API NUMBER: 049 25194

Oil & Gas

Horizontal Hole

## OKLAHOMA CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION P.O. BOX 52000 OKLAHOMA CITY, OK 73152-2000 (Rule 165:10-3-1)

Approval Date: 04/18/2018
Expiration Date: 10/18/2018

## PERMIT TO DRILL

WELL LOCATION:	Sec:	29	Twp:	4N	Rge:	3W	County	: GAR	VIN		
SPOT LOCATION:	NW	NE	N	E	NE		FEET FROM QUARTER:	FROM	NORTH	FROM	EAST
							SECTION LINES:		200		425

Lease Name: LUSITANO Well No: 1-20-17LWH Well will be 200 feet from nearest unit or lease boundary.

Operator Name: RIMROCK RESOURCE OPERATING LLC Telephone: 9183014700 OTC/OCC Number: 23802 0

RIMROCK RESOURCE OPERATING LLC

20 E 5TH ST STE 1300

TULSA, OK 74103-4462

JONNIE MCCALEB

18437 EAST COUNTY ROAD 1540

LINDSAY OK 73052

Formation(s) (Permit Valid for Listed Formations Only):

	Name	Depth	Name	Depth			
1	WOODFORD	8496	6				
2			7				
3			8				
4			9				
5			10				
Spacing Orders:	661565	Location Exception Orders: 673	3202	Increased Density Orders:			
. 0	660818						
	673293						

Pending CD Numbers: Special Orders:

Total Depth: 16000 Ground Elevation: 981 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 210

Under Federal Jurisdiction: No Fresh Water Supply Well Drilled: No Surface Water used to Drill: Yes

PIT 1 INFORMATION Approved Method for disposal of Drilling Fluids:

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED

Chlorides Max: 5000 Average: 3000 Is depth to top of ground water greater than 10ft below base of pit? Y

Within 1 mile of municipal water well? N
Wellhead Protection Area? N

Pit is not located in a Hydrologically Sensitive Area.

Category of Pit: C

**Liner not required for Category: C**Pit Location is NON HSA

Pit Location Formation: FAIRMONT

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 18-34217

H. SEE MEMO

## PIT 2 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: OIL BASED
Chlorides Max: 300000 Average: 200000

Is depth to top of ground water greater than 10ft below base of pit? Y

Within 1 mile of municipal water well? N
Wellhead Protection Area? N

Pit is not located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C
Pit Location is NON HSA

Pit Location Formation: FAIRMONT

## HORIZONTAL HOLE 1

Sec 17 Twp 4N Rge 3W County GARVIN

Spot Location of End Point: SE SE NW SE
Feet From: SOUTH 1/4 Section Line: 1375
Feet From: EAST 1/4 Section Line: 1350

Depth of Deviation: 8251
Radius of Turn: 800
Direction: 353
Total Length: 6492

Measured Total Depth: 16000

True Vertical Depth: 8615

End Point Location from Lease,
Unit, or Property Line: 1350

Notes:

Category Description

DEEP SURFACE CASING 4/4/2018 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS OF

CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR

SURFACE CASING

HYDRAULIC FRACTURING 4/4/2018 - G71 - OCC 165:10-3-10 REQUIRES:

1) PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE:

2) WITH NOTICE ALSO GIVEN 48 HOURS IN ADVANCE OF HYDRAULIC FRACTURING ALL WELLS TO BOTH THE OCC CENTRAL OFFICE AND LOCAL DISTRICT OFFICES, USING THE

"FRAC NOTICE FORM" FOUND AT THE FOLLOWING LINK:

OCCEWEB.COM/OG/OGFORMS.HTML; AND,

3) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS TO BE REPORTED TO FRACFOCUS WITHIN 60 DAYS AFTER THE CONCLUSION THE

HYDRAULIC FRACTURING OPERATIONS, USING THE FOLLOWING LINK: FRACFOCUS.ORG

LOCATION EXCEPTION - 673202 4/12/2018 - G57 - (I.O.) 20 & 17-4N-3W

X660818 WDFD 20-4N-3W X661565 WDFD 17-4N-3W

COMPL. INT. (20-4N-3W) NCT 165' FSL, NCT 0' FNL, NCT 330' FEL COMPL. INT. (17-4N-3W) NCT 0' FSL, NCT 165' FNL, NCT 330' FEL

RIMROCK RESOUCE OPERATING, LLC.

2-6-2018

MEMO 4/4/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 -

OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

Category Description

SPACING - 660818 4/12/2018 - G57 - (640)(HOR) 20-4N-3W

EST WDFD, OTHERS

POE TO BHL NCT 165' FNL & FSL, NCT 330' FEL & FWL

SPACING - 661565 4/12/2018 - G57 - (640)(HOR) 17-4N-3W

EST WDFD, OTHERS

POE TO BHL NCT 165' FNL & FSL, NCT 330' FEL & FWL

(COEXIST SP. ORDER 409484 WDFD)

SPACING - 673293 4/12/2018 - G57 - (I.O.) 20 & 17-4N-3W

EST MULTIUNIT HORÍZONTAL WELL

X660818 WDFD 20-4N-3W X661565 WDFD 17-4N-3W

50% 20-4N-3W 50% 17-4N-3W

RIMROCK RESOURCE OPERATING, LLC.

2-7-2018

SURFACE CASING 4/4/2018 - G71 - MIN. 400' PER ORDER 64240

