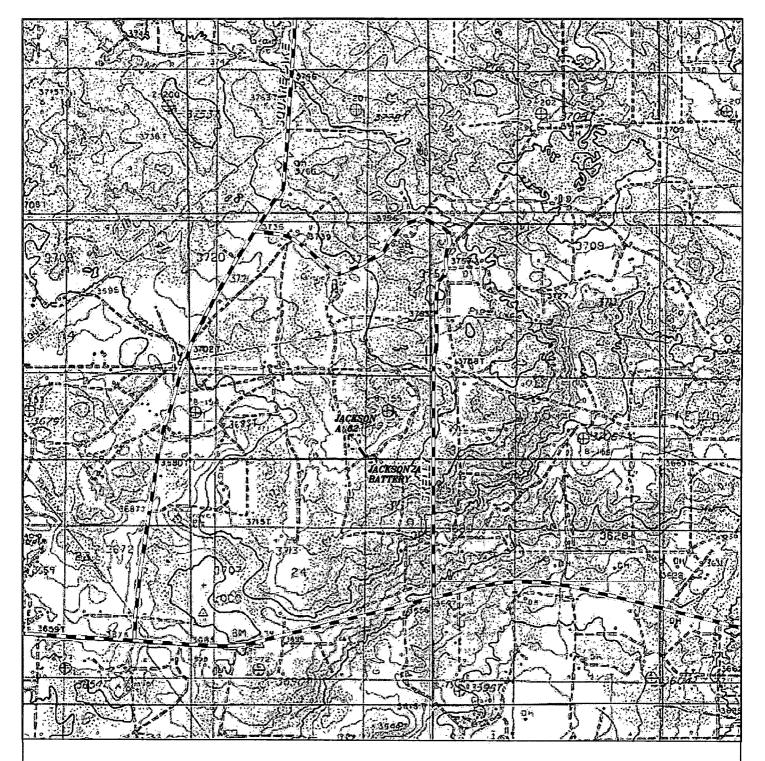


#### LEGAL DESCRIPTION

A STRIP OF LAND 30.0 FEET WIDE, LOCATED IN SECTION 13, TOWNSHIP 17 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO AND BEING 15.0 FEET LEFT AND RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.

249.0 FEET = 15.09 RODS = 0.05 MILES = 0.17 ACRES





## PROPOSED JACKSON A 62 PIPELINE

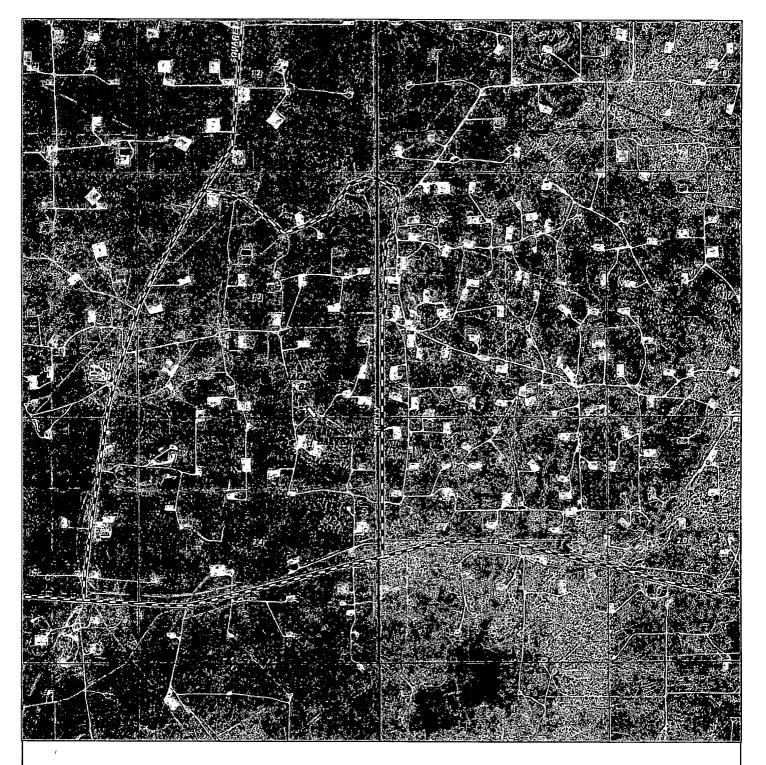
Section 13, Township 17 South, Range 30 East, N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (575) 393-7316 - Office (575) 392-2206 - Fax basinsurveys.com

/	0' 1000' 2000' 3000' 4000'	Γ
	SCALE: 1" = 2000'	١,
	W.O. Number: JG 34011	1
	Survey Date: 8-16-2018	þ
	YELLOW TINT — USA LAND BLUE TINT — STATE LAND NATURAL COLOR — FEE LAND	

Burnett Oil Co., Inc.



# PROPOSED JACKSON A 62 PIPELINE Section 13, Township 17 South, Range 30 East, N.M.P.M., Eddy County, New Mexico.

Bisin
SULTVEYS
focused on excellence
in the oilfield

P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (575) 393-7316 - Office (575) 392-2206 - Fax basinsurveys.com

\	0' 1000' 2000' 3000' 4000'	١,
	SCALE: 1" = 2000"	1
	W.O. Number: JG 34011	1
	Survey Date: 8-16-2018	٩
	YELLOW TINT — USA LAND BLUE TINT — STATE LAND NATURAL COLOR — FEE LAND	

Burnett Oil Co., Inc. るるる



#### 1. Existing Roads:

- a. All roads into the location are shown on the Vicinity Map
- From Highway 82 go North on Square Lake Road 1.0 miles then go East 0.6 Miles then South 0.2 Miles to Existing Pad with Proposed road.
- 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 show the new road which will be utilized. Attached Plats show the existing roads surrounding the location.
- b. New Road will be needed and 72.8' in length.
  - 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.
  - 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 attached plats 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. See attached plats for the location of existing Jackson A Tank Battery facility on this Federal Lease NMLC-029339A (SW1/4 SE1/4) of the Section 13 See attached for layout of existing, previously approved tank battery.
- b. Flowline from the new well pad site is on this same lease. The required flowline will be laid above ground and along existing lease road and right of way within the current flowline corridor from the Jackson A 62 to the Jackson A tank battery (see attached plats). The flowline(s) will be 3" poly pipe 249 ft. in length (Refer to attached) and will transport oil, gas and water. All flowlines will be 3" low pressure 3" SDR7 4710 poly pipe with a typical working pressure of 60 psi. The SDR7 4710 poly pipe has a maximum pressure rating of 335 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 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 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.
- 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. Attachment shows the relative location and dimensions of the drilling pad and related components. The pad size will be 250 ft.x 300 ft. Only minor leveling of the drilling site is anticipated.
- b. The V-Door will be North. Entry will be on the Northeast side of the location. Top soil stockpile will be to the East.
- c. On site was approved on 10 July 2018.
- d. All permanent power for the well site is provided and handled by CVE.
- e. If temporary power is needed, the lines will follow the road 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.

#### 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. (See attached)
- 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 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.
- 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.

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

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

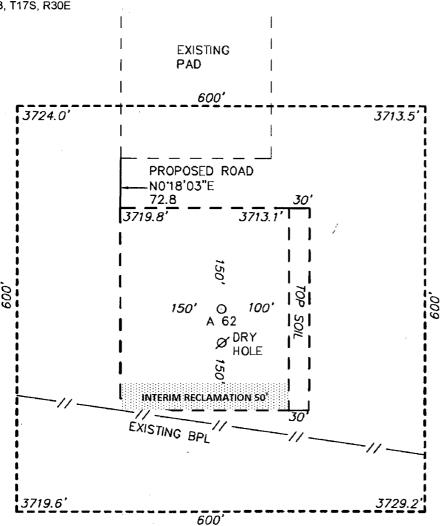
Tyler Deans
Engineering Manager
Burnett Oil Co. Inc.
P.O. Box 188
Loco Hills, New Mexico 88255
575.677.2313 (office)
432.553.4699 (cell)
tdeans@burnettoil.com

#### **Regulatory Representative**

Leslie M. Garvis
Regulatory & Government Affairs Manager
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)
Igarvis@burnettoil.com



INTERIM RECLAMATION PLAT JACKSON A 62 380' FSLM 1650' FEL SEC 13, T17S, R30E



NOT TO SCALE INTERIM RECLAMATION: 50' OFF SOUTH



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

# PWD Data Report

#### Section 1 - General

Would you like to address long-term produced water disposal? NO

#### Section 2 - Lined Pits

Would you like to utilize Lined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit specifications:

Pit liner description:

Pit liner manufacturers information:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Leak detection system description:

Leak detection system attachment:

Lined pit Monitor description:

Lined pit Monitor attachment:

Lined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information attachment:

PWD disturbance (acres):

## Section 3 - Unlined Pits

PWD surface owner:

Injection well mineral owner:

Injection PWD discharge volume (bbl/day):

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:	
PWD surface owner:	PWD disturbance (acres):
Unlined pit PWD on or off channel:	
Unlined pit PWD discharge volume (bbl/day):	
Unlined pit specifications:	
Precipitated solids disposal:	
Decribe precipitated solids disposal:	
Precipitated solids disposal permit:	
Unlined pit precipitated solids disposal schedule:	
Unlined pit precipitated solids disposal schedule attachment:	
Unlined pit reclamation description:	
Unlined pit reclamation attachment:	
Unlined pit Monitor description:	
Unlined pit Monitor attachment:	
Do you propose to put the produced water to beneficial use?	
Beneficial use user confirmation:	
Estimated depth of the shallowest aquifer (feet):	
Does the produced water have an annual average Total Dissolv that of the existing water to be protected?	ved Solids (TDS) concentration equal to or less than
TDS lab results:	
Geologic and hydrologic evidence:	
State authorization:	
Unlined Produced Water Pit Estimated percolation:	
Unlined pit: do you have a reclamation bond for the pit?	
Is the reclamation bond a rider under the BLM bond?	
Unlined pit bond number:	·
Unlined pit bond amount:	
Additional bond information attachment:	
Section 4 - Injection	
Would you like to utilize Injection PWD options? NO	
Produced Water Disposal (PWD) Location:	en e

PWD disturbance (acres):

Injection well type: Injection well number: Injection well name: Assigned injection well API number? Injection well API number: Injection well new surface disturbance (acres): Minerals protection information: Mineral protection attachment: **Underground Injection Control (UIC) Permit? UIC Permit attachment:** Section 5 - Surface Discharge Would you like to utilize Surface Discharge PWD options? NO Produced Water Disposal (PWD) Location: PWD surface owner: PWD disturbance (acres): Surface discharge PWD discharge volume (bbl/day): **Surface Discharge NPDES Permit?** Surface Discharge NPDES Permit attachment: Surface Discharge site facilities information: Surface discharge site facilities map: Section 6 - Other Would you like to utilize Other PWD options? NO Produced Water Disposal (PWD) Location: PWD surface owner: PWD disturbance (acres): Other PWD discharge volume (bbl/day): Other PWD type description: Other PWD type attachment: Have other regulatory requirements been met?

Other regulatory requirements attachment:



## U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

## Bond Info Data Report

### **Bond Information**

Federal/Indian APD: FED

BLM Bond number: NMB000197

**BIA Bond number:** 

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment: