

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

API NUMBER: 073 25414

Approval Date: 11/07/2016

Expiration Date: 05/07/2017

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 36 Twp: 19N Rge: 8W

County: KINGFISHER

SPOT LOCATION:

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 190 330

Lease Name: THAMIN 19-08-36

Well No: 1H

Well will be 190 feet from nearest unit or lease boundary.

Operator Name: STAGHORN PETROLEUM LLC

Telephone: 9185842558

OTC/OCC Number: 23753 0

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

COMMISSIONERS OF THE LAND OFFICE
204 NORTH ROBINSON, SUITE 900
OKLAHOMA CITY OK 73102

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	7470	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 608242

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201604448

Special Orders:

Total Depth: 12520

Ground Elevation: 1156

Surface Casing: 400

Depth to base of Treatable Water-Bearing FM: 280

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 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: 16-31788

H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

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.

HORIZONTAL HOLE 1

Sec 36 Twp 19N Rge 8W County KINGFISHER

Spot Location of End Point: NE NW NW NW

Feet From: NORTH 1/4 Section Line: 165

Feet From: WEST 1/4 Section Line: 380

Depth of Deviation: 6990

Radius of Turn: 573

Direction: 1

Total Length: 4630

Measured Total Depth: 12520

True Vertical Depth: 7470

End Point Location from Lease,

Unit, or Property Line: 165

Notes:

Category

Description

BOTTOM-HOLE LOCATION

11/7/2016 - G75 - 165' FNL, 380' FWL NW4 36-19N-8W PER STAKING PLAT

HYDRAULIC FRACTURING

11/4/2016 - 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.

PENDING CD - 201604448

11/7/2016 - G75 - (I.O.) 36-19N-8W
X608242 MSSP
SHL NCT 190' FSL, NCT 330' FWL
COMPL. INT. NCT 165' FSL, NCT 165' FNL, NCT 330' FWL
NO OP. NAMED
REC 10-24-2016 (MCKEOWN)

SPACING - 608242

11/7/2016 - G75 - (640)(HOR) 36-19N-8W
VAC OTHERS
VAC 56211/67354 MSSP S2 & NW4
VAC 165280 MSSP, MNNG NE4
EST MSSP, OTHERS
COMPL. INT. NCT 660' FB



Well Location Plat

Sec. 36-19N-8W I.M.

API 073-25414

Operator : STAGHORN PETROLEUM, LLC

Lease Name and No. : THAMIN 19-08-36 #1H

Footage : 190' FSL - 330' FWL GR. ELEVATION : 1156' Good Site? YES

Section : 36 Township : 19N Range : 8W I.M.

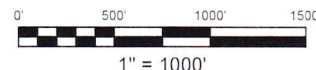
County : Kingfisher State of Oklahoma

Alternate Loc. : N/A

Terrain at Loc. : Location fell in a plowed field, 154' North of an existing E-W fence/aerial power line & 304' East of an existing N-S fence/aerial power line.

Accessibility : From the East.

Directions : From the junction of U.S. Hwy 81 & State Hwy 51 in Hennessey, OK, go 6.5 miles West on Hwy 51, go 3.0 miles South on "NS 280 Rd." to the Southwest Corner of Section 36-19N-8W.



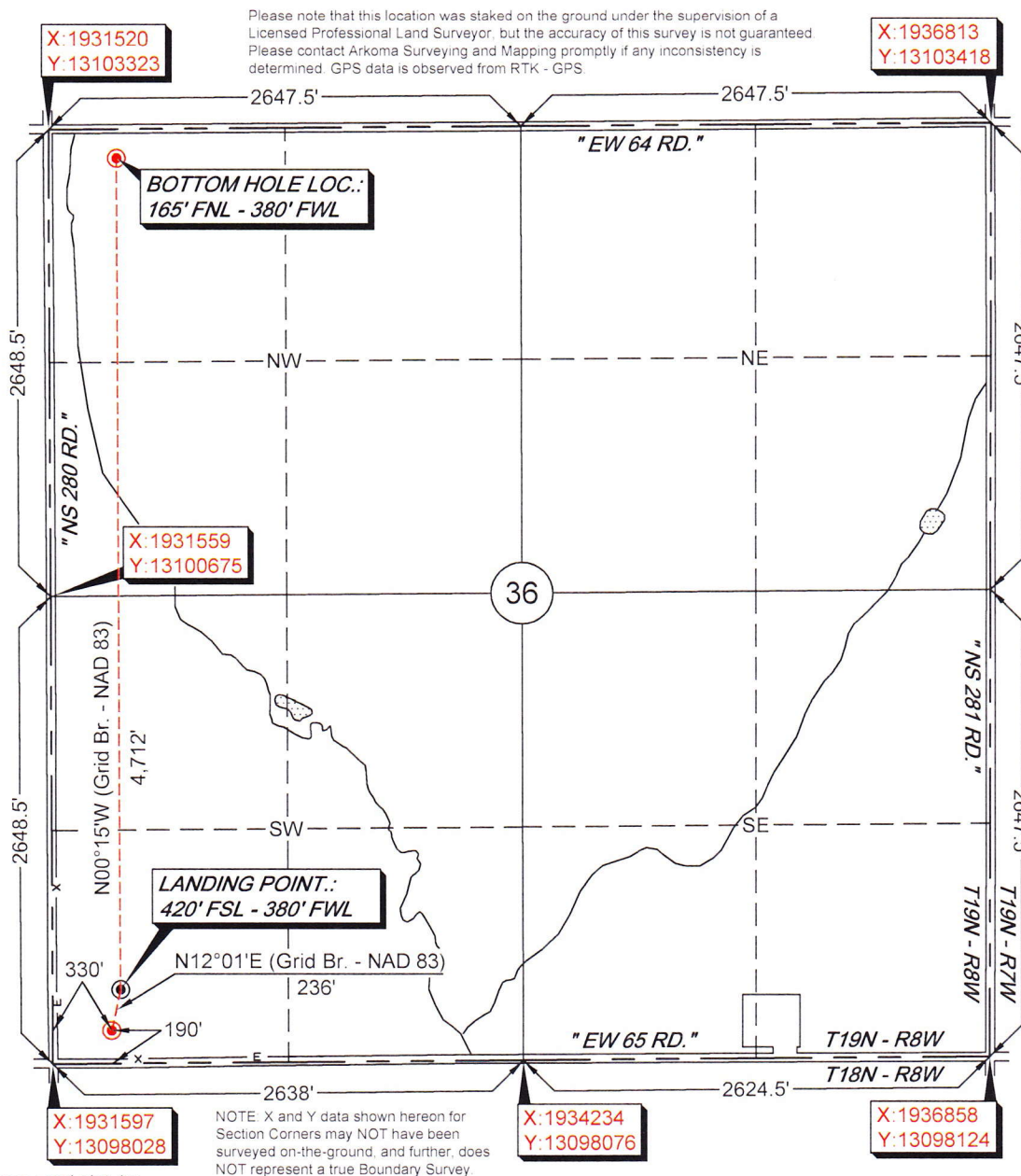
GPS DATUM
NAD - 83
NAD - 27
UTM - ZONE 14

Surface Hole Loc.:
Lat: 36°04'24.61"N
Lon: 98°00'49.02"W
Lat: 36.07346391
Lon: -98.01327856
X: 1931925
Y: 13098224

Landing Point:
Lat: 36°04'26.89"N
Lon: 98°00'48.42"W
Lat: 36.07409689
Lon: -98.01311281
X: 1931971
Y: 13098455

Bottom Hole Loc.:
Lat: 36°05'13.48"N
Lon: 98°00'48.68"W
Lat: 36.08704023
Lon: -98.01318402
X: 1931902
Y: 13103164

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.



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.

Invoice #6652

Date Staked : 09/28/16 By : J.W.

Date Drawn : 09/29/16 By : K.M.

Add Landing Point & Rev. BHL : 11/02/16 By : R.S.

Lance G. Mathis
LANCE G. MATHIS

11/02/16

OK LPLS 1664

