

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**APPLICATION FOR PERMIT TO DRILL OR REENTER**

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

5. Lease Serial No.  
NMLC029415B

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.  
NOSLER 12 FED MO 8H

9. API Well No.  
30-015-44276

10. Field and Pool, or Exploratory  
FREN / GLORIETA-YESO

11. Sec., T. R. M. or Blk. and Survey or Area  
SEC 11 / T17S / R31E / NMP

12. County or Parish  
EDDY

13. State  
NM

1a. Type of work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☒ Multiple Zone

2. Name of Operator  
BURNETT OIL CO INC

3a. Address  
Burnett Plaza - Suite 1500, 801 Cherry Street

3b. Phone No. (include area code)  
(817)583-8730

4. Location of Well (Report location clearly and in accordance with any State requirements.)  
At surface SESE / 750 FSL / 200 FEL / LAT 32.843975 / LONG -103.832359  
At proposed prod. zone SWSE / 331 FSL / 1651 FEL / LAT 32.842845 / LONG -103.819881

14. Distance in miles and direction from nearest town or post office\*  
10 miles

15. Distance from proposed\*  
location to nearest  
property or lease line, ft.  
(Also to nearest drig. unit line, if any)  
200 feet

16. No. of acres in lease  
1920

17. Spacing Unit dedicated to this well  
120

18. Distance from proposed location\*  
to nearest well, drilling, completed, 407 feet  
applied for, on this lease, ft.

19. Proposed Depth  
5475 feet / 9178 feet

20. BLM/BIA Bond No. on file  
FED: NMB000197

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
3950 feet

22. Approximate date work will start\*  
03/31/2017

23. Estimated duration  
14 days

**24. Attachments**

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

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

25. Signature  
(Electronic Submission)

Name (Printed Typed)  
Leslie Garvis / Ph: (817)583-8730

Date  
12/26/2016

Title  
Regulatory Coordinator

Approved by (Signature)  
(Electronic Submission)

Name (Printed Typed)  
Cody Layton / Ph: (575)234-5959

Date  
06/14/2017

Title  
Supervisor Multiple Resources

Office  
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.

(Continued on page 2)

\*(Instructions on page 2)

**APPROVED WITH CONDITIONS**

**NM OIL CONSERVATION**  
ARTESIA DISTRICT

JUN 22 2017

**RECEIVED**

RWP 6.22.17

## **Additional Operator Remarks**

### **Location of Well**

1. SHL: SESE / 750 FSL / 200 FEL / TWSP: 17S / RANGE: 31E / SECTION: 11 / LAT: 32.843975 / LONG: -103.832359 ( TVD: 0 feet, MD: 0 feet )  
PPP: SWSW / 331 FSL / 331 FWL / TWSP: 17S / RANGE: 31E / SECTION: 12 / LAT: 32.842827 / LONG: -103.830629 ( TVD: 5475 feet, MD: 9178 feet )  
BHL: SWSE / 331 FSL / 1651 FEL / TWSP: 17S / RANGE: 31E / SECTION: 12 / LAT: 32.842845 / LONG: -103.819881 ( TVD: 5475 feet, MD: 9178 feet )

### **BLM Point of Contact**

Name: Melissa Agee

Title: Legal Instruments Examiner

Phone: 5752345937

Email: [magee@blm.gov](mailto:magee@blm.gov)

## **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.



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

## Operator Certification Data Report

06/14/2017

### 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:** 11/22/2016

**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:**

**Street Address:**

**City:**

**State:**

**Zip:**

**Phone:**

**Email address:**



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

## Application Data Report

06/14/2017

**APD ID:** 10400006964

**Submission Date:** 12/26/2016

**Operator Name:** BURNETT OIL CO INC

**Well Name:** NOSLER 12 FED MO

**Well Number:** 8H

**Well Type:** OIL WELL

**Well Work Type:** Drill

### Section 1 - General

**APD ID:** 10400006964

**Tie to previous NOS?**

**Submission Date:** 12/26/2016

**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:** NMLC029415B

**Lease Acres:** 1920

**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 CO INC

**Operator letter of designation:**

**Keep application confidential?** NO

### Operator Info

**Operator Organization Name:** BURNETT OIL CO INC

**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

**Mater Development Plan name:**

**Well in Master SUPO?** NO

**Master SUPO name:**

**Well in Master Drilling Plan?** NO

**Master Drilling Plan name:**

**Well Name:** NOSLER 12 FED MO

**Well Number:** 8H

**Well API Number:**

**Field/Pool or Exploratory?** Field and Pool

**Field Name:** FREN

**Pool Name:** GLORIETA-YESO

**Operator Name:** BURNETT OIL CO INC

**Well Name:** NOSLER 12 FED MO

**Well Number:** 8H

**Is the proposed well in an area containing other mineral resources?** USEABLE WATER

**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:** HORIZONTAL **Number of Legs:**

**Well Work Type:** Drill

**Well Type:** OIL WELL

**Describe Well Type:**

**Well sub-Type:** INFILL

**Describe sub-type:**

**Distance to town:** 10 Miles **Distance to nearest well:** 407 FT **Distance to lease line:** 200 FT

**Reservoir well spacing assigned acres Measurement:** 120 Acres

**Well plat:** 2017.01.24 NF12MO8HC-102\_01-24-2017.pdf

**Well work start Date:** 03/31/2017 **Duration:** 14 DAYS

### Section 3 - Well Location Table

**Survey Type:** RECTANGULAR

**Describe Survey Type:**

**Datum:** NAD83 **Vertical Datum:** NAVD88

**Survey number:**

	<b>STATE:</b> NEW MEXICO	<b>Meridian:</b> NEW MEXICO PRINCIPAL	<b>County:</b> EDDY
	<b>Latitude:</b> 32.843975	<b>Longitude:</b> -103.832359	
SHL	<b>Elevation:</b> 3950	<b>MD:</b> 0	<b>TVD:</b> 0
<b>Leg #:</b> 1	<b>Lease Type:</b> FEDERAL	<b>Lease #:</b> NMLC029418B	
	<b>NS-Foot:</b> 750	<b>NS Indicator:</b> FSL	
	<b>EW-Foot:</b> 200	<b>EW Indicator:</b> FEL	
	<b>Twsp:</b> 17S	<b>Range:</b> 31E	<b>Section:</b> 11
	<b>Aliquot:</b> SESE	<b>Lot:</b>	<b>Tract:</b>

**Operator Name:** BURNETT OIL CO INC

**Well Name:** NOSLER 12 FED MO

**Well Number:** 8H

	<b>STATE:</b> NEW MEXICO	<b>Meridian:</b> NEW MEXICO PRINCIPAL	<b>County:</b> EDDY
	<b>Latitude:</b> 32.843949	<b>Longitude:</b> -103.832352	
KOP	<b>Elevation:</b> -949	<b>MD:</b> 4900	<b>TVD:</b> 4899
<b>Leg #: 1</b>	<b>Lease Type:</b> FEDERAL	<b>Lease #:</b> NMLC029418B	
	<b>NS-Foot:</b> 741	<b>NS Indicator:</b> FSL	
	<b>EW-Foot:</b> 198	<b>EW Indicator:</b> FWL	
	<b>Twsp:</b> 17S	<b>Range:</b> 31E	<b>Section:</b> 12
	<b>Aliquot:</b> SWSW	<b>Lot:</b>	<b>Tract:</b>
	<b>STATE:</b> NEW MEXICO	<b>Meridian:</b> NEW MEXICO PRINCIPAL	<b>County:</b> EDDY
	<b>Latitude:</b> 32.842827	<b>Longitude:</b> -103.830629	
PPP	<b>Elevation:</b> -1525	<b>MD:</b> 9178	<b>TVD:</b> 5475
<b>Leg #: 1</b>	<b>Lease Type:</b> FEDERAL	<b>Lease #:</b> NMLC029415B	
	<b>NS-Foot:</b> 331	<b>NS Indicator:</b> FSL	
	<b>EW-Foot:</b> 331	<b>EW Indicator:</b> FWL	
	<b>Twsp:</b> 17S	<b>Range:</b> 31E	<b>Section:</b> 12
	<b>Aliquot:</b> SWSW	<b>Lot:</b>	<b>Tract:</b>
	<b>STATE:</b> NEW MEXICO	<b>Meridian:</b> NEW MEXICO PRINCIPAL	<b>County:</b> EDDY
	<b>Latitude:</b> 32.842845	<b>Longitude:</b> -103.819881	
EXIT	<b>Elevation:</b> -1525	<b>MD:</b> 9178	<b>TVD:</b> 5475
<b>Leg #: 1</b>	<b>Lease Type:</b> FEDERAL	<b>Lease #:</b> NMLC029415B	
	<b>NS-Foot:</b> 331	<b>NS Indicator:</b> FSL	
	<b>EW-Foot:</b> 1651	<b>EW Indicator:</b> FEL	
	<b>Twsp:</b> 17S	<b>Range:</b> 31E	<b>Section:</b> 12
	<b>Aliquot:</b> SWSE	<b>Lot:</b>	<b>Tract:</b>
	<b>STATE:</b> NEW MEXICO	<b>Meridian:</b> NEW MEXICO PRINCIPAL	<b>County:</b> EDDY
	<b>Latitude:</b> 32.842845	<b>Longitude:</b> -103.819881	
BHL	<b>Elevation:</b> -1525	<b>MD:</b> 9178	<b>TVD:</b> 5475
<b>Leg #: 1</b>	<b>Lease Type:</b> FEDERAL	<b>Lease #:</b> NMLC029415B	
	<b>NS-Foot:</b> 331	<b>NS Indicator:</b> FSL	
	<b>EW-Foot:</b> 1651	<b>EW Indicator:</b> FEL	

**Operator Name:** BURNETT OIL CO INC

**Well Name:** NOSLER 12 FED MO

**Well Number:** 8H

**Twsp:** 17S

**Range:** 31E

**Section:** 12

**Aliquot:** SWSE

**Lot:**

**Tract:**





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

## Drilling Plan Data Report

06/14/2017

APD ID: 10400006964

Submission Date: 12/26/2016

Operator Name: BURNETT OIL CO INC

Well Name: NOSLER 12 FED MO

Well Number: 8H

Well Type: OIL WELL

Well Work Type: Drill

### Section 1 - Geologic Formations

ID: Surface formation

Name: RUSTLER

Lithology(ies):

ALLUVIUM

Elevation: 0

True Vertical Depth: 0

Measured Depth: 0

Mineral Resource(s):

NONE

Is this a producing formation? N

ID: Formation 1

Name: RUSTLER

Lithology(ies):

ANHYDRITE

Elevation: -671

True Vertical Depth: 671

Measured Depth: 671

Mineral Resource(s):

NONE

Is this a producing formation? N

ID: Formation 2

Name: SALADO

Lithology(ies):

SALT

Elevation: -846

True Vertical Depth: 846

Measured Depth: 846

Mineral Resource(s):

NONE

Is this a producing formation? N

**Operator Name:** BURNETT OIL CO INC

**Well Name:** NOSLER 12 FED MO

**Well Number:** 8H

**ID:** Formation 3

**Name:** YATES

**Lithology(ies):**

SHALE

**Elevation:** -1992

**True Vertical Depth:** 1992

**Measured Depth:** 1992

**Mineral Resource(s):**

NONE

**Is this a producing formation?** N

**ID:** Formation 4

**Name:** SEVEN RIVERS

**Lithology(ies):**

ANHYDRITE

**Elevation:** -2315

**True Vertical Depth:** 2315

**Measured Depth:** 2315

**Mineral Resource(s):**

OIL

**Is this a producing formation?** N

**ID:** Formation 5

**Name:** QUEEN

**Lithology(ies):**

SHALE

**Elevation:** -2930

**True Vertical Depth:** 2930

**Measured Depth:** 2930

**Mineral Resource(s):**

OIL

**Is this a producing formation?** N

**ID:** Formation 6

**Name:** GRAYBURG

**Lithology(ies):**

DOLOMITE

**Elevation:** -3348

**True Vertical Depth:** 3348

**Measured Depth:** 3348

**Mineral Resource(s):**

OIL

**Operator Name:** BURNETT OIL CO INC

**Well Name:** NOSLER 12 FED MO

**Well Number:** 8H

**Is this a producing formation?** N

**ID:** Formation 7

**Name:** SAN ANDRES

**Lithology(ies):**

DOLOMITE

**Elevation:** -3710

**True Vertical Depth:** 3710

**Measured Depth:** 3710

**Mineral Resource(s):**

OIL

**Is this a producing formation?** N

**ID:** Formation 8

**Name:** GLORIETA

**Lithology(ies):**

SHALE

**Elevation:** -5198

**True Vertical Depth:** 5198

**Measured Depth:** 5251

**Mineral Resource(s):**

OIL

**Is this a producing formation?** Y

**ID:** Formation 9

**Name:** YESO

**Lithology(ies):**

SHALE

**Elevation:** -5273

**True Vertical Depth:** 5273

**Measured Depth:** 5359

**Mineral Resource(s):**

OIL

**Is this a producing formation?** Y

## Section 2 - Blowout Prevention

**Pressure Rating (PSI):** 2M

**Rating Depth:** 7000

**Equipment:** 2000 PSI Hydril Unit (annular) with hydraulic closing equipment. 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:**

**Operator Name:** BURNETT OIL CO INC

**Well Name:** NOSLER 12 FED MO

**Well Number:** 8H

**Testing Procedure:** The equipment will comply with Onshore Order #2 and will be tested to 2,000 psi and maintained for at least ten (10) minutes. The 10-3/4" drilling head will be installed on the surface casing and in use continuously until total depth is reached. An independent testing company will be used for the testing.

**Choke Diagram Attachment:**

OPsmaint\_01-23-2017.pdf

**BOP Diagram Attachment:**

2MChokeManifold Drilling\_10-19-2016.pdf

### Section 3 - Casing

**String Type:** CONDUCTOR

**Other String Type:**

**Hole Size:** 24

**Top setting depth MD:** 0

**Top setting depth TVD:** 0

**Top setting depth MSL:** -949

**Bottom setting depth MD:** 90

**Bottom setting depth TVD:** 90

**Bottom setting depth MSL:** -1039

**Calculated casing length MD:** 90

**Casing Size:** 20.0

**Other Size**

**Grade:** OTHER

**Other Grade:** ASTM A53

**Weight:** 52.78

**Joint Type:** OTHER

**Other Joint Type:**

**Condition:** NEW

**Inspection Document:**

**Standard:** API

**Spec Document:**

**Tapered String?:** N

**Tapered String Spec:**

### Safety Factors

**Collapse Design Safety Factor:**

**Burst Design Safety Factor:**

**Joint Tensile Design Safety Factor type:**

**Joint Tensile Design Safety Factor:**

**Body Tensile Design Safety Factor type:**

**Body Tensile Design Safety Factor:**

**Casing Design Assumptions and Worksheet(s):**

**Operator Name:** BURNETT OIL CO INC

**Well Name:** NOSLER 12 FED MO

**Well Number:** 8H

**String Type:** SURFACE

**Other String Type:**

**Hole Size:** 17.5

**Top setting depth MD:** 0

**Top setting depth TVD:** 0

**Top setting depth MSL:** -949

**Bottom setting depth MD:** 750

**Bottom setting depth TVD:** 750

**Bottom setting depth MSL:** -1699

**Calculated casing length MD:** 750

**Casing Size:** 13.625

**Other Size**

**Grade:** H-40

**Other Grade:**

**Weight:** 48

**Joint Type:** STC

**Other Joint Type:**

**Condition:** NEW

**Inspection Document:**

**Standard:** API

**Spec Document:**

**Tapered String?:** N

**Tapered String Spec:**

### Safety Factors

**Collapse Design Safety Factor:** 1.125

**Burst Design Safety Factor:** 1

**Joint Tensile Design Safety Factor type:** DRY

**Joint Tensile Design Safety Factor:** 1.8

**Body Tensile Design Safety Factor type:** DRY

**Body Tensile Design Safety Factor:** 1.8

**Casing Design Assumptions and Worksheet(s):**

Casing Design Worksheet\_11-22-2016.pdf

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**Operator Name:** BURNETT OIL CO INC

**Well Name:** NOSLER 12 FED MO

**Well Number:** 8H

**String Type:** PRODUCTION

**Other String Type:**

**Hole Size:** 8.5

**Top setting depth MD:** 4800

**Top setting depth TVD:** 4800

**Top setting depth MSL:** -5749

**Bottom setting depth MD:** 9300

**Bottom setting depth TVD:** 9300

**Bottom setting depth MSL:** -10249

**Calculated casing length MD:** 4500

**Casing Size:** 5.5

**Other Size**

**Grade:** L-80

**Other Grade:**

**Weight:** 17

**Joint Type:** LTC

**Other Joint Type:**

**Condition:** NEW

**Inspection Document:**

**Standard:** API

**Spec Document:**

**Tapered String?:** N

**Tapered String Spec:**

### **Safety Factors**

**Collapse Design Safety Factor:** 1.125

**Burst Design Safety Factor:** 1

**Joint Tensile Design Safety Factor type:** DRY

**Joint Tensile Design Safety Factor:** 1.8

**Body Tensile Design Safety Factor type:** DRY

**Body Tensile Design Safety Factor:** 1.8

**Casing Design Assumptions and Worksheet(s):**

Casing Design Worksheet\_11-22-2016.pdf

Horizontal Drilling Plan- Casing\_02-16-2017.pdf

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**Operator Name:** BURNETT OIL CO INC

**Well Name:** NOSLER 12 FED MO

**Well Number:** 8H

**String Type:** PRODUCTION

**Other String Type:**

**Hole Size:** 8.5

**Top setting depth MD:** 0

**Top setting depth TVD:** 0

**Top setting depth MSL:** -949

**Bottom setting depth MD:** 4800

**Bottom setting depth TVD:** 4800

**Bottom setting depth MSL:** -5749

**Calculated casing length MD:** 4800

**Casing Size:** 7.0

**Other Size**

**Grade:** L-80

**Other Grade:**

**Weight:** 26

**Joint Type:** LTC

**Other Joint Type:**

**Condition:** NEW

**Inspection Document:**

**Standard:** API

**Spec Document:**

**Tapered String?:** N

**Tapered String Spec:**

### **Safety Factors**

**Collapse Design Safety Factor:** 1.125

**Burst Design Safety Factor:** 1

**Joint Tensile Design Safety Factor type:** DRY

**Joint Tensile Design Safety Factor:** 1.8

**Body Tensile Design Safety Factor type:** DRY

**Body Tensile Design Safety Factor:** 1.8

**Casing Design Assumptions and Worksheet(s):**

Casing Design Worksheet\_11-22-2016.pdf

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**Operator Name:** BURNETT OIL CO INC

**Well Name:** NOSLER 12 FED MO

**Well Number:** 8H

**String Type:** INTERMEDIATE

**Other String Type:**

**Hole Size:** 12.25

**Top setting depth MD:** 0

**Top setting depth TVD:** 0

**Top setting depth MSL:** -949

**Bottom setting depth MD:** 2300

**Bottom setting depth TVD:** 2300

**Bottom setting depth MSL:** -3249

**Calculated casing length MD:** 2300

**Casing Size:** 9.875

**Other Size**

**Grade:** J-55

**Other Grade:**

**Weight:** 36

**Joint Type:** LTC

**Other Joint Type:**

**Condition:** NEW

**Inspection Document:**

**Standard:** API

**Spec Document:**

**Tapered String?:** N

**Tapered String Spec:**

### **Safety Factors**

**Collapse Design Safety Factor:** 1.125

**Burst Design Safety Factor:** 1

**Joint Tensile Design Safety Factor type:** DRY

**Joint Tensile Design Safety Factor:** 1.8

**Body Tensile Design Safety Factor type:** DRY

**Body Tensile Design Safety Factor:** 1.8

**Casing Design Assumptions and Worksheet(s):**

Casing Design Worksheet\_11-22-2016.pdf

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### **Section 4 - Cement**

**Casing String Type:** PRODUCTION



**Operator Name:** BURNETT OIL CO INC

**Well Name:** NOSLER 12 FED MO

**Well Number:** 8H

**Stage Tool Depth:**

Lead

**Top MD of Segment:** 0

**Bottom MD Segment:** 0

**Cement Type:** 0

**Additives:** 0

**Quantity (sks):** 0

**Yield (cu.ff./sk):** 0

**Density:** 0

**Volume (cu.ft.):** 0

**Percent Excess:** 0

Tail

**Top MD of Segment:** 0

**Bottom MD Segment:** 0

**Cement Type:** 0

**Additives:** 0CFR-3, 0.10% HR-800

**Quantity (sks):** 0

**Yield (cu.ff./sk):** 0

**Density:** 0

**Volume (cu.ft.):**

**Percent Excess:** 0

**Casing String Type:** CONDUCTOR

**Stage Tool Depth:**

Lead

**Top MD of Segment:** 0

**Bottom MD Segment:** 0

**Cement Type:** 0

**Additives:** 0

**Quantity (sks):** 0

**Yield (cu.ff./sk):** 0

**Density:** 0

**Volume (cu.ft.):** 0

**Percent Excess:**

**Casing String Type:** SURFACE

**Stage Tool Depth:**

Lead

**Top MD of Segment:** 0

**Bottom MD Segment:** 750

**Cement Type:** ExtendaCem

**Additives:** CZ 0.1250 lmb Poly-E-Flake

**Quantity (sks):** 330

**Yield (cu.ff./sk):** 1.75

**Density:** 13.5

**Volume (cu.ft.):** 94

**Percent Excess:** 100

Tail

**Top MD of Segment:** 0

**Bottom MD Segment:** 750

**Cement Type:** HalCem 2% Calcium Chloride

**Additives:** Flake

**Quantity (sks):** 340

**Yield (cu.ff./sk):** 1.35

**Density:** 14.8

**Volume (cu.ft.):**

**Percent Excess:** 100

**Casing String Type:** INTERMEDIATE

**Operator Name:** BURNETT OIL CO INC

**Well Name:** NOSLER 12 FED MO

**Well Number:** 8H

**Stage Tool Depth:**

**Lead**

**Top MD of Segment:** 0

**Bottom MD Segment:** 2300

**Cement Type:** ExtendaCem

**Additives:** CZ 0.1250 lbm Poly-E-Flake **Quantity (sks):** 475

**Yield (cu.ff./sk):** 1.75

**Density:** 13.5

**Volume (cu.ft.):** 94

**Percent Excess:** 50

**Tail**

**Top MD of Segment:** 0

**Bottom MD Segment:** 2300

**Cement Type:** HalCem

**Additives:**

**Quantity (sks):** 205

**Yield (cu.ff./sk):** 1.33

**Density:** 14.8

**Volume (cu.ft.):**

**Percent Excess:** 50

**Casing String Type:** PRODUCTION

**Stage Tool Depth:**

**Lead**

**Top MD of Segment:** 0

**Bottom MD Segment:** 9300

**Cement Type:** EconoCem-C

**Additives:** 0.1250 lbm Poly-E-Flake,  
0.25 lbm D-Air 5000

**Quantity (sks):** 255

**Yield (cu.ff./sk):** 2.46

**Density:** 14.24

**Volume (cu.ft.):** 94

**Percent Excess:** 35

**Tail**

**Top MD of Segment:** 0

**Bottom MD Segment:** 9300

**Cement Type:** Halchem

**Additives:** 0.50% LAP-1, 0.25 lbm D-Air  
5000, 0.40% CFR-3, 0.10% HR-800  
**Density:** 14.8

**Quantity (sks):** 170

**Yield (cu.ff./sk):** 1.33

**Volume (cu.ft.):**

**Percent Excess:** 35

## 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 locations at all times.

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

## Circulating Medium Table

**Operator Name:** BURNETT OIL CO INC

**Well Name:** NOSLER 12 FED MO

**Well Number:** 8H

**Top Depth:** 0

**Bottom Depth:** 750

**Mud Type:** WATER-BASED MUD

**Min Weight (lbs./gal.):** 8.4

**Max Weight (lbs./gal.):** 9.5

**Density (lbs/cu.ft.):**

**Gel Strength (lbs/100 sq.ft.):**

**PH:**

**Viscosity (CP):**

**Filtration (cc):**

**Salinity (ppm):**

**Additional Characteristics:**

---

**Top Depth:** 750

**Bottom Depth:** 2300

**Mud Type:** WATER-BASED MUD

**Min Weight (lbs./gal.):** 9.5

**Max Weight (lbs./gal.):** 10

**Density (lbs/cu.ft.):**

**Gel Strength (lbs/100 sq.ft.):**

**PH:**

**Viscosity (CP):**

**Filtration (cc):**

**Salinity (ppm):**

**Additional Characteristics:**

---

**Top Depth:** 2300

**Bottom Depth:** 5475

**Mud Type:** WATER-BASED MUD

**Min Weight (lbs./gal.):** 9.5

**Max Weight (lbs./gal.):** 10

**Density (lbs/cu.ft.):**

**Gel Strength (lbs/100 sq.ft.):**

**PH:**

**Viscosity (CP):**

**Filtration (cc):**

**Salinity (ppm):**

**Additional Characteristics:**

---

## Section 6 - Test, Logging, Coring

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

No open hole logs will be run.

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

DS,OTH

**Other log type(s):**

Mud Log

**Coring operation description for the well:**

No cores or DSTs are planned at this time.

**Operator Name:** BURNETT OIL CO INC

**Well Name:** NOSLER 12 FED MO

**Well Number:** 8H

### **Section 7 - Pressure**

**Anticipated Bottom Hole Pressure:** 2436

**Anticipated Surface Pressure:** 1231.5

**Anticipated Bottom Hole Temperature(F):** 105

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

**Describe:**

**Contingency Plans geohazards description:**

**Contingency Plans geohazards attachment:**

**Hydrogen Sulfide drilling operations plan required?** YES

**Hydrogen sulfide drilling operations plan:**

H2S Plan\_10-19-2016.pdf

### **Section 8 - Other Information**

**Proposed horizontal/directional/multi-lateral plan submission:**

HZSurvey Report20170123\_01-23-2017.pdf

**Other proposed operations facets description:**

**Other proposed operations facets attachment:**

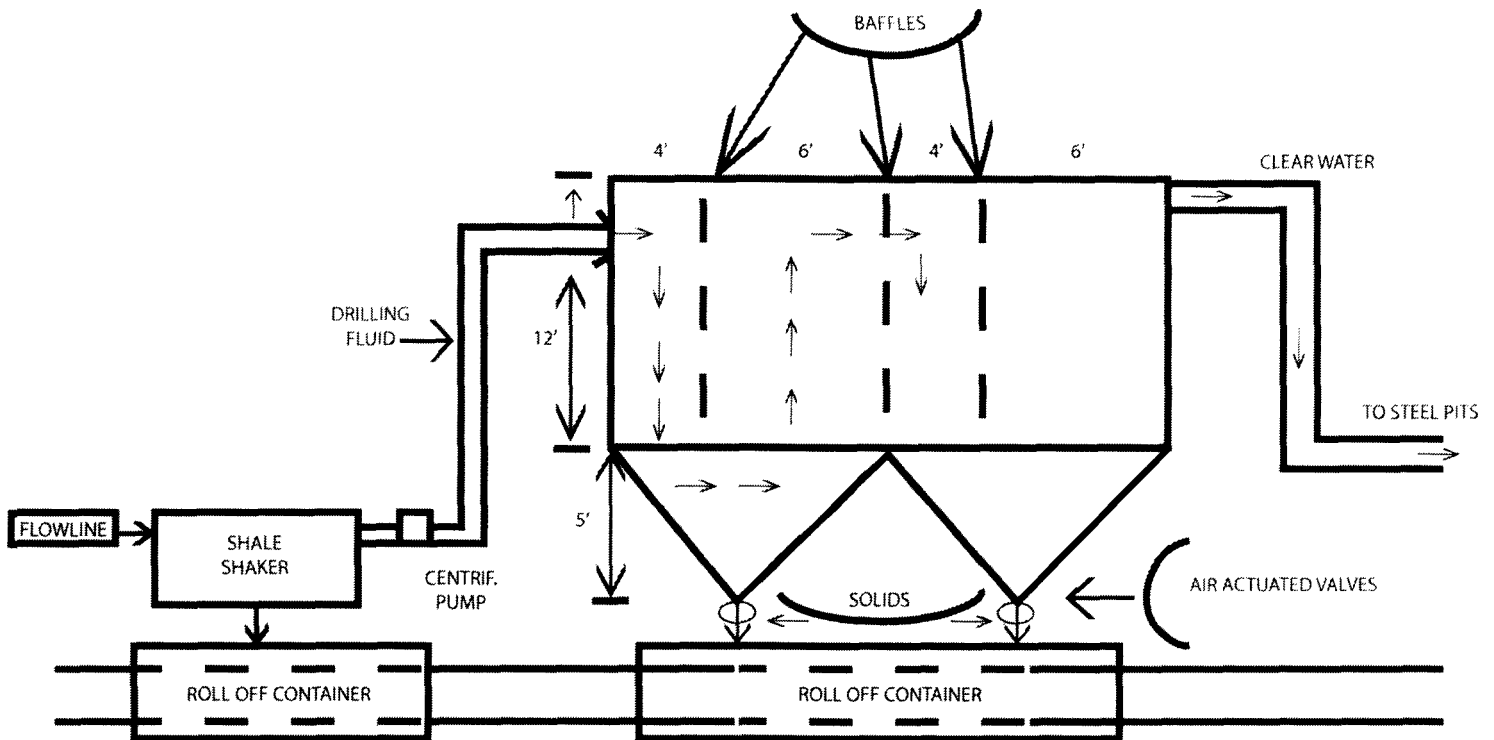
2016.10.26 AC Report\_11-22-2016.pdf

**Other Variance attachment:**



BURNETT OIL CO., INC.

## EXHIBIT L



### OPERATIONS & MAINTENANCE

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

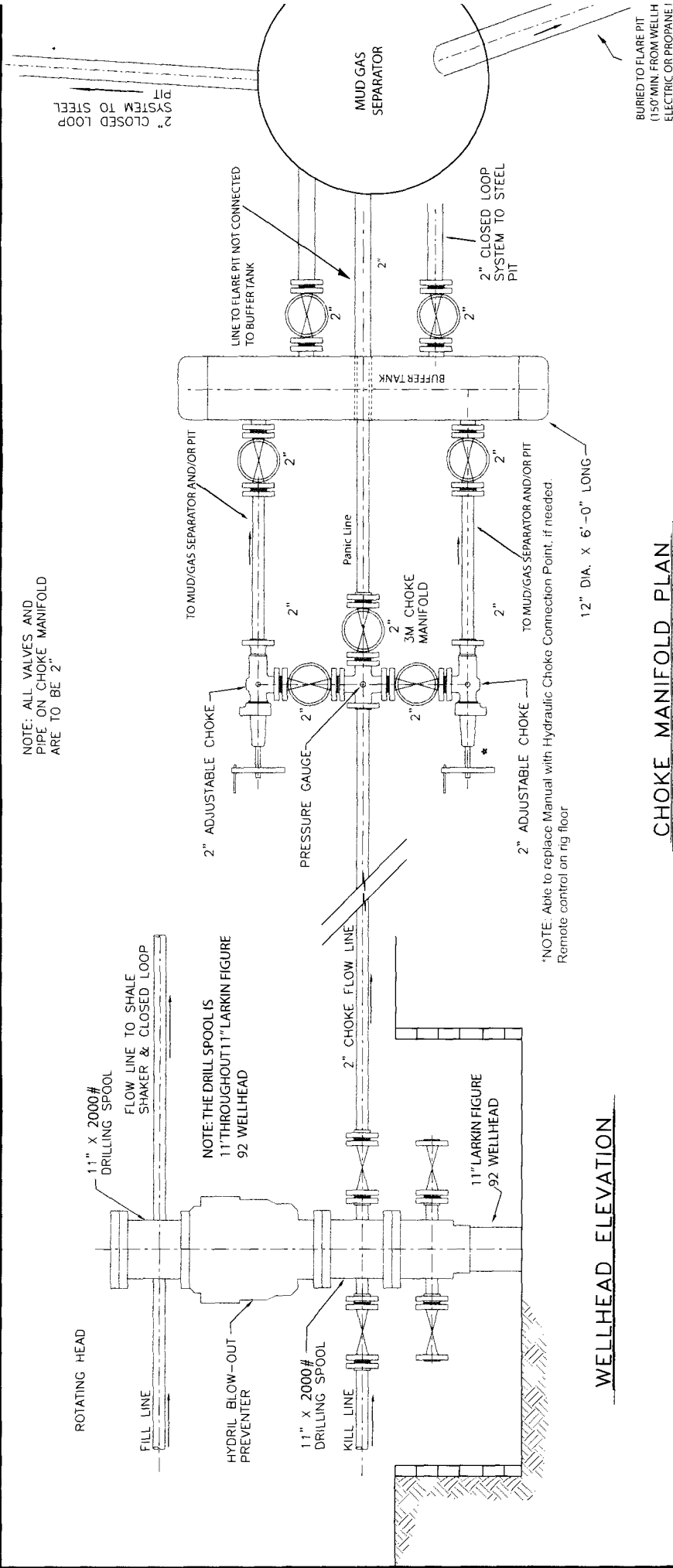
### INSPECTION

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

### CLOSURE PLAN

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

## EXHIBIT K



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

# CHOKER MANIFOLD PLAN

## WELLHEAD ELEVATION

**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

Fax: 817-332-2438

[illegible]

Fax: 817-332-2438

[illegible]



Fax: 817-332-2438





**DRILLING PLAN- Casing  
Nosler 12 Fed MO 8H  
HORIZONTAL FREN GLORIETA YESO WELL**

**NOTE: Spoke with Seven Krueng on 2/16/17 regarding the two strings of Production Casing**

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

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

a. Design Safety Factors:

Type	Hole Size	Depth Interval	OD CSG	Weight	Collar	Grade	Collapse Design Factor	Burst Design Factor	Tension Design Factor
Conductor	24"	0-90'	20"	52.78#	Contractor Discretion	ASTM A53	-----	-----	-----
Surface	17-1/2"	0-750'	13-3/8"	48#	ST&C	H-40	1.125	1.00	1.80
Intermediate	12-1/4"	0'-2300'	9-5/8"	36#	LT&C	J-55	1.125	1.00	1.80
Production	8-1/2"	0-4800'	7"	26#	LT&C	L-80	1.125	1.00	1.80
	8-1/2"	4800-9300'	5-1/2"	17#	LT&C	L-80	1.125	1.00	1.80

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

b. Surface Casing Info

The proposed 13-3/8" casing setting depth is +/- 750' based on cross sections which show the estimated top of the rustler and top of salt. Drilling times will be plotted to find the hard section just above the salt. A mud logger will be on location to evaluate drill and cutting samples as long as circulation is maintained. If salt is penetrated, it will be obvious by the sudden increase in water salinity and surface casing will then be set above the top of salt. Our highly experienced drilling personnel has drilled many wells in this area and is able to easily identify the hard streak on the top of the salt.

c. Intermediate casing

We will run 9-5/8" intermediate casing to 2,300' and circulate cement to surface to get the Salt section behind pipe.

d. Production casing

We will run 7" x 5-1/2" production casing with a DV Tool at the bottom of the 7" (4800' +/-), then a crossover from 7" to 5-1/2" (4800' -TD). There will be no cement in the lateral, only from the stage tool and up hole into the intermediate casing with top of cement reaching approximately 1,500'.

Burnett proposes to run a multiple packer system on the 5-1/2" production casing which will cross over into the 7" casing string (no cement in the lateral). An isolation packer will be set at or a few feet inside the lease offset limit and no completion perforations or ports will be placed between this isolation packer and the cement stage tool.



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

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

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

### **A. Training**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

### **6. Metallurgy:**

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

**7. Communication:**

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



BURNETT OIL CO., INC.

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

### A. Emergency Procedures

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

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

### B. Ignition of Gas Source

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

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

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

### D. Contacting Authorities

Burnett Oil Co., Inc. 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

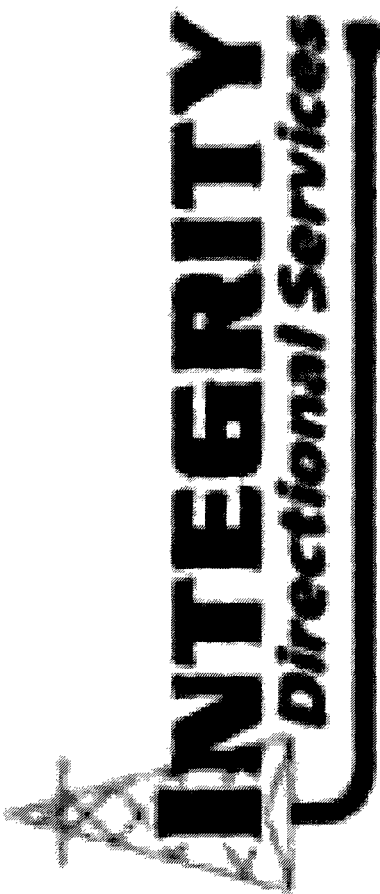
Loco Hills, New Mexico (2 miles East of Loco Hills on US Hwy 82 to C #220. Then North on CR #220 approximately one (1) mile to office.



Federal MO 8H

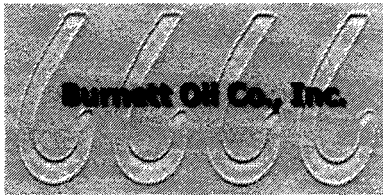
3967.5usft (UNK)

Latitude	Longitude
32° 50' 37.885 N	103° 49' 54.671 W



Section Details

	+E/-W	Dleg	TFace	VSect	Target
-S	0.0	0.00	0.00	0.0	
.0	0.0	0.00	0.00	0.0	
.0	0.0	0.00	0.00	0.0	



# **Burnett Oil Company, INC**

Eddy County, NM

Sec.11, T.17 S., R. 31 E.

Nosler 12 Federal MO 8H

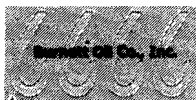
Wellbore #1

Plan: Plan#4

## **Standard Survey Report**

25 October, 2016





# Integrity Directional Services, LLC

## Survey Report



**Company:** Burnett Oil Company, INC  
**Project:** Eddy County, NM  
**Site:** Sec.11, T.17 S., R. 31 E.  
**Well:** Nosler 12 Federal MO 8H  
**Wellbore:** Wellbore #1  
**Design:** Plan#4

**Local Co-ordinate Reference:** Well Nosler 12 Federal MO 8H  
**TVD Reference:** KB=17.5' @ 3967.5usft (UNK)  
**MD Reference:** KB=17.5' @ 3967.5usft (UNK)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 5000.1 Multi User Db

<b>Project</b>	Eddy County, NM		
<b>Map System:</b>	US State Plane 1927 (Exact solution)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	New Mexico East 3001		

<b>Site</b>	Sec.11, T.17 S., R. 31 E.		
<b>Site Position:</b>		<b>Northing:</b>	671,071.90 usft
<b>From:</b>	Map	<b>Easting:</b>	654,016.50 usft
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	13-3/16 "
		<b>Latitude:</b>	32° 50' 37.885 N
		<b>Longitude:</b>	103° 49' 54.671 W
		<b>Grid Convergence:</b>	0.27 °

<b>Well</b>	Nosler 12 Federal MO 8H		
<b>Well Position</b>	+N/-S	0.0 usft	<b>Northing:</b> 671,071.90 usft
	+E/-W	0.0 usft	<b>Easting:</b> 654,016.50 usft
<b>Position Uncertainty</b>	0.0 usft	<b>Wellhead Elevation:</b>	0.0 usft
		<b>Latitude:</b>	32° 50' 37.885 N
		<b>Longitude:</b>	103° 49' 54.671 W
		<b>Ground Level:</b>	3,950.0 usft

<b>Wellbore</b>	Wellbore #1		
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination</b>
	IGRF2015	10/18/2016	(°)
			7.19
			<b>Dip Angle</b>
			(°)
			60.60
			<b>Field Strength</b>
			(nT)
			48,343

<b>Design</b>	Plan#4		
<b>Audit Notes:</b>			
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b> 0.0
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			<b>Direction</b>
			(°)
			95.12

<b>Survey Tool Program</b>	<b>Date</b> 10/25/2016		
<b>From</b>	<b>To</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>
(usft)	(usft)		
0.0	9,178.4	Plan#4 (Wellbore #1)	MWD
			<b>Description</b>
			MWD - Standard

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00	



# Integrity Directional Services, LLC

## Survey Report



**Company:** Burnett Oil Company, INC  
**Project:** Eddy County, NM  
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**MD Reference:** KB=17.5' @ 3967.5usft (UNK)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 5000.1 Multi User Db

### Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 11.22									
4,900.0	11.22	166.73	4,899.4	-9.5	2.2	3.1	11.22	11.22	0.00
5,000.0	22.44	166.73	4,994.9	-37.6	8.9	12.2	11.22	11.22	0.00
5,100.0	33.66	166.73	5,083.0	-83.3	19.7	27.0	11.22	11.22	0.00
5,129.2	36.95	166.73	5,106.9	-99.8	23.5	32.3	11.22	11.22	0.00



# Integrity Directional Services, LLC

## Survey Report



**Company:** Burnett Oil Company, INC  
**Project:** Eddy County, NM  
**Site:** Sec.11, T.17 S., R. 31 E.  
**Well:** Nosler 12 Federal MO 8H  
**Wellbore:** Wellbore #1  
**Design:** Plan#4

**Local Co-ordinate Reference:** Well Nosler 12 Federal MO 8H  
**TVD Reference:** KB=17.5' @ 3967.5usft (UNK)  
**MD Reference:** KB=17.5' @ 3967.5usft (UNK)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 5000.1 Multi User Db

### Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
<b>Start 14.4 hold at 5129.2 MD</b>									
5,143.6	36.95	166.73	5,118.4	-108.2	25.5	35.1	0.00	0.00	0.00
<b>Start DLS 11.22 TFO -79.64</b>									
5,200.0	38.52	156.71	5,163.0	-140.8	36.4	48.8	11.22	2.79	-17.78
5,300.0	43.16	141.04	5,238.8	-196.2	70.3	87.5	11.22	4.64	-15.67
5,400.0	49.57	128.27	5,308.0	-246.5	121.8	143.4	11.22	6.41	-12.77
5,500.0	57.12	117.90	5,367.7	-289.9	189.0	214.2	11.22	7.55	-10.37
5,600.0	65.39	109.23	5,415.9	-324.6	269.3	297.2	11.22	8.27	-8.67
5,700.0	74.09	101.67	5,450.5	-349.4	359.6	389.4	11.22	8.70	-7.56
5,800.0	83.03	94.75	5,470.3	-363.3	456.5	487.1	11.22	8.94	-6.92
5,877.0	90.00	89.61	5,475.0	-366.2	533.3	563.8	11.22	9.04	-6.67
<b>Start 3301.3 hold at 5877.0 MD</b>									
5,900.0	90.00	89.61	5,475.0	-366.0	556.2	586.7	0.00	0.00	0.00
6,000.0	90.00	89.61	5,475.0	-365.4	656.2	686.2	0.00	0.00	0.00
6,100.0	90.00	89.61	5,475.0	-364.7	756.2	785.8	0.00	0.00	0.00
6,200.0	90.00	89.61	5,475.0	-364.0	856.2	885.3	0.00	0.00	0.00
6,300.0	90.00	89.61	5,475.0	-363.3	956.2	984.8	0.00	0.00	0.00
6,400.0	90.00	89.61	5,475.0	-362.7	1,056.2	1,084.4	0.00	0.00	0.00
6,500.0	90.00	89.61	5,475.0	-362.0	1,156.2	1,183.9	0.00	0.00	0.00
6,600.0	90.00	89.61	5,475.0	-361.3	1,256.2	1,283.4	0.00	0.00	0.00
6,700.0	90.00	89.61	5,475.0	-360.6	1,356.2	1,383.0	0.00	0.00	0.00
6,800.0	90.00	89.61	5,475.0	-359.9	1,456.2	1,482.5	0.00	0.00	0.00
6,900.0	90.00	89.61	5,475.0	-359.3	1,556.2	1,582.0	0.00	0.00	0.00
7,000.0	90.00	89.61	5,475.0	-358.6	1,656.2	1,681.6	0.00	0.00	0.00
7,100.0	90.00	89.61	5,475.0	-357.9	1,756.2	1,781.1	0.00	0.00	0.00
7,200.0	90.00	89.61	5,475.0	-357.2	1,856.2	1,880.7	0.00	0.00	0.00
7,300.0	90.00	89.61	5,475.0	-356.5	1,956.2	1,980.2	0.00	0.00	0.00
7,400.0	90.00	89.61	5,475.0	-355.9	2,056.2	2,079.7	0.00	0.00	0.00
7,500.0	90.00	89.61	5,475.0	-355.2	2,156.2	2,179.3	0.00	0.00	0.00
7,600.0	90.00	89.61	5,475.0	-354.5	2,256.2	2,278.8	0.00	0.00	0.00
7,700.0	90.00	89.61	5,475.0	-353.8	2,356.2	2,378.3	0.00	0.00	0.00
7,800.0	90.00	89.61	5,475.0	-353.2	2,456.2	2,477.9	0.00	0.00	0.00
7,900.0	90.00	89.61	5,475.0	-352.5	2,556.2	2,577.4	0.00	0.00	0.00
8,000.0	90.00	89.61	5,475.0	-351.8	2,656.2	2,677.0	0.00	0.00	0.00
8,100.0	90.00	89.61	5,475.0	-351.1	2,756.2	2,776.5	0.00	0.00	0.00
8,200.0	90.00	89.61	5,475.0	-350.4	2,856.2	2,876.0	0.00	0.00	0.00
8,300.0	90.00	89.61	5,475.0	-349.8	2,956.2	2,975.6	0.00	0.00	0.00
8,400.0	90.00	89.61	5,475.0	-349.1	3,056.1	3,075.1	0.00	0.00	0.00
8,500.0	90.00	89.61	5,475.0	-348.4	3,156.1	3,174.6	0.00	0.00	0.00
8,600.0	90.00	89.61	5,475.0	-347.7	3,256.1	3,274.2	0.00	0.00	0.00
8,700.0	90.00	89.61	5,475.0	-347.0	3,356.1	3,373.7	0.00	0.00	0.00
8,800.0	90.00	89.61	5,475.0	-346.4	3,456.1	3,473.3	0.00	0.00	0.00
8,900.0	90.00	89.61	5,475.0	-345.7	3,556.1	3,572.8	0.00	0.00	0.00
9,000.0	90.00	89.61	5,475.0	-345.0	3,656.1	3,672.3	0.00	0.00	0.00



# Integrity Directional Services, LLC

## Survey Report



**Company:** Burnett Oil Company, INC  
**Project:** Eddy County, NM  
**Site:** Sec.11, T.17 S., R. 31 E.  
**Well:** Nosler 12 Federal MO 8H  
**Wellbore:** Wellbore #1  
**Design:** Plan#4

**Local Co-ordinate Reference:** Well Nosler 12 Federal MO 8H  
**TVD Reference:** KB=17.5' @ 3967.5usft (UNK)  
**MD Reference:** KB=17.5' @ 3967.5usft (UNK)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 5000.1 Multi User Db

### Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,100.0	90.00	89.61	5,475.0	-344.3	3,756.1	3,771.9	0.00	0.00	0.00
9,178.4	90.00	89.61	5,475.0	-343.8	3,834.5	3,849.9	0.00	0.00	0.00
TD at 9178.4									

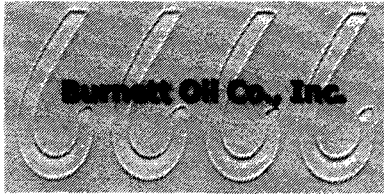
### Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Nosler 12 Federal MC	0.00	0.00	5,475.0	-343.8	3,834.5	670,728.10	657,851.00	32° 50' 34.301 N	103° 49' 9.745 W
- plan hits target center									
- Point									
Nosler 12 Federal MC	0.00	0.00	5,475.0	-366.2	533.3	670,705.70	654,549.77	32° 50' 34.236 N	103° 49' 48.441 W
- plan hits target center									
- Point									

### Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
4800	4800	0	0	Start Build 11.22
5129	5107	-100	24	Start 14.4 hold at 5129.2 MD
5144	5118	-108	26	Start DLS 11.22 TFO -79.64
5877	5475	-366	533	Start 3301.3 hold at 5877.0 MD
9178	5475	-344	3834	TD at 9178.4

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_



# **Burnett Oil Company, INC**

**Eddy County, NM**

**Sec.11, T.17 S., R. 31 E.**

**Nosler 12 Federal MO 8H**

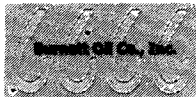
**Wellbore #1**

**Plan#4**

## **Anticollision Report**

**25 October, 2016**





# Integrity Directional Services, LLC

## Anticollision Report



**Company:** Burnett Oil Company, INC  
**Project:** Eddy County, NM  
**Reference Site:** Sec.11, T.17 S., R. 31 E.  
**Site Error:** 0.0 usft  
**Reference Well:** Nosler 12 Federal MO 8H  
**Well Error:** 0.0 usft  
**Reference Wellbore:** Wellbore #1  
**Reference Design:** Plan#4

**Local Co-ordinate Reference:** Well Nosler 12 Federal MO 8H  
**TVD Reference:** KB=17.5' @ 3967.5usft (UNK)  
**MD Reference:** KB=17.5' @ 3967.5usft (UNK)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Output errors are at:** 2.00 sigma  
**Database:** EDM 5000.1 Multi User Db  
**Offset TVD Reference:** Offset Datum

<b>Reference</b>	<b>Plan#4</b>
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria
<b>Interpolation Method:</b>	MD Interval 50.0usft
<b>Depth Range:</b>	Unlimited
<b>Results Limited by:</b>	Maximum center-center distance of 10,000.0 us
<b>Warning Levels Evaluated at:</b>	2.00 Sigma
<b>Error Model:</b>	ISCWSA
<b>Scan Method:</b>	Closest Approach 3D
<b>Error Surface:</b>	Elliptical Conic
<b>Casing Method:</b>	Not applied

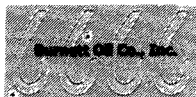
Survey Tool Program		Date	10/25/2016		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	9,178.4	Plan#4 (Wellbore #1)	MWD	MWD - Standard	

<b>Summary</b>						
<b>Site Name</b>	<b>Reference Measured Depth (usft)</b>	<b>Offset Measured Depth (usft)</b>	<b>Distance Between Centres (usft)</b>	<b>Distance Between Ellipses (usft)</b>	<b>Separation Factor</b>	<b>Warning</b>
Offset Well - Wellbore - Design						
Sec.11, T.17 S., R. 31 E.						
Nosler Fed #1 - Wellbore #1 - Wellbore #1/INC ONLY	6,385.2	5,481.6	49.5	-143.8	0.256	Level 1, CC, ES, SF

Offset Design      Sec.11, T.17 S., R. 31 E. - Nosler Fed #1 - Wellbore #1 - Wellbore #1/INC ONLY													Offset Site Error:	0.0 usft
Survey Program: 338-Inclinometer only													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	6.5	6.5	0.0	0.2	111.59	-412.3	1,041.8	1,120.4					
50.0	50.0	56.5	56.5	0.0	1.6	111.59	-412.3	1,041.8	1,120.4	1,118.7	1.63	686.824		
100.0	100.0	106.5	106.5	0.1	3.0	111.59	-412.3	1,041.8	1,120.4	1,117.3	3.10	361.565		
150.0	150.0	156.5	156.5	0.2	4.4	111.59	-412.3	1,041.8	1,120.4	1,115.8	4.62	242.384		
200.0	200.0	206.5	206.5	0.3	5.8	111.59	-412.3	1,041.8	1,120.4	1,114.2	6.15	182.295		
250.0	250.0	256.5	256.5	0.4	7.2	111.59	-412.3	1,041.8	1,120.4	1,112.7	7.67	146.080		
300.0	300.0	306.5	306.5	0.5	8.7	111.59	-412.3	1,041.8	1,120.4	1,111.2	9.19	121.870		
350.0	350.0	356.5	356.5	0.7	10.1	111.59	-412.3	1,041.8	1,120.4	1,109.6	10.75	104.224		
400.0	400.0	406.5	406.5	0.8	11.6	111.59	-412.3	1,041.8	1,120.4	1,108.0	12.36	90.630		
450.0	450.0	456.5	456.5	0.9	13.1	111.59	-412.3	1,041.8	1,120.4	1,106.4	13.97	80.173		
500.0	500.0	506.5	506.5	1.0	14.6	111.59	-412.3	1,041.8	1,120.4	1,104.8	15.59	71.880		
550.0	550.0	556.5	556.5	1.1	16.1	111.59	-412.3	1,041.8	1,120.4	1,103.2	17.20	65.141		
600.0	600.0	606.5	606.5	1.2	17.6	111.59	-412.3	1,041.8	1,120.4	1,101.6	18.81	59.558		
650.0	650.0	656.5	656.5	1.3	19.1	111.59	-412.3	1,041.8	1,120.4	1,099.9	20.42	54.856		
700.0	700.0	706.5	706.5	1.4	20.6	111.59	-412.3	1,041.8	1,120.4	1,098.3	22.04	50.842		
750.0	750.0	756.5	756.5	1.6	22.1	111.59	-412.3	1,041.8	1,120.4	1,096.7	23.65	47.375		
800.0	800.0	806.5	806.5	1.7	23.6	111.59	-412.3	1,041.8	1,120.4	1,095.1	25.26	44.351		
850.0	850.0	856.5	856.5	1.8	25.1	111.59	-412.3	1,041.8	1,120.4	1,093.5	26.87	41.690		
900.0	900.0	906.5	906.5	1.9	26.6	111.59	-412.3	1,041.8	1,120.4	1,091.9	28.49	39.331		
950.0	950.0	956.5	956.5	2.0	28.1	111.59	-412.3	1,041.8	1,120.4	1,090.3	30.10	37.224		
1,000.0	1,000.0	1,006.5	1,006.5	2.1	29.6	111.59	-412.3	1,041.8	1,120.4	1,088.7	31.71	35.331		
1,050.0	1,050.0	1,056.5	1,056.5	2.2	31.1	111.59	-412.3	1,041.8	1,120.4	1,087.0	33.32	33.621		
1,100.0	1,100.0	1,106.5	1,106.5	2.3	32.6	111.59	-412.3	1,041.8	1,120.4	1,085.4	34.94	32.070		
1,150.0	1,150.0	1,156.5	1,156.5	2.5	34.1	111.59	-412.3	1,041.8	1,120.4	1,083.8	36.55	30.655		
1,200.0	1,200.0	1,206.5	1,206.5	2.6	35.6	111.59	-412.3	1,041.8	1,120.4	1,082.2	38.16	29.360		
1,250.0	1,250.0	1,256.5	1,256.5	2.7	37.1	111.59	-412.3	1,041.8	1,120.4	1,080.6	39.77	28.169		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation





# Integrity Directional Services, LLC

## Anticollision Report



**Company:** Burnett Oil Company, INC  
**Project:** Eddy County, NM  
**Reference Site:** Sec.11, T.17 S., R. 31 E.  
**Site Error:** 0.0 usft  
**Reference Well:** Nosler 12 Federal MO 8H  
**Well Error:** 0.0 usft  
**Reference Wellbore:** Wellbore #1  
**Reference Design:** Plan#4

**Local Co-ordinate Reference:** Well Nosler 12 Federal MO 8H  
**TVD Reference:** KB=17.5' @ 3967.5usft (UNK)  
**MD Reference:** KB=17.5' @ 3967.5usft (UNK)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Output errors are at** 2.00 sigma  
**Database:** EDM 5000.1 Multi User Db  
**Offset TVD Reference:** Offset Datum

Offset Design Sec.11, T.17 S., R. 31 E. - Nosler Fed #1 - Wellbore #1 - Wellbore #1/INC ONLY														Offset Site Error:	0.0 usft
Survey Program: 338-Inclinometer only														Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N-S (usft)	+E-W (usft)							
1,300.0	1,300.0	1,306.5	1,306.5	2.8	38.6	111.59	-412.3	1,041.8	1,120.4	1,079.0	41.39	27.072			
1,350.0	1,350.0	1,356.5	1,356.5	2.9	40.1	111.59	-412.3	1,041.8	1,120.4	1,077.4	43.00	26.057			
1,400.0	1,400.0	1,406.5	1,406.5	3.0	41.6	111.59	-412.3	1,041.8	1,120.4	1,075.8	44.61	25.115			
1,450.0	1,450.0	1,456.5	1,456.5	3.1	43.1	111.59	-412.3	1,041.8	1,120.4	1,074.2	46.22	24.239			
1,500.0	1,500.0	1,506.5	1,506.5	3.2	44.6	111.59	-412.3	1,041.8	1,120.4	1,072.5	47.83	23.422			
1,550.0	1,550.0	1,556.5	1,556.5	3.4	46.1	111.59	-412.3	1,041.8	1,120.4	1,070.9	49.45	22.658			
1,600.0	1,600.0	1,606.5	1,606.5	3.5	47.6	111.59	-412.3	1,041.8	1,120.4	1,069.3	51.06	21.942			
1,650.0	1,650.0	1,656.5	1,656.5	3.6	49.1	111.59	-412.3	1,041.8	1,120.4	1,067.7	52.67	21.271			
1,700.0	1,700.0	1,706.5	1,706.5	3.7	50.6	111.59	-412.3	1,041.8	1,120.4	1,066.1	54.28	20.639			
1,750.0	1,750.0	1,756.5	1,756.5	3.8	52.1	111.59	-412.3	1,041.8	1,120.4	1,064.5	55.90	20.044			
1,800.0	1,800.0	1,806.5	1,806.5	3.9	53.6	111.59	-412.3	1,041.8	1,120.4	1,062.9	57.51	19.482			
1,850.0	1,850.0	1,856.5	1,856.5	4.0	55.1	111.59	-412.3	1,041.8	1,120.4	1,061.3	59.12	18.950			
1,900.0	1,900.0	1,906.5	1,906.5	4.1	56.6	111.59	-412.3	1,041.8	1,120.4	1,059.6	60.73	18.447			
1,950.0	1,950.0	1,956.5	1,956.5	4.3	58.1	111.59	-412.3	1,041.8	1,120.4	1,058.0	62.35	17.970			
2,000.0	2,000.0	2,006.5	2,006.5	4.4	59.6	111.59	-412.3	1,041.8	1,120.4	1,056.4	63.96	17.517			
2,050.0	2,050.0	2,056.5	2,056.5	4.5	61.1	111.59	-412.3	1,041.8	1,120.4	1,054.8	65.57	17.086			
2,100.0	2,100.0	2,106.5	2,106.5	4.6	62.6	111.59	-412.3	1,041.8	1,120.4	1,053.2	67.18	16.676			
2,150.0	2,150.0	2,156.5	2,156.5	4.7	64.1	111.59	-412.3	1,041.8	1,120.4	1,051.6	68.80	16.285			
2,200.0	2,200.0	2,206.5	2,206.5	4.8	65.6	111.59	-412.3	1,041.8	1,120.4	1,050.0	70.41	15.912			
2,250.0	2,250.0	2,256.5	2,256.5	4.9	67.1	111.59	-412.3	1,041.8	1,120.4	1,048.4	72.02	15.556			
2,300.0	2,300.0	2,306.5	2,306.5	5.0	68.6	111.59	-412.3	1,041.8	1,120.4	1,046.7	73.63	15.216			
2,350.0	2,350.0	2,356.5	2,356.5	5.1	70.1	111.59	-412.3	1,041.8	1,120.4	1,045.1	75.25	14.890			
2,400.0	2,400.0	2,406.5	2,406.5	5.3	71.6	111.59	-412.3	1,041.8	1,120.4	1,043.5	76.86	14.577			
2,450.0	2,450.0	2,456.5	2,456.5	5.4	73.1	111.59	-412.3	1,041.8	1,120.4	1,041.9	78.47	14.277			
2,500.0	2,500.0	2,506.5	2,506.5	5.5	74.6	111.59	-412.3	1,041.8	1,120.4	1,040.3	80.08	13.990			
2,550.0	2,550.0	2,556.5	2,556.5	5.6	76.1	111.59	-412.3	1,041.8	1,120.4	1,038.7	81.70	13.714			
2,600.0	2,600.0	2,606.5	2,606.5	5.7	77.6	111.59	-412.3	1,041.8	1,120.4	1,037.1	83.31	13.448			
2,650.0	2,650.0	2,656.5	2,656.5	5.8	79.1	111.59	-412.3	1,041.8	1,120.4	1,035.5	84.92	13.193			
2,700.0	2,700.0	2,706.5	2,706.5	5.9	80.6	111.59	-412.3	1,041.8	1,120.4	1,033.8	86.53	12.947			
2,750.0	2,750.0	2,756.5	2,756.5	6.0	82.1	111.59	-412.3	1,041.8	1,120.4	1,032.2	88.15	12.710			
2,800.0	2,800.0	2,806.5	2,806.5	6.2	83.6	111.59	-412.3	1,041.8	1,120.4	1,030.6	89.76	12.482			
2,850.0	2,850.0	2,856.5	2,856.5	6.3	85.1	111.59	-412.3	1,041.8	1,120.4	1,029.0	91.37	12.262			
2,900.0	2,900.0	2,906.5	2,906.5	6.4	86.6	111.59	-412.3	1,041.8	1,120.4	1,027.4	92.98	12.049			
2,950.0	2,950.0	2,956.5	2,956.5	6.5	88.1	111.59	-412.3	1,041.8	1,120.4	1,025.8	94.60	11.844			
3,000.0	3,000.0	3,006.5	3,006.5	6.6	89.6	111.59	-412.3	1,041.8	1,120.4	1,024.2	96.21	11.645			
3,050.0	3,050.0	3,056.5	3,056.5	6.7	91.1	111.59	-412.3	1,041.8	1,120.4	1,022.6	97.82	11.453			
3,100.0	3,100.0	3,106.5	3,106.5	6.8	92.6	111.59	-412.3	1,041.8	1,120.4	1,020.9	99.43	11.268			
3,150.0	3,150.0	3,156.5	3,156.5	6.9	94.1	111.59	-412.3	1,041.8	1,120.4	1,019.3	101.04	11.088			
3,200.0	3,200.0	3,206.5	3,206.5	7.1	95.6	111.59	-412.3	1,041.8	1,120.4	1,017.7	102.66	10.914			
3,250.0	3,250.0	3,256.5	3,256.5	7.2	97.1	111.59	-412.3	1,041.8	1,120.4	1,016.1	104.27	10.745			
3,300.0	3,300.0	3,306.5	3,306.5	7.3	98.6	111.59	-412.3	1,041.8	1,120.4	1,014.5	105.88	10.581			
3,350.0	3,350.0	3,361.0	3,360.9	7.4	100.2	111.59	-412.3	1,041.8	1,120.4	1,012.8	107.63	10.410			
3,368.3	3,368.3	3,374.9	3,374.8	7.4	100.6	111.59	-412.3	1,041.8	1,120.4	1,012.3	108.08	10.366			
3,400.0	3,400.0	3,406.5	3,406.5	7.5	101.6	111.59	-412.3	1,041.8	1,120.4	1,011.3	109.11	10.269			
3,450.0	3,450.0	3,456.5	3,456.5	7.6	103.1	111.59	-412.3	1,041.8	1,120.4	1,009.7	110.72	10.119			
3,500.0	3,500.0	3,506.5	3,506.5	7.7	104.6	111.59	-412.3	1,041.8	1,120.4	1,008.0	112.33	9.974			
3,550.0	3,550.0	3,556.5	3,556.5	7.8	106.1	111.59	-412.3	1,041.8	1,120.4	1,006.4	113.94	9.833			
3,600.0	3,600.0	3,606.5	3,606.5	8.0	107.6	111.59	-412.3	1,041.8	1,120.4	1,004.8	115.56	9.695			
3,650.0	3,650.0	3,656.5	3,656.5	8.1	109.1	111.59	-412.3	1,041.8	1,120.4	1,003.2	117.17	9.562			
3,700.0	3,700.0	3,706.5	3,706.5	8.2	110.6	111.59	-412.3	1,041.8	1,120.4	1,001.6	118.78	9.432			
3,750.0	3,750.0	3,756.5	3,756.5	8.3	112.1	111.59	-412.3	1,041.8	1,120.4	1,000.0	120.39	9.306			
3,800.0	3,800.0	3,806.5	3,806.5	8.4	113.6	111.59	-412.3	1,041.8	1,120.4	998.4	122.01	9.183			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Integrity Directional Services, LLC

## Anticollision Report



**Company:** Burnett Oil Company, INC  
**Project:** Eddy County, NM  
**Reference Site:** Sec.11, T.17 S., R. 31 E.  
**Site Error:** 0.0 usft  
**Reference Well:** Nosler 12 Federal MO 8H  
**Well Error:** 0.0 usft  
**Reference Wellbore:** Wellbore #1  
**Reference Design:** Plan#4

**Local Co-ordinate Reference:** Well Nosler 12 Federal MO 8H  
**TVD Reference:** KB=17.5' @ 3967.5usft (UNK)  
**MD Reference:** KB=17.5' @ 3967.5usft (UNK)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Output errors are at** 2.00 sigma  
**Database:** EDM 5000.1 Multi User Db  
**Offset TVD Reference:** Offset Datum

Offset Design Sec.11, T.17 S., R. 31 E. - Nosler Fed #1 - Wellbore #1 - Wellbore #1/INC ONLY													Offset Site Error:	0.0 usft
Survey Program: 336-Inclinometer only													Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
3,850.0	3,850.0	3,856.6	3,856.5	8.5	115.1	111.59		-412.3	1,041.8	1,120.4	996.8	123.62	9.063	
3,900.0	3,900.0	3,906.6	3,906.5	8.6	116.6	111.59		-412.3	1,041.8	1,120.4	995.1	125.23	8.946	
3,950.0	3,950.0	3,956.6	3,956.5	8.7	118.1	111.59		-412.3	1,041.8	1,120.4	993.5	126.84	8.833	
4,000.0	4,000.0	4,006.6	4,006.5	8.9	119.6	111.59		-412.3	1,041.8	1,120.4	991.9	128.46	8.722	
4,050.0	4,050.0	4,056.6	4,056.5	9.0	121.1	111.59		-412.3	1,041.8	1,120.4	990.3	130.07	8.614	
4,100.0	4,100.0	4,106.6	4,106.5	9.1	122.6	111.59		-412.3	1,041.8	1,120.4	988.7	131.68	8.508	
4,150.0	4,150.0	4,156.6	4,156.5	9.2	124.1	111.59		-412.3	1,041.8	1,120.4	987.1	133.29	8.405	
4,200.0	4,200.0	4,206.6	4,206.5	9.3	125.6	111.59		-412.3	1,041.8	1,120.4	985.5	134.91	8.305	
4,250.0	4,250.0	4,256.6	4,256.5	9.4	127.1	111.59		-412.3	1,041.8	1,120.4	983.9	136.52	8.207	
4,300.0	4,300.0	4,306.6	4,306.5	9.5	128.6	111.59		-412.3	1,041.8	1,120.4	982.2	138.13	8.111	
4,350.0	4,350.0	4,356.6	4,356.5	9.6	130.1	111.59		-412.3	1,041.8	1,120.4	980.6	139.74	8.017	
4,400.0	4,400.0	4,406.6	4,406.5	9.8	131.6	111.59		-412.3	1,041.8	1,120.4	979.0	141.36	7.926	
4,450.0	4,450.0	4,456.6	4,456.5	9.9	133.1	111.59		-412.3	1,041.8	1,120.4	977.4	142.97	7.836	
4,500.0	4,500.0	4,506.6	4,506.5	10.0	134.6	111.59		-412.3	1,041.8	1,120.4	975.8	144.58	7.749	
4,550.0	4,550.0	4,556.6	4,556.5	10.1	136.1	111.59		-412.3	1,041.8	1,120.4	974.2	146.19	7.664	
4,600.0	4,600.0	4,606.6	4,606.5	10.2	137.6	111.59		-412.3	1,041.8	1,120.4	972.6	147.81	7.580	
4,650.0	4,650.0	4,656.6	4,656.5	10.3	139.1	111.59		-412.3	1,041.8	1,120.4	971.0	149.42	7.498	
4,700.0	4,700.0	4,706.6	4,706.5	10.4	140.6	111.59		-412.3	1,041.8	1,120.4	969.3	151.03	7.418	
4,750.0	4,750.0	4,756.6	4,756.5	10.5	142.1	111.59		-412.3	1,041.8	1,120.4	967.7	152.64	7.340	
4,800.0	4,800.0	4,806.6	4,806.5	10.7	143.6	111.59		-412.3	1,041.8	1,120.4	966.1	154.26	7.263	
4,850.0	4,849.9	4,856.6	4,856.4	10.8	145.1	-55.37		-412.3	1,041.8	1,119.0	963.4	155.61	7.191	
4,900.0	4,899.4	4,906.6	4,905.9	10.8	146.6	-56.07		-412.3	1,041.8	1,114.8	958.3	156.48	7.124	
4,950.0	4,947.9	4,954.6	4,954.4	10.9	148.0	-57.22		-412.3	1,041.8	1,108.0	951.0	156.99	7.058	
5,000.0	4,994.9	5,001.5	5,001.4	11.0	149.4	-58.83		-412.3	1,041.8	1,098.7	941.4	157.29	6.985	
5,050.0	5,040.1	5,046.7	5,046.6	11.1	150.8	-60.88		-412.3	1,041.8	1,087.2	929.6	157.61	6.898	
5,100.0	5,083.0	5,089.7	5,089.5	11.2	152.1	-63.33		-412.3	1,041.8	1,073.7	915.6	158.18	6.788	
5,150.0	5,123.5	5,130.1	5,130.0	11.4	153.3	-64.46		-412.3	1,041.8	1,058.8	899.8	159.02	6.659	
5,200.0	5,163.0	5,169.6	5,169.5	11.6	154.5	-58.19		-412.3	1,041.8	1,041.4	884.5	156.87	6.639	
5,250.0	5,201.6	5,208.2	5,208.1	11.8	155.6	-52.50		-412.3	1,041.8	1,020.2	866.4	153.78	6.634	
5,300.0	5,238.9	5,245.5	5,245.4	12.1	156.8	-47.48		-412.3	1,041.8	995.2	845.5	149.73	6.647	
5,350.0	5,274.4	5,281.1	5,280.9	12.4	157.8	-43.13		-412.3	1,041.8	966.7	821.9	144.75	6.678	
5,400.0	5,308.0	5,314.6	5,314.5	12.7	158.8	-39.41		-412.3	1,041.8	934.7	795.9	138.85	6.732	
5,450.0	5,339.2	5,345.8	5,345.7	13.2	159.8	-36.23		-412.3	1,041.8	899.6	767.5	132.08	6.811	
5,500.0	5,367.7	5,374.4	5,374.2	13.6	160.6	-33.45		-412.3	1,041.8	861.5	737.0	124.48	6.920	
5,550.0	5,393.4	5,400.0	5,399.9	14.2	161.4	-30.96		-412.3	1,041.8	820.6	704.6	116.07	7.070	
5,600.0	5,415.9	5,422.5	5,422.4	14.8	162.1	-28.54		-412.3	1,041.8	777.4	670.7	106.71	7.285	
5,650.0	5,435.0	5,441.6	5,441.5	15.5	162.6	-25.87		-412.3	1,041.8	732.1	636.1	95.95	7.629	
5,700.0	5,450.5	5,457.1	5,457.0	16.2	163.1	-22.28		-412.3	1,041.8	685.0	602.7	82.36	8.317	
5,750.0	5,462.3	5,468.9	5,468.8	17.0	163.5	-15.92		-412.3	1,041.8	636.6	575.3	61.30	10.385	
5,800.0	5,470.3	5,477.0	5,476.8	17.8	163.7	0.28		-412.3	1,041.8	587.3	562.6	24.70	23.779	
5,850.0	5,474.4	5,481.1	5,480.9	18.7	163.8	55.34		-412.3	1,041.8	537.5	388.0	149.57	3.594	
5,900.0	5,475.0	5,481.6	5,481.5	19.6	163.8	90.00		-412.3	1,041.8	487.7	305.7	182.05	2.679	
5,950.0	5,475.0	5,481.6	5,481.5	20.6	163.8	90.00		-412.3	1,041.8	438.0	254.9	183.11	2.392	
6,000.0	5,475.0	5,481.6	5,481.5	21.6	163.8	90.00		-412.3	1,041.8	388.4	204.2	184.17	2.109	
6,050.0	5,475.0	5,481.6	5,481.5	22.7	163.8	90.00		-412.3	1,041.8	338.9	153.6	185.30	1.829	
6,100.0	5,475.0	5,481.6	5,481.5	23.7	163.8	90.00		-412.3	1,041.8	289.5	103.1	186.43	1.553	
6,150.0	5,475.0	5,481.6	5,481.5	24.9	163.8	90.00		-412.3	1,041.8	240.4	52.8	187.61	1.281 Level 3	
6,200.0	5,475.0	5,481.6	5,481.5	26.0	163.8	90.00		-412.3	1,041.8	191.7	2.9	188.79	1.016 Level 2	
6,250.0	5,475.0	5,481.6	5,481.5	27.1	163.8	90.00		-412.3	1,041.8	144.0	-46.0	190.01	0.758 Level 1	
6,300.0	5,475.0	5,481.6	5,481.5	28.3	163.8	90.00		-412.3	1,041.8	98.6	-92.7	191.23	0.515 Level 1	
6,350.0	5,475.0	5,481.6	5,481.5	29.5	163.8	90.00		-412.3	1,041.8	60.8	-131.7	192.47	0.316 Level 1	
6,385.2	5,475.0	5,481.6	5,481.5	30.4	163.8	90.00		-412.3	1,041.8	49.5	-143.8	193.35	0.256 Level 1, CC, ES, SF	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Integrity Directional Services, LLC

## Anticollision Report



**Company:** Burnett Oil Company, INC  
**Project:** Eddy County, NM  
**Reference Site:** Sec.11, T.17 S., R. 31 E.  
**Site Error:** 0.0 usft  
**Reference Well:** Nosler 12 Federal MO 8H  
**Well Error:** 0.0 usft  
**Reference Wellbore:** Wellbore #1  
**Reference Design:** Plan#4

**Local Co-ordinate Reference:** Well Nosler 12 Federal MO 8H  
**TVD Reference:** KB=17.5' @ 3967.5usft (UNK)  
**MD Reference:** KB=17.5' @ 3967.5usft (UNK)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Output errors are at:** 2.00 sigma  
**Database:** EDM 5000.1 Multi User Db  
**Offset TVD Reference:** Offset Datum

Offset Design Sec.11, T.17 S., R. 31 E. - Nosler Fed #1 - Wellbore #1 - Wellbore #1/INC ONLY													Offset Site Error:
Survey Program: 339-Inclinometer only													0.0 usft
Reference													Offset Well Error:
Offset													0.0 usft
Semi Major Axis													
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N-S (usft)	Offset Wellbore Centre +E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,400.0	5,475.0	5,481.6	5,481.5	30.7	163.8	90.00	-412.3	1,041.8	51.7	-142.0	193.72	0.267	Level 1
6,450.0	5,475.0	5,481.6	5,481.5	32.0	163.8	90.00	-412.3	1,041.8	81.5	-113.4	194.99	0.418	Level 1
6,500.0	5,475.0	5,481.6	5,481.5	33.2	163.8	90.00	-412.3	1,041.8	125.0	-71.2	196.26	0.637	Level 1
6,550.0	5,475.0	5,481.6	5,481.5	34.4	163.8	90.00	-412.3	1,041.8	172.1	-25.5	197.54	0.871	Level 1
6,600.0	5,475.0	5,481.6	5,481.5	35.7	163.8	90.00	-412.3	1,041.8	220.4	21.6	198.82	1.109	Level 2
6,650.0	5,475.0	5,481.6	5,481.5	37.0	163.8	90.00	-412.3	1,041.8	269.4	69.3	200.12	1.346	Level 3
6,700.0	5,475.0	5,481.6	5,481.5	38.2	163.8	90.00	-412.3	1,041.8	318.7	117.2	201.42	1.582	
6,750.0	5,475.0	5,481.6	5,481.5	39.5	163.8	90.00	-412.3	1,041.8	368.1	165.4	202.73	1.816	
6,800.0	5,475.0	5,481.6	5,481.5	40.8	163.8	90.00	-412.3	1,041.8	417.7	213.7	204.04	2.047	
6,850.0	5,475.0	5,481.6	5,481.5	42.1	163.8	90.00	-412.3	1,041.8	467.4	262.1	205.36	2.276	
6,900.0	5,475.0	5,481.6	5,481.5	43.4	163.8	90.00	-412.3	1,041.8	517.2	310.5	206.67	2.502	
6,950.0	5,475.0	5,481.6	5,481.5	44.7	163.8	90.00	-412.3	1,041.8	567.0	359.0	208.00	2.726	
7,000.0	5,475.0	5,481.6	5,481.5	46.0	163.8	90.00	-412.3	1,041.8	616.8	407.5	209.32	2.947	
7,050.0	5,475.0	5,481.6	5,481.5	47.3	163.8	90.00	-412.3	1,041.8	666.6	456.0	210.66	3.165	
7,100.0	5,475.0	5,481.6	5,481.5	48.7	163.8	90.00	-412.3	1,041.8	716.5	504.5	211.99	3.380	
7,150.0	5,475.0	5,481.6	5,481.5	50.0	163.8	90.00	-412.3	1,041.8	766.4	553.1	213.32	3.593	
7,200.0	5,475.0	5,481.6	5,481.5	51.3	163.8	90.00	-412.3	1,041.8	816.3	601.6	214.66	3.803	
7,250.0	5,475.0	5,481.6	5,481.5	52.6	163.8	90.00	-412.3	1,041.8	866.2	650.2	216.00	4.010	
7,300.0	5,475.0	5,481.6	5,481.5	54.0	163.8	90.00	-412.3	1,041.8	916.1	698.8	217.34	4.215	
7,350.0	5,475.0	5,481.6	5,481.5	55.3	163.8	90.00	-412.3	1,041.8	966.1	747.4	218.69	4.418	
7,400.0	5,475.0	5,481.6	5,481.5	56.6	163.8	90.00	-412.3	1,041.8	1,016.0	796.0	220.03	4.618	
7,450.0	5,475.0	5,481.6	5,481.5	58.0	163.8	90.00	-412.3	1,041.8	1,065.9	844.6	221.38	4.815	
7,500.0	5,475.0	5,481.6	5,481.5	59.3	163.8	90.00	-412.3	1,041.8	1,115.9	893.2	222.73	5.010	
7,550.0	5,475.0	5,481.6	5,481.5	60.6	163.8	90.00	-412.3	1,041.8	1,165.8	941.8	224.08	5.203	
7,600.0	5,475.0	5,481.6	5,481.5	62.0	163.8	90.00	-412.3	1,041.8	1,215.8	990.4	225.43	5.393	
7,650.0	5,475.0	5,481.6	5,481.5	63.3	163.8	90.00	-412.3	1,041.8	1,265.8	1,039.0	226.78	5.581	
7,700.0	5,475.0	5,481.6	5,481.5	64.7	163.8	90.00	-412.3	1,041.8	1,315.7	1,087.6	228.13	5.767	
7,750.0	5,475.0	5,481.6	5,481.5	66.0	163.8	90.00	-412.3	1,041.8	1,365.7	1,136.2	229.49	5.951	
7,800.0	5,475.0	5,481.6	5,481.5	67.4	163.8	90.00	-412.3	1,041.8	1,415.7	1,184.8	230.84	6.133	
7,850.0	5,475.0	5,481.6	5,481.5	68.7	163.8	90.00	-412.3	1,041.8	1,465.6	1,233.4	232.20	6.312	
7,900.0	5,475.0	5,481.6	5,481.5	70.1	163.8	90.00	-412.3	1,041.8	1,515.6	1,282.0	233.56	6.489	
7,950.0	5,475.0	5,481.6	5,481.5	71.4	163.8	90.00	-412.3	1,041.8	1,565.6	1,330.7	234.92	6.664	
8,000.0	5,475.0	5,481.6	5,481.5	72.8	163.8	90.00	-412.3	1,041.8	1,615.5	1,379.3	236.28	6.838	
8,050.0	5,475.0	5,481.6	5,481.5	74.1	163.8	90.00	-412.3	1,041.8	1,665.5	1,427.9	237.64	7.009	
8,100.0	5,475.0	5,481.6	5,481.5	75.5	163.8	90.00	-412.3	1,041.8	1,715.5	1,476.5	239.00	7.178	
8,150.0	5,475.0	5,481.6	5,481.5	76.8	163.8	90.00	-412.3	1,041.8	1,765.5	1,525.1	240.36	7.345	
8,200.0	5,475.0	5,481.6	5,481.5	78.2	163.8	90.00	-412.3	1,041.8	1,815.5	1,573.7	241.72	7.511	
8,250.0	5,475.0	5,481.6	5,481.5	79.5	163.8	90.00	-412.3	1,041.8	1,865.4	1,622.4	243.08	7.674	
8,300.0	5,475.0	5,481.6	5,481.5	80.9	163.8	90.00	-412.3	1,041.8	1,915.4	1,671.0	244.45	7.836	
8,350.0	5,475.0	5,481.6	5,481.5	82.3	163.8	90.00	-412.3	1,041.8	1,965.4	1,719.6	245.81	7.996	
8,400.0	5,475.0	5,481.6	5,481.5	83.6	163.8	90.00	-412.3	1,041.8	2,015.4	1,768.2	247.17	8.154	
8,450.0	5,475.0	5,481.6	5,481.5	85.0	163.8	90.00	-412.3	1,041.8	2,065.4	1,816.8	248.54	8.310	
8,500.0	5,475.0	5,481.6	5,481.5	86.3	163.8	90.00	-412.3	1,041.8	2,115.4	1,865.5	249.90	8.465	
8,550.0	5,475.0	5,481.6	5,481.5	87.7	163.8	90.00	-412.3	1,041.8	2,165.4	1,914.1	251.27	8.618	
8,600.0	5,475.0	5,481.6	5,481.5	89.1	163.8	90.00	-412.3	1,041.8	2,215.3	1,962.7	252.64	8.769	
8,650.0	5,475.0	5,481.6	5,481.5	90.4	163.8	90.00	-412.3	1,041.8	2,265.3	2,011.3	254.00	8.919	
8,700.0	5,475.0	5,481.6	5,481.5	91.8	163.8	90.00	-412.3	1,041.8	2,315.3	2,059.9	255.37	9.067	
8,750.0	5,475.0	5,481.6	5,481.5	93.2	163.8	90.00	-412.3	1,041.8	2,365.3	2,108.6	256.74	9.213	
8,800.0	5,475.0	5,481.6	5,481.5	94.5	163.8	90.00	-412.3	1,041.8	2,415.3	2,157.2	258.10	9.358	
8,850.0	5,475.0	5,481.6	5,481.5	95.9	163.8	90.00	-412.3	1,041.8	2,465.3	2,205.8	259.47	9.501	
8,900.0	5,475.0	5,481.6	5,481.5	97.2	163.8	90.00	-412.3	1,041.8	2,515.3	2,254.4	260.84	9.643	
8,950.0	5,475.0	5,481.6	5,481.5	98.6	163.8	90.00	-412.3	1,041.8	2,565.3	2,303.1	262.21	9.783	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



# Integrity Directional Services, LLC

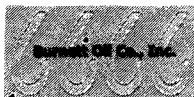
## Anticollision Report



**Company:** Burnett Oil Company, INC  
**Project:** Eddy County, NM  
**Reference Site:** Sec.11, T.17 S., R. 31 E.  
**Site Error:** 0.0 usft  
**Reference Well:** Nosler 12 Federal MO 8H  
**Well Error:** 0.0 usft  
**Reference Wellbore:** Wellbore #1  
**Reference Design:** Plan#4

**Local Co-ordinate Reference:** Well Nosler 12 Federal MO 8H  
**TVD Reference:** KB=17.5' @ 3967.5usft (UNK)  
**MD Reference:** KB=17.5' @ 3967.5usft (UNK)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Output errors are at:** 2.00 sigma  
**Database:** EDM 5000.1 Multi User Db  
**Offset TVD Reference:** Offset Datum

Offset Design      Sec.11, T.17 S., R. 31 E. - Nosler Fed #1 - Wellbore #1 - Wellbore #1/INC ONLY													Offset Site Error:	0.0 usft
Survey Program: 338-Inclinometer only													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
9,000.0	5,475.0	5,481.6	5,481.5	100.0	163.8	90.00	-412.3	1,041.8	2,615.3	2,351.7	263.58	9.922		
9,050.0	5,475.0	5,481.6	5,481.5	101.3	163.8	90.00	-412.3	1,041.8	2,665.2	2,400.3	264.95	10.060		
9,100.0	5,475.0	5,481.6	5,481.5	102.7	163.8	90.00	-412.3	1,041.8	2,715.2	2,448.9	266.32	10.196		
9,150.0	5,475.0	5,481.6	5,481.5	104.1	163.8	90.00	-412.3	1,041.8	2,765.2	2,497.5	267.69	10.330		
9,178.4	5,475.0	5,481.6	5,481.5	104.9	163.8	90.00	-412.3	1,041.8	2,793.6	2,525.1	268.46	10.406		



# Integrity Directional Services, LLC

## Anticollision Report



**Company:** Burnett Oil Company, INC  
**Project:** Eddy County, NM  
**Reference Site:** Sec.11, T.17 S., R. 31 E.  
**Site Error:** 0.0 usft  
**Reference Well:** Nosler 12 Federal MO 8H  
**Well Error:** 0.0 usft  
**Reference Wellbore:** Wellbore #1  
**Reference Design:** Plan#4

**Local Co-ordinate Reference:** Well Nosler 12 Federal MO 8H  
**TVD Reference:** KB=17.5' @ 3967.5usft (UNK)  
**MD Reference:** KB=17.5' @ 3967.5usft (UNK)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Output errors are at:** 2.00 sigma  
**Database:** EDM 5000.1 Multi User Db  
**Offset TVD Reference:** Offset Datum

Reference Depths are relative to KB=17.5' @ 3967.5usft (UNK)

Offset Depths are relative to Offset Datum

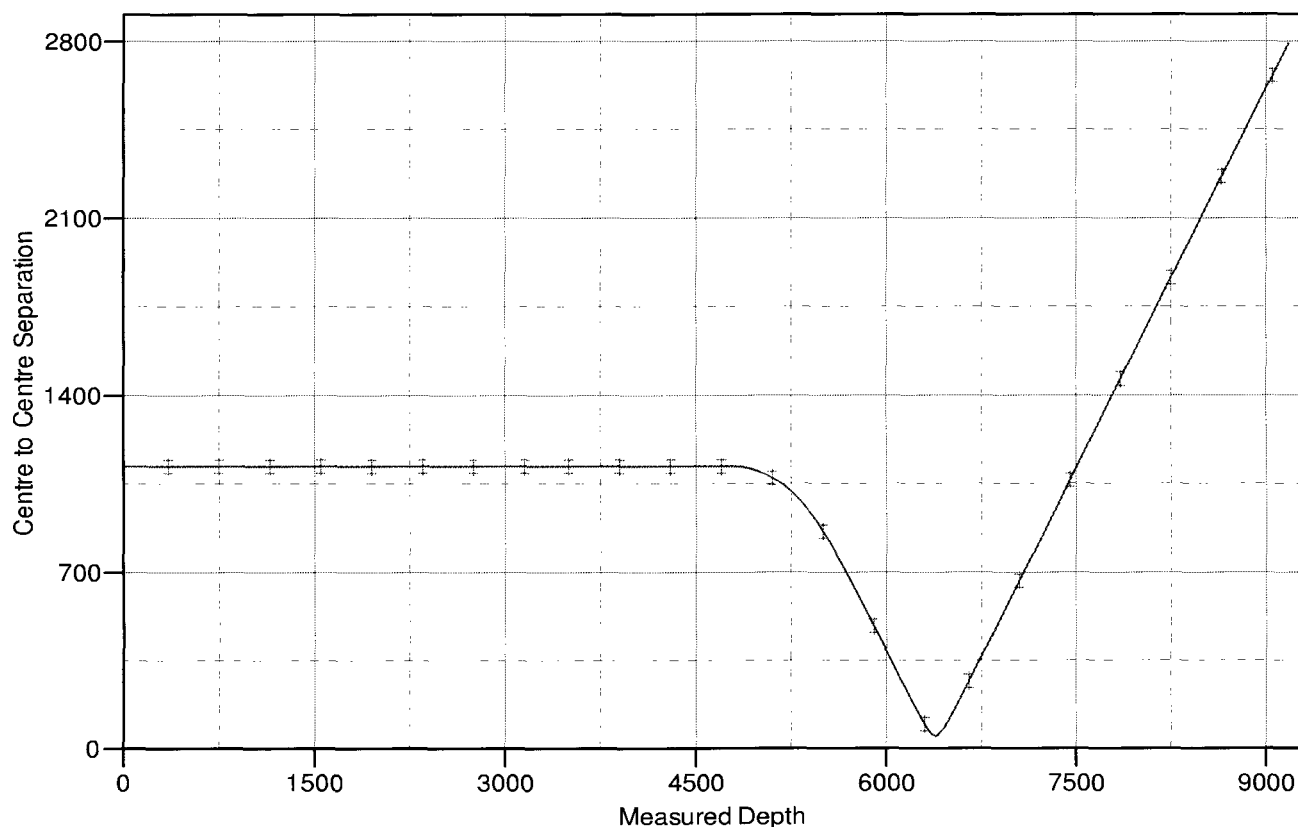
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Nosler 12 Federal MO 8H

Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30

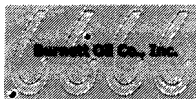
Grid Convergence at Surface is: 0.27°

### Ladder Plot



### LEGEND

Wellbore #1, Wellbore #1, Wellbore #1/INC ONLY V0



# Integrity Directional Services, LLC

## Anticollision Report



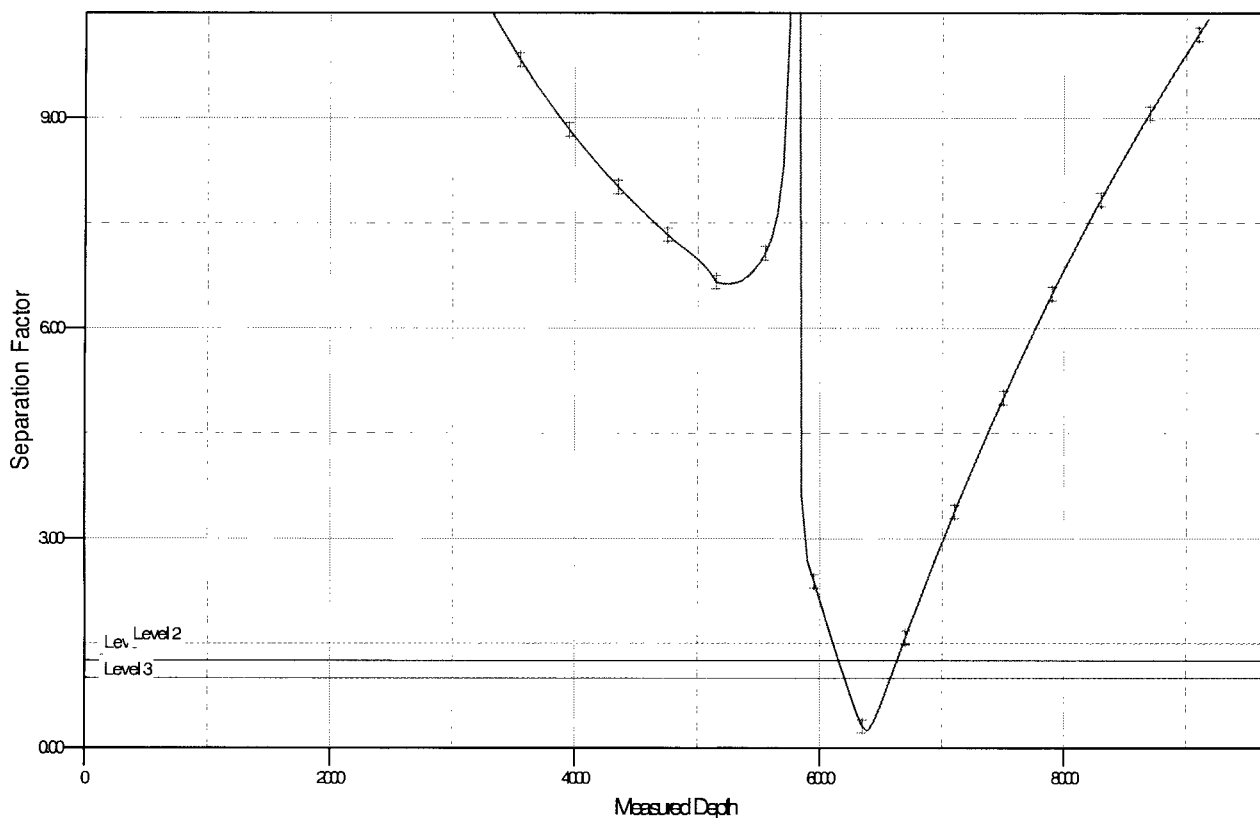
**Company:** Burnett Oil Company, INC  
**Project:** Eddy County, NM  
**Reference Site:** Sec.11, T.17 S., R. 31 E.  
**Site Error:** 0.0 usft  
**Reference Well:** Nosler 12 Federal MO 8H  
**Well Error:** 0.0 usft  
**Reference Wellbore:** Wellbore #1  
**Reference Design:** Plan#4

**Local Co-ordinate Reference:** Well Nosler 12 Federal MO 8H  
**TVD Reference:** KB=17.5' @ 3967.5usft (UNK)  
**MD Reference:** KB=17.5' @ 3967.5usft (UNK)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Output errors are at** 2.00 sigma  
**Database:** EDM 5000.1 Multi User Db  
**Offset TVD Reference:** Offset Datum

Reference Depths are relative to KB=17.5' @ 3967.5usft (UNK)  
Offset Depths are relative to Offset Datum  
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Nosler 12 Federal MO 8H  
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30  
Grid Convergence at Surface is: 0.27°

### Separation Factor Plot



### LEGEND

Wellbore #1, Wellbore #1, Wellbore #1/INC ONLY V0



APD ID: 10400006964

Submission Date: 12/26/2016

Operator Name: BURNETT OIL CO INC

Well Name: NOSLER 12 FED MO

Well Number: 8H

Well Type: OIL WELL

Well Work Type: Drill

### 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:

NOSLER 12 FED MO 8H Road\_11-21-2016.pdf

New road type: TWO-TRACK

Length: 195 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: OTHER

Access topsoil source: ONSITE

Access surfacing type description: Caliche

**Operator Name:** BURNETT OIL CO INC

**Well Name:** NOSLER 12 FED MO

**Well Number:** 8H

**Access onsite topsoil source depth:** 6

**Offsite topsoil source description:**

**Onsite topsoil removal process:** The top 6" of top soil will be pushed off and stockpiled on the North 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.

**Access other construction information:**

**Access miscellaneous information:** When caliche is found, material will be stock piled within the pad site to build the location and road.

**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:** See above

**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:**

NOSLER 12 FED MO 8H Existing\_11-21-2016.pdf

**Existing Wells description:**

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

**Submit or defer a Proposed Production Facilities plan?** SUBMIT

**Estimated Production Facilities description:**

**Production Facilities description:**

**Production Facilities map:**

Nosler 12 Fed Battery\_10-19-2016.pdf

NOSLER 12 FED MO 8H FLOWLINE-32463\_12-21-2016.pdf

### Section 5 - Location and Types of Water Supply

#### Water Source Table



**Operator Name:** BURNETT OIL CO INC

**Well Name:** NOSLER 12 FED MO

**Well Number:** 8H

**Water source use type:** INTERMEDIATE/PRODUCTION CASING,  
STIMULATION, SURFACE CASING  
**Describe type:** Commercial Supplier

**Water source type:** OTHER

**Source latitude:**

**Source longitude:**

**Source datum:**

**Water source permit type:** PRIVATE CONTRACT

**Source land ownership:** COMMERCIAL

**Water source transport method:** PIPELINE,TRUCKING

**Source transportation land ownership:** COMMERCIAL

**Water source volume (barrels):** 0

**Source volume (acre-feet):** 0

**Source volume (gal):** 0

**Water source and transportation map:**

NOSLER 12 FED MO 8H directions\_11-22-2016.pdf

**Water source comments:** Location and Type of Water Supply: All water to be used in drilling, cementing and completion operations will be brine or fresh water from one of the following options: Truck Transport - If transported by truck, will be hauled over existing and/or proposed lease road(s) from one of the following water suppliers: 1. Caprock Water (Maljamar, NM) located in the SE1/4SW1/4 of Section 3 in T17S, R32E, Lea County, NM 2. Caprock Water (Loco Hills, NM) located in the Lot 52 of the NW ¼ SE1/4 of Section 21 in T17S, R30E, Eddy County, NM 3. Ray Westall (Loco Hills, NM) located in the Lots 2 & 3 of the NW ¼ SE1/4 of Section 21 in T17S, R30E, Eddy County, NM Waterline - If water is sourced from a water line, we may install a pump and lay a temporary 2" poly line from the Burnett Oil Co., Inc. Water Pit (Maljamar, NM) located in the NW ¼ SE ¼ of Section 12 in T17S, R31E, Eddy County, NM Burnett has no plans to drill a water supply well on the proposed well location 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:**

**Operator Name:** BURNETT OIL CO INC

**Well Name:** NOSLER 12 FED MO

**Well Number:** 8H

**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. 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 (Exhibit P). 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.

**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. Wast 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 is turned to the lease tank battery. All produced water will be disposed of through one of our approved disposal methods

**Safe containmant attachment:**

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

**Disposal type description:**

**Disposal location description:** Off Lease disposal location

## 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?**

**Operator Name:** BURNETT OIL CO INC

**Well Name:** NOSLER 12 FED MO

**Well Number:** 8H

**Reserve pit liner**

**Reserve pit liner specifications and installation description**

### 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:**

Nosler 12 Fed MO 8H Rig Layout\_11-22-2016.pdf

N12FMO8HPad20170123\_01-23-2017.pdf

**Comments:**

## Section 10 - Plans for Surface Reclamation

**Type of disturbance:** NEW

**Recontouring attachment:**

2016.11.22 8H Reclamation\_11-22-2016.pdf

**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. If caliche is flipped on location, the following process will be followed. 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

**Operator Name:** BURNETT OIL CO INC

**Well Name:** NOSLER 12 FED MO

**Well Number:** 8H

soil will be stockpiled along the edge of the pad as depicted in the attached well diagram. An area approximately 120'x120' is used within the proposed site to remove caliche. 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.

**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, 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.

**Wellpad long term disturbance (acres):** 2

**Wellpad short term disturbance (acres):** 2.4

**Access road long term disturbance (acres):** 0.06

**Access road short term disturbance (acres):** 0.06

**Pipeline long term disturbance (acres):** 2.9442148

**Pipeline short term disturbance (acres):** 2.9442148

**Other long term disturbance (acres):** 0

**Other short term disturbance (acres):** 0

**Total long term disturbance:** 5.004215

**Total short term disturbance:** 5.404215

**Reconstruction method:** 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. An area approximately 120'x120' is used within the proposed site to remove caliche.

**Topsoil redistribution:** 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

**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?**

**Seedling transplant description attachment:**

**Will seed be harvested for use in site reclamation?**

**Operator Name:** BURNETT OIL CO INC

**Well Name:** NOSLER 12 FED MO

**Well Number:** 8H

**Seed harvest description:**

**Seed harvest description attachment:**

### Seed Management

#### Seed Table

**Seed type:**

**Seed source:**

**Seed name:**

**Source name:**

**Source address:**

**Source phone:**

**Seed cultivar:**

**Seed use location:**

**PLS pounds per acre:**

**Proposed seeding season:**

#### Seed Summary

**Total pounds/Acre:**

Seed Type	Pounds/Acre
-----------	-------------

**Seed reclamation attachment:**

### Operator Contact/Responsible Official Contact Info

**First Name:** Leslie

**Last Name:** Garvis

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

**Email:** lgarvis@burnettoil.com

**Seedbed prep:**

**Seed BMP:**

**Seed method:**

**Existing invasive species?** NO

**Existing invasive species treatment description:**

**Existing invasive species treatment attachment:**

**Weed treatment plan description:** Weed control performed on disturbed land i.e. (roads, pads, pipeline) where noxious weeds exist per EPA and BLM requirements.

**Weed treatment plan attachment:**

**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:**

**Operator Name:** BURNETT OIL CO INC

**Well Name:** NOSLER 12 FED MO

**Well Number:** 8H

## 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?** YES

**Use APD as ROW?** YES

**ROW Type(s):** 281001 ROW - ROADS,288100 ROW – O&G Pipeline,289001 ROW- O&G Well Pad

## ROW Applications

**SUPO Additional Information:**

**Use a previously conducted onsite?** YES

**Previous Onsite information:** Approved by Bob Ballard on 3/10/15. Nosler 12 Fed MO 8H

## Other SUPO Attachment

**Operator Name:** BURNETT OIL CO INC

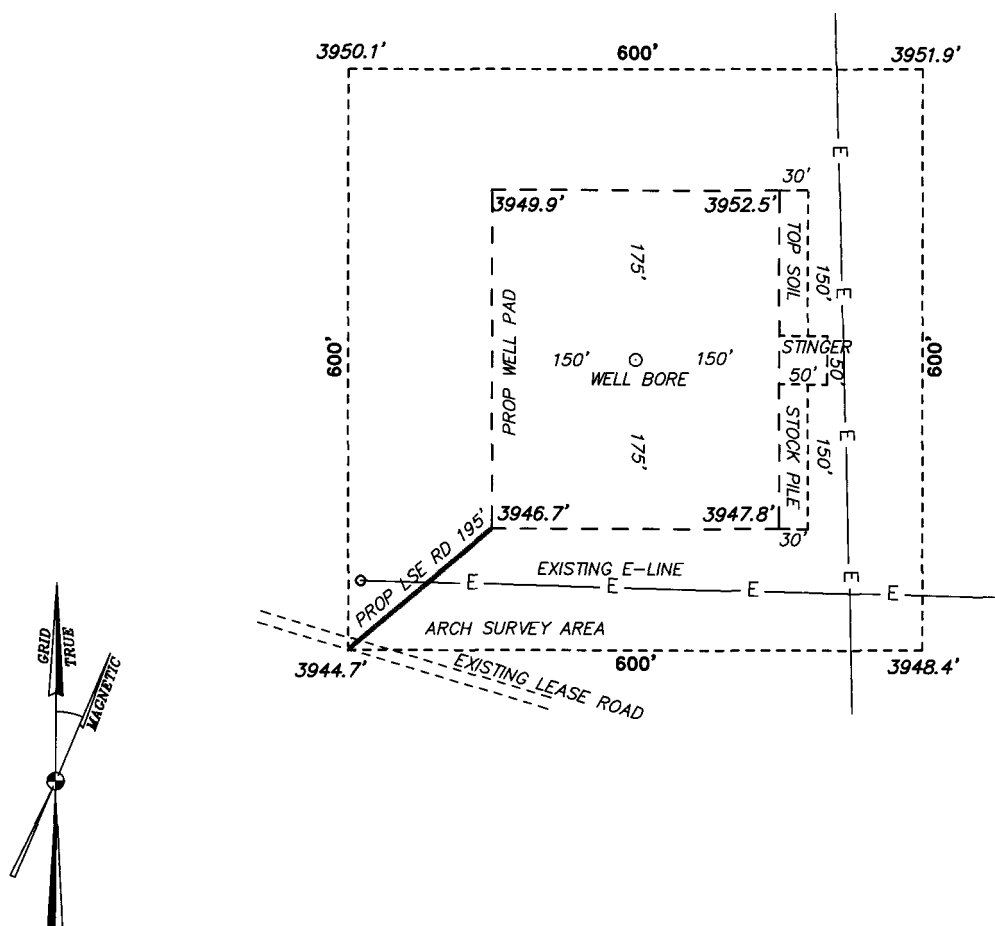
**Well Name:** NOSLER 12 FED MO

**Well Number:** 8H

COG Surface Approval\_12-21-2016.pdf

Chevron Surface Approval\_12-21-2016.pdf

SECTION 11, TOWNSHIP 17 SOUTH, RANGE 31 EAST. N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.

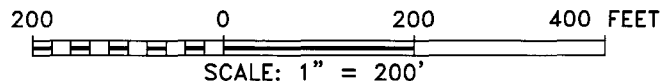


**BURNETT OIL CO**  
**NOSLER 12 FED MO 8H**  
**ELEV. - 3950'**  
Lat - N 32.843975°  
Long - W 103.832359°  
NMSPCE- N 671136.1  
E 695195.1  
(NAD-83)  
(NAVD88)

Directions to Location:

ON STATE 82 AT 0.6 MILES WEST OF MILE MARKER 141, TAKE LEASE ROAD NORTH 0.3 MILES, THEN NORTH 1.8 MILES ON MAIN LEASE ROAD, THEN EAST 0.3 MILES, CONTINUING EAST 0.1 MILES TO PROPOSED LOCATION DUE EAST.

MALJAMAR, NM IS ±3 MILES TO THE NORTHEAST OF LOCATION.



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

REF: NOSLER 12 FED MO 8H / WELL PAD TOPO

THE NOSLER 12 FED MO 8H LOCATED 750' FROM  
THE SOUTH LINE AND 200' FROM THE EAST LINE OF  
SECTION 11, TOWNSHIP 17 SOUTH, RANGE 31 EAST.

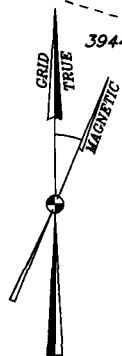
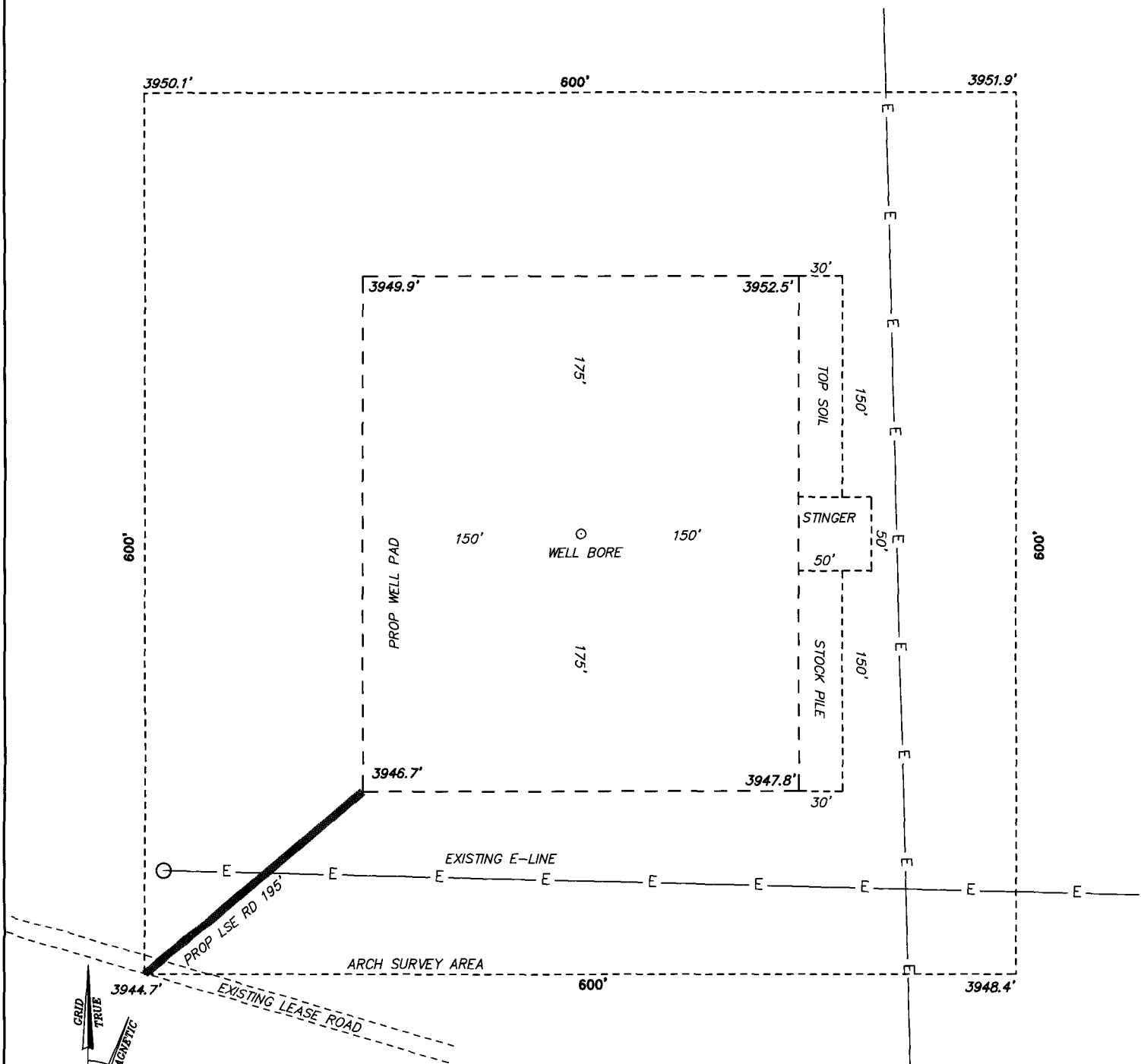
N.M.P.M., EDDY COUNTY, NEW MEXICO.

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EDDY COUNTY, NEW MEXICO.



100 0 100 200 FEET  
SCALE: 1" = 100'

Burnett Oil Co., Inc.  
6666

REF: NOSLER 12 FED MO 8H / WELL PAD TOPO

THE NOSLER 12 FED MO 8H LOCATED 750' FROM  
THE SOUTH LINE AND 200' FROM THE EAST LINE OF  
SECTION 11, TOWNSHIP 17 SOUTH, RANGE 31 EAST.

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

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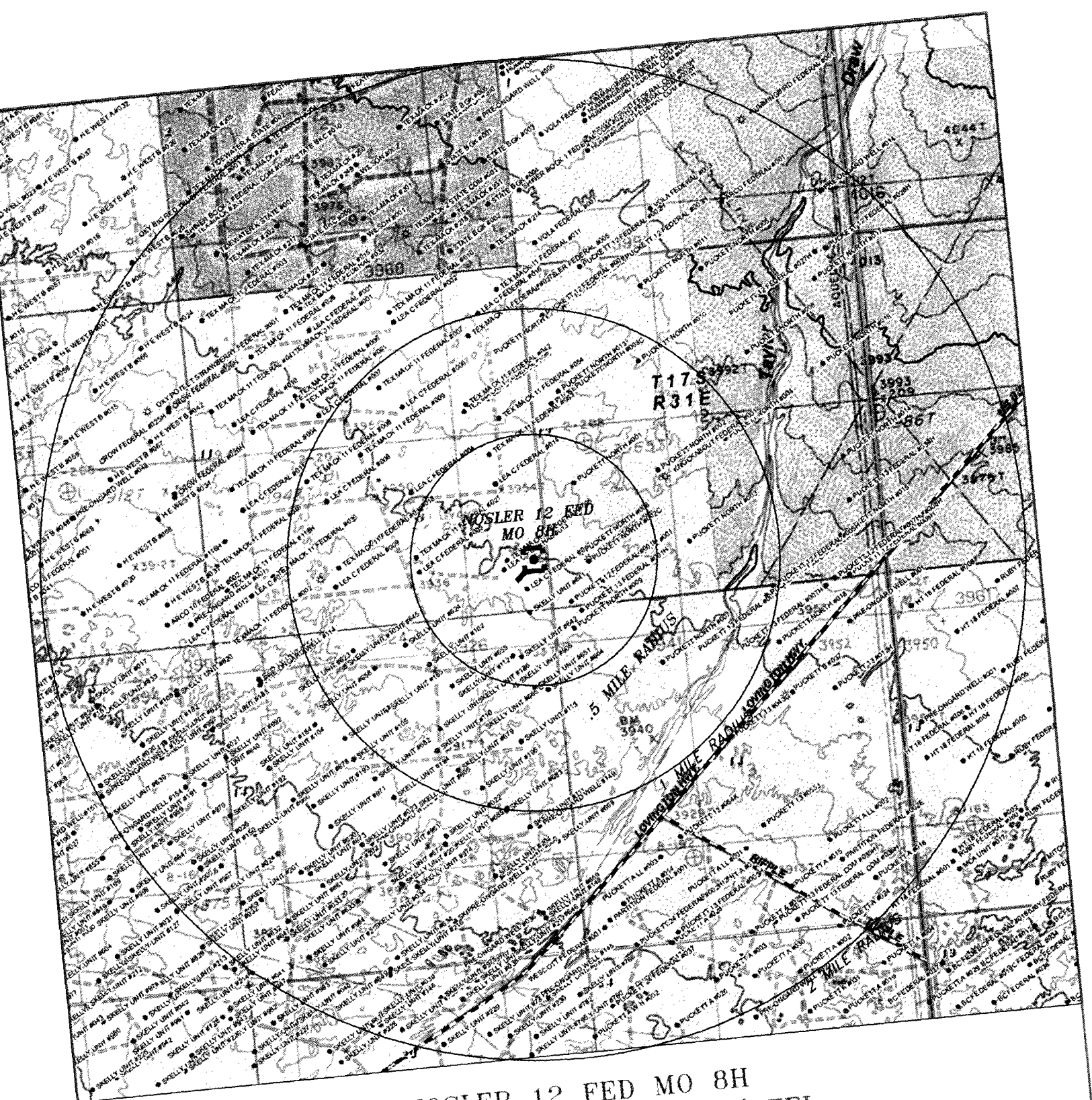
W.O. Number: 32108

Drawn By: K. NORRIS

Date: 12-15-2015

Survey Date: 12-09-2015

Sheet 1 of 1 Sheets



NOSLER 12 FED MO 8H  
 Located 750' FSL and 200' FEL  
 Section 11, Township 17 South, Range 31 East,  
 N.M.P.M., Eddy County, New Mexico.

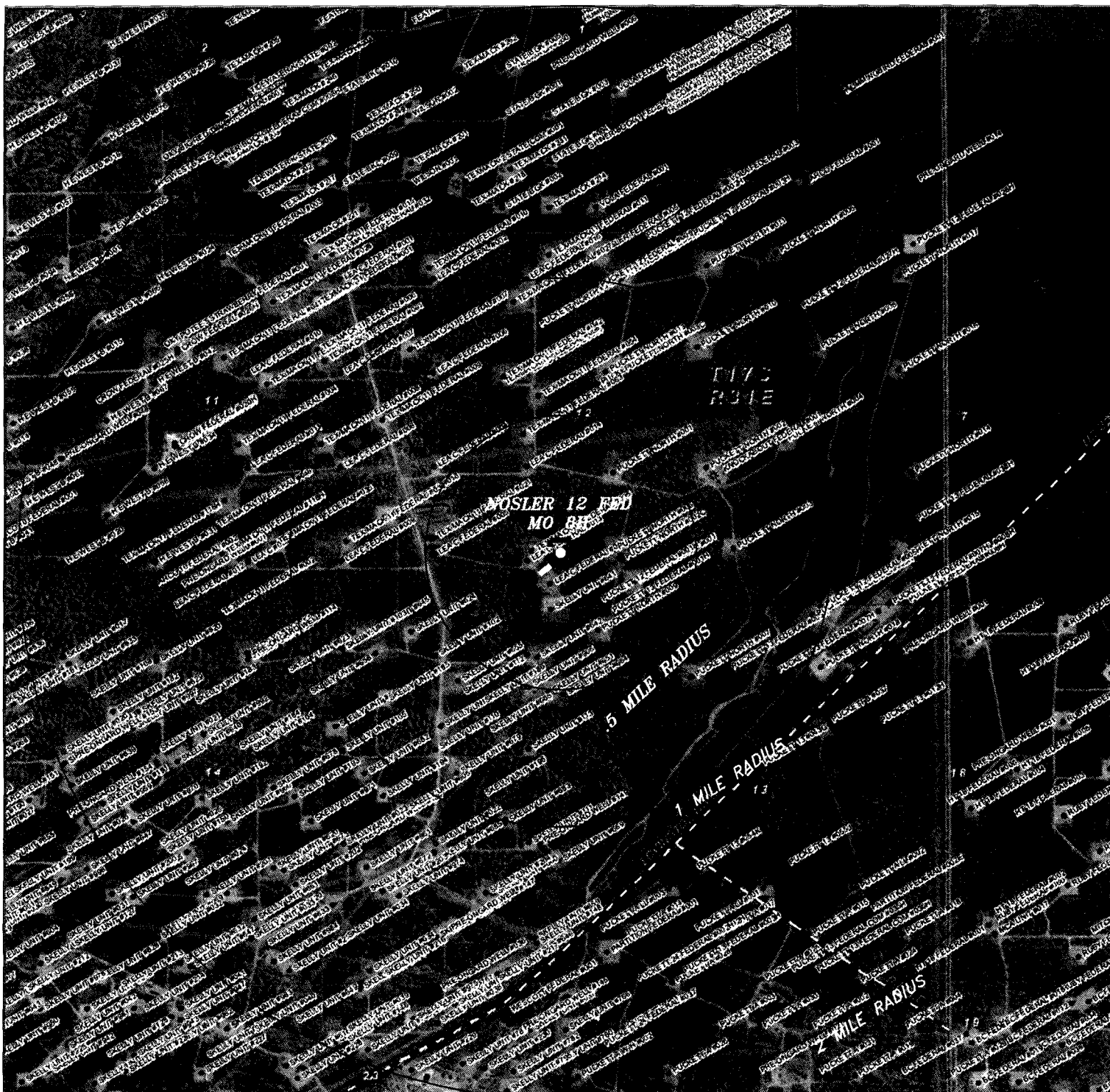
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0'	1000'	2000'	3000'	4000'
SCALE: 1" = 3000'				
W.O. Number: KAN 32108				
Survey Date: 12-09-2015				
YELLOW TINT - USA LAND				
BLUE TINT - STATE LAND				
NATURAL COLOR - FEE LAND				

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



**NOSLER 12 FED MO 8H**  
 Located 750' FSL and 200' FEL  
 Section 11, Township 17 South, Range 31 East,  
 N.M.P.M., Eddy County, New Mexico.

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

W.O. Number: KAN 32108

Survey Date: 12-09-2015

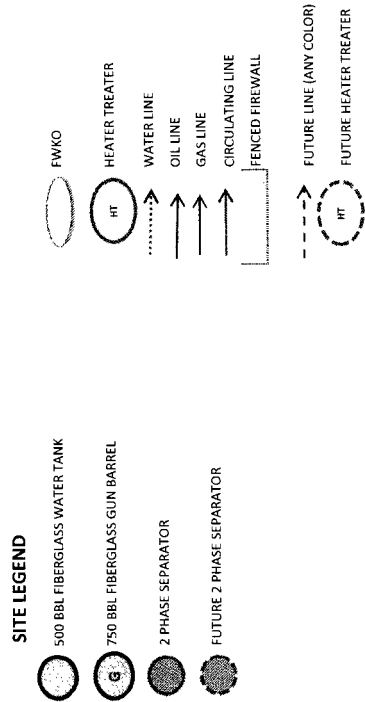
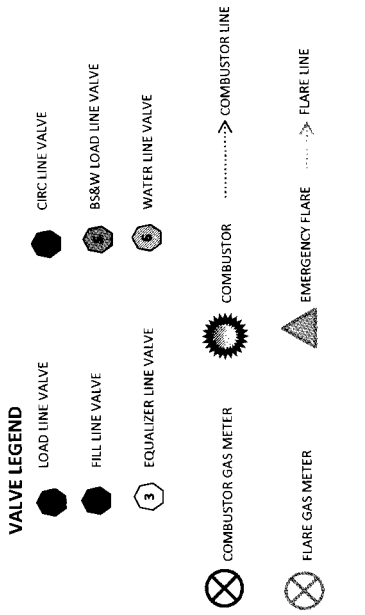
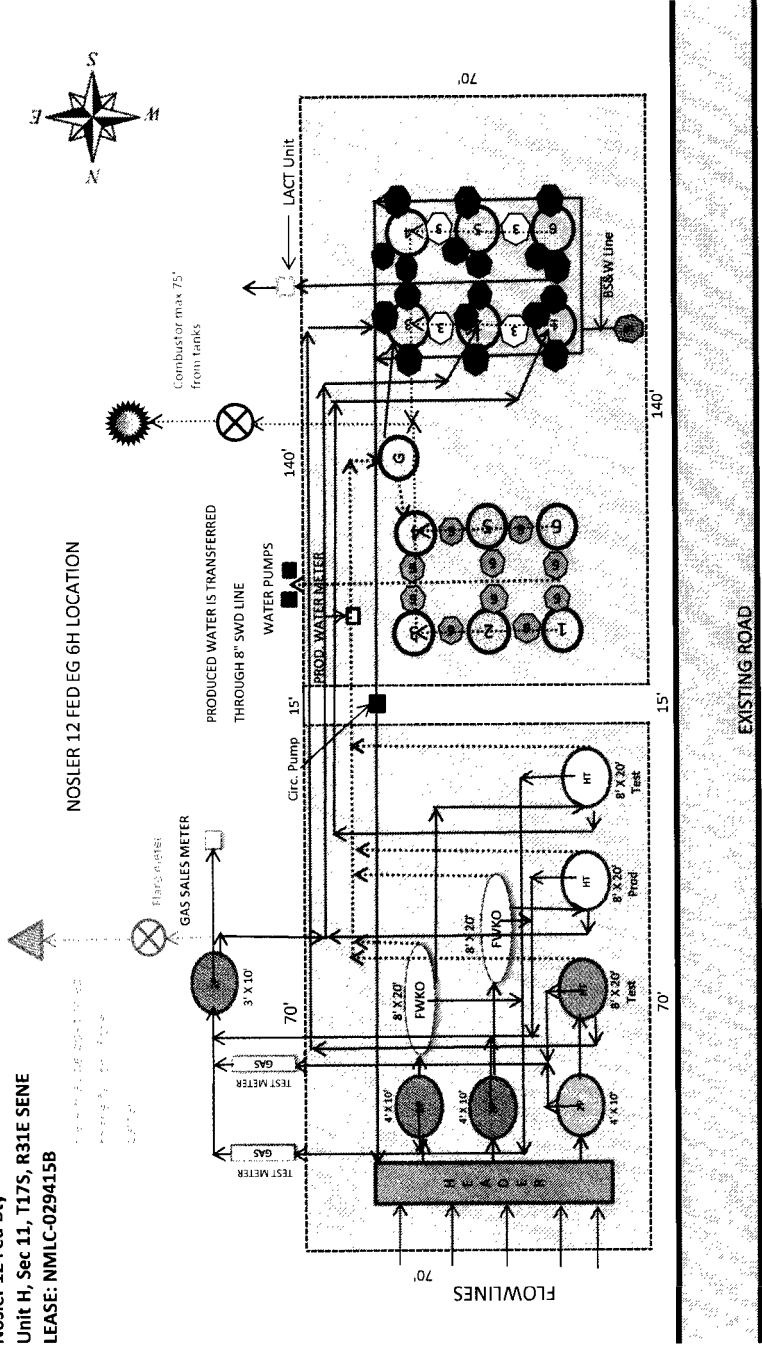
YELLOW TINT - USA LAND  
 BLUE TINT - STATE LAND  
 NATURAL COLOR - FEE LAND

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

EXHIBIT Q

BURNETT OIL CO. INC.  
Nosler 12 Fed Bty  
Unit H, Sec 11, T17S, R31E SENE  
LEASE: NMLC-029415B

10/30/15



BURNETT OIL CO. INC.  
Nosler 12 Fed Bty  
Unit H, Sec 12, T17S, R31E SESE  
LEASE:

**ATTACHMENT TO SITE FACILITY DIAGRAM**

General sealing of valves, sales by tank guage

**Production Phase:**

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

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







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

**Sales Phase:**

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

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

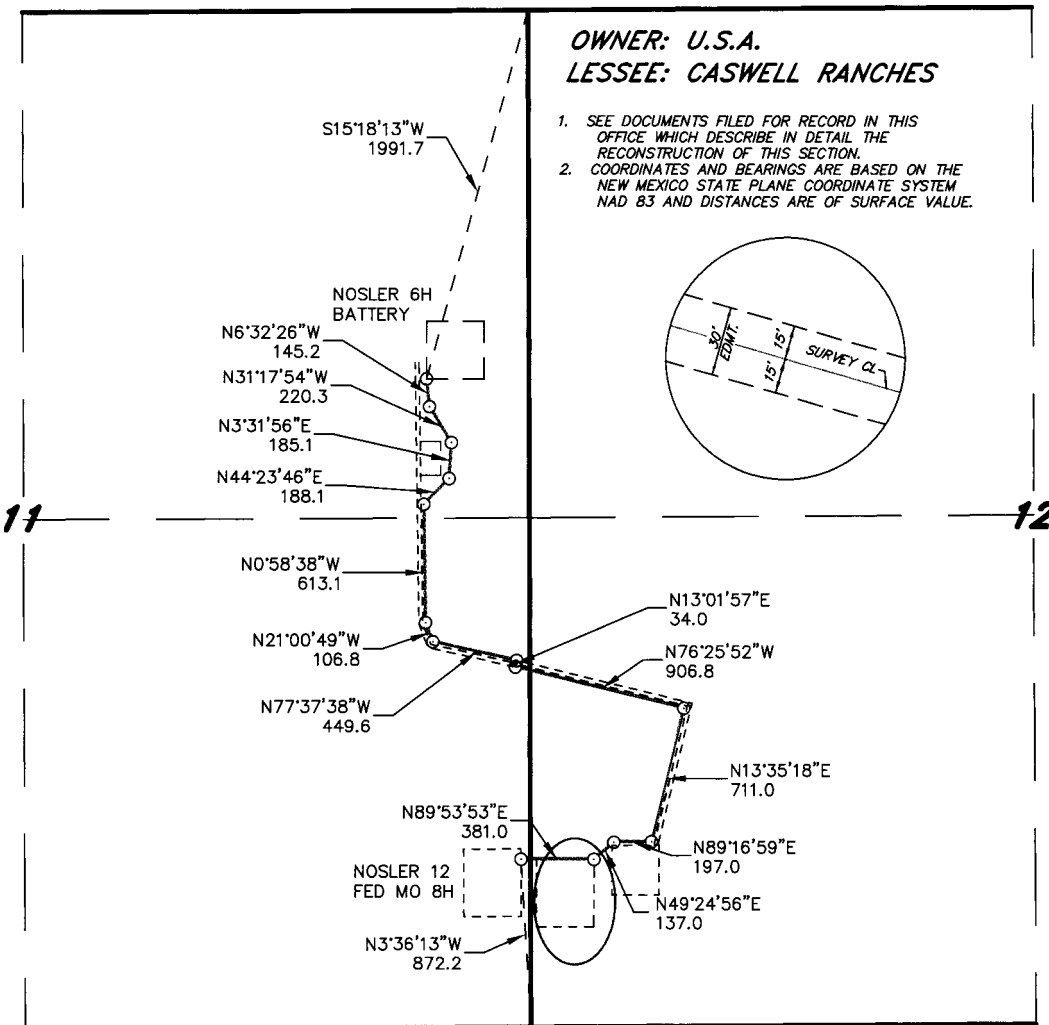
Sales by truck will be by tank gauge. Sales by LACT will be by LACT meter.

<u>VALVE</u>	<u>PRODUCTION PHASE</u>	<u>SALES PHASE</u>	<u>CIRCULATING</u>	<u>NOTE</u>
 LOAD LINE VALVE	CLOSED	OPEN	CLOSED	
 PRODUCTION FILL LINE VALVE	OPEN OR CLOSED	CLOSED	CLOSED OR OPEN	
 3 EQUALIZER LINE VALVE	OPEN	CLOSED	CLOSED OR OPEN	
 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
 WATER LINE VALVE	OPEN	NA	NA	WATER TANKS ARE ISOLATED FROM OIL PRODUCTION TANKS

SECTIONS 11&12, TOWNSHIP 17 SOUTH, RANGE 31 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.



42+75 END OF SURVEY AT  
SOUTHWEST CORNER  
OF PAD  
N32°51'04.16" W103°50'00.46"  
42+31 LEASE ROAD  
41+29.8 PI 24°45'27" RT  
39+09.5 PI 27°45'58" LT  
37+24.4 PI 40°51'50" LT  
35+36.3 PI 43°25'08" RT  
29+23.2 PI 20°02'09" RT  
28+16.4 PI 56°36'51" RT  
23+66.8 PI 64°46'34" LT  
23+53 LEASE ROAD  
23+32.8 PI 63°35'00" RT  
22+53.7 SECTION LINE  
14+26 PI 90°01'19" LT  
7+15 PI 75°41'41" LT  
5+18 PI 39°52'00" RT  
3+81 PI 40°48'25" LT  
0+50 SECTION LINE  
0+00 BEGIN SURVEY AT  
NORTHEAST CORNER  
OF PROPOSED PAD



OWNER: U.S.A.  
LESSEE: CASWELL RANCHES

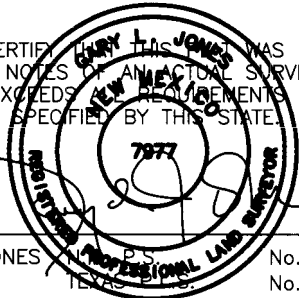
1. SEE DOCUMENTS FILED FOR RECORD IN THIS OFFICE WHICH DESCRIBE IN DETAIL THE RECONSTRUCTION OF THIS SECTION.
2. COORDINATES AND BEARINGS ARE BASED ON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM NAD 83 AND DISTANCES ARE OF SURFACE VALUE.

LEGAL DESCRIPTION

A STRIP OF LAND 30.0 FEET WIDE, LOCATED IN SECTIONS 11&12, TOWNSHIP 17 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO AND BEING 15.0 FEET LEFT AND RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.

SECTION 12 2203.7 FEET = 133.56 RODS = 0.42 MILES = 1.52 ACRES  
SECTION 11 2071.3 FEET = 125.53 RODS = 0.39 MILES = 1.42 ACRES  
TOTAL 4275.0 FEET = 259.09 RODS = 0.81 MILES = 2.94 ACRES

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



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

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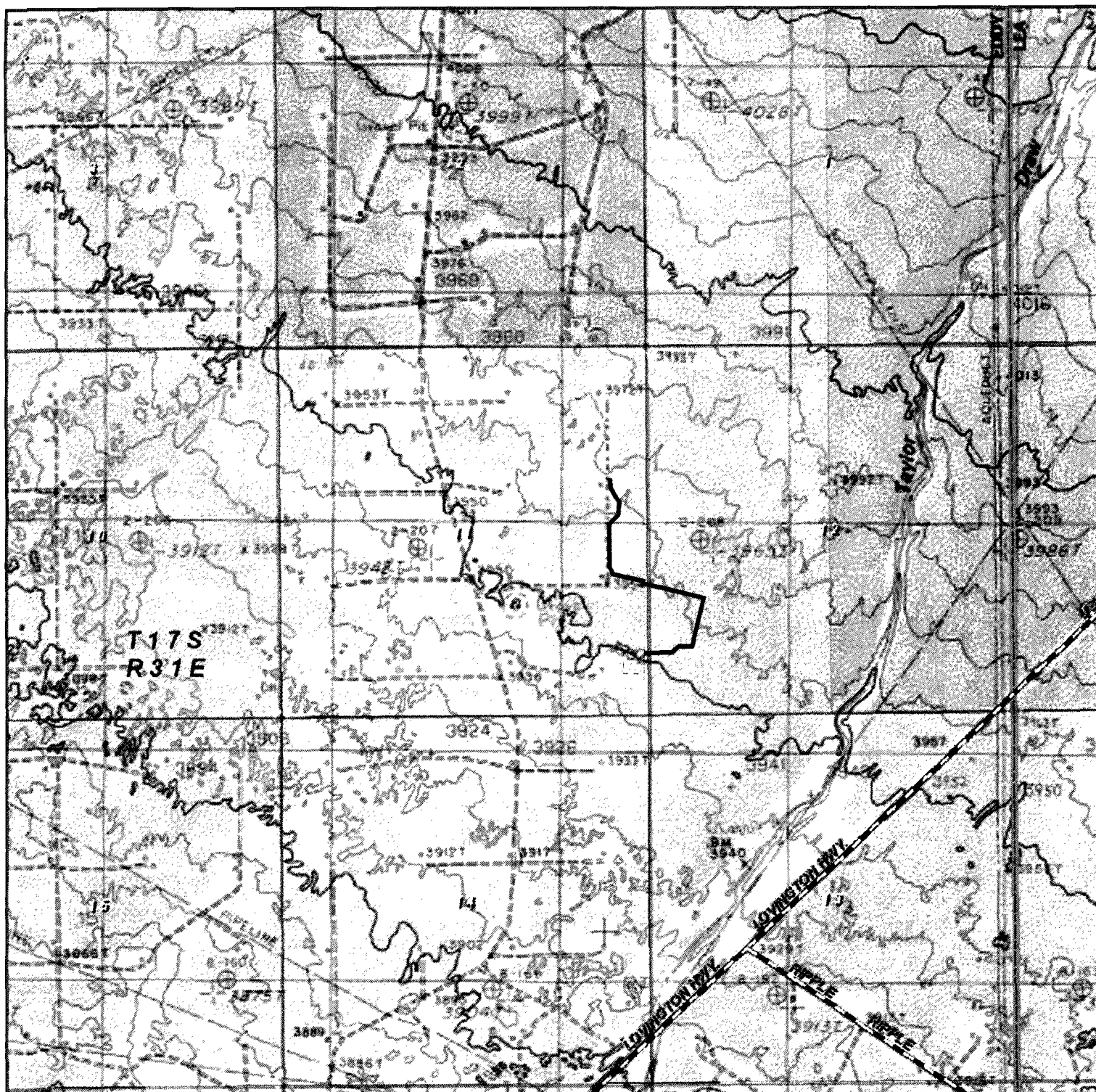
1000 0 1000 2000 FEET

BURNETT OIL CO.

REF: PROPOSED NOSLER 12 FED MO 8H FLOW LINE

A FLOW LINE CROSSING USA LAND IN  
SECTIONS 11&12, TOWNSHIP 17 SOUTH, RANGE 31 EAST,  
N.M.P.M., EDDY COUNTY, NEW MEXICO.





PROPOSED NOSLER 12 FED MO 8H FLOW LINE  
 Sections 11&12, Township 17 South, Range 31 East,  
 N.M.P.M., Eddy County, New Mexico.

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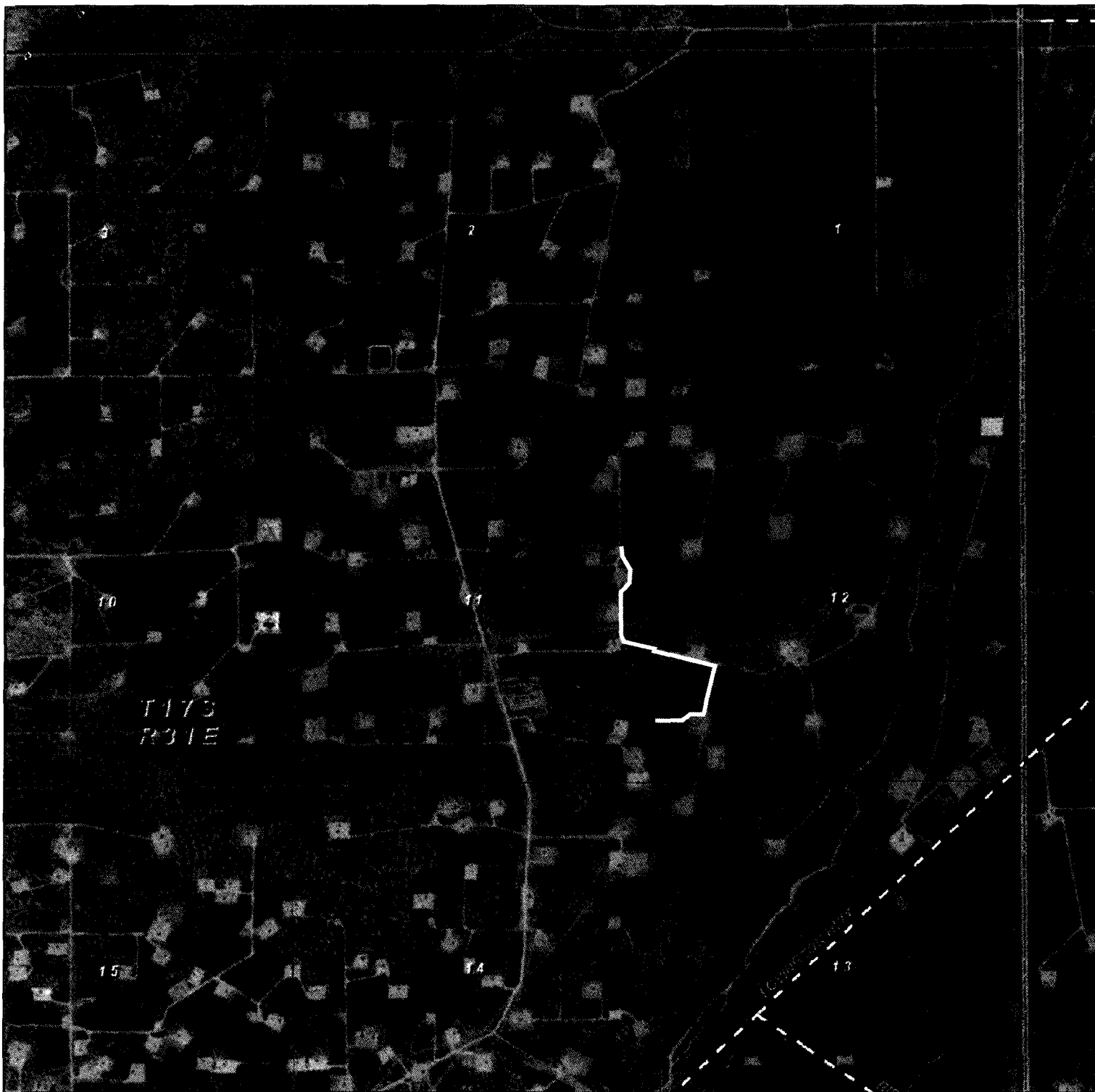
0' 1000' 2000' 3000' 4000'  
 SCALE: 1" = 2000'

W.O. Number: JG 32463

Survey Date: 9-27-2016

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

BURNETT  
 OIL CO.



PROPOSED NOSLER 12 FED MO 8H FLOW LINE  
Sections 11&12, Township 17 South, Range 31 East,  
N.M.P.M., Eddy County, New Mexico.

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

W.O. Number: JG 32463

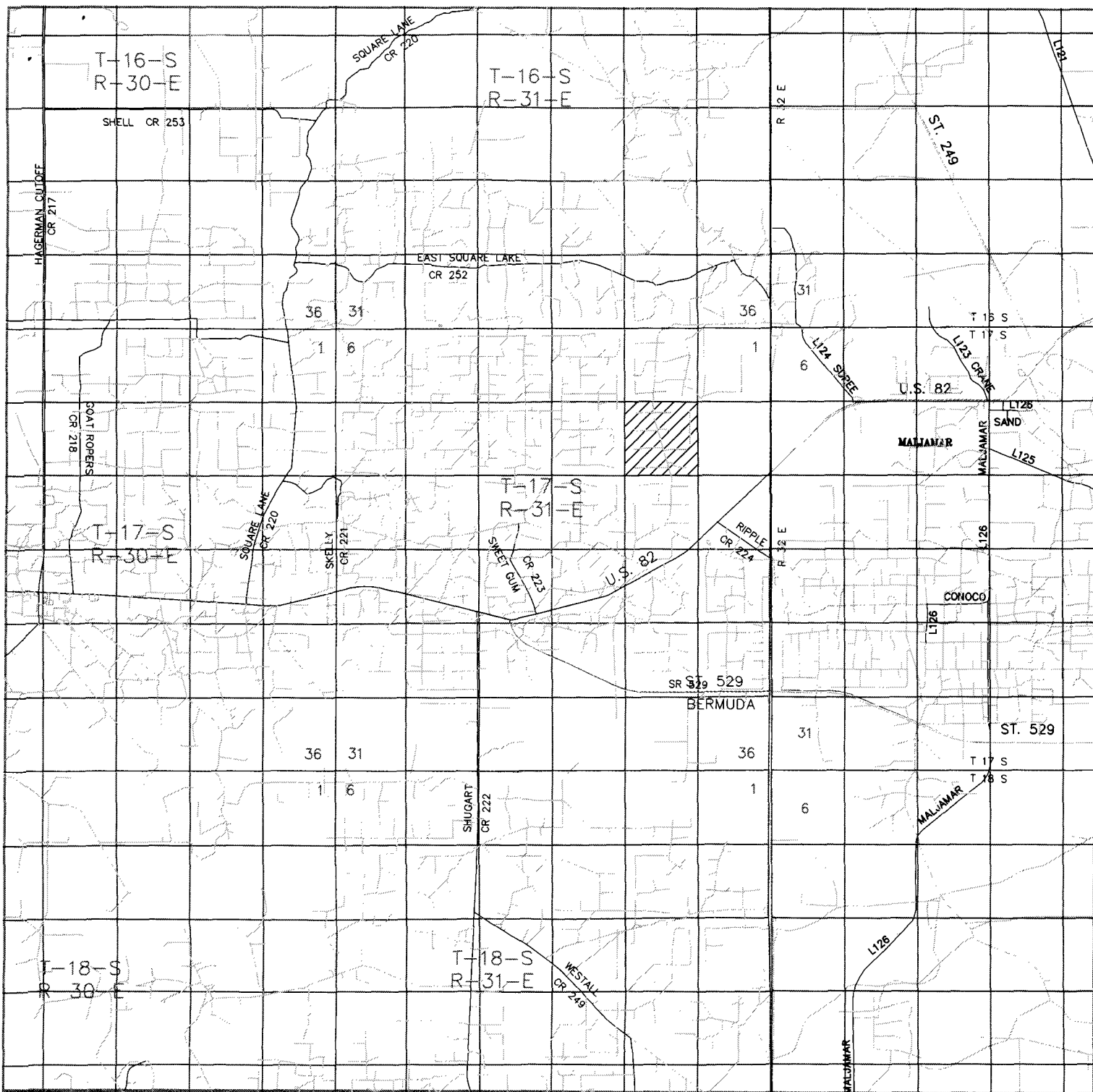
Survey Date: 9-27-2016

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



BURNETT  
OIL CO.





NOSLER 12 FED MO 8H

Located 750' FSL and 200' FEL

Section 11, Township 17 South, Range 31 East,  
N.M.P.M., Eddy County, New Mexico.

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0 1 MI 2 MI 3 MI 4 MI

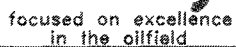
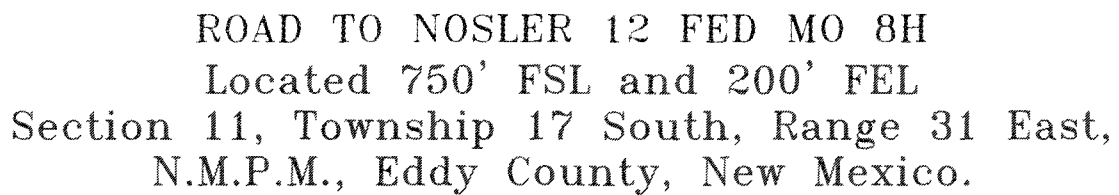
SCALE: 1" = 2 MILES

W.O. Number: KAN 32108

Survey Date: 12-09-2015

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

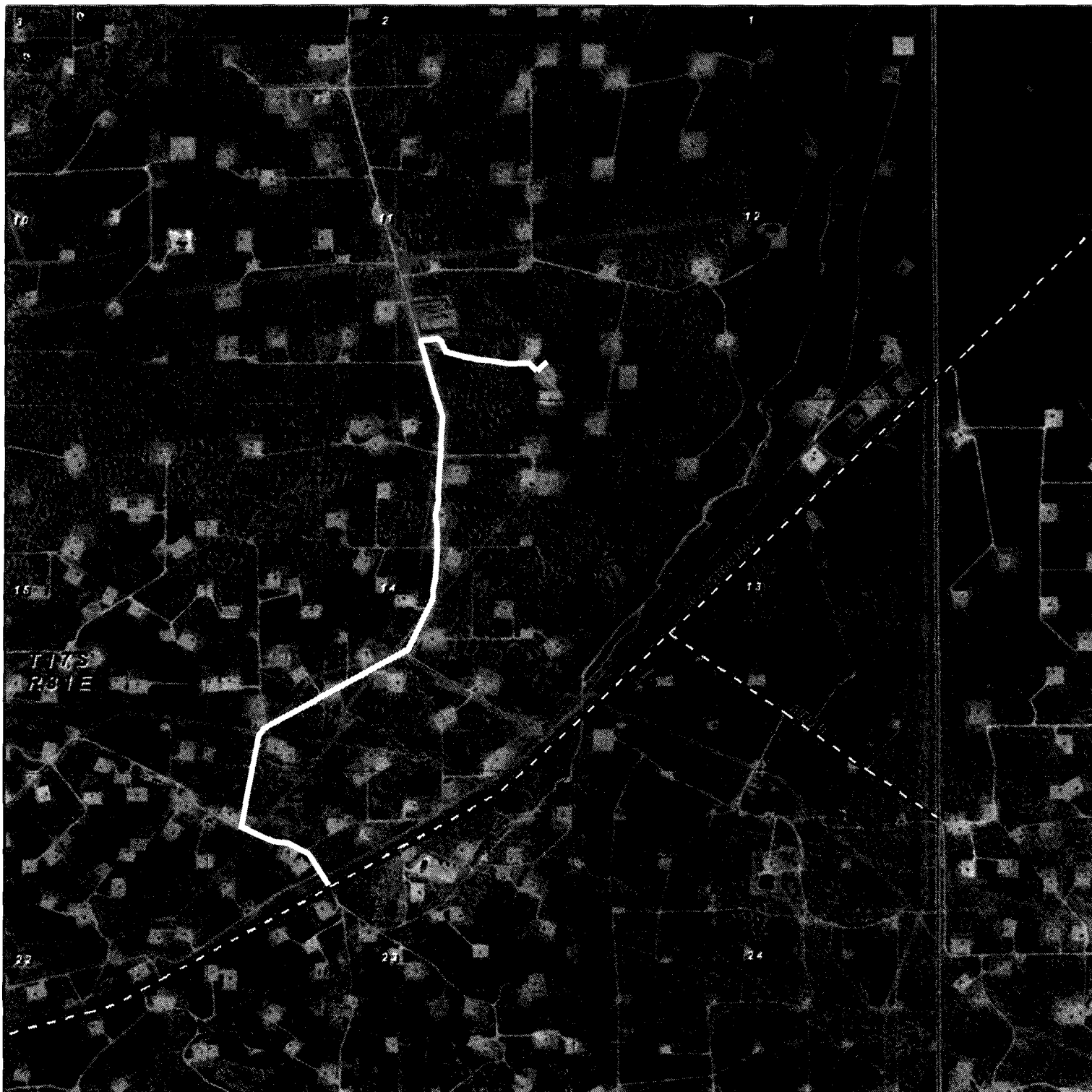
**Burnett Oil Co., Inc.**  
**6666**



SCALE: 1" = 3000'

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





ROAD TO NOSLER 12 FED MO 8H  
Located 750' FSL and 200' FEL  
Section 11, Township 17 South, Range 31 East,  
N.M.P.M., Eddy County, New Mexico.

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(575) 392-2206 - Fax  
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0' 1000' 2000' 3000' 4000'

SCALE: 1" = 3000'

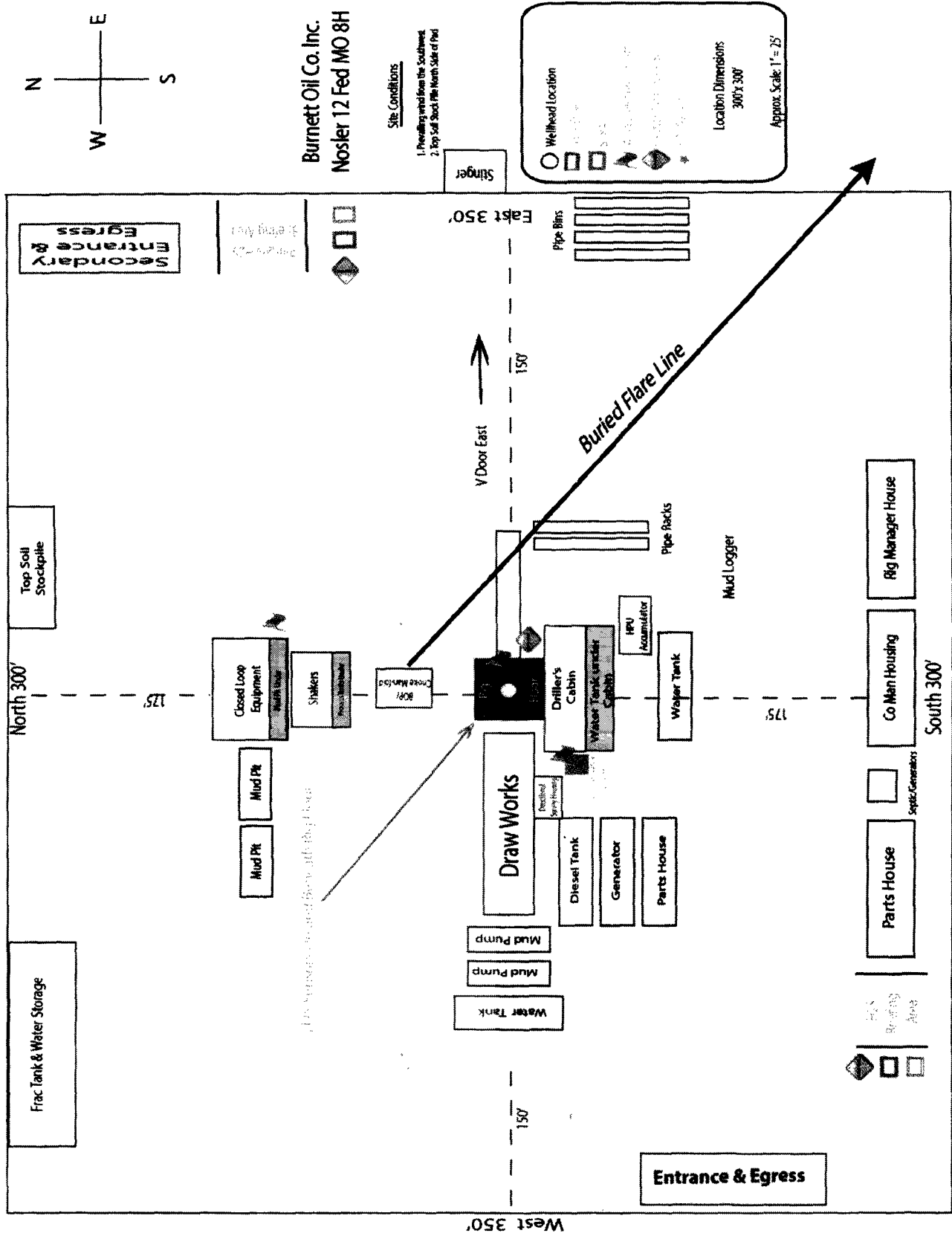
W.O. Number: KAN 32108

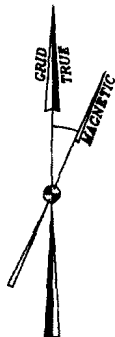
Survey Date: 12-09-2015

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

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

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





Lat - N 32.843975°  
 Long - W 103.832359°  
 NMSPCE- N 671136.1  
 E 695195.1  
 (NAD-83)  
 (NAVD88)

ON STATE 82 AT 0.6 MILES WEST OF MILE MARKER  
141, TAKE LEASE ROAD NORTH 0.3 MILES, THEN  
NORTH 1.8 MILES ON MAIN LEASE ROAD, THEN EAST  
0.3 MILES, CONTINUING EAST 0.1 MILES TO  
PROPOSED LOCATION DUE EAST.

200 0 200 400 FEET

SCALE: 1" = 200'

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

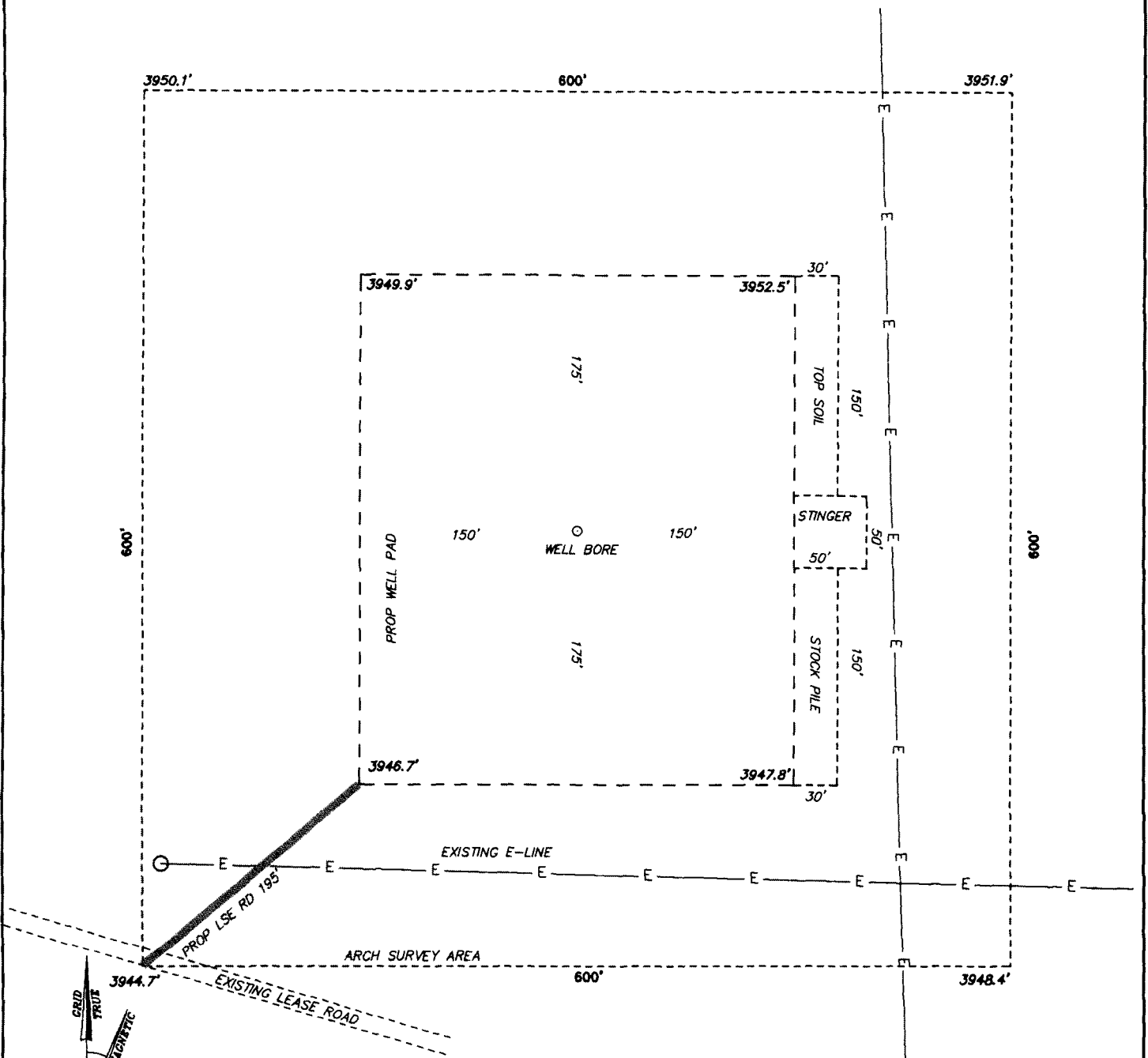
THE NOSLER 12 FED MO 8H LOCATED 750' FROM  
THE SOUTH LINE AND 200' FROM THE EAST LINE OF  
SECTION 11, TOWNSHIP 17 SOUTH, RANGE 31 EAST.

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

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SECTION 11, TOWNSHIP 17 SOUTH, RANGE 31 EAST. N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.



100 0 100 200 FEET  
SCALE: 1" = 100'

Burnett Oil Co., Inc.  
6666

REF: NOSLER 12 FED MO 8H / WELL PAD TOPO

THE NOSLER 12 FED MO 8H LOCATED 750' FROM  
THE SOUTH LINE AND 200' FROM THE EAST LINE OF  
SECTION 11, TOWNSHIP 17 SOUTH, RANGE 31 EAST.

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

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W.O. Number: 32108 Drawn By: K. NORRIS Date: 12-15-2015 Survey Date: 12-09-2015 Sheet 1 of 1 Sheets

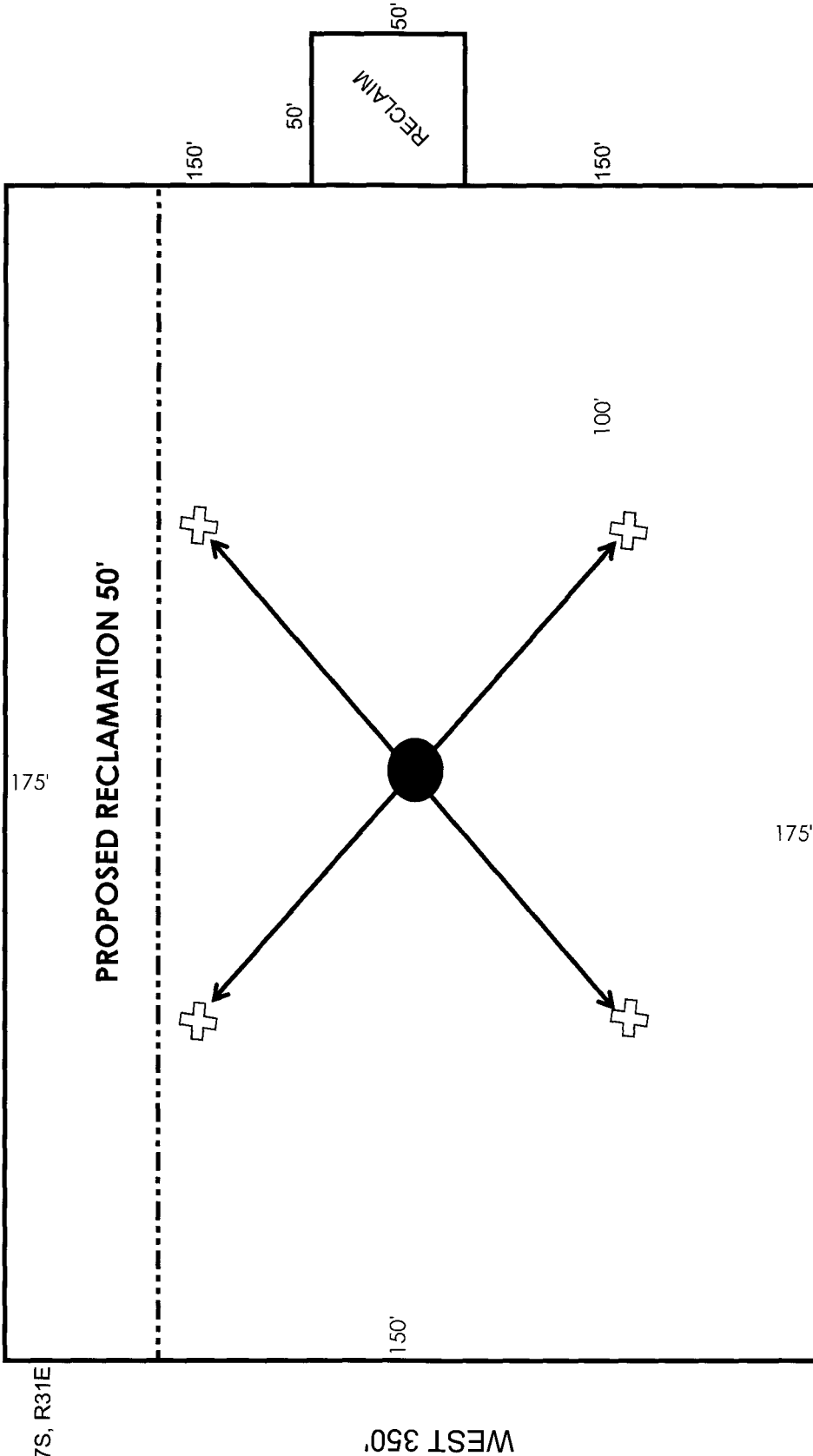
**BURNETT OIL CO., INC.**  
INTERIM RECLAMATION PLAT

NOSLER 12 FED MO 8H

750' FSL, 200' FEL

SEC 11, T17S, R31E

NORTH 300'



NOTE: RECLAIM 50' OFF NORTH, AND 50' X 50' STINGER

ANCHOR 75' FROM WELLHEAD TO ANCHORS

WELLHEAD

NOT TO SCALE

*Sent via email*

December 15, 2016

COG Operating LLC  
Attention: Mr. Joseph Scott, Landman  
600 W. Illinois Ave  
Midland, Texas 79701

Chevron North America Exploration and Production Company  
Attention: Ms. Amber Delach, Land Representative  
1400 Smith Street  
Houston, Texas 77002

RE: *Off-Lease Surface Locations; Maljamar Area, Eddy County, New Mexico*

Ladies and Gentlemen:

This letter agreement ("Letter Agreement") is entered into by and among Burnett Oil Co., Inc. ("Burnett"), COG Operating LLC ("COG"), and Chevron North America Exploration and Production Company ("Chevron" and collectively with COG, "COG / Chevron"), concerning three surface locations in the Maljamar area. Burnett, COG, and Chevron may be referred to herein individually as a "Party" or collectively as the "Parties."

Burnett is a leasehold interest owner and operator of oil and gas wells in and on part of Section 12, Township 17 South, Range 31 East, Eddy County, New Mexico. COG and Chevron are leasehold interest owners and joint operators of oil and gas wells in and on part of Section 11 of Township 17 South, Range 31 East, Eddy County, New Mexico. Burnett agrees to allow COG / Chevron to place, build, and locate two surface locations (the "COG / Chevron Locations") for well(s) and related equipment on or about Unit M of Section 12, as generally depicted on Exhibit "A" attached hereto and made a part hereof (depicted as the "Proposed Concho-Chevron Pad"). COG / Chevron agree to allow Burnett to place, build, and locate one surface location (the "Burnett Location") for well(s) and related equipment on or about Unit P of Section 11, as generally depicted on Exhibit "A" (depicted as the "Nosler 12 Fed MO 8H SL Proposed"). The Bureau of Land Management has approved the (i) COG / Chevron Locations and (ii) Burnett Location. Further, in order to avoid wellbore collisions, (i) Burnett agrees to furnish COG / Chevron with final directional plans, information, and gyro surveys for any well(s) drilled from the Burnett Location within thirty (30) days of receiving such information and (ii) COG / Chevron agree to furnish Burnett with final directional plans, information, and gyro surveys for any well(s) drilled from the COG / Chevron Locations within thirty (30) days of receiving such information.

Burnett agrees to not stake any well(s) on the COG / Chevron Locations without the prior written consent of COG / Chevron, such consent not to be unreasonably withheld. COG / Chevron agree to not stake any well(s) on the Burnett Location without the prior written consent of Burnett,



such consent not to be unreasonably withheld. The Parties agree that an existing or future well location that may conflict with the requested well to be staked is a reasonable ground for withholding consent.

This Letter Agreement may be executed in any number of counterparts, each of which shall be deemed valid and binding with respect to the signatories thereto, and all of which together shall constitute one and the same agreement.

If the foregoing accurately represents your understanding of our agreement, please so indicate by signing and returning an executed counterpart of this Letter Agreement to me at [cmeans@burnettoil.com](mailto:cmeans@burnettoil.com).


Sincerely,

A handwritten signature in black ink, appearing to read "Coley Means", with a stylized flourish at the end.

Coley Means

AGREED to and ACCEPTED:


BURNETT OIL CO., INC.

By:   
Name: Walter Glasgow  
Title: VP - Operations Permian Basin / NM

Date: 12.16.16

AGREED to and ACCEPTED:

COG Operating LLC

By:   
Name: Clay Bateman  
Title: Vice President of New Mexico

Date: 12-19-2016

AGREED to and ACCEPTED:

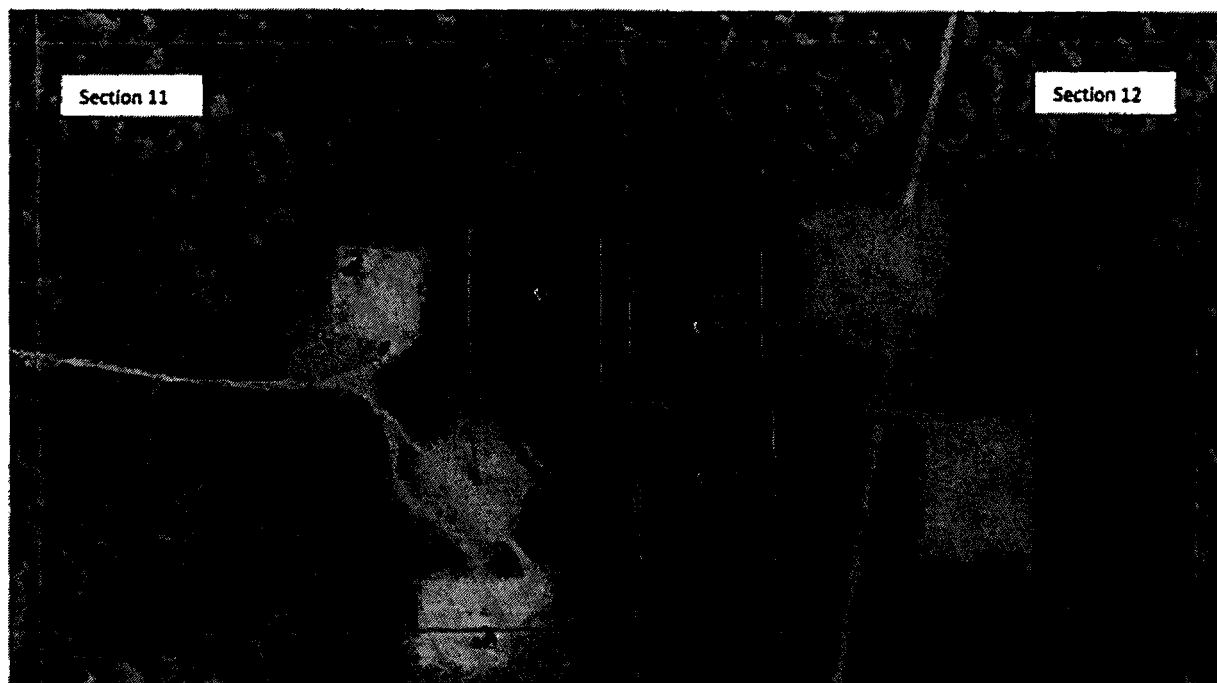
Chevron North America Exploration and Production Company

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

Date: \_\_\_\_\_

Exhibit "A"

*Attached to and made a part of that certain Letter Agreement concerning surface locations, dated December 15, 2016, by and among Burnett Oil Co., Inc., COG Operating LLC, and Chevron North America Exploration and Production Company*



**From:** Coley Means  
**To:** [Leslie Garvis](#)  
**Subject:** FW: Nosler 8H Well - Eddy Co, NM  
**Date:** Wednesday, December 21, 2016 8:57:34 AM

---

**COLEY MEANS**  
LAND MANAGER

**BURNETT OIL CO., INC.**  
BURNETT PLAZA – SUITE 1500  
801 CHERRY STREET – UNIT #9  
FORT WORTH, TX 76102-6881  
DIRECT: (817) 583-8761  
FAX: (817) 332-7832  
[CMEANS@BURNETTOIL.COM](mailto:CMEANS@BURNETTOIL.COM)

---

**From:** Delach, Amber Tarr [<mailto:ATarr@chevron.com>]  
**Sent:** Thursday, August 25, 2016 8:23 AM  
**To:** Coley Means  
**Subject:** RE: Nosler 8H Well - Eddy Co, NM

Coley-

I spoke with the technical team, and they are okay with the proposed SHL for the Nosler 8H. Please let me know if you have any questions, or need additional information.

Thanks,

**Amber Tarr Delach**  
Land Representative

Delaware Basin - New Mexico  
Chevron North America Exploration and Production Company  
1400 Smith St.  
Houston, TX 77002  
Direct: 713-372-9877  
Fax: 1-844-382-3721  
Email: [atarr@chevron.com](mailto:atarr@chevron.com)

---

**From:** Coley Means [<mailto:cmeans@burnettoil.com>]  
**Sent:** Thursday, August 18, 2016 8:25 AM  
**To:** Delach, Amber Tarr  
**Subject:** **[\*\*EXTERNAL\*\*]** RE: Nosler 8H Well - Eddy Co, NM

Thank you, Amber. I will give you a call soon to introduce myself.

**COLEY MEANS**  
LAND MANAGER

**BURNETT OIL CO., INC.**  
BURNETT PLAZA – SUITE 1500  
801 CHERRY STREET – UNIT #9  
FORT WORTH, TX 76102-6881  
DIRECT: (817) 583-8761  
FAX: (817) 332-7832

[CMEANS@BURNETTTOIL.COM](mailto:CMEANS@BURNETTTOIL.COM)

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**From:** Delach, Amber Tarr [<mailto:ATarr@chevron.com>]  
**Sent:** Wednesday, August 17, 2016 8:43 PM  
**To:** Coley Means  
**Subject:** RE: Nosler 8H Well - Eddy Co, NM

Coley,

I just want to let you know I have passed this information along to the technical team for their review and feedback, and will let you know as soon as I hear from them.

Thanks,

**Amber Tarr Delach**  
Land Representative

Delaware Basin - New Mexico  
Chevron North America Exploration and Production Company  
1400 Smith St.  
Houston, TX 77002  
Direct: 713-372-9877  
Fax: 1-844-382-3721  
Email: [atarr@chevron.com](mailto:atarr@chevron.com)

---

**From:** Coley Means [<mailto:cmeans@burnettoil.com>]  
**Sent:** Tuesday, August 02, 2016 4:57 PM  
**To:** Laning, James B  
**Cc:** Delach, Amber Tarr  
**Subject:** [**\*\*EXTERNAL\*\***] RE: Nosler 8H Well - Eddy Co, NM

Thank you. What area do you work now? Take care-

**COLEY MEANS**  
LAND MANAGER

**BURNETT OIL Co., INC.**  
BURNETT PLAZA – SUITE 1500  
801 CHERRY STREET – UNIT #9  
FORT WORTH, TX 76102-6881  
DIRECT: (817) 583-8761  
FAX: (817) 332-7832  
[CMEANS@BURNETTTOIL.COM](mailto:CMEANS@BURNETTTOIL.COM)

---

**From:** Laning, James B [<mailto:James.Laning@chevron.com>]  
**Sent:** Tuesday, August 02, 2016 3:37 PM  
**To:** Coley Means  
**Cc:** Walter Glasgow; Delach, Amber Tarr  
**Subject:** RE: Nosler 8H Well - Eddy Co, NM

Coley,

Thanks for the email. We had a re-org and I am no longer working NM. Amber Delach, who is cc'ed hereto, handles that area. I will sit down with her in the next few days and give her some background.

**J.J. Laning, CPL**  
Land Representative

CD/DRP AD Permian East  
Chevron North America Exploration and Production Company  
1400 Smith St.  
Houston, TX 77002  
Direct: 713-372-1290  
Fax: 1-877-384-7072  
Email: [jlpx@chevron.com](mailto:jlpx@chevron.com)

---

**From:** Coley Means [<mailto:cmeans@burnettoil.com>]  
**Sent:** Tuesday, August 02, 2016 3:26 PM  
**To:** Laning, James B  
**Cc:** Walter Glasgow  
**Subject:** [**\*\*EXTERNAL\*\***] Nosler 8H Well - Eddy Co, NM

JJ – Hope all is well.

Concerning our discussions last spring around the Burnett Nosler wells in Eddy County, NM (the Nosler 4H and 6H wells which have surface locations on the Chevron/Concho leasehold in Section 11 T17S R31E): You will recall that we discussed one more well Burnett would like to locate on Chevron / Concho's leasehold in Section 11, the Nosler 8H well. We agreed at the time to provide Chevron notice of any additional well location in Section 11 and work to find a location that will reasonably accommodate Chevron, COG, and Burnett.

Attached is a plat of our proposed location for the Nosler 8H well. We have worked to locate the well so as not to interfere with Chevron or COG's existing wells and to allow for what additional development in the SESE of Section 11 seems possible.

Would you look this over and let me know if Chevron is ok with this location? As before, Burnett will work with Chevron if it desires to use a portion of the Nosler 8H pad in the future for its operations on Section 11.

Feel free to call if you would like to discuss further. Thank you for your help with this.

**COLEY MEANS**  
LAND MANAGER

**BURNETT OIL Co., INC.**  
BURNETT PLAZA – SUITE 1500  
801 CHERRY STREET – UNIT #9  
FORT WORTH, TX 76102-6881  
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U.S. Department of the Interior  
BUREAU OF LAND MANAGEMENT

## PWD Data Report

06/14/2017

### 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:

PWD disturbance (acres):

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:

Describe 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:



### **Section 3 - Unlined Pits**

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:

Describe 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 Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

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:

PWD surface owner:

PWD disturbance (acres):

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

**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

06/14/2017

### 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:

# PECOS DISTRICT

## DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Burnett Oil Company Inc.
LEASE NO.:	NMLC029418B
WELL NAME & NO.:	8H – Nosler 12 Fed MO
SURFACE HOLE FOOTAGE:	750'/S & 200'/E
BOTTOM HOLE FOOTAGE:	331'/S & 1651'/E, 12
LOCATION:	Section 11 T.17 S., R.31 E., NMPM
COUNTY:	Lea County, New Mexico

Potash	<input checked="" type="radio"/> None	<input checked="" type="radio"/> Secretary	<input checked="" type="radio"/> R-111-P
Cave/Karst Potential	<input checked="" type="radio"/> Low	<input checked="" type="radio"/> Medium	<input checked="" type="radio"/> High
Variance	<input checked="" type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input checked="" type="radio"/> Other
Wellhead	<input checked="" type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	
Other	<input type="checkbox"/> 4 String Area	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP

### A. Hydrogen Sulfide

1. A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Plan shall be activated 500 feet prior to drilling into the **Grayburg** formation. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

### B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **750** 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 **8 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 **9-5/8** inch intermediate casing is:

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

**A double isolation packer is required at the top of Glorieta at approximately 5200 feet.**

3. The minimum required fill of cement behind the **7x5-½** 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.

- Cement should tie-back at least 200 feet into previous casing string.  
Operator shall provide method of verification.

### **C. PRESSURE CONTROL**

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)

☒ Chaves and Roosevelt Counties

Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201.

During office hours call (575) 627-0272.

After office hours call (575)

☒ Eddy County

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

☒ Lea County

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)  
393-3612

2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - 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.
3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
4. The record of the drilling rate along with the GR/N well log run from TD to surface (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. Operator shall perform the intermediate casing integrity test to 70% of the casing burst. This will test the multi-bowl seals.
  - 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.
  - f. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
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.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

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

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

**TMAK 06072017**

# PECOS DISTRICT SURFACE USE CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Burnett Oil Company Inc.
LEASE NO.:	NMLC029418B
WELL NAME & NO.:	8H – Nosler 12 Fed MO
SURFACE HOLE FOOTAGE:	750'/S & 200'/E
BOTTOM HOLE FOOTAGE	331'/S & 1651'/E, 12
LOCATION:	Section 11 T.17 S., R.31 E., NMPM
COUNTY:	Lea County, New Mexico

## TABLE OF CONTENTS

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

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☐ **Special Requirements**
  - Lesser Prairie-Chicken Timing Stipulations
  - Below Ground-level Abandoned Well Marker
- ☐ **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.

## V. SPECIAL REQUIREMENT(S)

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

Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period.

Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted.

Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise.

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

## **VI. CONSTRUCTION**

### **A. NOTIFICATION**

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the 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 .

### **E. WELL PAD SURFACING**

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation. The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

### **F. EXCLOSURE FENCING (CELLARS & PITS)**

**Exclosure Fencing**

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

**G. ON LEASE ACCESS ROADS****Road Width**

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

**Surfacing**

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

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

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

**Crowning**

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

**Ditching**

Ditching shall be required on both sides of the road.

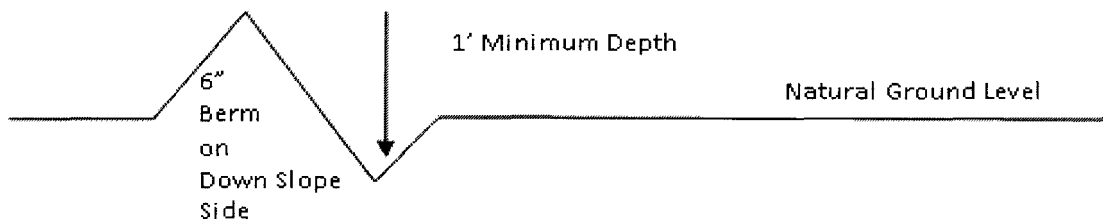
**Turnouts**

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

**Drainage**

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outloping and insloping, leadoff 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.



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 %);

### **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.



### Construction Steps

1. Salvage topsoil
2. Construct road

3. Redistribute topsoil
4. Revegetate slopes

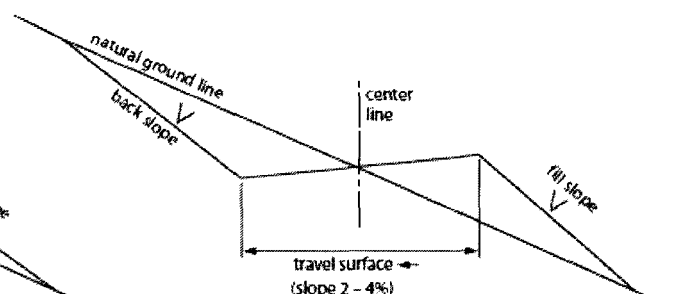
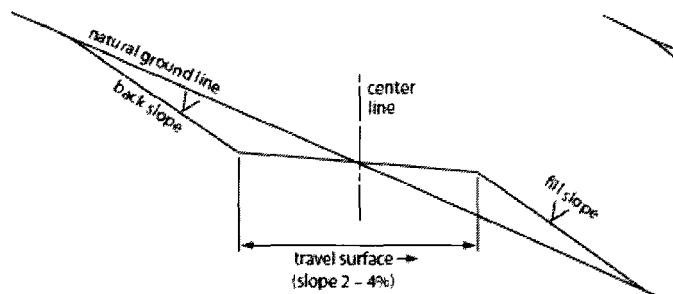
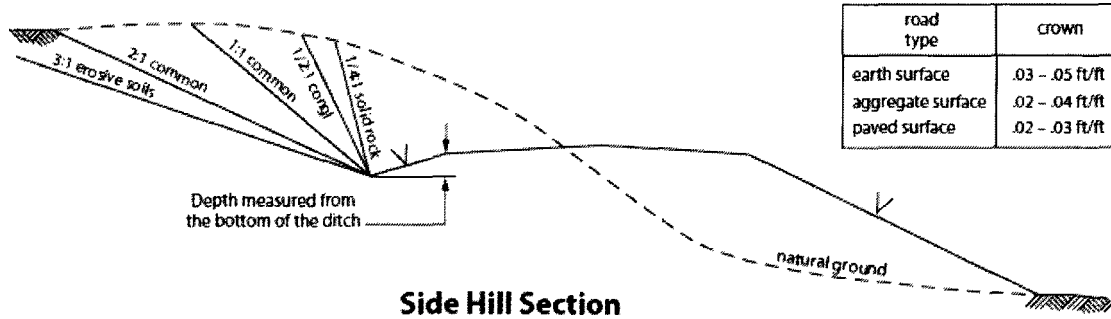
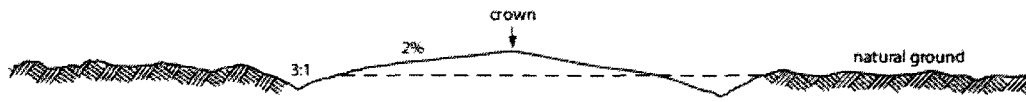
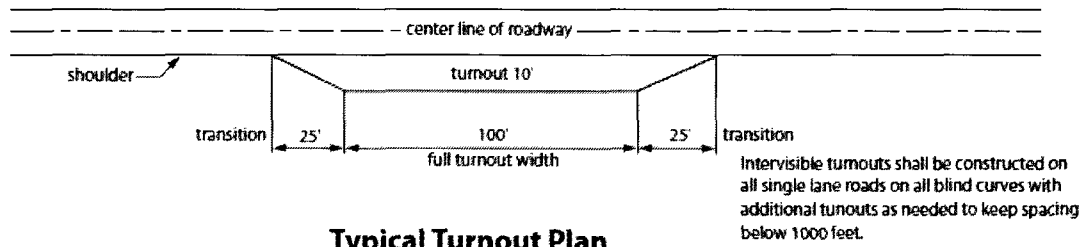


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

## VII. 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.

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 20 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.

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 or dune 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 24 inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.

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

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.

13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.

14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.

15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate cultural or scientific values. The holder will

be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

16. 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. **Lesser Prairie-Chicken:** Oil and gas activities will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities 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).

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

## Seed Mixture for LPC Sand/Shinnery Sites

Holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)\* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed shall be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed shall be either certified or registered seed. The seed container shall be tagged in accordance with State law(s) and available for inspection by the Authorized Officer.

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

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

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

\*Pounds of pure live seed:

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