<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV** 

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

Form C-101 August 1, 2011

Permit 349243

AT LIGATION TO ONT ENVIRT TO DRILL, NE-LIN	TEN, DEEL EN, LEOGBACK, ON ADD A ZONE
1. Operator Name and Address	2. OGRID Number
PURNETT OIL CO INC	3080

BURNETT OIL CO INC 3080 801 Cherry Street Unit #9 3. API Number Fort Worth, TX 76102 30-015-54335 4. Property Code 5. Property Name 6. Well No. 334820 FOUR LEAF CLOVER 003H

ADDITION FOR DEDMIT TO DOLL DE ENTED DEEDEN DILICRACK OR ADDIT ZONE

7. Surface Location

UL - Lot		Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County	
	E	17	19S	26E		1395	N	800	W	Eddy	

8. Proposed Bottom Hole Location

UL - Lot Section Township		Range Lot Idn Feet From			N/S Line	Feet From	E/W Line	County	
E	18	19S	26E	2	2290	N	101	E	Eddy

9. Pool Information

WILDCAT G-01 S192617K;GLOR-YESO	97788

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	OIL		Private	3394
16. Multiple	17. Proposed Depth	18. Formation	19. Contractor	20. Spud Date
N	9239	Yeso		1/31/2024
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

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

21. Proposed Casing and Cement Program

	21. Floposed Casing and Centent Flogram												
	Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC						
ĺ	Surf	12.25	9.625	36	1250	438	0						
	Prod	8.75	7	26	2900	1442	0						
I	Prod	8 75	5.5	17	9239	1442	0						

#### Casing/Cement Program: Additional Comments

g-	· · · · · · · · · · · · · · · · · ·

22. Proposed Blowout Prevention Program

Туре	Working Pressure	Test Pressure	Manufacturer
Annular	2000	1500	TBD

knowledge and I	I have complied with 19.15.14.9 (A) N	true and complete to the best of my  IMAC ⊠ and/or 19.15.14.9 (B) NMAC		OIL CONSER	VATION DIVISION
Printed Name:	Electronically filed by Heather Dis	smore	Approved By:	Ward Rikala	
Title:	Engineering Technician		Title:		
Email Address: hdissmore@burnettoil.com			Approved Date:	10/30/2023	Expiration Date: 10/30/2025
Date:	10/26/2023	Phone: 817-583-8873	Conditions of Appr	roval Attached	

State of New Mexico DISTRICT I 1625 N. FRENCH DR., HOBBS, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 Energy, Minerals & Natural Resources Department DISTRICT II 811 S. FIRST ST., ARTESIA, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505

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

☐ AMENDED REPORT

DISTRICT III 1000 RIO BRAZOS RD., AZTEC, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

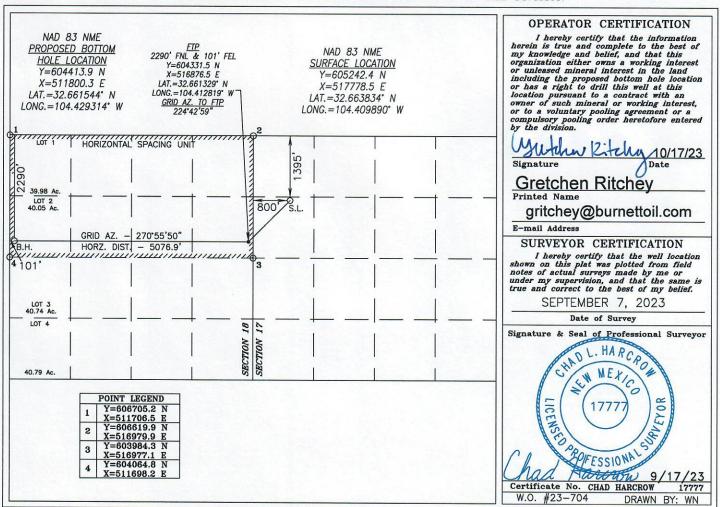
DISTRICT IV 1220 S. ST. FRANCIS DR., SANTA FE, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

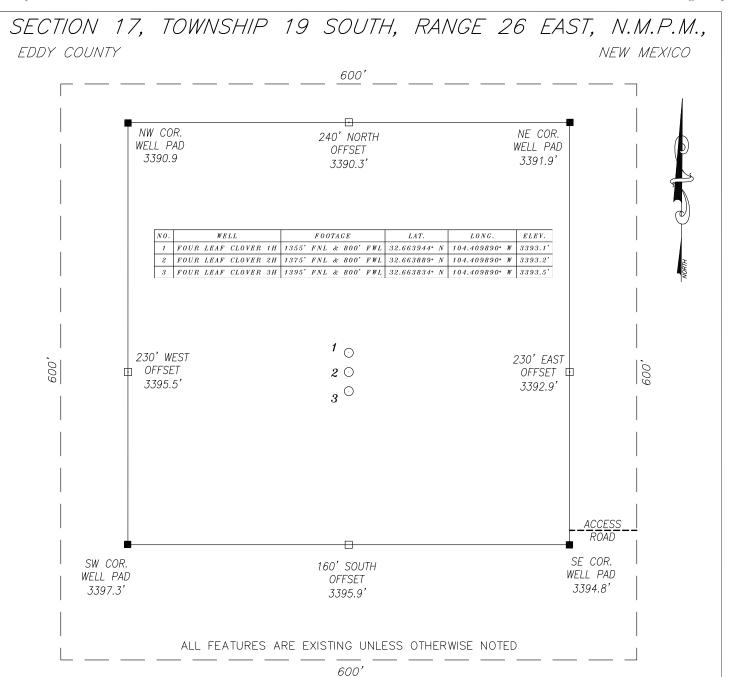
	WELL LOCATION AND	ACREAGE DEDICATION PLAT	
API Number	Pool Code	Pool Name	
30-015-54335	97788	WILDCAT G-01 S192617	K: GLOR-YESO
Property Code	Prop	erty Name	Well Number
334820	FOUR LI	EAF CLOVER	3H
OGRID No.		ator Name	Elevation
03080	BURNETT	OIL CO INC.	3393.5'

#### Surface Location UL or lot No. Section Township Lot Idn Feet from the Range North/South line Feet from the East/West line County E 17 19-S 26 - E1395 NORTH 800 WEST EDDY Bottom Hole Location If Different From Surface

2	18	19-		ange 6-E	Lot Idn	Feet from the 2290	North/South line NORTH	Feet from the	East/West line EAST	County
Dedicated Acres	s Joint o	r Infill	Consoli	idation (	Code Ord	der No.				

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION





DIRECTIONS TO LOCATION

FROM INTERSECTION OF HWY. 285 AND ROCKING R RED RD. (CR-21), GO WEST ON ROCKING R RED RD. FOR APPROX. 0.5 MILES; THEN TURN RIGHT (NORTH) AND GO APPROX. 0.5 MILES TO THE PROPOSED ROAD. PROPOSED WELLS LIE APPROX. 1250 FEET WEST.

COORDINATES ARE NAD 83 NME AND ELEVATIONS ARE NAVD 88 CERTIFICATION

MEXIC

POFESSIONA

CLIVITIOATION.

I, CHAD HARCROW, A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR CERTIFY
THAT I DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY IS
TRUE AND CORRECT TO THE BEST OF MIX KNOWLEDGE AND BELIEF.

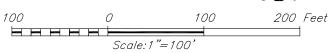
9/17/23

2316 W. MAIN ST, ARTESIA, N.M. 88210 PH: (575) 746-2158

c.harcrow@harcrowsurveying.com

HARCROW SURVEYING, LLC





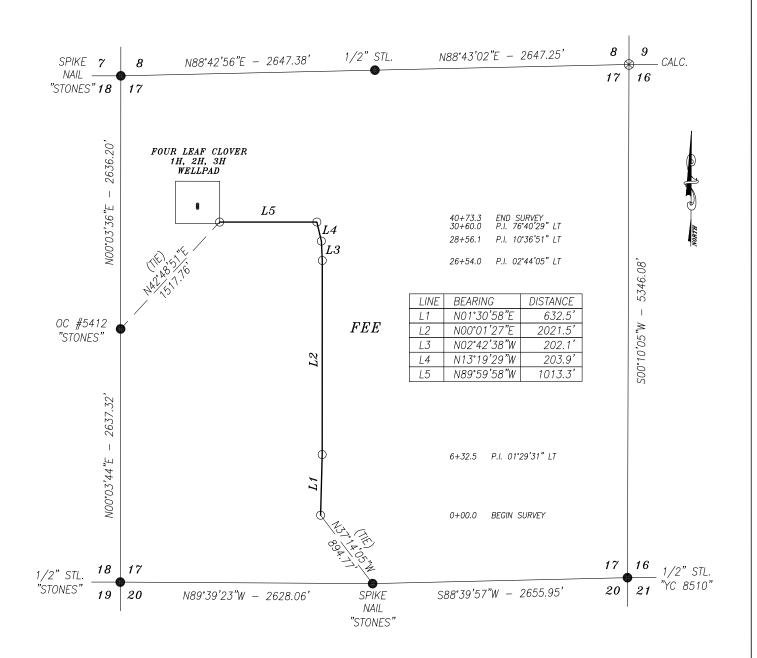
BURNE	CO :	IN(	7.	
SURVEY DATE: SEPT	6	300S		
DRAFTING DATE: SE	PAGE:	1	OF	1
APPROVED BY: CH	FILE:	23-	-701	

NO. 17777

CHAD HARCROW N.M.P.S.

# ROAD PLAT BURNETT OIL CO INC.

ACCESS ROAD FOR THE "FOUR LEAF CLOVER WELLPAD" IN SECTION 17, TOWNSHIP 19 SOUTH, RANGE 26 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.



# DESCRIPTION

A STRIP OF LAND 30.0 FEET WIDE AND 4073.3 FEET OR 246.87 RODS OR 0.771 MILES IN LENGTH CROSSING FEE LAND IN SECTION 17, TOWNSHIP 19 SOUTH, RANGE 26 EAST, EDDY COUNTY, NEW MEXICO AND BEING 15.0 FEET LEFT AND 15.0 FEET RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.

### BASIS OF BEARING:

BEARINGS SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983. DISTANCES ARE SURFACE VALUES.

### CERTIFICATION

I, CHAD HARCROW, A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR CERTIFY THAT I DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS

# HARCROW SURVEYING, LLC

2316 W. MAIN ST, ARTESIA, N.M. 88210 PH: (575) 746-2158 c.harcrow@harcrowsurveying.com



1000 0 1000 2000 FEET

SCALE: 1"=1000'

# BURNETT OIL CO INC.

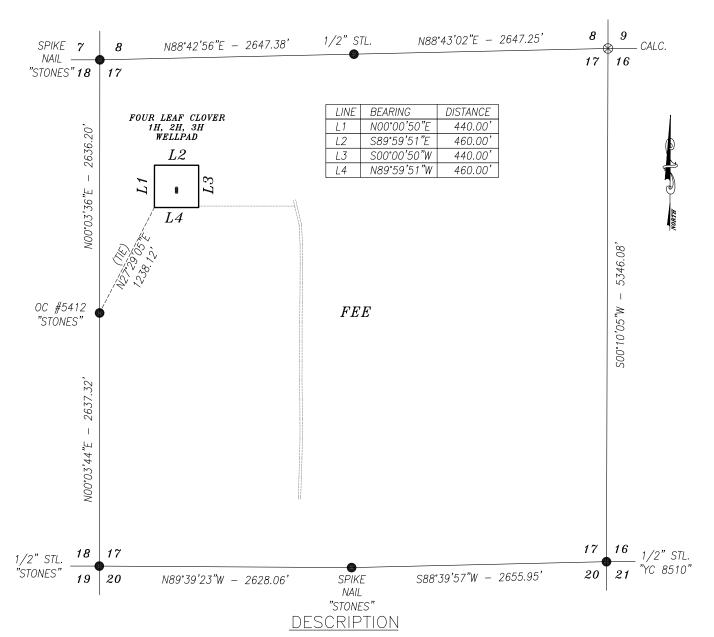
SURVEY OF A PROPOSED ROAD LOCATED IN SECTION 17, TOWNSHIP 19 SOUTH, RANGE 26 EAST, NMPM, EDDY COUNTY, NEW MEXICO

SURVEY DATE: SEPT. 7, 2023	ACCESS ROAD
DRAFTING DATE: SEPT. 12, 2023	PAGE 1 OF 1
APPROVED BY: CH DRAWN BY: WN	FILE: 23-701

# PAD EASEMENT PLAT BURNETT OIL CO INC.

"FOUR LEAF CLOVER WELLPAD" IN

SECTION 17. TOWNSHIP 19 SOUTH, RANGE 26 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.



A PROPOSED PAD LOCATED WITHIN USA LAND IN SECTION 17, TOWNSHIP 19 SOUTH, RANGE 26 EAST, NMPM, EDDY COUNTY, NEW MEXICO AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF THE PROPOSED PAD, WHICH LIES N27°29'05"E 1238.12 FEET FROM THE WEST QUARTER CORNER OF SAID SECTION; THEN NO0°00'50"E 440.00 FEET; THEN S89°59'51"E 460.00 FEET; THEN S00°00'50"W 440.00 FEET; THEN N89°59'51"W 460.00 FEET TO THE POINT OF BEGINNING.

SAID PAD CONTAINS 4.646 ACRES.

### BASIS OF BEARING:

BEARINGS SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983. DISTANCES ARE SURFACE VALUES.

### CERTIFICATION

I, CHAD HARCROW, A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR CERTIFY THAT I DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS



# HARCROW SURVEYING, LLC

2316 W. MAIN ST, ARTESIA, N.M. 88210 PH: (575) 746-2158

c.harcrow@harcrowsurveying.com

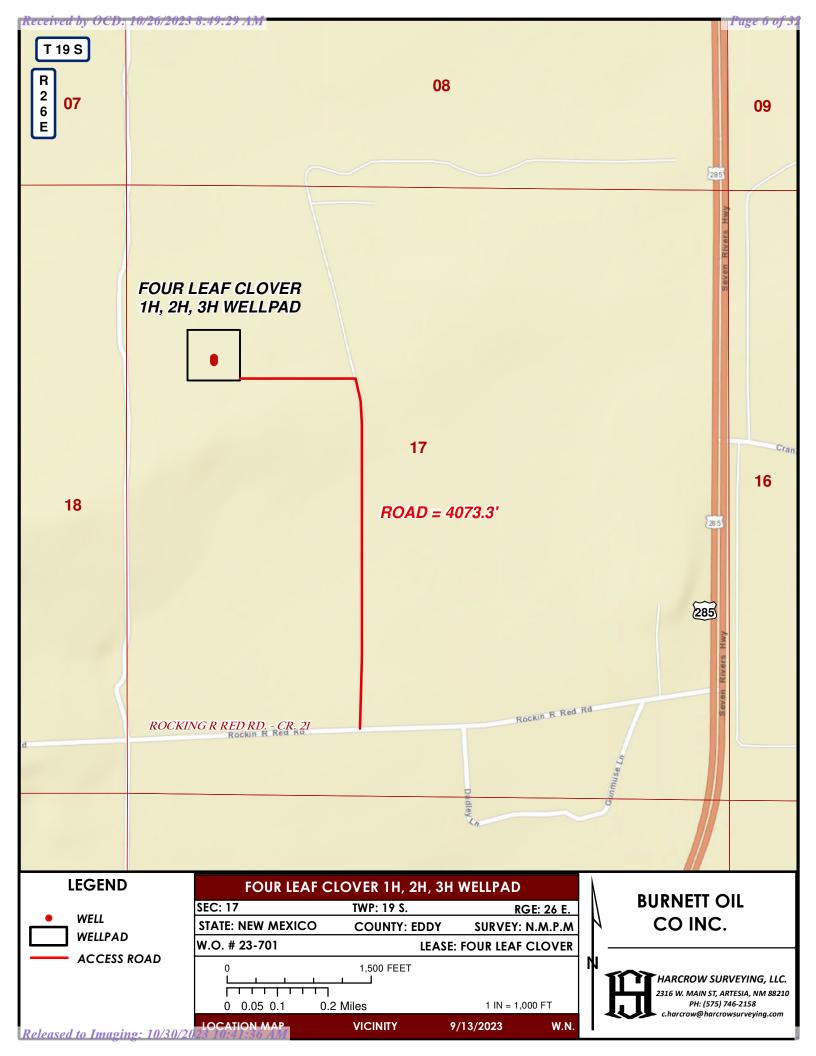


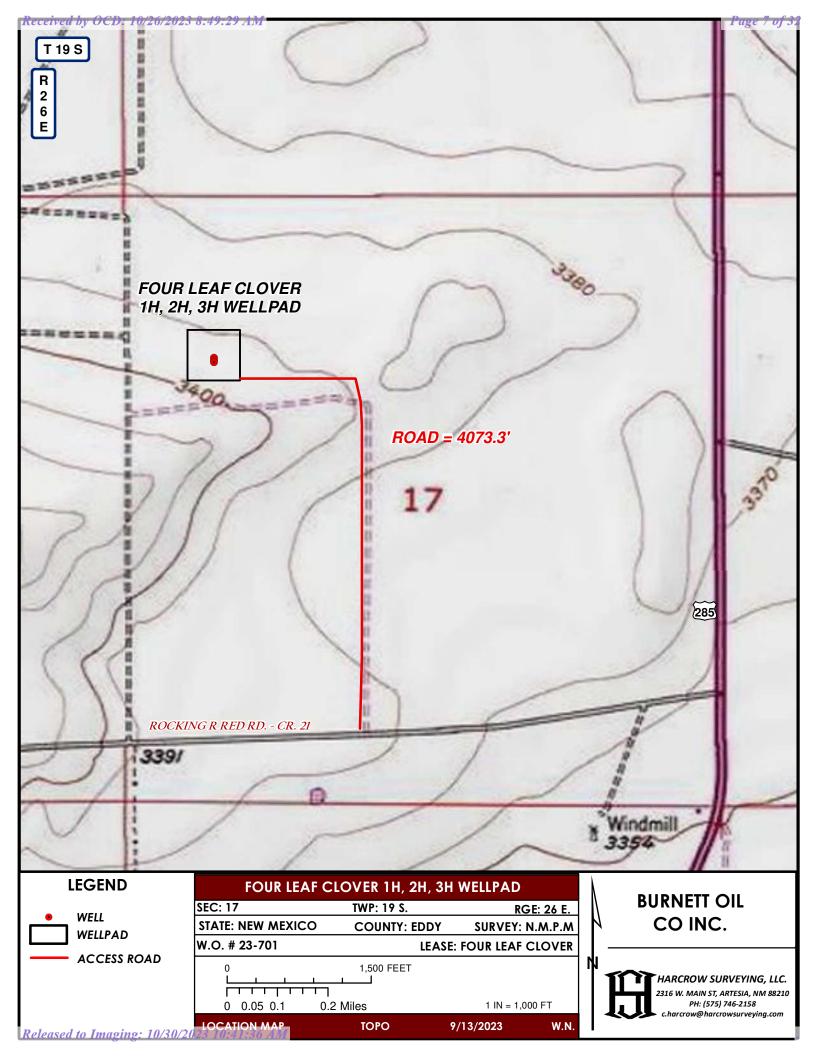
1000 1000 2000 FEET SCALE: 1"=1000'

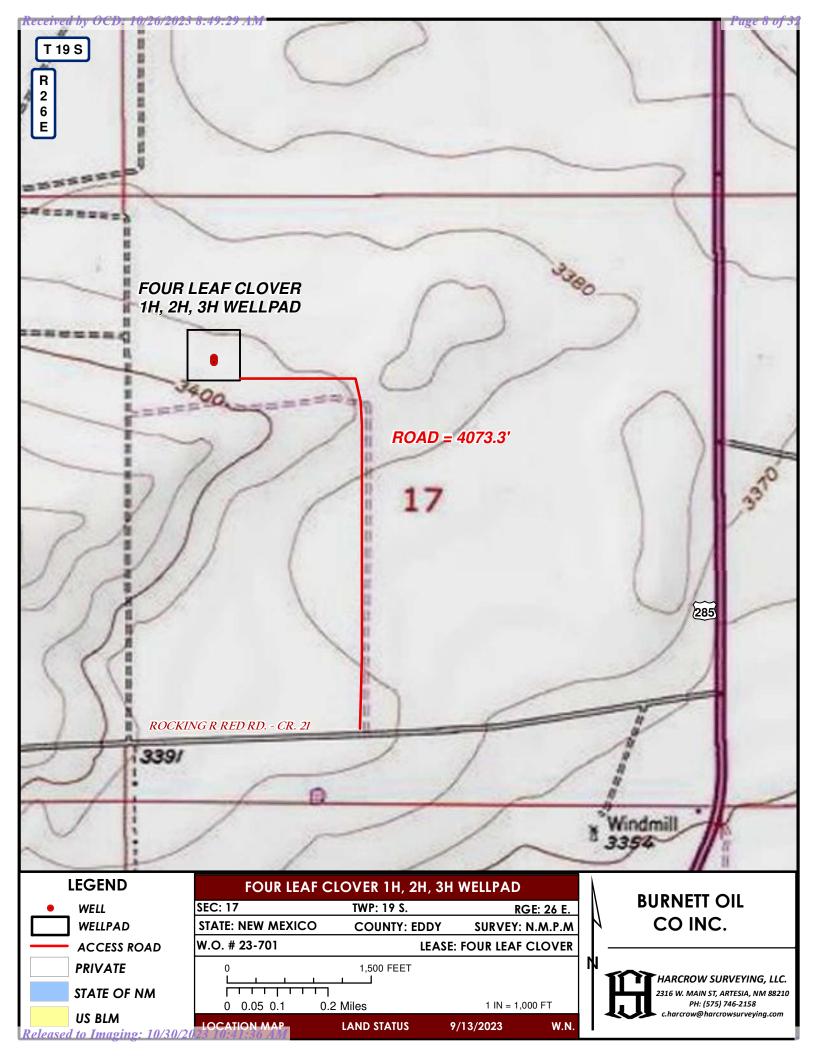
# BURNETT OIL CO INC.

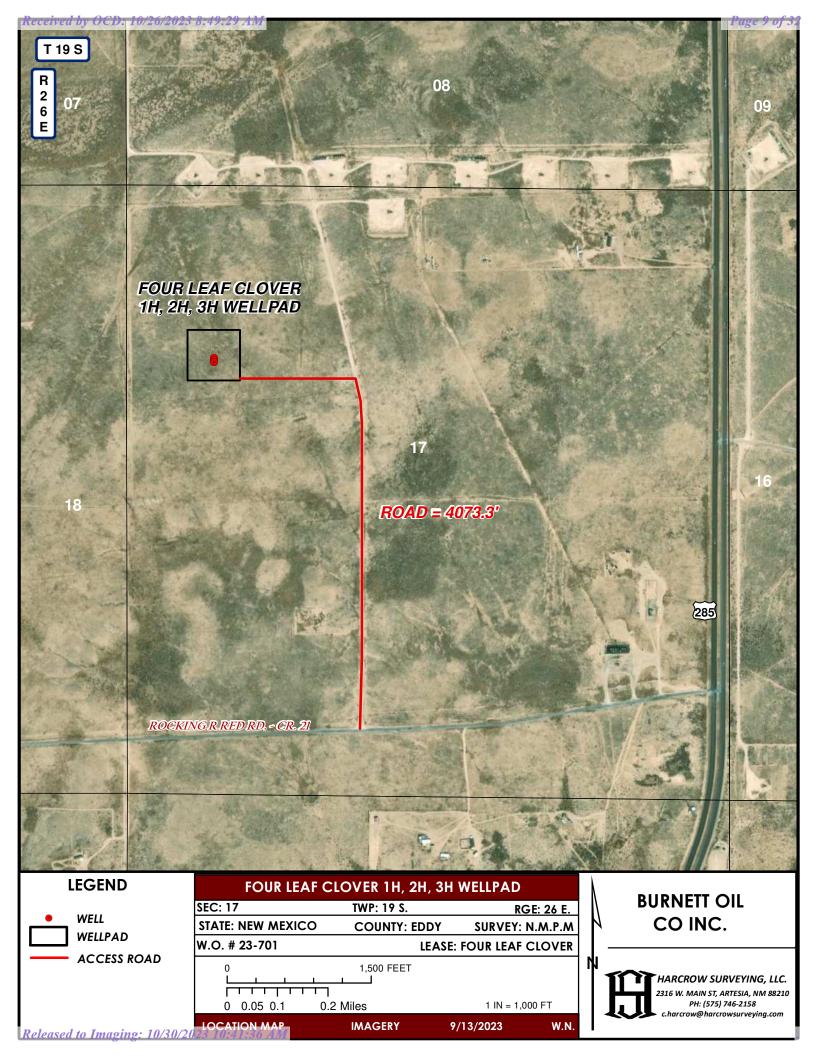
SURVEY OF A PROPOSED ROAD LOCATED IN SECTION 17, TOWNSHIP 19 SOUTH, RANGE 26 EAST, NMPM, EDDY COUNTY, NEW MEXICO

SURVEY DATE: S	EPT. 7, 2023	ACCESS ROAD
DRAFTING DATE: S	SEPT. 12, 2023	PAGE 1 OF 1
APPROVED BY: CH	DRAWN BY: WN	FILE: 23-701









<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

Form APD Conditions

Permit 349243

#### PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:		
BURNETT OIL CO INC [3080]	30-015-54335		
801 Cherry Street Unit #9	Well:		
Fort Worth, TX 76102	FOUR LEAF CLOVER #003H		

OCD Reviewer	Condition
ward.rikala	Notify OCD 24 hours prior to casing & cement
ward.rikala	Will require a File As Drilled C-102 and a Directional Survey with the C-104
ward.rikala	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing
ward.rikala	If cement does not circulate on any string, a CBL is required for that string of casing.
ward.rikala	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system
ward.rikala	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud
ward.rikala	Surface casing shall be sat no deeper than the top of the uppermost salt.
ward.rikala	Burnett is currently out of compliance with Rule 5.9. This well can not be produced until the operator is in compliance.

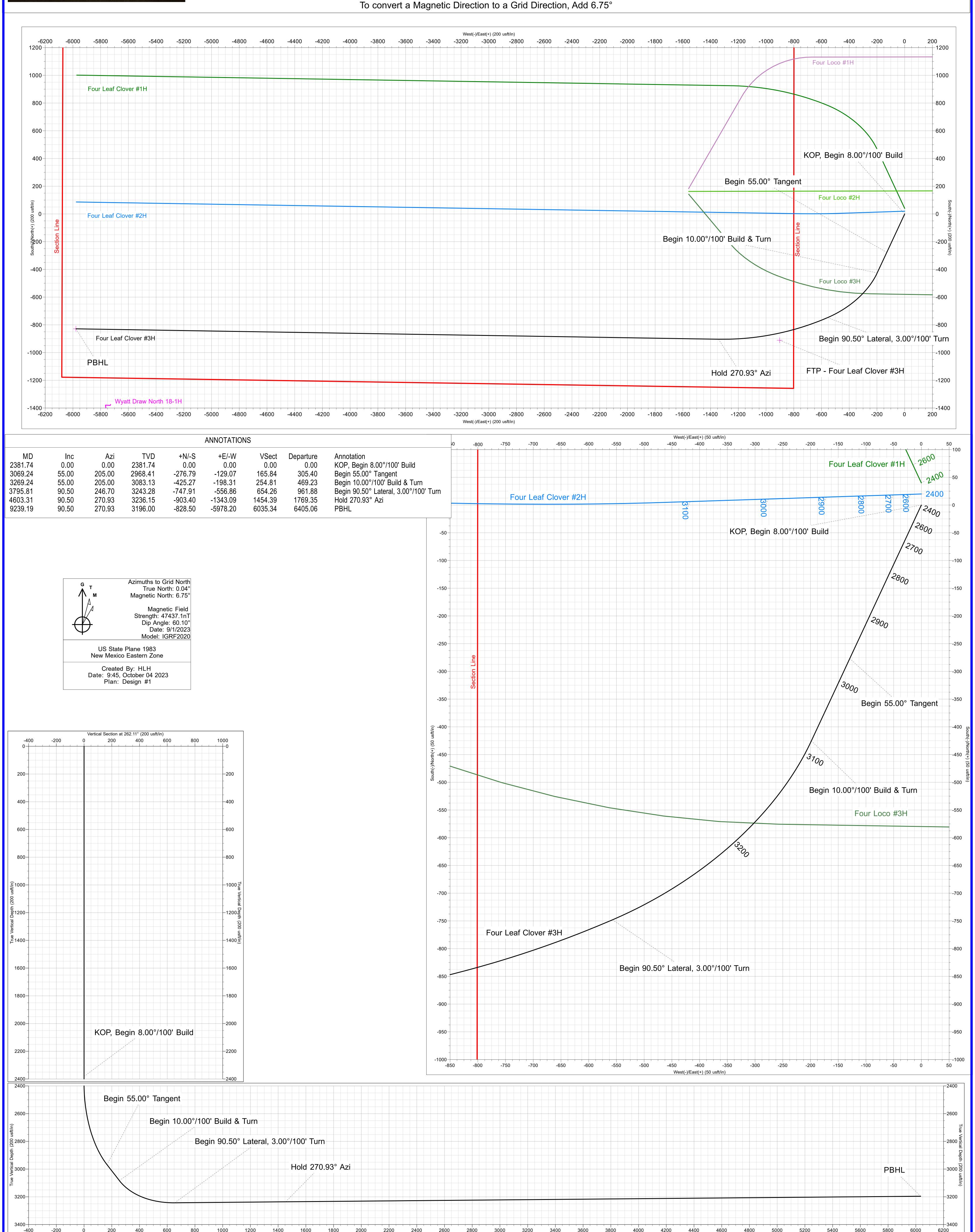
Received by OCD: 10/26/2023 8:49:29 AM

BURNETT OIL CO., INC.

Company: Burnett Oil Company
Site: Four Leaf Clover
Well: Four Leaf Clover #3H
Project: Eddy County, New Mexico (NAD83)
Rig: 17.6' KB
To convert a Magnetic Direction to a Grid Direction, Add 6.75°



Page 11 of 32



Vertical Section at 262.11° (200 usft/in)



# **Burnett Oil Company**

Eddy County, New Mexico (NAD83) Four Leaf Clover Four Leaf Clover #3H

Wellbore #1

Plan: Design #1

# **Standard Planning Report**

04 October, 2023



# BURNETT OIL CO., INC.

### Stryker Directional

Planning Report



EDM5000 Database:

Company: **Burnett Oil Company** 

Project: Eddy County, New Mexico (NAD83) Four Leaf Clover Site: Well: Four Leaf Clover #3H

Wellbore #1 Wellbore: Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well Four Leaf Clover #3H RKB @ 3411.10usft (17.6' KB) RKB @ 3411.10usft (17.6' KB)

Minimum Curvature

**Project** Eddy County, New Mexico (NAD83)

Map System: US State Plane 1983 North American Datum 1983 Geo Datum:

Map Zone: New Mexico Eastern Zone System Datum:

Mean Sea Level

Four Leaf Clover Site

Site Position: Northing: 605,356.96 usft Latitude: 32.664149 From: Мар Easting: 517,820.80 usft Longitude: -104.409753 **Position Uncertainty:** 0.00 usft Slot Radius: 13-3/16 " **Grid Convergence:** -0.04°

Well Four Leaf Clover #3H

**Well Position** +N/-S -114.56 usft Latitude: 32.663834 Northing: 605,242.40 usft +E/-W -42.30 usft Easting: 517,778.50 usft Longitude: -104.409890

**Position Uncertainty** 0.00 usft Wellhead Elevation: **Ground Level:** 3,393.50 usft

Wellbore #1 Wellbore

Declination Field Strength **Magnetics Model Name** Sample Date **Dip Angle** (°) (°) (nT) 47,437.10632589 IGRF2020 9/1/2023 60.10 6.71

Design Design #1

**Audit Notes:** 

Version: Phase: **PLAN** Tie On Depth: 0.00

Depth From (TVD) Vertical Section: +N/-S +E/-W Direction (usft) (usft) (usft) (°) 0.00 0.00 0.00 262.11

Plan Section	s									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,381.74	0.00	0.00	2,381.74	0.00	0.00	0.00	0.00	0.00	0.00	
3,069.24	55.00	205.00	2,968.41	-276.79	-129.07	8.00	8.00	0.00	205.00	
3,269.24	55.00	205.00	3,083.13	-425.27	-198.31	0.00	0.00	0.00	0.00	
3,795.81	90.50	246.70	3,243.28	-747.91	-556.86	10.00	6.74	7.92	56.79	
4,603.31	90.50	270.93	3,236.15	-903.40	-1,343.09	3.00	0.00	3.00	89.90	
9,239.20	90.50	270.93	3,196.00	-828.50	-5,978.20	0.00	0.00	0.00	0.00 P	BHL - Four Leaf C

### BURNETT OIL CO., INC.

# **Stryker Directional**

**Planning Report** 



Database: Company: EDM5000

**Burnett Oil Company** 

Project: Eddy County, New Mexico (NAD83)
Site: Four Leaf Clover

Site: Four Leaf Clover
Well: Four Leaf Clover #3H

Wellbore: Wellbore #1

Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well Four Leaf Clover #3H RKB @ 3411.10usft (17.6' KB) RKB @ 3411.10usft (17.6' KB)

Grid

Minimum Curvature

Design:		Design #1								
Planned Su	rvey									
De	sured pth sft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3	0.00 100.00 200.00 800.00 400.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 100.00 200.00 300.00 400.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
6 7 8	500.00 500.00 700.00 800.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	500.00 600.00 700.00 800.00 900.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
1,1 1,2 1,3	000.00 100.00 200.00 800.00 400.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	1,000.00 1,100.00 1,200.00 1,300.00 1,400.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
1,6 1,7 1,8	500.00 500.00 700.00 800.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	1,500.00 1,600.00 1,700.00 1,800.00 1,900.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
2,1 2,2 2,3 2,3	000.00 100.00 200.00 800.00 381.74	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	2,000.00 2,100.00 2,200.00 2,300.00 2,381.74	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
KOI	P, Begin	8.00°/100' Bu	ild							
2,4 2,5 2,5	100.00 150.00 500.00 550.00 600.00	1.46 5.46 9.46 13.46 17.46	205.00 205.00 205.00 205.00 205.00	2,400.00 2,449.90 2,499.46 2,548.46 2,596.64	-0.21 -2.95 -8.83 -17.83 -29.91	-0.10 -1.37 -4.12 -8.31 -13.95	0.13 1.77 5.29 10.68 17.92	8.00 8.00 8.00 8.00 8.00	8.00 8.00 8.00 8.00 8.00	0.00 0.00 0.00 0.00 0.00
2,7 2,7 2,8	650.00 700.00 750.00 800.00 850.00	21.46 25.46 29.46 33.46 37.46	205.00 205.00 205.00 205.00 205.00	2,643.77 2,689.63 2,733.99 2,776.63 2,817.34	-45.00 -63.04 -83.93 -107.58 -133.86	-20.99 -29.40 -39.14 -50.16 -62.42	26.96 37.77 50.29 64.46 80.21	8.00 8.00 8.00 8.00 8.00	8.00 8.00 8.00 8.00 8.00	0.00 0.00 0.00 0.00 0.00
2,9 3,0 3,0	900.00 950.00 000.00 050.00 069.24	41.46 45.46 49.46 53.46 55.00	205.00 205.00 205.00 205.00 205.00	2,855.94 2,892.22 2,926.02 2,957.17 2,968.41	-162.66 -193.82 -227.20 -262.64 -276.79	-75.85 -90.38 -105.95 -122.47 -129.07	97.46 116.13 136.13 157.37 165.84	8.00 8.00 8.00 8.00 8.00	8.00 8.00 8.00 8.00 8.00	0.00 0.00 0.00 0.00 0.00
Beg	gin 55.00	0° Tangent								
3,2 3,2	100.00 200.00 269.24	55.00 55.00 55.00	205.00 205.00 205.00	2,986.06 3,043.42 3,083.13	-299.63 -373.87 -425.27	-139.72 -174.34 -198.31	179.53 224.01 254.81	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
	g <mark>in 10.00</mark> 300.00	0°/100' Build 8		3 100 20	-448.04	200 60	260.24	10.00	E 60	10.01
	300.00 350.00	56.72 59.68	208.08 212.83	3,100.39 3,126.75	-448.04 -484.64	-209.69 -231.24	269.21 295.58	10.00 10.00	5.60 5.91	10.01 9.50
3,4 3,5 3,5	100.00 150.00 500.00 550.00 600.00	62.79 66.04 69.40 72.85 76.36	217.29 221.50 225.51 229.34 233.03	3,150.82 3,172.41 3,191.37 3,207.55 3,220.83	-520.48 -555.30 -588.83 -620.82 -651.01	-256.42 -285.05 -316.90 -351.74 -389.29	325.44 358.58 394.73 433.63 474.98	10.00 10.00 10.00 10.00 10.00	6.23 6.50 6.72 6.89 7.03	8.93 8.43 8.01 7.66 7.38

# **Stryker Directional**

**Planning Report** 



Database: EDM5000

Company: Burnett Oil Company

Project: Eddy County, New Mexico (NAD83)
Site: Four Leaf Clover
Well: Four Leaf Clover #3H

Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well Four Leaf Clover #3H RKB @ 3411.10usft (17.6' KB) RKB @ 3411.10usft (17.6' KB)

Grid

Minimum Curvature

Design:	Design #1								
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)
3,650.00	79.93	236.61	3,231.10	-679.19	-429.28	518.45	10.00	7.14	7.16
3,700.00	83.54	240.11	3,238.29	-705.14	-471.39	563.73	10.00	7.21	7.00
3,750.00	87.17	243.56	3,242.35	-728.65	-515.31	610.46	10.00	7.26	6.90
3,795.81	90.50	246.70	3,243.28	-747.91	-556.86	654.26	10.00	7.28	6.86
3,800.00	0° Lateral, 3.0 90.50	0°/ <b>100' Turn</b> 246.83	3,243.24	-749.56	-560.71	658.29	3.00	0.01	3.00
3,900.00	90.50	249.83	3,242.37	-786.49	-653.62	755.40	3.00	0.00	3.00
4,000.00	90.51	252.83	3,241.48	-818.50	-748.34	853.62	3.00	0.00	3.00
4,100.00	90.51	255.83	3,240.60	-845.51	-844.61	952.68	3.00	0.00	3.00
4,200.00	90.51	258.83	3,239.71	-867.45	-942.16	1,052.32	3.00	0.00	3.00
4,300.00	90.51	261.83	3,238.82	-884.25	-1,040.72	1,152.25	3.00	0.00	3.00
4,400.00	90.51	264.83	3,237.93	-895.87	-1,140.03	1,252.22	3.00	0.00	3.00
4,500.00	90.50	267.83	3,237.05	-902.28	-1,239.81	1,351.93	3.00	0.00	3.00
4,603.31	90.50	270.93	3,236.15	-903.40	-1,343.09	1,454.39	3.00	-0.01	3.00
Hold 270.9 4,700.00 4,800.00	<b>3° Azi</b> 90.50 90.50	270.93 270.93	3,235.32 3,234.45	-901.84 -900.23	-1,439.77 -1,539.75	1,549.94 1,648.75	0.00 0.00	0.00 0.00	0.00 0.00
4,900.00	90.50	270.93	3,233.58	-898.61	-1,639.73	1,747.57	0.00	0.00	0.00
5,000.00	90.50	270.93	3,232.72	-896.99	-1,739.72	1,846.38	0.00	0.00	0.00
5,100.00	90.50	270.93	3,231.85	-895.38	-1,839.70	1,945.20	0.00	0.00	0.00
5,200.00	90.50	270.93	3,230.99	-893.76	-1,939.68	2,044.01	0.00	0.00	0.00
5,300.00	90.50	270.93	3,230.12	-892.15	-2,039.67	2,142.83	0.00	0.00	0.00
5,400.00	90.50	270.93	3,229.25	-890.53	-2,139.65	2,241.64	0.00	0.00	0.00
5,500.00	90.50	270.93	3,228.39	-888.91	-2,239.63	2,340.46	0.00	0.00	0.00
5,600.00	90.50	270.93	3,227.52	-887.30	-2,339.62	2,439.27	0.00	0.00	0.00
5,700.00	90.50	270.93	3,226.66	-885.68	-2,439.60	2,538.09	0.00	0.00	0.00
5,800.00	90.50	270.93	3,225.79	-884.07	-2,539.58	2,636.90	0.00	0.00	0.00
5,900.00	90.50	270.93	3,224.92	-882.45	-2,639.57	2,735.72	0.00	0.00	0.00
6,000.00	90.50	270.93	3,224.06	-880.84	-2,739.55	2,834.53	0.00	0.00	0.00
6,100.00	90.50	270.93	3,223.19	-879.22	-2,839.53	2,933.35	0.00	0.00	0.00
6,200.00	90.50	270.93	3,222.32	-877.60	-2,939.52	3,032.16	0.00	0.00	0.00
6,300.00	90.50	270.93	3,221.46	-875.99	-3,039.50	3,130.98	0.00	0.00	0.00
6,400.00	90.50	270.93	3,220.59	-874.37	-3,139.48	3,229.79	0.00	0.00	0.00
6,500.00	90.50	270.93	3,219.73	-872.76	-3,239.47	3,328.61	0.00	0.00	0.00
6,600.00	90.50	270.93	3,218.86	-871.14	-3,339.45	3,427.42	0.00	0.00	0.00
6,700.00	90.50	270.93	3,217.99	-869.53	-3,439.43	3,526.23	0.00	0.00	0.00
6,800.00	90.50	270.93	3,217.13	-867.91	-3,539.42	3,625.05	0.00	0.00	0.00
6,900.00	90.50	270.93	3,216.26	-866.29	-3,639.40	3,723.86	0.00	0.00	0.00
7,000.00	90.50	270.93	3,215.40	-864.68	-3,739.38	3,822.68	0.00	0.00	0.00
7,100.00	90.50	270.93	3,214.53	-863.06	-3,839.36	3,921.49	0.00	0.00	0.00
7,200.00	90.50	270.93	3,213.66	-861.45	-3,939.35	4,020.31	0.00	0.00	0.00
7,300.00	90.50	270.93	3,212.80	-859.83	-4,039.33	4,119.12	0.00	0.00	0.00
7,400.00	90.50	270.93	3,211.93	-858.22	-4,139.31	4,217.94	0.00	0.00	0.00
7,500.00	90.50	270.93	3,211.06	-856.60	-4,239.30	4,316.75	0.00	0.00	0.00
7,600.00	90.50	270.93	3,210.20	-854.98	-4,339.28	4,415.57	0.00	0.00	0.00
7,700.00	90.50	270.93	3,209.33	-853.37	-4,439.26	4,514.38	0.00	0.00	0.00
7,800.00	90.50	270.93	3,208.47	-851.75	-4,539.25	4,613.20	0.00	0.00	0.00
7,900.00	90.50	270.93	3,207.60	-850.14	-4,639.23	4,712.01	0.00	0.00	0.00
8,000.00	90.50	270.93	3,206.73	-848.52	-4,739.21	4,810.83	0.00	0.00	0.00
8,100.00	90.50	270.93	3,205.87	-846.91	-4,839.20	4,909.64	0.00	0.00	0.00
8,200.00	90.50	270.93	3,205.00	-845.29	-4,939.18	5,008.46	0.00	0.00	0.00
8,300.00	90.50	270.93	3,204.14	-843.67	-5,039.16	5,107.27	0.00	0.00	0.00
8,400.00	90.50	270.93	3,203.27	-842.06	-5,139.15	5,206.09	0.00	0.00	0.00
8,500.00	90.50	270.93	3,202.40	-840.44	-5,239.13	5,304.90	0.00	0.00	0.00

# BURNETT OIL CO., INC.

# **Stryker Directional**

**Planning Report** 



Database: Company: EDM5000

**Burnett Oil Company** 

Eddy County, New Mexico (NAD83)

Project: Site: Well:

Four Leaf Clover Four Leaf Clover #3H

Wellbore #1 Wellbore: Design: Design #1

**Local Co-ordinate Reference:** 

**TVD Reference:** MD Reference: North Reference:

**Survey Calculation Method:** 

Well Four Leaf Clover #3H

RKB @ 3411.10usft (17.6' KB) RKB @ 3411.10usft (17.6' KB)

Minimum Curvature

Dia	nne	\ A C		,a,
Pla	mne	au s	our	vev

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)
8,600.00	90.50	270.93	3,201.54	-838.83	-5,339.11	5,403.72	0.00	0.00	0.00
8,700.00	90.50	270.93	3,200.67	-837.21	-5,439.10	5,502.53	0.00	0.00	0.00
8,800.00	90.50	270.93	3,199.80	-835.60	-5,539.08	5,601.35	0.00	0.00	0.00
8,900.00	90.50	270.93	3,198.94	-833.98	-5,639.06	5,700.16	0.00	0.00	0.00
9,000.00	90.50	270.93	3,198.07	-832.36	-5,739.05	5,798.98	0.00	0.00	0.00
9,100.00	90.50	270.93	3,197.21	-830.75	-5,839.03	5,897.79	0.00	0.00	0.00
9,200.00	90.50	270.93	3,196.34	-829.13	-5,939.01	5,996.61	0.00	0.00	0.00
9,239.20	90.50	270.93	3,196.00	-828.50	-5,978.20	6,035.34	0.00	0.00	0.00
PBHL									

### **Design Targets**

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL - Four Leaf Clor - plan hits target of		270.93	3,196.00	-828.50	-5,978.20	604,413.90	511,800.30	32.661544	-104.429314

360.00 3,240.00 -910.90 -902.00 604,331.50 516,876.50 32.661329 -104.412819 FTP - Four Leaf Clove 0.00

- plan misses target center by 50.66usft at 4170.35usft MD (3239.97 TVD, -861.48 N, -913.12 E)

- Point

Plan	Ann	otati	ons
------	-----	-------	-----

Measured Depth	Vertical Depth	Local Coor +N/-S	+E/-W	
(usft)	(usft)	(usft)	(usft)	Comment
2,381.74	2,381.74	0.00	0.00	KOP, Begin 8.00°/100' Build
3,069.24	2,968.41	-276.79	-129.07	Begin 55.00° Tangent
3,269.24	3,083.13	-425.27	-198.31	Begin 10.00°/100' Build & Turn
3,795.81	3,243.28	-747.91	-556.86	Begin 90.50° Lateral, 3.00°/100' Turn
4,603.31	3,236.15	-903.40	-1,343.09	Hold 270.93° Azi
9,239.20	3,196.00	-828.50	-5,978.20	PBHL



# Four Leaf Clover #3H DRILLING PLAN HORIZONTAL LOCO HILLS GLORIETA YESO WELL

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

<b>Geological Name</b>	<b>Estimate Top</b>	Anticipated Fresh Water, Oil or Gas
Alluvium	Surface	Useable Water
San Andres	915'	Oil
Glorieta	2460'	Oil
Yeso	2575'	Oil
Total Depth	Refer to APD	Oil

No other formations are expected to yield fresh water, oil or gas in measurable volumes. We will set 9-5/8" casing @ +/-1250' and circulate cement to surface.

All intervals will be isolated by setting 7" x 5-1/2" casing to total depth and circulating cement to surface.

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

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

### a. Design Safety Factors:

Туре	Hole Size	Depth Interval	OD CSG	Weight	Collar	Grade	Collapse Design Factor	Burst Design Factor	Tension Design Factor
Conductor	20"	0-90'	16"	Contractor	Discretion				
Surface	12-1/4"	0-1,250'	9-5/8"	36#	LTC	J-55	1.125	1.00	1.80
Production	8-3/4"	0'-2,900'	7"	26#	BTC	P-110	1.125	1.00	1.80
	8-3/4"	2,900'-9,000'	5-1/2"	17#	BTC	P-110	1.125	1.00	1.80

### b. Surface Casing Info

The proposed 9-5/8" casing setting depth is +/- 1250'.

### c. Production casing

We will run 7" x 5-1/2" production casing with a crossover from 7" to 5-1/2" at +/-2,900', 5-1/2" to TD. The wellbore will be cemented to surface.

# DRILLING PLAN Horizontal Yeso

### 3. Cementing Program

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

### a. 9 5/8" Surface Casing:

- Cement to surface
- 20 bbls fresh water spacer at 8.4 lbm/gal.
- <u>Lead:</u> 270 sx Class C Premium Plus Cement, fluid weight 12.2 ppg, slurry yield 2.31 ft3/sx, water 13.48 gal/sx.
- <u>Tail:</u> 168 sx Class C Premium Plus Cement, fluid weight 13.2 ppg, slurry yield 1.84 ft3/sx, water 9.92 gal/sx.
- Excess Cement: Lead 100%, Tail 165%

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

#### b. 7" & 5 1/2" Production Casing:

- <u>Lead:</u> 169 sx Class C Premium Plus Cement, fluid weight 11.8 ppg, slurry yield 2.54 ft3/sx, water 15.29 gal/sx.
- Tail: 1273 sx Class C Premium Plus Cement, fluid weight 13.2 ppg, slurry yield 1.81, water 9.81 gal/sx.
- Excess Cement: lead 0%, Tail 50%

### 4. Pressure Control Equipment:

The blowout prevention equipment (BOPE) will consist of a 2,000 PSI Hydril Unit (annular) with hydraulic closing equipment. The equipment will comply with Onshore Order #2 and will be tested to 2,000 psi and the Annular tested to 1,500 psi and maintained for a least ten (10) minutes. The 9-5/8" drilling head will be installed on the surface casing and in use continuously until total depth is reached. An independent testing company will be used for the testing. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines and choke manifold having 2,000 PSI WP rating.

Occasionally, water flows have been encountered. To control these water flows and to drill through salt formation(s), our anticipated

maximum mud weight is 8.9 ppg. For the producing formation and at TD, the pore pressure in this area is 0.47 psi/ft based on review of drilling histories, mud weights, formation gradients etc. from surrounding wells.

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

# DRILLING PLAN Horizontal Yeso

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

- a. A Kelly cock will be in the drill string at all times.
- b. A full opening drill pipe stabbing valve with the appropriate connections will be on the rig floor at all times.
- c. Hydrogen Sulfide detection and breathing equipment will be installed and in operation prior to drilling out the surface shoe and will remain until production casing is cemented.
- d. An H2S compliance package will be on site while drilling.

### 6. Proposed Mud Circulation System (Closed Loop System)

<u>Depth</u>	Mud Wt	<u>Vis</u>	Fluid Loss	Type System
0' - 1250'	8.6 - 8.9	32-36	NC	Fresh Water
1250' – TD MD	8.6 - 8.9	32-36	NC	Cut Brine Water

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

Pason or similar equipment will be used to monitor the mud system.

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

- a. No cores or DSTs are planned at this time.
- b. A mud logger will be on the well from 200' to TD.
- c. No open hole logs will be run.

### 8. Potential Hazards:

No abnormal pressures or temperatures are expected. Lost circulation is expected in the surface hole and not expected in production.

For the producing formation and at TD, the anticipated bottom hole pressure at deepest TVD is 1588 psi based on drilling histories, mud weights, formation gradients etc. from surrounding wells. Based upon logs of wells in this area, the anticipated bottom hole temperature is 105°F.

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

# DRILLING PLAN Horizontal Yeso

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

Road and location construction will begin after NMOCD has approved the APD and has approved the start of the location work. Anticipated spud date will be as soon as the location building work has been completed and the drilling rig is available to move to the location. Move in operations and drilling is expected to take approximately 25 days. If production casing is run, an additional 90 days would be required to complete the well and install the necessary surface equipment (pumping unit, electricity, flowline and storage facility) in order to place the well on production.

### 10. Completion Procedure

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

### State of New Mexico Energy, Minerals and Natural Resources Department

Submit Electronically Via E-permitting

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

### NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

# Section 1 – Plan Description Effective May 25, 2021

I. Operator: Burnett	Oil Co., In	C. OGRII	D: 03080		Date: 1	0 / 19 / 2023
II. Type: ☑ Original □	☐ Amendment	due to □ 19.15.27.9.	O(6)(a) NMAC	C □ 19.15.27.9.D	(6)(b) NMAC □ (	Other.
If Other, please describe	:					
III. Well(s): Provide the be recompleted from a si	_				wells proposed to	be drilled or proposed to
Well Name	API	ULSTR	Factores	Anticipated	Anticipated	Anticipated
wen name	API	ULSIK	Footages	Oil BBL/D	Gas MCF/D	Produced Water BBL/D
FOUR LEAF CLOVER 1H	TBD	E-17-19S-26E	1355 FNL 800 FWL	550 BBL/D	550 MCF/D	2500 BBL/D
FOUR LEAF CLOVER 2H	TBD	E-17-19S-26E	1375 FNL 800 FWL	550 BBL/D	550 MCF/D	2500 BBL/D
FOUR LEAF CLOVER 3H	TBD	E-17-19S-26E	1395 FNL 800 FWL	550 BBL/D	550 MCF/D	2500 BBL/D
IV. Central Delivery Po	oint Name: _	FOUR LEAF CLOVE	ER BATTER	Y	[See 19.15.27.9	(D)(1) NMAC]

**V. Anticipated Schedule:** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

			TD Reached	Completion	Initial Flow	First Production
Well Name	API	Spud Date	Date	Commencement Date	Back Date	Date
FOUR LEAF CLOVER 1H	TBD	1/1/2024	1/14/2024	3/1/2024	3/15/2024	3/15/2024
FOUR LEAF CLOVER 2H	TBD	1/15/2024	1/29/2024	3/1/2024	3/15/2024	3/15/2024
FOUR LEAF CLOVER 3H	TBD	1/30/2024	2/15/2024	3/1/2024	3/15/2024	3/15/2024

- VI. Separation Equipment: Attach a complete description of how Operator will size separation equipment to optimize gas capture.
- VII. Operational Practices: ✓ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.
- VIII. Best Management Practices: ✓ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

### Section 2 – Enhanced Plan EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

Departor certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

### IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

### X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

- **XI. Map.**  $\square$  Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.
- XII. Line Capacity. The natural gas gathering system  $\square$  will  $\square$  will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.
- XIII. Line Pressure. Operator  $\square$  does  $\square$  does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).
- ☐ Attach Operator's plan to manage production in response to the increased line pressure.
- XIV. Confidentiality: 
  Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

(i)

# Section 3 - Certifications <u>Effective May 25, 2021</u>

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal: 🗷 Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system: or ☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. If Operator checks this box, Operator will select one of the following: Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or Venting and Flaring Plan. 

Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including: power generation on lease; (a) power generation for grid; (b) (c) compression on lease; (d) liquids removal on lease; reinjection for underground storage; (e) **(f)** reinjection for temporary storage; **(g)** reinjection for enhanced oil recovery; fuel cell production; and (h)

### **Section 4 - Notices**

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

other alternative beneficial uses approved by the division.

- (a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or
- (b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.
- 2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under and Gas Act.	the Oil
Signature:	
Printed Name: TYLER DEANS	
Title: VP ENGINEERING	
E-mail Address: TDEANS@BURNETTOIL.COM	
Date: 10/19/2023	
Phone: 432-553-4699	
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)	
Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct

### NATURAL GAS MANAGEMENT PLAN

### **Section 1 – Attachments**

Compar	ıy:	Burnett Oil Co., Inc. Well Name: FOUR LEAF CLOVER 3H API#: TBD
VI.	Sep	paration Equipment: Description of how Operator will size separation equipment to optimize gas capture.
	A.	This well will be added to an existing tank battery.
	B.	The engineered system is designed to handle $\underline{11,500}$ MCF/D. It will produce through the following vessels:
		1. 2-phase separator,
		2. free-water knockout,
		3. heater treater, and then finally a
		4. 2-phase gas scrubber.
	C.	Current battery throughput is 1100 MCF/D.
	D.	The referenced well is anticipated to produce a maximum of <u>550</u> MCF/D for a total throughput of <u>1650</u> MCF/D.

- **VII. Operational Practices:** Description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.
  - A. In all circumstances, the operator shall flare rather than vent natural gas except when flaring is technically infeasible or would pose a risk to safe operations or personnel safety, and venting is a safer alternative than flaring.
  - B. During drilling operations a mud/gas separator will be on location. If needed, it will be utilized to capture natural gas for purposes of flaring. If flaring is required, a properly-sized flare stack will be at a minimum of 100' from the nearest surface hole location unless otherwise approved by the division.
  - C. Venting and flaring during completion or recompletion operations
    - 1. During completion or recompletion, gas is trapped/retained in the wellbore through use of properly weighted "kill" fluids.
    - 2. During the completion phase, the well will be routed directly into an existing battery. With this initial flowback already being connected to the existing battery, all flowback gasses will be routed, if applicable, only to flare. No venting will occur during this initial flowback period. As soon as it is feasible, the existing separation will be utilized.
  - D. Equipment redundancies within the system, along with the overall battery design, enables us to service equipment without interruption to gas flow in most scenarios. With the existing battery compression at this facility, in most cases we can avoid flaring during times of elevated transmission line pressures caused by mid-stream maintenance. Additionally, we have gas takeaway with two (2) midstream companies to try and keep gas going to sales in case one of them has a problem.

#### E. Performance Standards

- 1. The existing facility is designed for maximum anticipated throughput and pressure to minimize waste.
- 2. The existing storage tanks are routed to a combustor.
- 3. The existing flare stack is properly sized and designed to ensure proper combustion efficiency.
- 4. The existing flare stack is securely anchored and located at least 100 feet from the storage tanks.
- 5. AVO inspections are conducted weekly.
- 6. NA
- 7. NA
- 8. We strive to minimize waste and shall resolve emergencies as quickly and safely as possible.
- F. Measurement or estimation of vented and flared natural gas
  - 1. We shall measure or estimate the volume of natural gas that is vented, flared, or beneficially used during drilling, completion and production operations regardless of the reason or authorization for such venting or flaring.
  - 2. The existing flare has a meter to measure the gas going to it.
  - 3. The measurement equipment conforms to an industry standard such as American Petroleum Institute (API) Manual of Petroleum Measurement Standards (MPMS) Chapter 14.10 Measurement of Flow to Flares
  - 4. The measuring equipment is not equipped with a manifold that allows the diversion of natural gas around the metering element except for the sole purpose of inspecting and servicing the measurement equipment.
  - 5. If metering is not practicable due to circumstances such as low flow rate or low pressure venting and flaring, the operator will estimate the volume of vented or flared natural gas using a methodology that can be independently verified.
  - 6. NA
  - 7. The operator shall install measuring equipment whenever the division determines that metering is practicable or the existing measuring equipment or GOR test is not sufficient to measure the volume of vented and flared natural gas.
- VIII. Best Management Practices: Operator's best management practices to minimize venting during active and planned maintenance.
  - A. The existing facility is designed for maximum anticipated throughput and pressure to minimize waste.
  - B. Equipment redundancies within the system, along with the overall battery design, enables us to service equipment without interruption to gas flow in most scenarios. With the existing battery compression at this facility, in most cases we can avoid flaring during times of elevated transmission line pressures caused by mid-stream maintenance.
  - C. During well maintenance, gas is trapped/retained in the wellbore through use of properly weighted "kill" fluids.
  - D. Additionally, we have gas takeaway with two (2) midstream companies to try and keep gas going to sales in case one of them has a problem.

Intent X As Drille	d		
30-015-			
Operator Name:		Property Name:	Well Number
Burnett Oil Co., Inc.		FOUR LEAF CLOVER	3H

# Kick Off Point (KOP)

E   17   19S   26E	1395	NORTH	800	WEST	EDDY
Latitude 32.663834	Longitude <b>-</b> 104.409	890			NAD NAD83

# First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Н	18	19S	26E		2290	NORTH	101	EAST	EDDY
Latitude				Longitude		NAD DOO			
32.661329				<b>-</b> 104-412819				NAD83	

# Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
2	18	19S	26E		2290	NORTH	101	EAST	EDDY
Latitude				Longitude				NAD	
32.661544				-104.429314				NAD83	



### **HYDROGEN SULFIDE (H2S) PLAN & TRAINING**

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

Based on our area testing H2S at 100 PPM has a radius of 139' and does not get off our well sites. There are no schools, residences, churches, parks, public buildings, recreation area or public within 2+ miles of our area.

### A. Training

### 1. Training of Personnel

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

- a. The hazards and characteristics of Hydrogen Sulfide (H2S).
- b. The proper use and maintenance of personal protective equipment and life support systems.
- c. The proper use of H2S detectors, alarms, warning systems, briefing areas, evacuation procedures and the prevailing wind.
- d. The proper techniques for first aid and rescue procedures.
- e. ATTACHED HYDROGEN SULFIDE (H2S) CONTINGENCY PLAN DRILLING EXHIBIT K.
- f. ATTACHED EMERGENCY CALL LIST FOR ANY ON SITE EMERGENCY DRILLING EXHIBIT L.

### 2. Training of Supervisory Personnel

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

- a. The effects of H2S on metal components. If high tensile tubulars are to be used, personnel will be trained in special maintenance requirements.
- b. Corrective action and shut-in procedures when drilling or reworking a well, blowout prevention and well control procedures.
- c. The contents and requirements of the H2S Drilling Operations Plan and the Public Protection Plan (if applicable.)

### 3. Initial and Ongoing Training

There will be an initial training session just prior to encountering a known or probable H2S zone (within 3 days or 500 feet) and weekly H2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H2S Drilling Operations Plan and the Public Protection Plan (if applicable). This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

### B. <u>H2S Drilling Operations Plan</u>

- 1. 2M Well Control Equipment
  - a. Remote control choke
  - b. Blooie line off choke
  - c. Half tank
  - 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 L - HYDROGEN SULFIDE (H2S) CONTIGENCY PLAN**

### A. **Emergency Procedures**

In the event of a release of gas containing H2S, the first responder(s) must

- 1. Isolate the area and prevent entry by other persons into the 100 PPM ROE. Assumed 100PPM ROE = 3000'.
- 2. Evacuate any public places encompassed by 100 PPM ROE.
- 3. Be equipped with H2S monitors and air packs in order to control release.
- 4. Use the "buddy system" to ensure no injuries occur during the response.
- 5. Take precautions to avoid personal injury during this operation.
- 6. Have received training in the following:
  - a. H2S detection
  - b. Measures for protection against this gas
  - c. Equipment used for protection and emergency response.

### B. Ignition of Gas Source

Should control of the well be considered lost and ignition considered, care will be taken to protect against exposure to Sulfur Dioxide (SO2). Intentional ignition will be coordinated with the NMOCD and local officials. Additionally, the New Mexico State Police may become involved. NM State Police shall be the incident command on scene of any major release. Care will be taken to protect downwind whenever there is an ignition of gas.

### C. Characteristics of H2S and SO2

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

### D. Contacting Authorities

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

Directions to the site are as follows:

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

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

Hydrogen Sulfide Contingency Plan

### **EXHIBIT M - EMERGENCY NOTIFICATION LIST**

### **BURNETT CONTACTS**

**Burnett's New Mexico Office** 

817.332.5108 x 102

87 Square Lake Road (CR #220) Loco Hills, New Mexico 88255

Directions: Loco Hills, NM – 2 miles east of Loco Hills on US Hwy 82 to CR#220. Then

North on CR #220 approximately one (1) mile to office.

**Burnett Oil Home Office** 

817.332.5108

Burnett Plaza – Suite 1500 | 801 Cherry Street – Unit #9| Fort Worth, Texas 76102

 Walter Glasgow
 Office - 817.583.8871

 VP Engineering
 Cell - 817.343.5567

 Tyler Deans
 Office - 575.677.2313

 VP Engineering- New Mexico
 Cell - 432-553-4699

 Bryan Burnes
 Office - 817.332.5108

 HSE & Security Coordinator
 Cell - 575-706-5999

**SHERIFF/POLICE CONTACTS** 

Eddy County Sheriff 911 or 575.677.2313 New Mexico State Police 575.746.2701

FIRE DEPARTMENT

Loco Hills Fire Department (VOLUNTEER ONLY)

911 or 575.677.2349

For Medical and Fire (Artesia)

575.746.2701

**AIR AMBULANCE** 

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

**FEDERAL AND STATE** 

US Bureau of Land Management (Carlsbad) 575.361.2822 575.234.5972

New Mexico Oil Conservation Division (Artesia) 575.748.1283

New Mexico Emergency Response Commission (24 hour) 575.827.9126

Local Emergency Planning Operation Center (Artesia) 505.842.4949

National Emergency Response Center (Washington, DC) 800.424.8802

**OTHER IMPORTANT NUMBERS** 

 Boots & Coots IWC
 800.256.9688

 Cudd Pressure Control
 432.570.5300

 Halliburton Services
 575.746.2757

 BJ Service
 575.746.2293

THIS MUST BE POSTED AT THE RIG WHILE ON LOCATION