

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

API NUMBER: 017 25393

Approval Date: 02/19/2019

Expiration Date: 08/19/2020

Horizontal Hole
Oil & Gas
Multi Unit

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: 190 2469

Lease Name: BRAVEHEART

Well No: 1H-21-28

Well will be 190 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

SANDY D. GARRISON
17187 CR 1060
HINTON OK 73047

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: 201900889
201900890

Special Orders:

Total Depth: 23900

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: 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 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: 19-36250

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 28 Twp 12N Rge 10W County CANADIAN

Spot Location of End Point: SE SE SE SW

Feet From: SOUTH 1/4 Section Line: 165

Feet From: WEST 1/4 Section Line: 2470

Depth of Deviation: 12796

Radius of Turn: 573

Direction: 180

Total Length: 10204

Measured Total Depth: 23900

True Vertical Depth: 13700

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

Additional Surface Owner	Address	City, State, Zip
SANDY D. GARRISON	17187 CR 1060	HINTON, OK 73047

Notes:

Category

Description

DEEP SURFACE CASING

2/13/2019 - 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

2/13/2019 - 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: 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

MEMO

2/13/2019 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201900889

2/19/2019 - G58 - (E.O.)(1280)(HOR) 21 & 28-12N-10W
VAC 91807 CSTR
EST MSSP
REC 2/12/2019 (JOHNSON)

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

017 25393 BRAVEHEART 1H-21-28

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

PENDING CD - 201900890

Description

2/19/2019 - G58 - (E.O.) 21 & 28-12N-10W
X201900889 MSSP
COMPL. INT. 21-12N-10W NCT 165' FNL, NCT 0' FSL, NCT 660' FWL
COMPL. INT. 28-12N-10W NCT 165' FSL, NCT 0' FNL, NCT 660' FEL
NO OP. NAMED
REC 2/12/2019 (JOHNSON)

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.



Well Location Plat

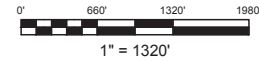
S.H.L. Sec. 21-12N-10W I.M.
B.H.L. Sec. 28-12N-10W I.M.

Operator: CITIZEN ENERGY, LLC
Lease Name and No.: BRAVEHEART 1H-21-28
Footage: 190' FNL - 2469' FWL Gr. Elevation: 1355'
Section: 21 Township: 12N Range: 10W I.M.
County: Canadian State of Oklahoma
Terrain at Loc.: Location fell on existing pad.

017-25393



All bearings shown
are grid bearings.



GPS DATUM

NAD 83

NAD 27

OK NORTH ZONE

Surface Hole Loc.:
Lat: 35°30'24.02"N
Lon: 98°15'48.04"W
Lat: 35.50667294
Lon: -98.26334535
X:1890116
Y:184545

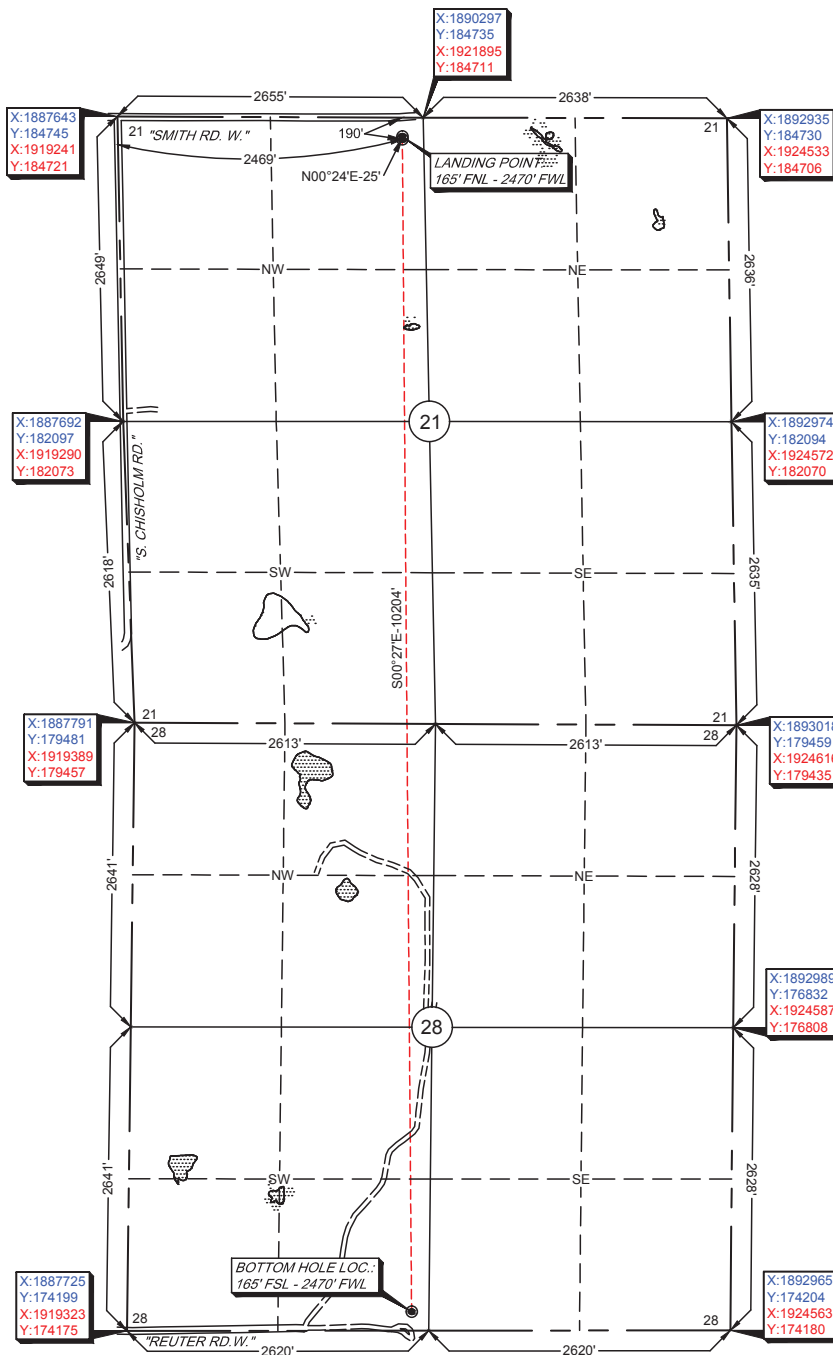
Surface Hole Loc.:
Lat: 35°30'23.84"N
Lon: 98°15'46.83"W
Lat: 35.50662140
Lon: -98.26300929
X:1921714
Y:184521

Landing Point:
Lat: 35°30'24.27"N
Lon: 98°15'48.04"W
Lat: 35.50674150
Lon: -98.26334500
X:1890116
Y:184570

Landing Point:
Lat: 35°30'24.08"N
Lon: 98°15'46.83"W
Lat: 35.50668997
Lon: -98.26300894
X:1921715
Y:184546

Bottom Hole Loc.:
Lat: 35°28'43.36"N
Lon: 98°15'46.73"W
Lat: 35.47871039
Lon: -98.26298145
X:1890197
Y:174366

Bottom Hole Loc.:
Lat: 35°28'43.17"N
Lon: 98°15'45.53"W
Lat: 35.47865809
Lon: -98.26264595
X:1921795
Y:174342



-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

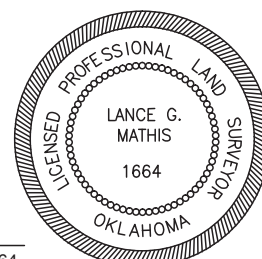
Certification:

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

02/12/19

OK LPLS 1664



Invoice #8245-B

Date Staked: 02/08/19 By: D.K.

Date Drawn: 02/11/19 By: M.K.