

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

API NUMBER: 063 24839 B

Approval Date: 08/07/2018  
Expiration Date: 02/07/2019

Horizontal Hole Oil & Gas

Amend reason: OCC CORRECTION; PIT SYSTEM TO INCLUDE  
OBM

AMEND PERMIT TO DRILL

WELL LOCATION: Sec: 13 Twp: 8N Rge: 11E County: HUGHES  
SPOT LOCATION: ☐ SW ☐ NE ☐ SE ☐ NE FEET FROM QUARTER: FROM NORTH FROM EAST  
SECTION LINES: 1855 625

Lease Name: JERRY Well No: 1-13/12/1H Well will be 625 feet from nearest unit or lease boundary.  
Operator BRAVO ARKOMA LLC  
Name: Telephone: 9188944440; 9188944 OTC/OCC Number: 23562 0

BRAVO ARKOMA LLC  
1323 E 71ST ST STE 400  
TULSA, OK 74136-5067

SUE E. ANDERSON REVOCABLE TRUST  
311 COUNTRY CLUB DRIVE  
HOLDENVILLE OK 74848

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	4564	6	
2	WOODFORD	4881	7	
3	SYLVAN	4954	8	
4			9	
5			10	

Spacing Orders: 668135  
668322

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201805855  
201805854

Special Orders:

Total Depth: 13744 Ground Elevation: 731 Surface Casing: 1000 Depth to base of Treatable Water-Bearing FM: 170

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

PIT 1 INFORMATION

Type of Pit System: ON SITE  
Type of Mud System: AIR

Approved Method for disposal of Drilling Fluids:

A. Evaporation/dewater and backfilling of reserve pit.

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: 4

Liner not required for Category: 4

Pit Location is BED AQUIFER

Pit Location Formation: SENORA

Mud System Change to Water-Based or Oil-Based Mud Requires an Amended Intent (Form 1000).

F. Haul to Commercial soil farming facility: Sec. 14 Twn. 7N Rng. 9E Cnty. 63 Order No: 551649

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: 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: SENORA

PIT 3 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: SENORA

HORIZONTAL HOLE 1

Sec 01 Twp 8N Rge 11E County HUGHES

Spot Location of End Point: NW SE NE SE

Feet From: SOUTH 1/4 Section Line: 1960

Feet From: EAST 1/4 Section Line: 370

Depth of Deviation: 3815

Radius of Turn: 528

Direction: 1

Total Length: 9097

Measured Total Depth: 13744

True Vertical Depth: 4954

End Point Location from Lease,

Unit, or Property Line: 370

Notes:

Category

Description

DEEP SURFACE CASING

8/3/2018 - 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

This permit does not address the right of entry or settlement of surface damages.

063 24839 JERRY 1-13/12/1H

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
HYDRAULIC FRACTURING	<p>8/30/2018 - G71 - OCC 165:10-3-10 REQUIRES:</p> <p>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;</p> <p>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: <a href="http://OCCWEB.COM/OG/OGFORMS.HTML">OCCWEB.COM/OG/OGFORMS.HTML</a>; AND,</p> <p>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: <a href="http://FRACFOCUS.ORG">FRACFOCUS.ORG</a></p>
MEMO	<p>9/13/2018 - G57 - PITS 1 &amp; 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT</p>
PENDING CD - 201805854	<p>9/6/2018 - G57 - (I.O.) 1, 12, 13-8N-11E  EST MULTIUNIT HORIZONTAL WELL  X668135 MSSP, WDFD, SLVN 1 &amp; 12-8N-11E  X668322 MSSP, WDFD, SLVN 13-8N-11E  (MSSP, SLVN ARE ADJACENT COMMON SOURCES OF SUPPLY TO THE WDFD)  19% 13-8N-11E  58% 12-8N-11E  23% 1-8N-11E  BRAVO ARKOMA, LLC.  REC 8-13-2018 (DUNN)</p>
PENDING CD - 201805855	<p>9/6/2018 - G57 - (I.O.) 1, 12, 13-8N-11E  X668135 MSSP, WDFD, SLVN 1 &amp; 12-8N-11E  X668322 MSSP, WDFD, SLVN 13-8N-11E  COMPL. INT. (13-8N-11E) NCT 1870' FNL, NCT 0' FNL, NCT 330' FEL  COMPL. INT. (12-8N-11E) NCT 0' FSL, NCT 0' FNL, NCT 330' FEL  COMPL. INT. (1-8N-11E) NCT 0' FSL, NCT 2640' FNL, NCT 330' FEL  BRAVO ARKOMA, LLC.  REC 8-13-2018 (DUNN)</p>
SPACING - 668135	<p>9/6/2018 - G57 - (640)(HOR) 1 &amp; 12-8N-11E  EXT 659541 MSSP, WDFD, SLVN, OTHER  POE TO BHL (MSSP) NLT 660' FB  POE TO BHL (WDFD) NLT 165' FNL &amp; FSL, NLT 330' FEL &amp; FWL  POE TO BHL (SLVN) NLT 330' FB</p>
SPACING - 668322	<p>9/6/2018 - G57 - (640)(HOR) 13-8N-11E  EXT 659541 MSSP, WDFD, SLVN, OTHER  POE TO BHL (MSSP) NLT 660' FB  POE TO BHL (WDFD) NLT 165' FNL &amp; FSL, NLT 330' FEL &amp; FWL  POE TO BHL (SLVN) NLT 330' FB</p>

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.



Operator: BRAVO NATURAL RESOURCES, LLC  
Lease Name and No.: JERRY 1-13/12/1H  
Footage: 1855' FNL - 625' FEL Gr. Elevation: 731'  
Section: 13 Township: 8N Range: 11E I.M.  
County: Hughes State of Oklahoma  
Terrain at Loc.: Location fell in a pasture.

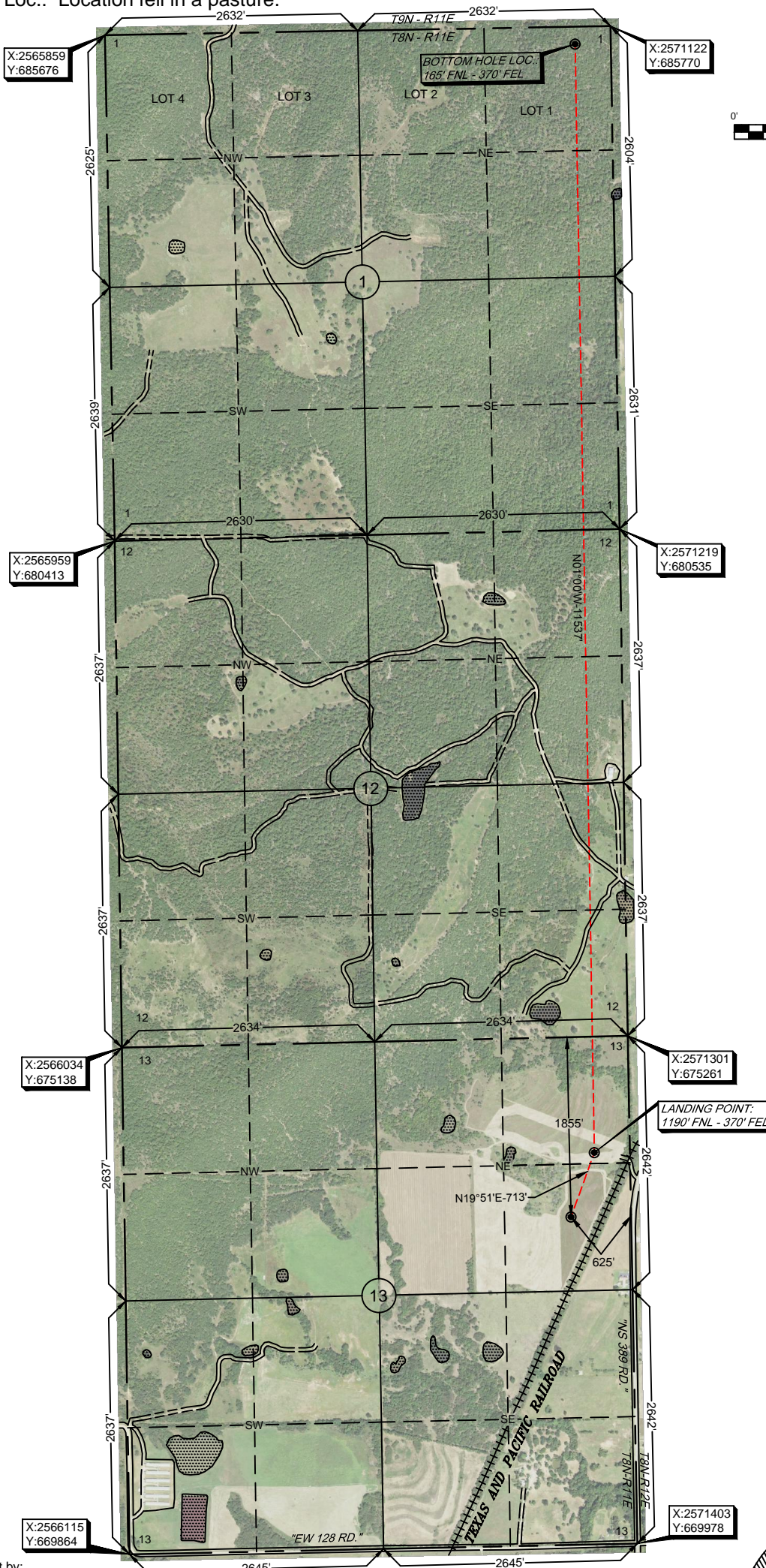
A north arrow pointing upwards with the letter 'N' in the center. Below the arrow is a graphic scale bar divided into four equal segments, labeled 0', 660', 1320', and 1980'. Below the scale bar is the text "1" = 1500'".

All bearings shown are grid bearings.

Surface Hole Loc.: Lat: 35°10'07.97"N Lon: 96°05'25.56"W X: 2570712 Y: 673392
Landing Point: Lat: 35°10'14.56"N Lon: 96°05'22.49"W X: 2570955 Y: 674063

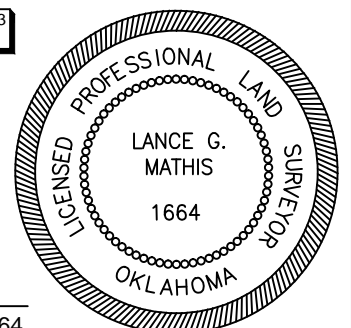
Bottom Hole Loc.:  
Lat:35°12'08.67"N  
Lon:96°05'22.27"W  
X:2570755  
Y:685598

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 Altona Surveying and Mapping promptly if any inconsistency is determined. GPS data is observed from RTK - GPS. -N-0-E-X and Y data shown hereon (or Section Corners may NOT have been surveyed on-the-ground, and further, does NOT represent a true boundary Survey-Corner Section distances may be assumed from a Government Survey Plan 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.



**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.

 08/22/18  
LANCE G. MATHIS OK LPLS 1664



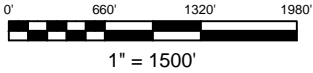




# Well Location Plat

S.H.L. Sec. 13-8N-11E I.M.  
B.H.L. Sec. 1-8N-11E I.M.

Operator: BRAVO NATURAL RESOURCES, LLC  
Lease Name and No.: JERRY 1-13/12/1H  
Footage: 1855' FNL - 625' FEL Gr. Elevation: 731'  
Section: 13 Township: 8N Range: 11E I.M.  
County: Hughes State of Oklahoma  
Terrain at Loc.: Location fell in a pasture.

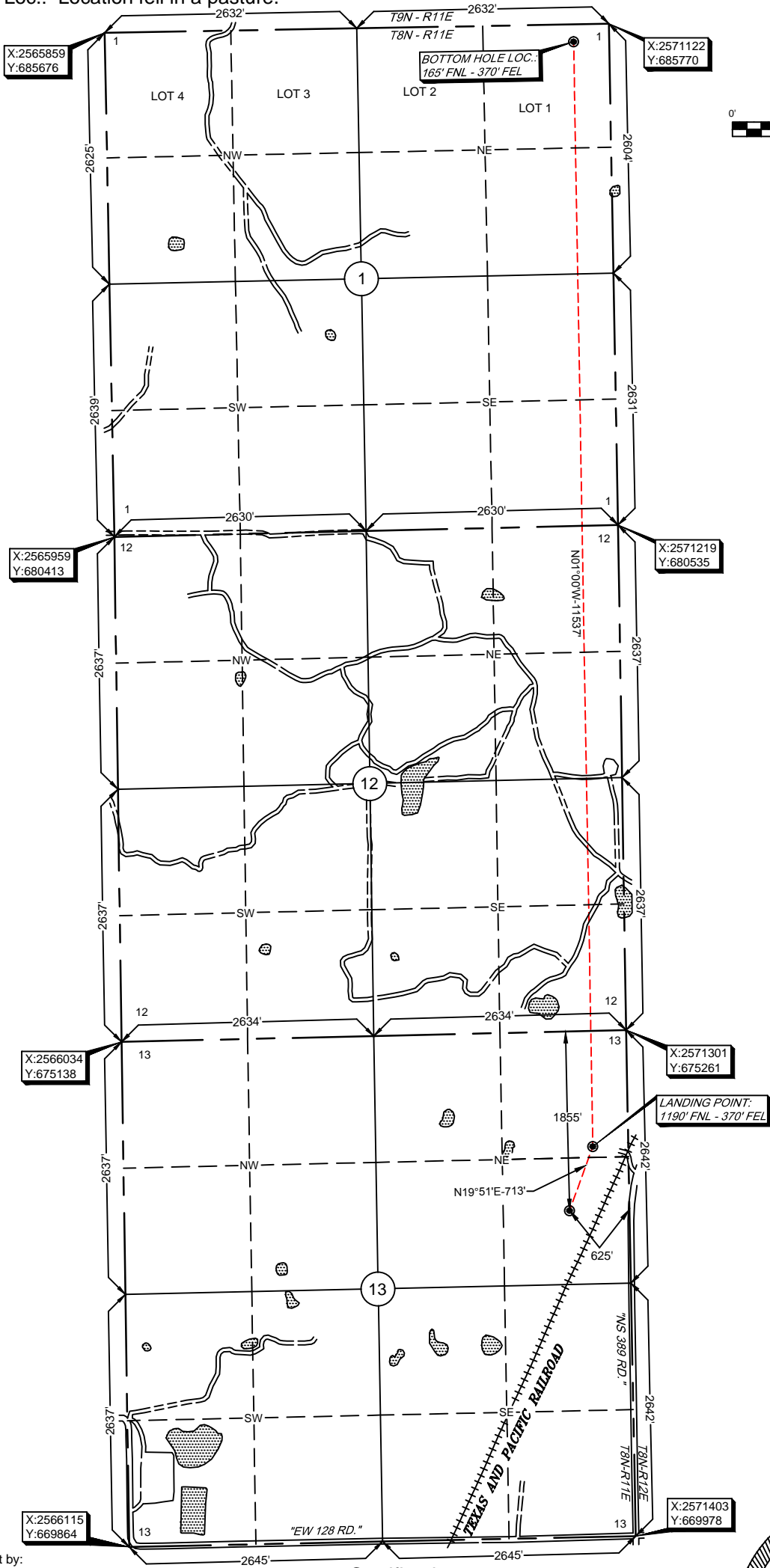


GPS DATUM  
NAD 27  
OK SOUTH ZONE

Surface Hole Loc.:
Lat: 35°10'07.97"N
Lon: 96°05'25.56"W
X: 2570712
Y: 673392
Landing Point:
Lat: 35°10'14.56"N
Lon: 96°05'22.49"W
X: 2570955
Y: 674063

Bottom Hole Loc.:
Lat: 35°12'08.67"N
Lon: 96°05'22.27"W
X: 2570755
Y: 685598

-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.

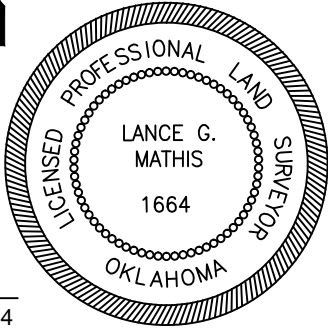


Survey and plat by:  
**Arkoma Surveying and Mapping, PLLC**  
P.O. Box 238 Wilburton, OK 74578  
Ph. 918-465-5711 Fax 918-465-5030  
Certificate of Authorization No. 5348  
Expires June 30, 2020  
Invoice #7978-B  
Date Staked: 07/09/18 By: D.A.  
Date Drawn: 07/11/18 By: J.K.  
Added Sec. & Rev. Lse Names: 08/03/18 By: K.B.  
Added LP & BHL: 08/20/18 By: M.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**

08/22/18  
OK LPLS 1664







# Topographic Vicinity Map

Operator: BRAVO NATURAL RESOURCES, LLC

Lease Name and No.: JERRY 1-13/12/1H

Surface Hole Location: 1855' FNL - 625' FEL

Landing Point: 1190' FNL - 370' FEL

Sec. 13 Twp. 8N Rng. 11E I.M.

Bottom Hole Location: 165' FNL - 370' FEL

Sec. 1 Twp. 8N Rng. 11E I.M.

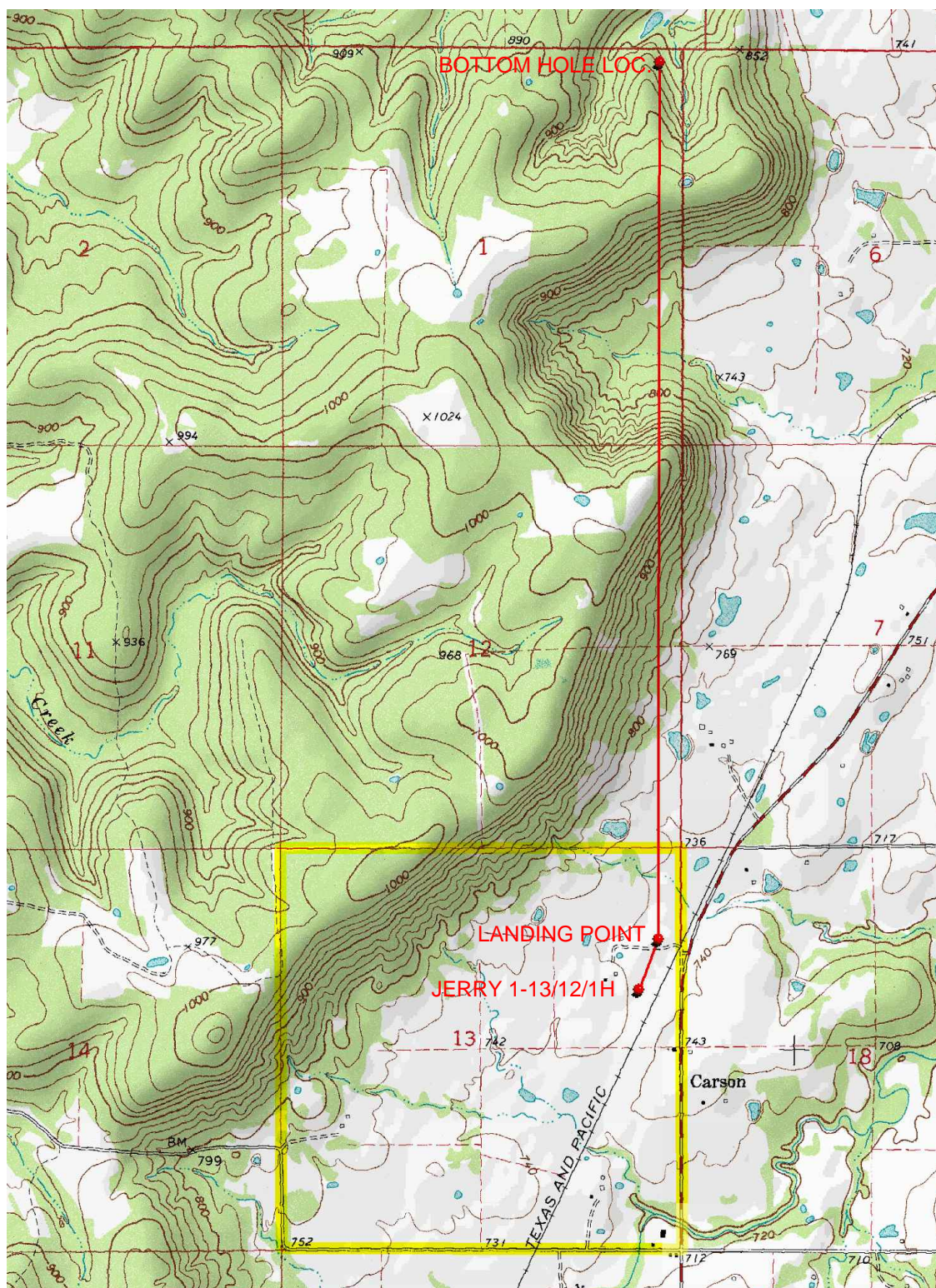
County: Hughes State of Oklahoma



Scale 1" = 2000'

Contour Interval: 10'

Ground Elevation at Surface Hole Location: 731'



Provided 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, 2020

Date Staked: 07/09/18

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.

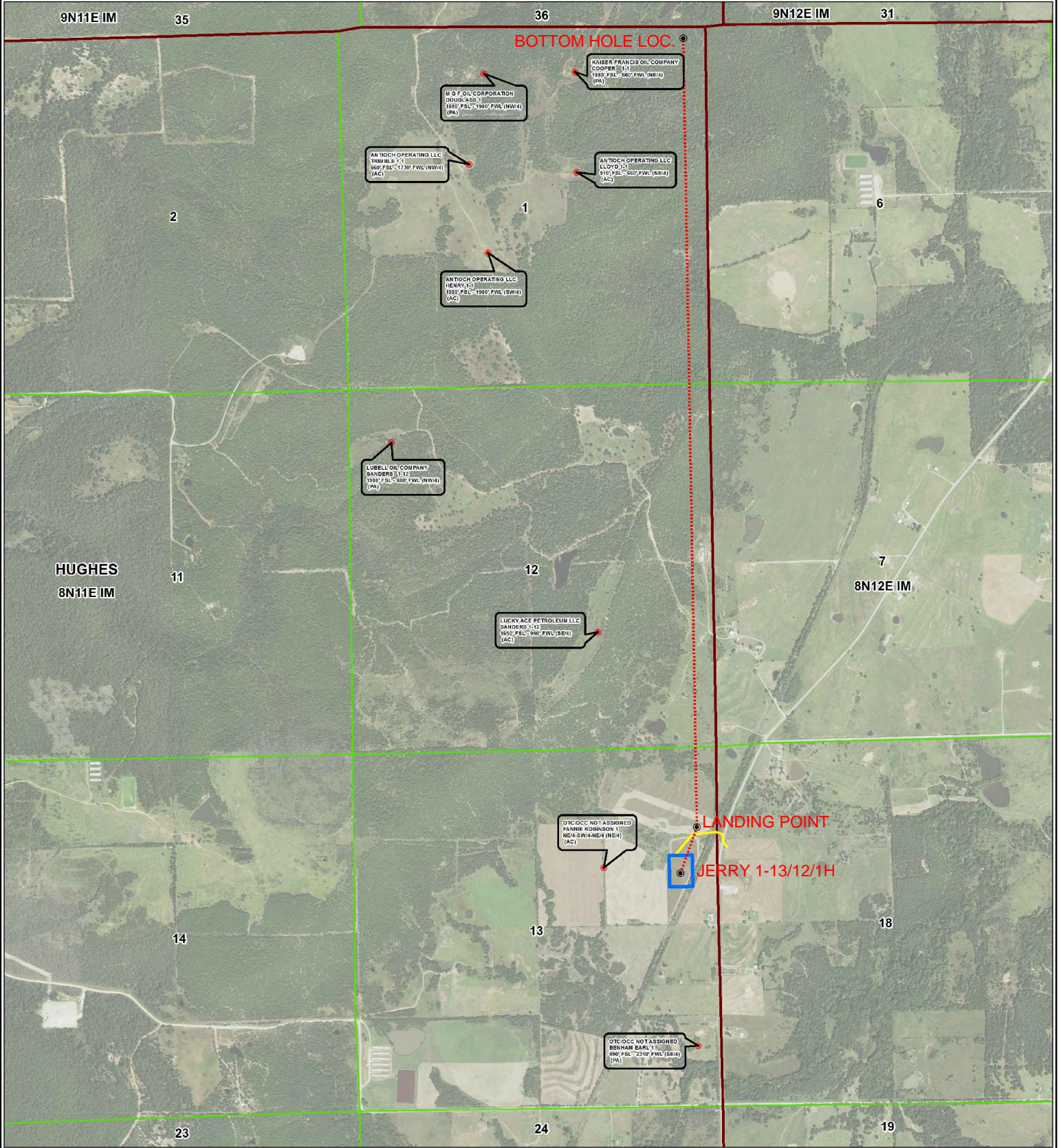
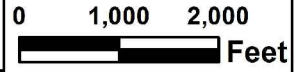
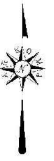




# Anti-Collision

Sec. 13-8N-11E I.M.

Operator: BRAVO NATURAL RESOURCES, LLC  
Lease Name and No.: JERRY 1-13/12/1H  
Surface Hole Location: 1855' FNL - 625' FEL  
Landing Point: 1190' FNL - 370' FEL  
Sec. 13 Twp. 8N Rng. 11E I.M.  
Bottom Hole Location: 165' FNL - 370' FEL  
Sec. 1 Twp. 8N Rng. 11E I.M.  
County: Hughes State of Oklahoma





# County Highway Vicinity Map

Job #: 7978-B

Operator: BRAVO NATURAL RESOURCES, LLC

Lease Name and No.: **JERRY 1-13/12/1H**

Accessibility: From the South.

Directions: From the junction of "Main St" & "Jefferson St" in the town of Lamar, OK, go 0.2 miles East on "Jefferson St", 1.8 miles North on "NS 387 RD.", 1.1 miles East on "EW 131 RD.", then go 3.9 miles North on "NS 389 RD." to the Northeast Quarter of Section 13-8N-11E on the West side of the road.

1 inch = 0.75 mile

provided 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  
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