

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

API NUMBER: 093 25089 A

Approval Date: 08/17/2017  
Expiration Date: 02/17/2018

Horizontal Hole Oil & Gas

Amend reason: CHANGE SURFACE LOCATION & GROUND  
ELEVATION; UPDATE ORDERS

AMEND PERMIT TO DRILL

WELL LOCATION: Sec: 24 Twp: 20N Rge: 13W

County: MAJOR

SPOT LOCATION: ☐ SW ☐ SE ☐ SE ☐ SW

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 211 2145

Lease Name: ERIC MATTHEW

Well No: 20-13-24 1H

Well will be 211 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

LEONARD WICHERT & JANICE WICHERT, TRUSTEES  
52528 S. COUNTY ROAD 253  
FAIRVIEW OK 73737

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	8415	6	
2			7	
3			8	
4			9	
5			10	

Spacing Orders: 667175

Location Exception Orders: 668413

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 13500

Ground Elevation: 1526

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: 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 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: DOG CREEK

D. One time land application -- (REQUIRES PERMIT)  
H. SEE MEMO

PERMIT NO: 17-32945

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 **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: DOG CREEK

## HORIZONTAL HOLE 1

Sec 24 Twp 20N Rge 13W County MAJOR

Spot Location of End Point: N2 N2 N2 N2

Feet From: NORTH 1/4 Section Line: 50

Feet From: WEST 1/4 Section Line: 2640

Depth of Deviation: 7880

Radius of Turn: 573

Direction: 5

Total Length: 4720

Measured Total Depth: 13500

True Vertical Depth: 8475

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

### Notes:

#### Category

#### Description

BOTTOM-HOLE LOCATION

8/17/2017 - G75 - 50' FNL, 2640' FWL 24-20N-13W PER STAKING PLAT

DEEP SURFACE CASING

7/24/2017 - G58 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY FOR ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON CONDUCTOR OR SURFACE CASING

HYDRAULIC FRACTURING

7/24/2017 - G58 - 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: [OCCWEB.COM/OG/OGFORMS.HTML](http://OCCWEB.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](http://FRACFOCUS.ORG)

INTERMEDIATE CASING

7/24/2017 - G58 - 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

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.

093 25089 ERIC MATTHEW 20-13-24 1H

Category	Description
LOCATION EXCEPTION - 668413	<p>11/29/2017 - G75 - (I.O.) 24-20N-13W  X667175 MSSP  COMPL. INT. NCT 165' FSL, NCT 165' FNL, NCT 660' FEL  STAGHORN PETRO. LLC **  9-22-20107</p> <p>** S/B STAGHORN PETRO. II, LLC; TO BE CORRECTED AT HEARING FOR FINAL ORDER  LOCATION EXCEPTION PER ATTORNEY FOR OPERATOR</p>
MEMO	<p>7/24/2017 - G58 - PIT 1 &amp; 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST; PIT 2 -  OBM TO VENDOR, OBM CUTTINGS PER DISTRICT</p>
SPACING - 667175	<p>11/29/2017 - G75 - (640)(HOR) 24-20N-13W  EST MSSP, OTHERS  COMPL. INT. NLT 660' FB  (COEXIST SP. ORDER # 46580/67846/185072/548387 UNCCR N2, SE4; ORDER # 67846/185072  MISS N2, SE4; ORDER # 127382/548387 MNNG; ORDER # 185072 UNCCR, MSSLM SW4)</p>



# Well Location Plat

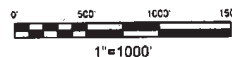
Sec. 24-20N-13W I.M.

Operator: STAGHORN PETROLEUM, LLC  
Lease Name and No.: ERIC MATTHEW 20-13-24 1H  
Footage: 211' FSL - 2145' FWL PAD ELEVATION: 1526'  
Section: 24 Township: 20N Range: 13W I.M.  
County: Major State of Oklahoma  
Terrain at Loc.: Location fell on existing level pad site.

API 093-25089 A



All bearings shown are grid bearings

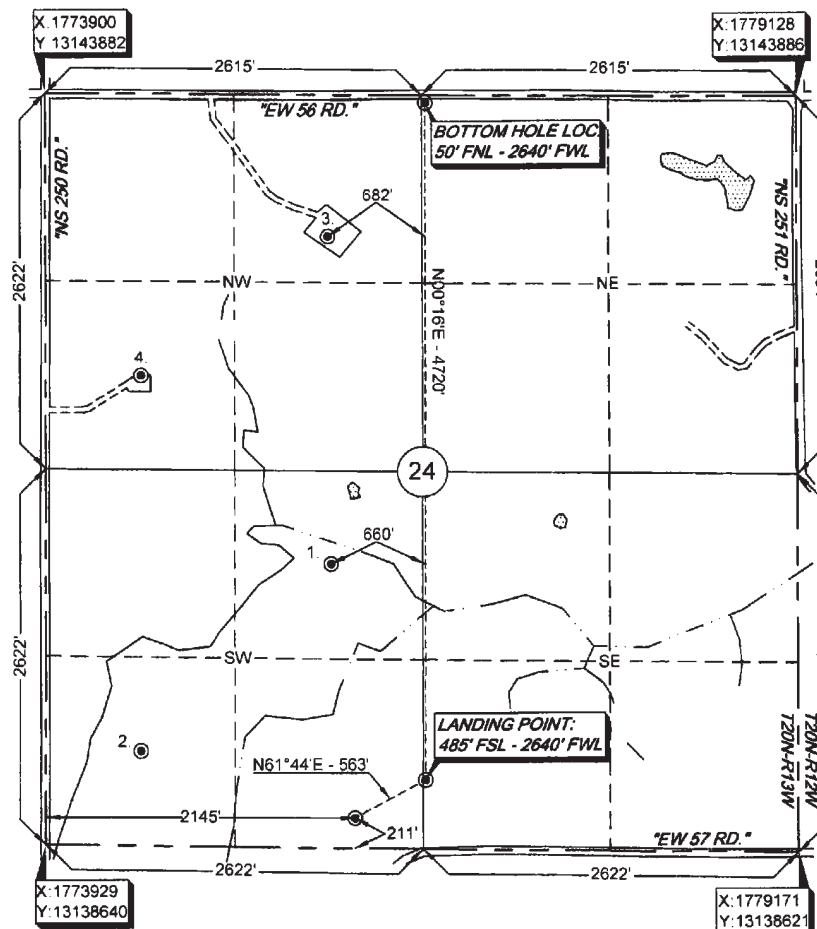


GPS DATUM  
NAD 83  
NAD 27  
UTM - ZONE 14

Surface Hole Loc.:  
Lat: 36°11'17.91"N  
Lon: 98°32'25.82"W  
Lat: 36.188269858  
Lon: -98.540145846  
X: 1776072  
Y: 13138844

Landing Point:  
Lat: 36°11'20.57"N  
Lon: 98°32'19.78"W  
Lat: 36.18901006  
Lon: -98.53847006  
X: 1776565  
Y: 13139116

Bottom Hole Loc.:  
Lat: 36°12'07.25"N  
Lon: 98°32'19.83"W  
Lat: 36.20197644  
Lon: -98.53848218  
X: 1776539  
Y: 13143834



\*PLEASE NOTE\*  
EXISTING WELL DATA SHOWN HEREON WAS  
FURNISHED FROM THE OCC WEBSITE AND WAS NOT  
SURVEYED OR VERIFIED ON THE GROUND

1. KINGFISHER RESOURCES GRABOW 1-24 1980' FSL-1980' FWL (SW/4) OCC STATUS: PA	2. C&S PLUGGING LONG 1-24 660' FSL-660' FWL (SW/4) OCC STATUS: PA	3. STAGHORN DAVID 2-24 990' FNL-1958' FWL (NW/4) OCC STATUS: AC	4. QEP ENERGY CO DAVID 1-24 660' FSL-660' FWL (NW/4) OCC STATUS: AC
--	--	--	--

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 R1K - GPS

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.

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  
Invoice #7053-C

Date Staked: 09/19/17 By: C.K.  
Date Drawn: 09/25/17 By: C.K.

## 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*

LANCE G. MATHIS

09/28/17

OK LPLS 1664

