

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

API NUMBER: 043 23585

Approval Date: 01/04/2018

Expiration Date: 07/04/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 36 Twp: 19N Rge: 15W

County: DEWEY

SPOT LOCATION: ☐ NE ☐ NW ☐ NE ☐ NE

FEET FROM QUARTER: FROM NORTH FROM EAST

SECTION LINES: 275 950

Lease Name: CONNOR SULLIVAN

Well No: 19-15-36 1H

Well will be 275 feet from nearest unit or lease boundary.

Operator Name: STAGHORN PETROLEUM II LLC

Telephone: 9185842558

OTC/OCC Number: 24056 0

STAGHORN PETROLEUM II LLC
1 W 3RD ST STE 1000
TULSA, OK 74103-3500

WWR LAND & CATTLE, LLC.
404 SW 175TH TERRACE
MOORE OK 73170

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

| Name | Depth | Name | Depth |
|-----------------|-------|------|-------|
| 1 MISSISSIPPIAN | 9961 | 6 | |
| 2 | | 7 | |
| 3 | | 8 | |
| 4 | | 9 | |
| 5 | | 10 | |

Spacing Orders: 671044

Location Exception Orders: 201706531

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 15300

Ground Elevation: 1887

Surface Casing: 550

Depth to base of Treatable Water-Bearing FM: 300

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: 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

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

PERMIT NO: 17-33673

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 36 Twp 19N Rge 15W County DEWEY

Spot Location of End Point: S2 SE SE SE

Feet From: SOUTH 1/4 Section Line: 50

Feet From: EAST 1/4 Section Line: 330

Depth of Deviation: 9306

Radius of Turn: 800

Direction: 178

Total Length: 4737

Measured Total Depth: 15300

True Vertical Depth: 10016

End Point Location from Lease,
Unit, or Property Line: 50

Notes:

Category

Description

HYDRAULIC FRACTURING

1/4/2018 - 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

INTERMEDIATE CASING

1/4/2018 - 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

LOCATION EXCEPTION - 201706531

1/4/2018 - G57 - (I.O.) 36-19N-15W
X671044 MSSP
COMPL. INT. NCT 165' FNL, NCT 165' FSL, NCT 330' FEL
NO OP. NAMED
REC 11-6-2017 (MCKEOWN)

MEMO

1/4/2018 - 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.

043 23585 CONNOR SULLIVAN 19-15-36 1H

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 - 671044 | 1/4/2018 - G57 - (640)(HOR) 36-19N-15W EXT 665418 MSSP, OTHER EST OTHER POE TO BHL NCT 660' FB (COEXIST SP. ORDER #258497 MSSSD, CSTR) |

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.



Well Location Plat

Sec. 36-19N-15W I.M.

Operator: STAGHORN PETROLEUM, LLC

Lease Name and No.: CONNOR SULLIVAN 19-15-36 1H

API: 043 23585

Footage: 275' FNL - 950' FEL Gr. Elevation: 1887'

Section: 36 Township: 19N Range: 15W I.M.

County: Dewey State of Oklahoma

Terrain at Loc.: Location fell in pasture, South of fence and staked pipeline.



All bearings shown
are grid bearings



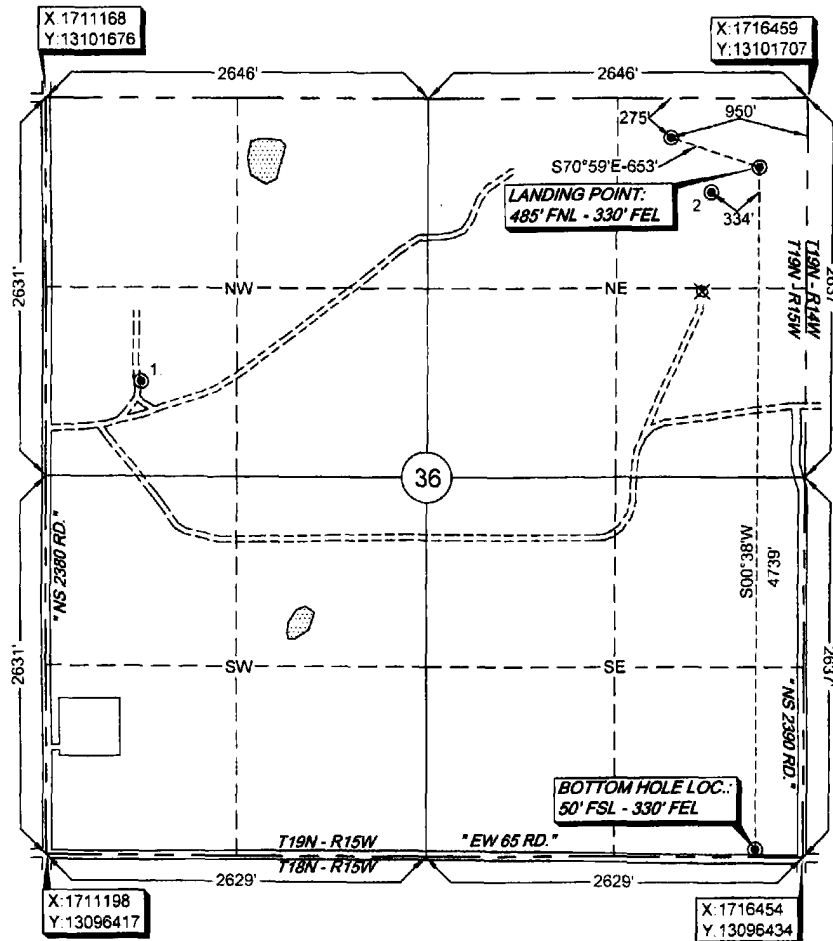
1"=1000'

GPS DATUM
NAD 83
NAD 27
UTM - ZONE 14

Surface Hole Loc.:
Lat: 36°05'09.96"N
Lon: 98°44'46.12"W
Lat: 36.08605818
Lon: -98.74577646
X: 1715509
Y: 13101427

Landing Point:
Lat: 36°05'07.90"N
Lon: 98°44'38.57"W
Lat: 36.08548669
Lon: -98.74368087
X: 1716129
Y: 13101220

Bottom Hole Loc.:
Lat: 36°04'21.04"N
Lon: 98°44'38.78"W
Lat: 36.07246925
Lon: -98.74373960
X: 1716124
Y: 13096483



NOTE
ALL ANTI-COLLISION INFORMATION SHOWN
HEREON WAS PROVIDED BY THE OCC WEBSITE
WELLS HAVE NOT BEEN SHOT ON THE GROUND

1. RED EAGLE OIL COMPANY
HASBROOK 1
660' FSL - 660' FWL (NW/4)
OCC STATUS: PA

2. CIMARRON OPERATING COMPANY
HASBROOK 1
1980' FSL - 1980' FWL (NE/4)
OCC STATUS: PA

Quarter Section distances may be assumed from a Government Survey Plat or assumed at a proportionate distance from opposing section corners, or occupation thereof, and may not have been measured on-the-ground, and further, does not represent a true boundary survey. Please note that this location was staked on the ground under the supervision of a Licensed Professional Land Surveyor, but the accuracy of this survey is not guaranteed. Please contact Arkoma Surveying and Mapping promptly if any inconsistency is determined. GPS data is observed from RTK - GPS.

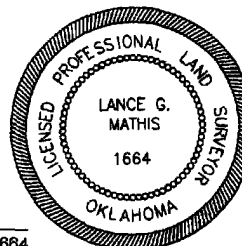
NOTE: X and Y data shown hereon for Section Corners may NOT have been surveyed on-the-ground, and further, does NOT represent a true Boundary Survey.

Survey and plat by:
Arkoma Surveying and Mapping, PLLC
P.O. Box 238 Wilburton, OK 74578
Ph. 918-465-5711 Fax 918-465-5030
Certificate of Authorization No. 5348
Expires June 30, 2018

Certification:

This is to certify that this Well Location Plat represents the results of a survey made on the ground performed under the supervision of the undersigned.

Lance G. Mathis 12/12/17
LANCE G. MATHIS OK LPLS 1664



Invoice #7278-B

Date Staked: 12/06/17 By: C.K.
Date Drawn: 12/08/17 By: P.B.