

API NUMBER: 011 24276

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

Approval Date: 09/08/2021
Expiration Date: 03/08/2023

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Section: 32 Township: 18N Range: 13W County: BLAINE

SPOT LOCATION: ☐ SW ☐ NW ☐ SW ☐ SE FEET FROM QUARTER: FROM SOUTH FROM EAST
SECTION LINES: 676 2478

Lease Name: LASSEN 17-13-05 Well No: 1H Well will be 676 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

JACK & CAROL FOSTER, HWJT
RT 2, BOX 29
CANTON OK 73724

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

Name	Code	Depth
1 MISSISSIPPIAN	359MSSP	8557

Spacing Orders: 679012

Location Exception Orders: 720299

Increased Density Orders: No Density

Pending CD Numbers: No Pending

Working interest owners' notified: ***

Special Orders: No Special

Total Depth: 16245

Ground Elevation: 1686

Surface Casing: 1000

Depth to base of Treatable Water-Bearing FM: 60

Deep surface casing has been approved

Under Federal Jurisdiction: No
Fresh Water Supply Well Drilled: No
Surface Water used to Drill: Yes

Approved Method for disposal of Drilling Fluids:

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

PERMIT NO: 21-37805

H. (Other)

SEE MEMO

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

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

This permit does not address the right of entry or settlement of surface damages. The duration of this permit is 18 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

Section: 5	Township: 17N	Range: 13W	Meridian: 1M	Total Length: 4800
	County: BLAINE			Measured Total Depth: 16245
Spot Location of End Point: SW	SW	SW	SE	True Vertical Depth: 10810
Feet From: SOUTH		1/4 Section Line: 165		End Point Location from
Feet From: EAST		1/4 Section Line: 2450		Lease, Unit, or Property Line: 165

NOTES:

Category	Description
DEEP SURFACE CASING	[9/7/2021 - GC2] - 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	<p>[9/3/2021 - GC2] - OCC 165:10-3-10 REQUIRES:</p> <p>1) NOTICE SHALL BE GIVEN AT LEAST 5 BUSINESS DAYS PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS ON A HORIZONTAL WELL TO OPERATORS PRODUCING WELLS WITHIN 1 MILE OF THE COMPLETION INTERVAL OF THE SUBJECT WELL. THE NOTICE TO SUCH OPERATORS SHALL CONTAIN THE INFORMATION IN FORM 6000NOO. IF THE HYDRAULIC FRACTURING OPERATIONS SCHEDULE CHANGES AFTER NOTICE HAS BEEN PROVIDED, RESULTING IN A DELAY OF OPERATIONS OF MORE THAN 5 DAYS FROM THE INITIAL NOTICE, NEW NOTICE IS REQUIRED TO BE GIVEN;</p> <p>2) NOTICE WILL BE GIVEN TO THE OCC CENTRAL OFFICE AND LOCAL DISTRICT OFFICES AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS. FORM 6000NHF SHALL BE USED AND IS FOUND AT THIS LINK: OCCEWEB.COM/OG/OGFORMS.HTML; AND,</p> <p>3) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS IS TO BE REPORTED TO FRACFOCUS WITHIN 60 DAYS AFTER THE CONCLUSION OF HYDRAULIC FRACTURING OPERATIONS, FOUND AT FRACFOCUS.ORG</p>
INTERMEDIATE CASING	[9/3/2021 - GC2] - 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 - 720299 (202101507)	<p>[9/8/2021 - GB6] - (I.O.) 5-17N-13W</p> <p>X679012 MSSP</p> <p>COMPL. INT. NCT 165' FSL, NCT 165' FNL, NCT 660' FEL</p> <p>STAGHORN PETROLEUM II, LLC</p> <p>08/30/2021</p>
MEMO	[9/3/2021 - GC2] - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT
SPACING - 679012	<p>[9/8/2021 - GB6] - (640)(HOR) 5-17N-13W</p> <p>EXT 674517 MSSP, OTHERS</p> <p>EST OTHER</p> <p>COMPL. INT. (MSSP) NLT 660' FB</p> <p>(COEXIST SP. ORDER# 220044 CSTR, OTHER; SP. ORDER# 286524 MSSLM, OTHER)</p>



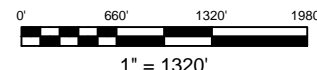
Well Location Plat

S.H.L. Sec. 32-18N-13W I.M.
B.H.L. Sec. 5-17N-13W I.M.

Operator: STAGHORN PETROLEUM, LLC
Lease Name and No.: LASSEN 17-13-05 1H
Surface Hole Location: 676' FSL - 2478' FEL Gr. Elevation: 1686'
SW/4-NW/4-SW/4-SE/4 Section: 32 Township: 18N Range: 13W I.M.
Bottom Hole Location: 165' FSL - 2450' FEL
SW/4-SW/4-SW/4-SE/4 Section: 5 Township: 17N Range: 13W I.M.
County: Blaine State of Oklahoma
Terrain at Loc.: Location fell on open pasture.



All bearings shown
are grid bearings.



GPS DATUM

NAD 83

NAD 27

UTM - ZONE 14

Surface Hole Loc.:

Lat: 35°59'14.54"N

Lon: 98°36'33.81"W

Lat: 35.98733039

Lon: -98.60902909

X: 1756046

Y: 13065635

Landing Point:

Lat: 35°59'06.22"N

Lon: 98°36'33.47"W

Lat: 35.98502014

Lon: -98.60893592

X: 1756077

Y: 13064794

Bottom Hole Loc.:

Lat: 35°58'18.73"N

Lon: 98°36'33.69"W

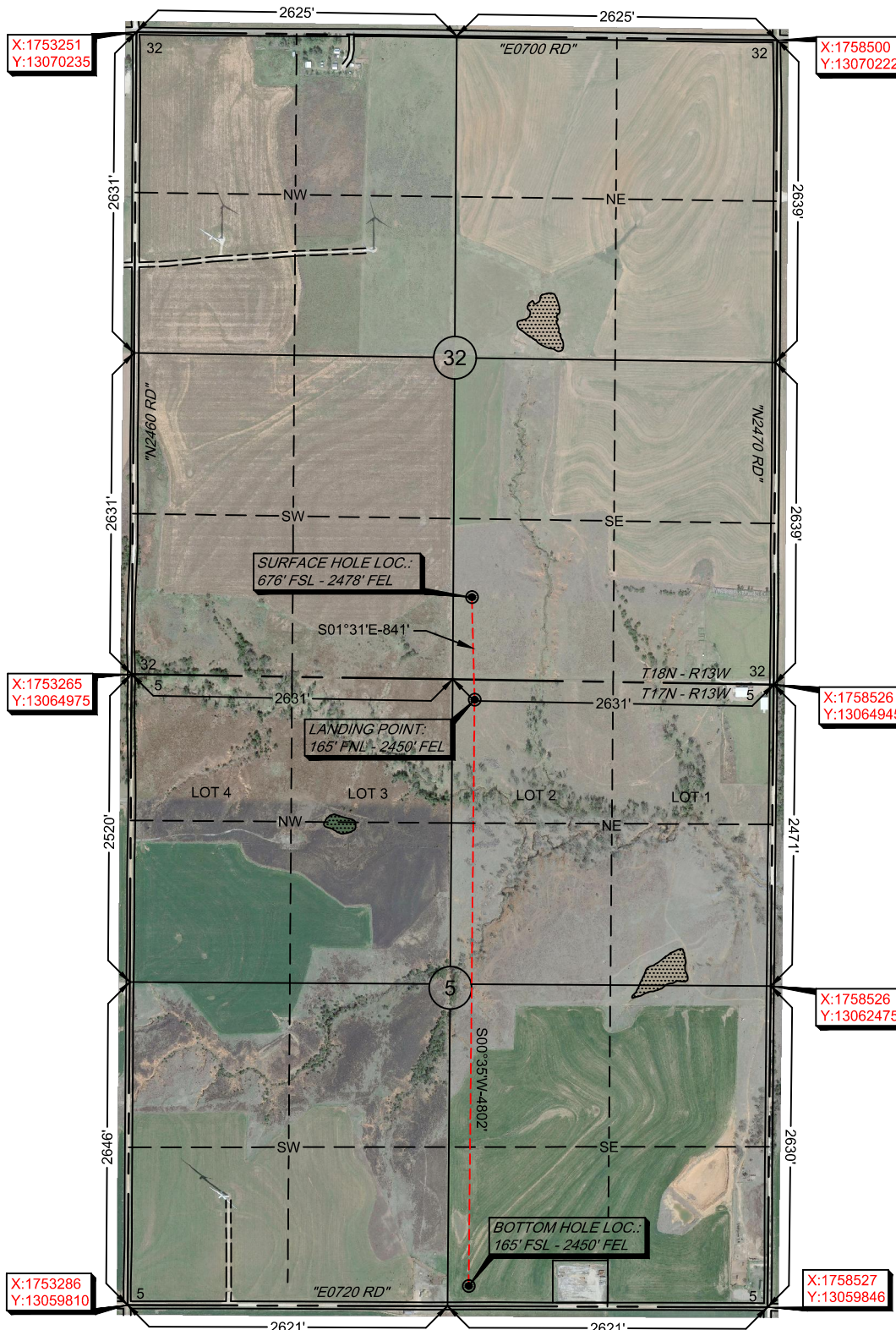
Lat: 35.97182867

Lon: -98.60899829

X: 1756078

Y: 13059994

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. 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, 2022

Invoice #9555

Date Staked: 08/18/2021

By: D.W.

Date Drawn: 08/20/2021

By: J.L.

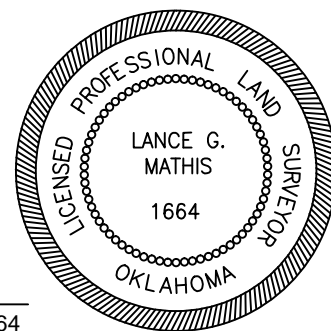
Certification:

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

08/24/2021

OK LPLS 1664





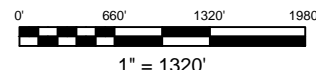
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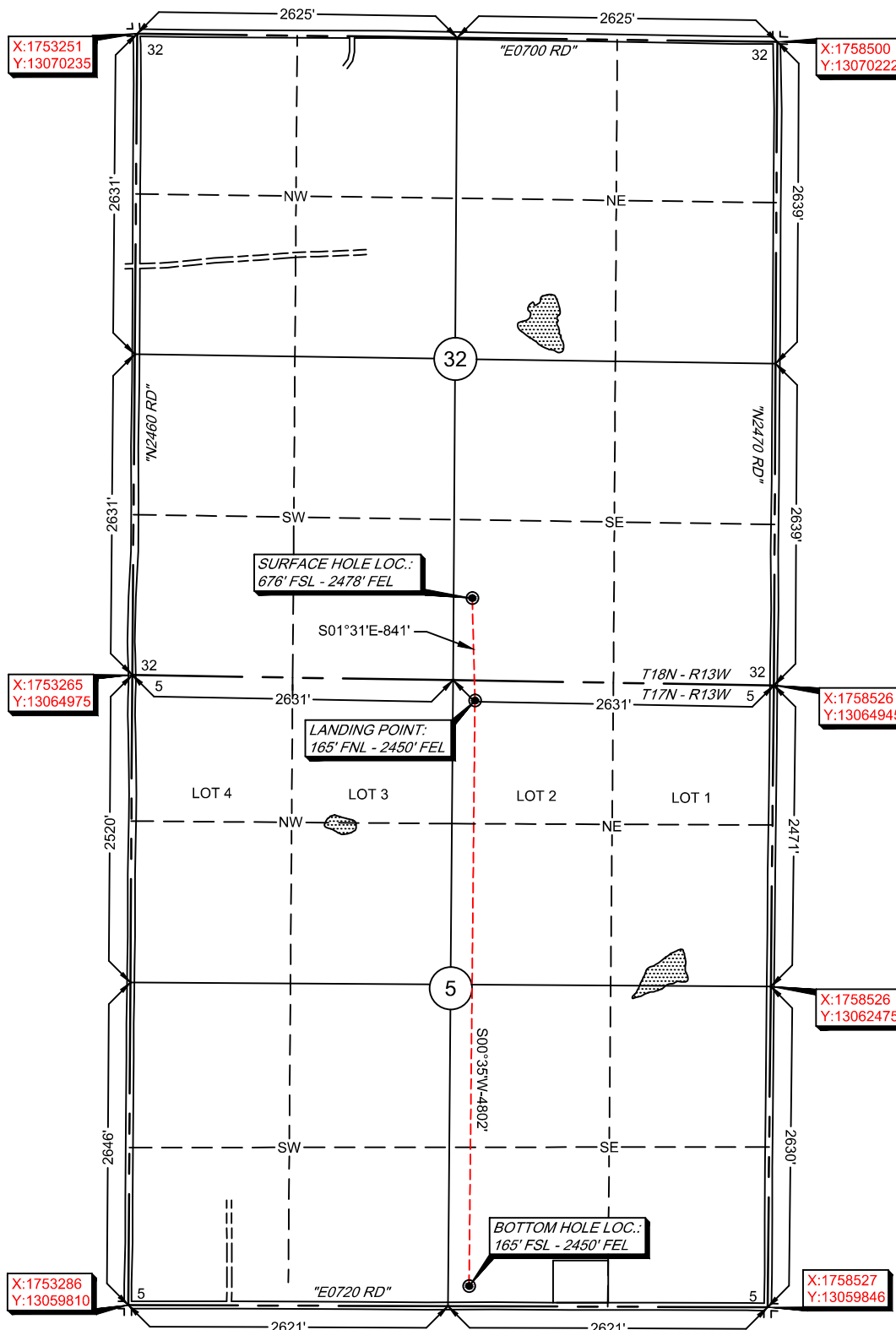
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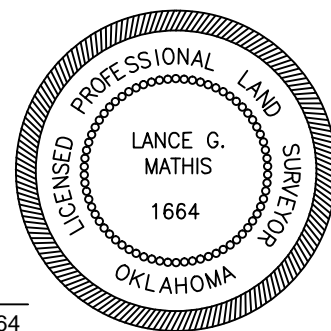
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08/24/2021

OK LPLS 1664

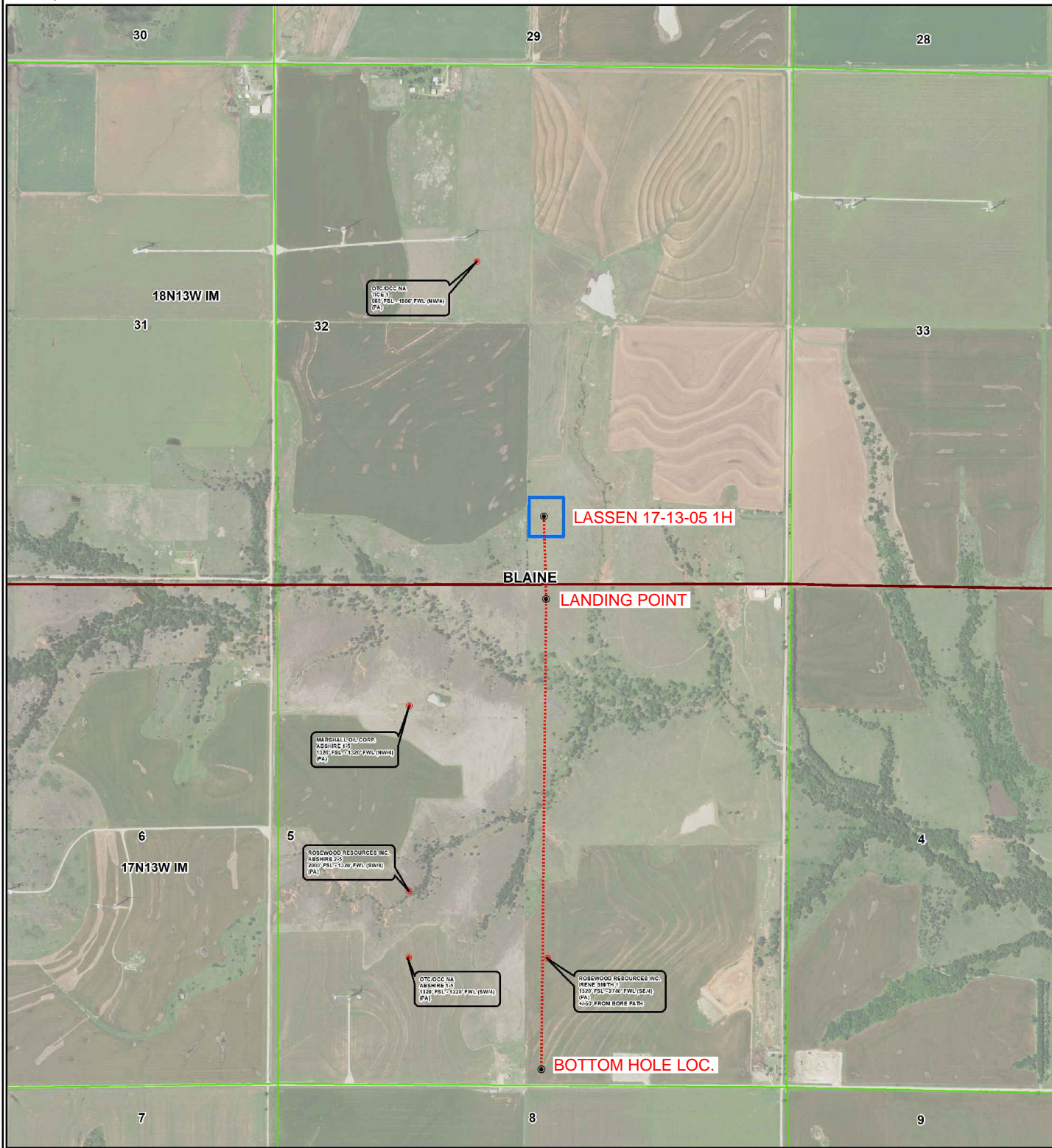
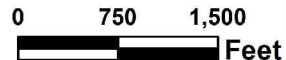




Anti-Collision

Operator: STAGHORN PETROLEUM, LLC
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Sec. 5 Twp. 17N Rng. 13W I.M.
County: Blaine State of Oklahoma

Secs. 32-18N-13W I.M.
& 5-17N-13W I.M.





Topographic Vicinity Map

Operator: STAGHORN PETROLEUM, LLC

Lease Name and No.: LASSEN 17-13-05 1H

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Sec. 32 Twp. 18N Rng. 13W I.M.

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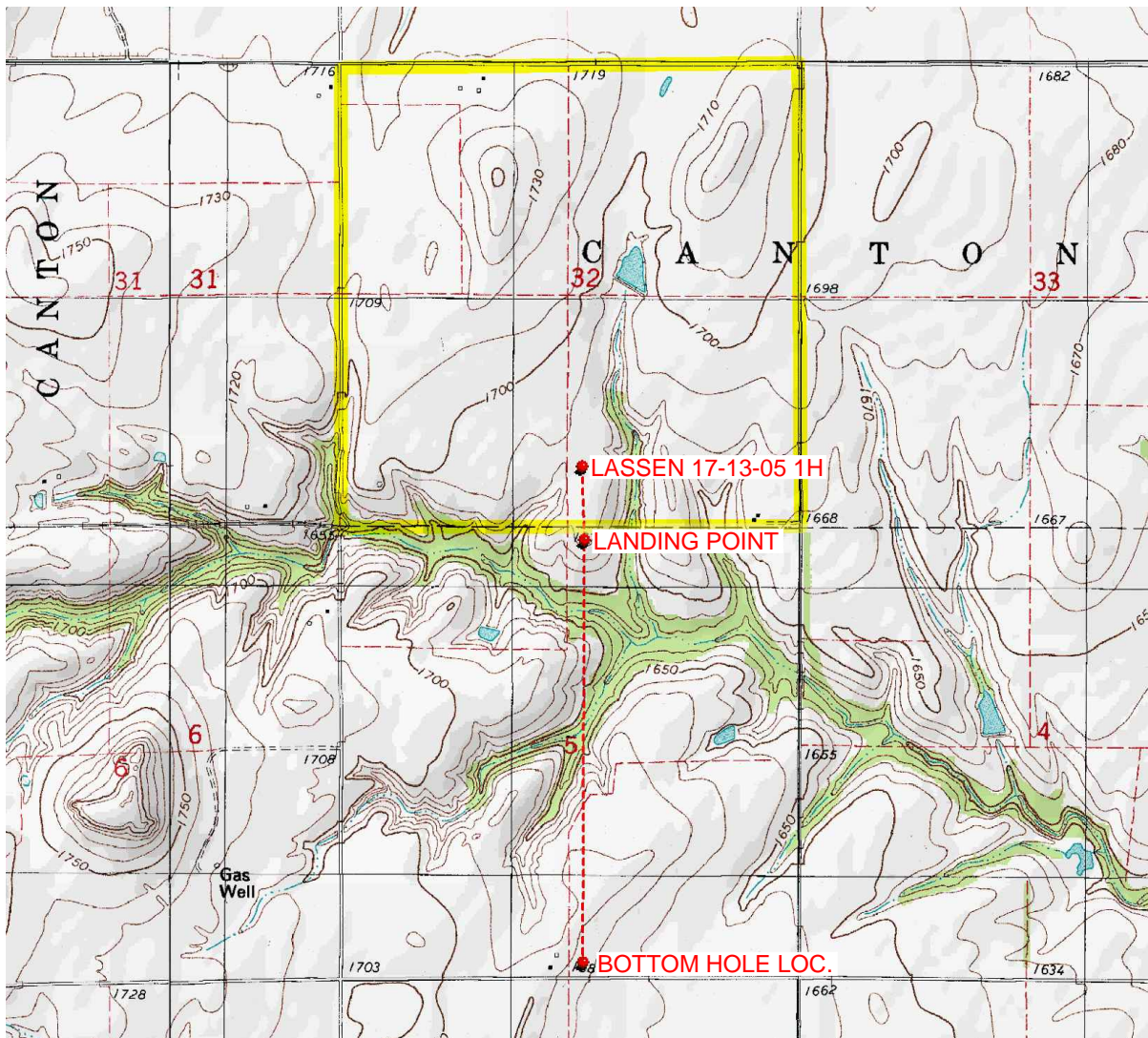
Sec. 5 Twp. 17N Rng. 13W I.M.

County: Blaine State of Oklahoma



Scale 1" = 2000'
Contour Interval: 10'

Ground Elevation at Surface Hole Location: 1686'



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Date Staked: 08/18/2021

The purpose of this map is to verify the location and elevation as staked on the ground and to show the surrounding Topographic features. The footage shown hereon is only as SCALED onto a U.S.G.S. Topographic Map.

Please note that this location was staked carefully 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.

County Highway Vicinity Map

Job #: 9555

Operator: STAGHORN PETROLEUM, LLC

Lease Name and No.: **LASSEN 17-13-05 1H**

Accessibility: From the North.

Directions: From the junction of State Highway 51 and "N2470 Rd." in Canton, OK, go 4.5 miles South on "N2470 Rd." to the entrance to the proposed lease road.



1 inch = 0.75 mile

provided by:
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