

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

API NUMBER: 017 25339

Approval Date: 12/07/2018

Expiration Date: 06/07/2020

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 21 Twp: 12N Rge: 10W

County: CANADIAN

SPOT LOCATION: ☐ NE ☐ NE ☐ NE ☐ NW

FEET FROM QUARTER: FROM NORTH FROM WEST

SECTION LINES: 240 2470

Lease Name: BRAVEHEART

Well No: 1H-16-9

Well will be 240 feet from nearest unit or lease boundary.

Operator
Name: CITIZEN ENERGY III LLC

Telephone: 9189494680

OTC/OCC Number: 24120 0

CITIZEN ENERGY III LLC
320 S BOSTON AVE STE 900
TULSA, OK 74103-3729

TERAL R. GARRISON
17187 CR 1060
HINTON OK 74103

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	13500	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201809115
201809116

Special Orders:

Total Depth: 24000

Ground Elevation: 1355

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 180

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: No

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 ALLUVIAL

Pit Location Formation: ALLUVIUM

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 18-35856
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 ALLUVIAL

Pit Location Formation: ALLUVIUM

HORIZONTAL HOLE 1

Sec 09 Twp 12N Rge 10W County CANADIAN

Spot Location of End Point: NW NW NW NE

Feet From: NORTH 1/4 Section Line: 165

Feet From: EAST 1/4 Section Line: 2499

Depth of Deviation: 12784

Radius of Turn: 573

Direction: 359

Total Length: 10316

Measured Total Depth: 24000

True Vertical Depth: 13500

End Point Location from Lease,
Unit, or Property Line: 165

Notes:

Category

Description

DEEP SURFACE CASING

11/27/2018 - 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

HYDRAULIC FRACTURING

11/27/2018 - 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

MEMO

11/27/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201809115

12/7/2018 - G58 - (E.O.)(1280)(HOR) 9 & 16-12N-10W
EST MSSP
COMPL. INT. NLT 660' FB
(COEXIST SP. ORDER 96815 CSTR; SP. ORDER 548859 MSSP)
REC 11/9/2018 (DUNN)

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.

017 25339 BRAVEHEART 1H-16-9

Category	Description
PENDING CD - 201809116	12/7/2018 - G58 - (E.O.) 9 & 16-12N-10W X201809115 MSSP SHL 240' FNL, 2470' FWL COMPL. INT. 16-12N-10W NCT 165' FSL, NCT 0' FNL, NCT 1320' FWL COMPL. INT. 9-12N-10W NCT 165' FNL, NCT 0' FSL, NCT 1320' FWL NO OP. NAMED REC 11/9/2018 (DUNN)



Terrain at Loc.: Location fell in an open field.

B.H.L. Sec. 9-12N-10W I.M.

All bearings shown are grid bearings.

0' 750' 1500' 2250'

1" = 1500'

GPS DATUM
NAD 83
NAD 27
OK NORTH ZONE

Surface Hole Loc.:
Lat: 35°30'23.53"N
Lon: 98°15'48.03"W
Lat: 35.50653686
Lon: -98.26334178
X: 1890117
Y: 184496

Surface Hole Loc.:
Lat: 35°30'23.35"N
Lon: 98°15'46.82"W
Lat: 35.50648533
Lon: -98.26300571
X: 1921715
Y: 184472

Landing Point:
Lat: 35°30'27.53"N
Lon: 98°15'48.29"W
Lat: 35.50764812
Lon: -98.26341359
X: 1890097
Y: 184900

Landing Point:
Lat: 35°30'27.35"N
Lon: 98°15'47.08"W
Lat: 35.50759661
Lon: -98.26307751
X: 1921695
Y: 184876

Bottom Hole Loc.:
Lat: 35°32'09.55"N
Lon: 98°15'48.77"W
Lat: 35.53598604
Lon: -98.26354663
X: 1890085
Y: 195216

Bottom Hole Loc.:
Lat: 35°32'09.37"N
Lon: 98°15'47.56"W
Lat: 35.53593533
Lon: -98.26320988
X: 1921684
Y: 195192


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 AGMA Surveying and Mapping promptly if you have any questions or concerns. GPS data is observed from RTK. GPSs may have inconsistency is determined. GPS data is observed from RTK. GPSs may have inconsistency is determined. GPS data is observed from RTK. GPSs may have inconsistency is determined.

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.

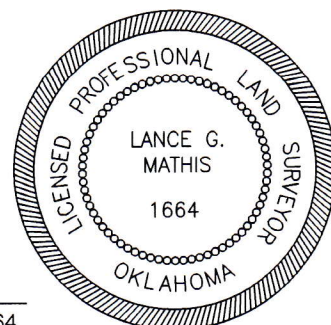
Survey and plat by:
Arkoma Surveying and Mapping, PLLC
P.O. Box 238 Wilburton, OK 74578
Ph. 918-465-5711 Fax 918-465-5030
Certificate of Authorization No. 5348
Expires June 30, 2020

Rev. SHL: 10/23/18 By: J.K.

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

OK LPLS 1664



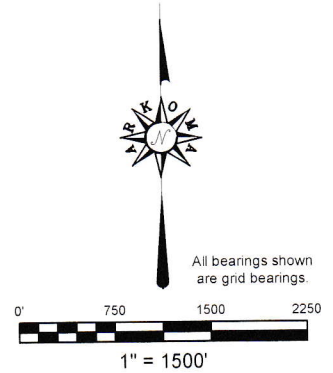


Well Location Plat

Operator: CITIZEN ENERGY, LLC
Lease Name and No.: BRAVEHEART 1H 16-9
Footage: 240' FNL - 2470' FWL Gr. Elevation: 1355'
Section: 21 Township: 12N Range: 10W I.M.
County: Canadian State of Oklahoma
Terrain at Loc.: Location fell in an open field.

017-25339

S.H.L. Sec. 21-12N-10W I.M.
B.H.L. Sec. 9-12N-10W I.M.



GPS DATUM
NAD 83
NAD 27
OK NORTH ZONE

Surface Hole Loc.:
Lat: 35°30'23.53"N
Lon: 98°15'48.03"W
Lat: 35.50653686
Lon: -98.26334178
X: 1890117
Y: 184496
Surface Hole Loc.:
Lat: 35°30'23.35"N
Lon: 98°15'46.82"W
Lat: 35.50648533
Lon: -98.26300571
X: 1921715
Y: 184472
Landing Point:
Lat: 35°30'27.53"N
Lon: 98°15'48.29"W
Lat: 35.50764812
Lon: -98.26341359
X: 1890097
Y: 184900
Landing Point:
Lat: 35°30'27.35"N
Lon: 98°15'47.08"W
Lat: 35.50759661
Lon: -98.26307751
X: 1921695
Y: 184876
Bottom Hole Loc.:
Lat: 35°32'09.55"N
Lon: 98°15'48.77"W
Lat: 35.53598604
Lon: -98.26354663
X: 1890085
Y: 195216
Bottom Hole Loc.:
Lat: 35°32'09.37"N
Lon: 98°15'47.56"W
Lat: 35.53593533
Lon: -98.26320988
X: 1921684
Y: 195192

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

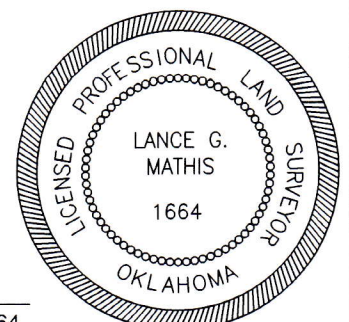
Certification:

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

10/25/18

OK LPLS 1664



Invoice #8245

Date Staked: 10/11/18 By: D.K.
Date Drawn: 10/12/18 By: C.K.
Rev. SHL: 10/23/18 By: J.K.



Anti-Collision

Sec. 21-12N-10W I.M.

CITIZEN ENERGY

Operator: CITIZEN ENERGY, LLC

Lease Name and No.: BRAVEHEART 1H 16-9

Surface Hole Location: 240' FNL - 2470' FWL

Sec. 21 Twp. 12N Rng. 10W I.M.

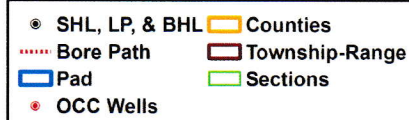
Landing Point: 165' FSL - 2450' FWL

Sec. 16 Twp. 12N Rng. 10W I.M.

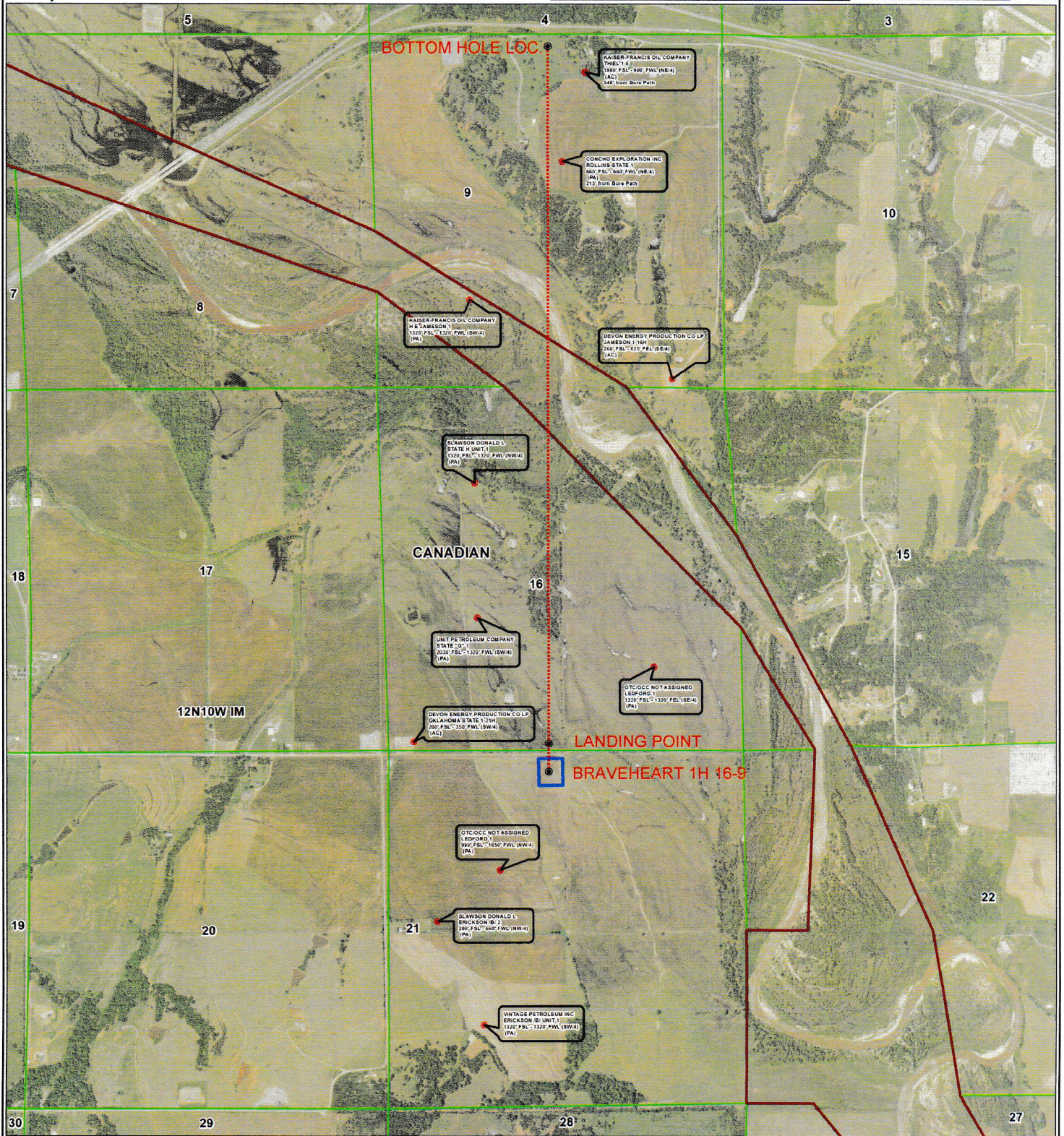
Bottom Hole Location: 165' FNL - 2499' FEL

Sec. 9 Twp. 12N Rng. 10W I.M.

County: Canadian State of Oklahoma



0 1,000 2,000 Feet





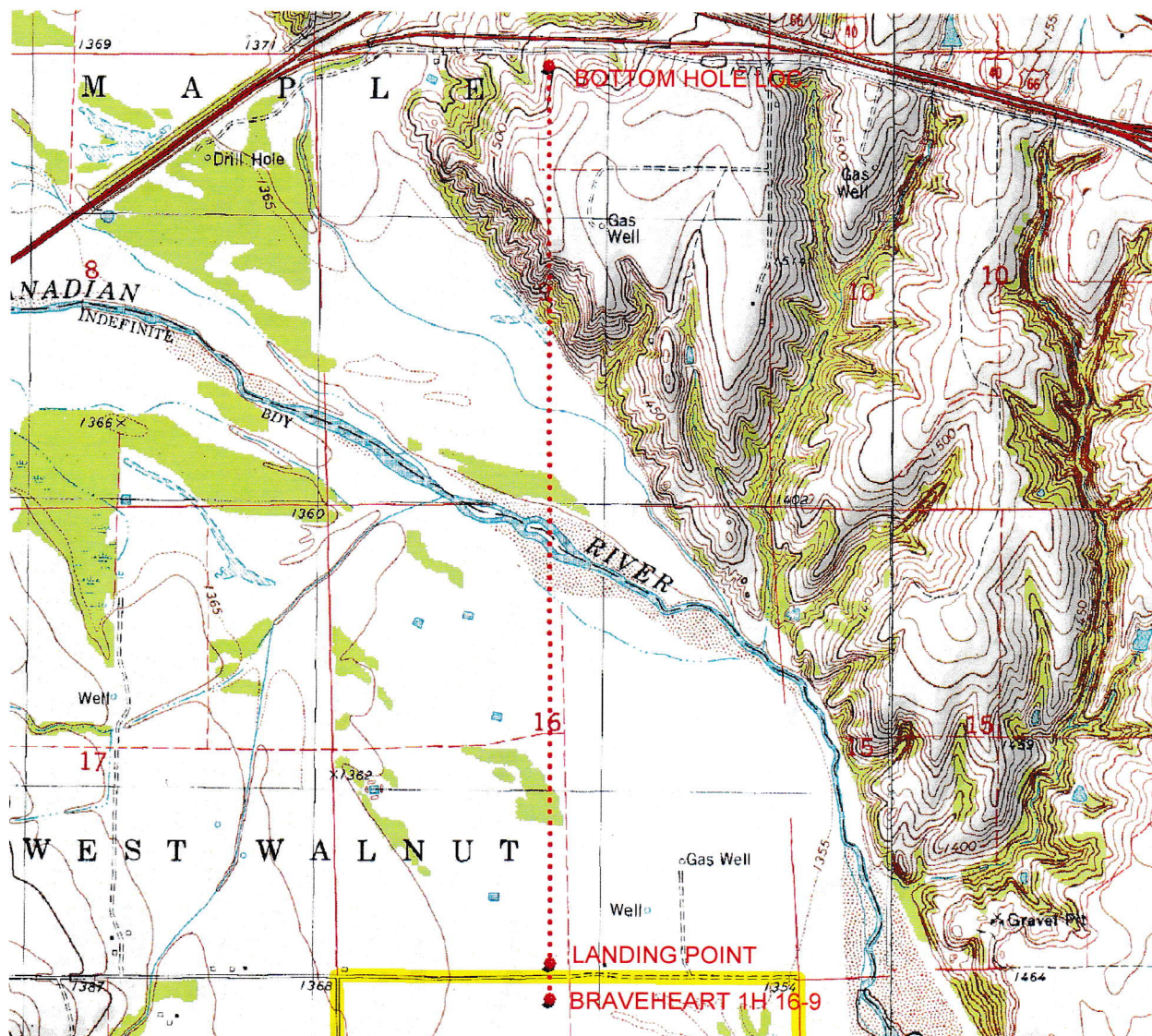
Topographic Vicinity Map

Operator: CITIZEN ENERGY, LLC
Lease Name and No.: BRAVEHEART 1H 16-9
Surface Hole Location: 240' FNL - 2470' FWL
Sec. 21 Twp. 12N Rng. 10W I.M.
Landing Point: 165' FSL - 2450' FWL
Sec. 16 Twp. 12N Rng. 10W I.M.
Bottom Hole Location: 165' FNL - 2499' FEL
Sec. 9 Twp. 12N Rng. 10W I.M.
County: Canadian State of Oklahoma



Scale 1" = 2000'
Contour Interval: 10'

Ground Elevation at Surface Hole Location: 1355'



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: 10/11/18

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.

County Highway Vicinity Map

Job #:8245

Operator: CITIZEN ENERGY, LLC

Lease Name and No.: BRAVEHEART 1H 16-9

Accessibility: From the South.

Directions: From the junction of US HWY 281 & State HWY 37 in the town of Hinton, OK, go 5.0 miles East on State HWY 37, 4.0 miles North on "S Methodist Rd", then go 1.2 miles East on "Smith Rd W" to the Northwest Quarter of Section 21-12N-10W on the East side of the road.



1 inch = 1 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
Expires June 30, 2018

