

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

API NUMBER: 011 23968

Approval Date: 03/27/2018
Expiration Date: 09/27/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 14 Twp: 14N Rge: 13W County: BLAINE
SPOT LOCATION: NE NW NE NE FEET FROM QUARTER: FROM NORTH FROM EAST
SECTION LINES: 295 915

Lease Name: ROLLING THUNDER 11-14N-13W Well No: 1MH Well will be 295 feet from nearest unit or lease boundary.
Operator Name: PALOMA OPERATING CO INC Telephone: 7136508509 OTC/OCC Number: 23932 0

PALOMA OPERATING CO INC
1100 LOUISIANA ST STE 5100
HOUSTON, TX 77002-5220

MICKEY JOE WILSON
8234 NW 134TH TERRACE
OKLAHOMA CITY OK 73142

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

Name	Depth	Name	Depth
1 MISSISSIPPI LIME	12668	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 663154

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201801187

Special Orders:

Total Depth: 18405

Ground Elevation: 1629

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: No

PIT 1 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED

Chlorides Max: 8000 Average: 5000

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 located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is BED AQUIFER

Pit Location Formation: RUSH SPRINGS

Approved Method for disposal of Drilling Fluids:

D. One time land application -- (REQUIRES PERMIT)

PERMIT NO: 18-33877

H. SEE MEMO

This permit does not address the right of entry or settlement of surface damages.

The duration of this permit is SIX MONTHS, except as otherwise provided by Rule 165: 10-3-1.

Rule 165: 10-3-4 (c) (7) (e) - The Operator shall give 24 Hours notice by telephone to the appropriate District Office of the Conservation Division as to when Surface Casing will be run.

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 located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is BED AQUIFER

Pit Location Formation: RUSH SPRINGS

HORIZONTAL HOLE 1

Sec 11 Twp 14N Rge 13W County BLAINE

Spot Location of End Point: NW NE NE NE

Feet From: NORTH 1/4 Section Line: 65

Feet From: EAST 1/4 Section Line: 400

Depth of Deviation: 12516

Radius of Turn: 782

Direction: 5

Total Length: 4660

Measured Total Depth: 18405

True Vertical Depth: 12994

End Point Location from Lease,
Unit, or Property Line: 65

Notes:

Category

Description

DEEP SURFACE CASING

3/15/2018 - 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

3/15/2018 - 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

INTERMEDIATE CASING

3/15/2018 - G71 - DUE TO THE KNOWN POTENTIAL RISK OF ENCOUNTERING AN OVER-PRESSURED ZONE IN THE MORROW SERIES IN THIS AREA, THE TECHNICAL MANAGER RECOMMENDS SETTING AN INTERMEDIATE STRING OF CASING IMMEDIATELY ABOVE THE MORROW SERIES

MEMO

3/15/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

This permit does not address the right of entry or settlement of surface damages.

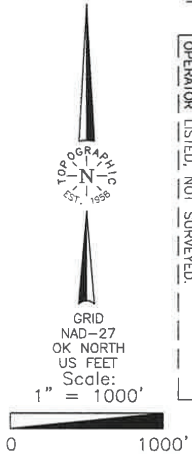
The duration of this permit is SIX MONTHS, except as otherwise provided by Rule 165: 10-3-1.

Rule 165: 10-3-4 (c) (7) (e) - The Operator shall give 24 Hours notice by telephone to the appropriate District Office of the Conservation Division as to when Surface Casing will be run.

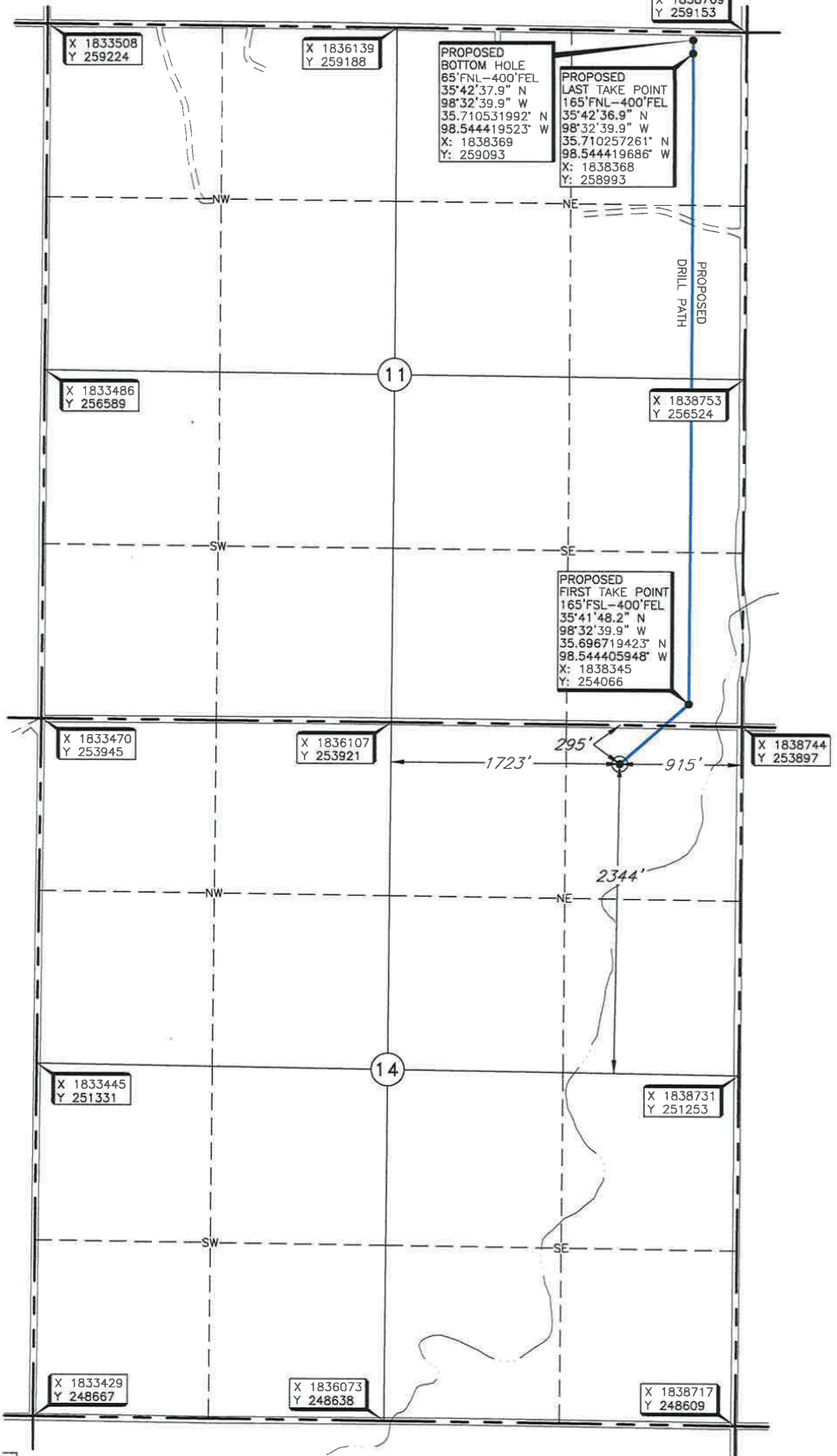
Category	Description
PENDING CD - 201801187	3/23/2018 - G56 - (I.O.) 11-14N-13W X663154 MSSLM COMPL. INT. NCT 165' FNL, NCT 165' FSL, NCT 330' FEL NO OP. NAMED REC 3/5/18 (MURER)
SPACING - 663154	3/22/2018 - G56 - (640) 11-14N-13W EXT 582213 MSSLM, OTHER

This permit does not address the right of entry or settlement of surface damages.
The duration of this permit is SIX MONTHS, except as otherwise provided by Rule 165: 10-3-1.
Rule 165: 10-3-4 (c) (7) (e) - The Operator shall give 24 Hours notice by telephone to the appropriate District Office of the Conservation Division as to when Surface Casing will be run.

BLAINE County, Oklahoma
 295'FNL-915'FEL Section 14 Township 14N Range 13W I.M.



FIRST TAKE POINT, LAST TAKE POINT, BOTTOM HOLE AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED.



Operator: PALOMA OPERATING COMPANY, INC.
 Lease Name: ROLLING THUNDER 11-14N-13W
 Topography & Vegetation Loc. fell in sloped pasture
 Well No.: 1H
 ELEVATION: 1629' Gr. at Stake

Good Drill Site? Yes No
 Best Accessibility to Location From North off county road
 Distance & Direction From the junction of E0940 Road & US Hwy 281/St. Hwy 8 go ± 12 miles West on E0940 Road, then ± 3 miles North to the Northeast Corner of Section 14, T14N-13W.
 Reference Stakes or Alternate Location
 Stakes Set None

THE INFORMATION SHOWN HEREIN IS FOR CONSTRUCTION PURPOSES ONLY

DATUM: NAD-27
 LAT: 35°41'43.7" N
 LONG: 98°32'46.1" W
 LAT: 35.695460956° N
 LONG: 98.546138322° W
 STATE PLANE COORDINATES (US FEET):
 ZONE: OK NORTH
 X: 1837828
 Y: 253610

Date of Drawing: Nov. 13, 2017
 Invoice # 282979 Date Staked: Nov. 5, 2017 NMB

CERTIFICATE:

I, Thomas L. Howell an Oklahoma Licensed Land Surveyor and an authorized agent of Topographic Land Surveyors of Oklahoma, do hereby certify to the information shown herein.

Thomas L. Howell
 Oklahoma Lic. No. 1433

