

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

API NUMBER: 011 23781

Approval Date: 04/14/2017
Expiration Date: 10/14/2017

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 09 Twp: 15N Rge: 13W County: BLAINE
SPOT LOCATION: SW SE SW SE FEET FROM QUARTER: FROM SOUTH FROM EAST
SECTION LINES: 275 1785

Lease Name: BIG JOE 9-15N-13W Well No: 1H Well will be 275 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

JOYCE, TOMLINSON, TRUSTEE
8133 NW 80TH ST
OKLAHOMA CITY OK 73132

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	11933	6	
2			7	
3			8	
4			9	
5			10	

Spacing Orders: 659015
661308

Location Exception Orders: 661064

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 17303

Ground Elevation: 1725

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 220

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: No

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: 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 AP/TE DEPOSIT

Pit Location Formation: TERRACE

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

PERMIT NO: 17-32135

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 AP/TE DEPOSIT

Pit Location Formation: TERRACE

HORIZONTAL HOLE 1

Sec 09 Twp 15N Rge 13W County BLAINE

Spot Location of End Point: NE NE NW NE

Feet From: NORTH 1/4 Section Line: 65

Feet From: EAST 1/4 Section Line: 1510

Depth of Deviation: 11545

Radius of Turn: 699

Direction: 2

Total Length: 4660

Measured Total Depth: 17303

True Vertical Depth: 12500

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

Notes:

Category

Description

DEEP SURFACE CASING

4/13/2017 - 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

4/13/2017 - G71 - OCC 165:10-3-10 REQUIRES: 1) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS BE REPORTED TO FRACFOCUS USING THE FOLLOWING LINK [HTTP://FRACFOCUS.ORG/](http://fracfocus.org/) WITH NOTICE GIVEN 48 HOURS IN ADVANCE OF FRACTURING TO THE LOCAL OCC DISTRICT OFFICE; AND, 2) PRIOR TO COMMENCEMENT OF FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE ALSO GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE

INTERMEDIATE CASING

4/13/2017 - 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

LOCATION EXCEPTION - 661064

4/13/2017 - G60 - (I.O.) 9-15N-13W
X659015 MSSP
COMPL. INT. NCT 165' FSL, NCT 165' FNL, NCT 330' FEL
PALOMA OPERATING CO. INC.
2/15/17

MEMO

4/13/2017 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

SPACING - 659015

4/13/2017 - G60 - (640) 9-15N-13W
EXT 654488 MSSP, OTHERS
EST OTHERS

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

SPACING - 661308

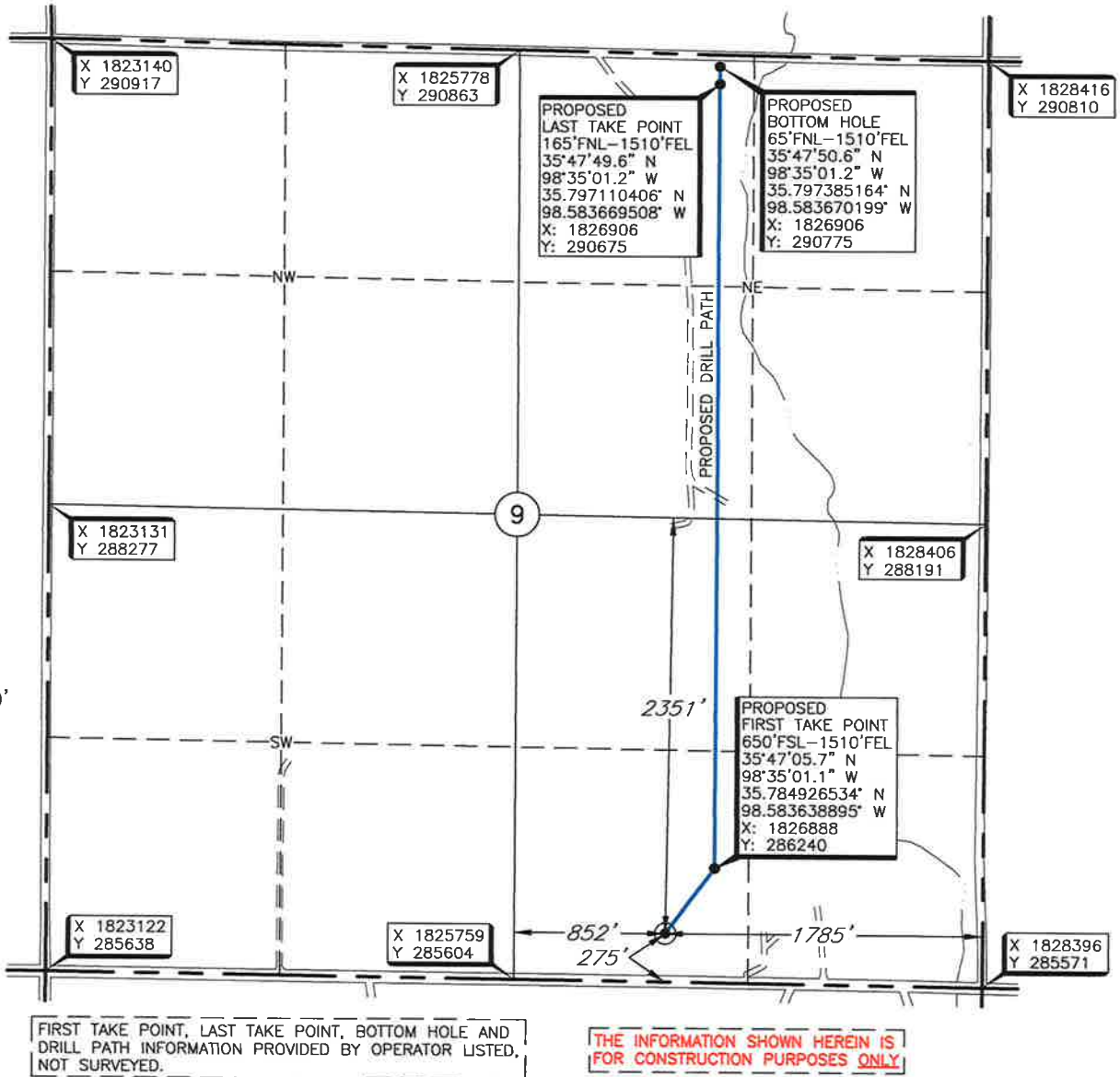
4/13/2017 - G60 - NPT 659015 TO CORRECT HEADERS ON PAGE 2,3, AND 4

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

275'FSL-1785'FEL Section 9 Township 15N Range 13W I.M.

3501123781



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

THE INFORMATION SHOWN HEREIN IS FOR CONSTRUCTION PURPOSES ONLY.

Operator: PALOMA OPERATING COMPANY, INC.
 Lease Name: BIG JOE 9-15N-13W

Well No.: 1H ELEVATION: 1725' Gr. on Existing Pad

Topography & Vegetation Loc. fell on existing pad

Good Drill Site? Yes Reference Stakes or Alternate Location Stakes Set None

Best Accessibility to Location From South off county road

Distance & Direction from Hwy Jct or Town From the junction of St. Hwy 33/US Hwy 270 & US Hwy 281/St. Hwy 8 in Watonga, Oklahoma, go ± 7 miles West on St. Hwy 33/US Hwy 270, ± 4 miles South, then ± 2 miles West to the Southeast Corner of Section 9, T15N-R13W.

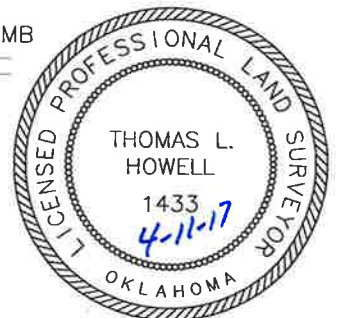
DATUM: NAD-27
 LAT: 35°47'02.0" N
 LONG: 98°35'04.4" W
 LAT: 35.783901042° N
 LONG: 98.584562001° W
 STATE PLANE COORDINATES (US FEET):
 ZONE: OK NORTH
 X: 1826612
 Y: 285869

Date of Drawing: Apr. 11, 2017
 Invoice # 274484 Date Staked: Apr. 10, 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 Reg. No. 1433



This information was gathered with a GPS receiver with ±1 foot Horiz./Vert. accuracy.