API NUMBER: 039 22533

Under Federal Jurisdiction: No

Type of Mud System: WATER BASED

Within 1 mile of municipal water well? N

Chlorides Max: 8000 Average: 5000

Liner not required for Category: C

Pit Location is BED AQUIFER

Pit Location Formation: RUSH SPRINGS

Wellhead Protection Area?

Category of Pit: C

Type of Pit System: CLOSED Closed System Means Steel Pits

Is depth to top of ground water greater than 10ft below base of pit? Y

located in a Hydrologically Sensitive Area.

PIT 1 INFORMATION

Oil & Gas

Horizontal Hole

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

Approval Date: 04/17/2018
Expiration Date: 10/17/2018

Surface Water used to Drill: Yes

PERMIT NO: 18-34012

PERMIT TO DRILL

WELL LOCATION: Sec: SPOT LOCATION: SW Lease Name: MANN Operator Name:	SW SW NE	FEET FROM QUARTER: FROM N SECTION LINES: 2:		EAST 2430 Well will b	be 2430 feet from nearest unit or lease boundary. OTC/OCC Number: 24120 0
CITIZEN ENEF 320 S BOSTOI TULSA,	RGY III LLC N AVE STE 900 OK	74103-3729		TINA MANNERING 22995 E. 840 ROAL CUSTER CITY	
Formation(s) (Permit Valid for Listed For Name 1 MISSISSIPPIAN		rmations Only): Depth 13550	6	Name	Depth
2 WOOD 3 4 5	FORD	14550	7 8 9 10		
Spacing Orders: No S Pending CD Numbers:	201800771 201800772 201800773 201800779	Location Exception Or	rders:		Increased Density Orders: Special Orders:
Total Depth: 22920	Ground Elevation: 1	833 Surface Ca	asing: 1500	Dep	pth to base of Treatable Water-Bearing FM: 380

Fresh Water Supply Well Drilled: No

Approved Method for disposal of Drilling Fluids:

H. SEE MEMO

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

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

HORIZONTAL HOLE 1

Sec 09 Twp 15N Rge 16W County CUSTER

Spot Location of End Point: SW SW SW SE
Feet From: SOUTH 1/4 Section Line: 165
Feet From: EAST 1/4 Section Line: 2430

Depth of Deviation: 14030 Radius of Turn: 572 Direction: 180

Total Length: 7992

Measured Total Depth: 22920

True Vertical Depth: 14600

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

Address City, State, Zip

TINA MANNERING 22995 E. 840 ROAD CUSTER CITY, OK 73096

Notes:

Category Description

DEEP SURFACE CASING 4/2/2018 - 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 4/2/2018 - 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

4/2/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

MEMO

Category Description

PENDING CD - 201800771 4/6/2018 - G58 - (640)(HOR) 4 & 9-15N-16W

VAC OTHER
VAC 152275 MSSLM**
EST MSSP, WDFD, OTHER
COMPLIANT NCT 660' FR

COMPL. INT. NCT 660' FB REC 4/2/2018 (JOHNSON)

**SHOULD ALSO VACATE/COEXIST CSTR FROM THIS ORDER; COEXISTED CSTR AT HEARING

PER ATTORNEY FOR OP

PENDING CD - 201800772 4/6/2018 - G58 - (I.O.) 4 & 9-15N-16W

EST MULTIUNIT HORIZONTAL WELL X201800771 MSSP, WDFD (4 & 9-15N-16W)

**

33% 4-15N-16W 67% 9-15N-16W NO OP. NAMED

REC 4/2/2018 (JOHNSON)

**TARGET FORMATION NOT SPECIFIED; SPECIFIED WDFD AT HEARING PER ATTORNEY FOR

OP.

PENDING CD - 201800773 4/6/2018 - G58 - (I.O.) 4 & 9-15N-16W

X201800771 MSSP, WDFD

COMPL. INT. (4-15N-16W) NCT 2640' FSL, NCT 0' FSL, NCT 330' FEL COMPL. INT. (9-15N-16W) NCT 165' FSL, NCT 0' FNL, NCT 330' FEL

NO OP. NAMÈD

REC 4/2/2018 (JOHNSON)

PENDING CD - 201800779 4/6/2018 - G58 - 4-15N-16W

X201800771 MSSP, WDFD 1 WELL CITIZEN ENERGY II, LLC REC 4/2/2018 (JOHNSON)

SURFACE CASING 4/2/2018 - G71 - MIN. 500' PER ORDERS 39839/42589



S.H.L. Sec. 4-15N-16W I.M. B.H.L. Sec. 9-15N-16W I.M.

Operator: CITIZEN ENERGY, LLC

Lease Name and No.: MANNERING 1H-4-9

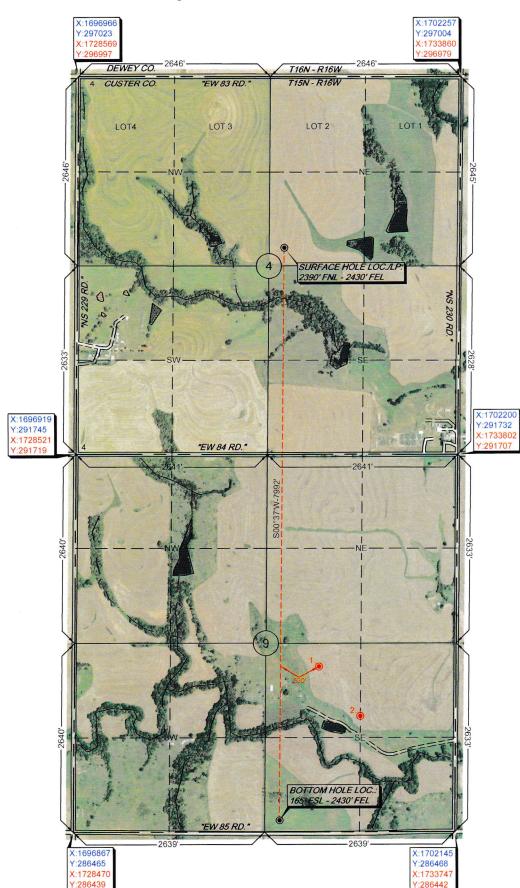
039-22533

Lease Name and No.: MANNERING 1H-4-9
Footage: 2390' FNL - 2430' FEL Gr. Elevation: 1833'
Section: 4 Township: 15N Range: 16W I.M.

County: Custer State of Oklahoma

Terrain at Loc.: Location fell in an open, flat, cultivated field with the Southwest corner of pad

15' North and 15' East of existing fence corner.



1" = 1320'

GPS DATUM

NAD 83

NAD 27

OK NORTH ZONE

Surface Hole Loc.: Lat: 35°48'21.32"N Lon: 98°54'22.22"W Lat: 35.80592110 Lon: -98.90617268 X: 1699801 Y: 294623

Surface Hole Loc.: Lat: 35°48'21.15"N Lon: 98°54'20.89"W Lat: 35.80587437 Lon: -98.90580391 X: 1731404 Y: 294597

Landing Point: Lat: 35°48'21.32"N Lon: 98°54'22.22"W Lat: 35.80592110 Lon: -98.90617268 X: 1699801 Y: 294623

Landing Point: Lat: 35°48'21.15"N Lon: 98°54'20.89"W Lat: 35.80587437 Lon: -98.90580391 X: 1731404 Y: 294597

Bottom Hole Loc.: Lat: 35°47'02.28"N Lon: 98°54'22.35"W Lat: 35.78396556 Lon: -98.90620763 X: 1699716 Y: 286631

Bottom Hole Loc.: Lat: 35°47'02.11"N Lon: 98°54'21.02"W Lat: 35.78391838 Lon: -98.90583927 X: 1731319 Y: 286606

-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 Cortificate of Authorization No. 5348

Certificate of Authorization No. 5348 Expires June 30, 2018

Invoice #7600-A

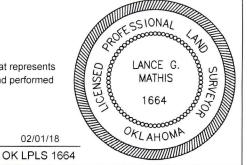
Date Staked: 01/22/18 By: C.K.

Date Drawn: 01/30/18 By: P.B.

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.





Gr. Elevation: 1833'

Terrain at Loc.: Location fell in an open, flat, cultivated field with the Southwest corner of pad

Operator: CITIZEN ENERGY, LLC

Footage: 2390' FNL - 2430' FEL

County: Custer

Lease Name and No.: MANNERING 1H-4-9

Section: 4 Township: 15N Range: 16W I.M. State of Oklahoma

S.H.L. Sec. 4-15N-16W I.M. B.H.L. Sec. 9-15N-16W I.M.

1" = 1320'

GPS DATUM NAD 83 NAD 27 OK NORTH ZONE

Lat: 35°48'21.32"N Lon: 98°54'22.22"W Lat: 35.80592110 Lon: -98.90617268 X: 1699801 Y: 294623

Surface Hole Loc.:

Surface Hole Loc.: Lat: 35°48'21.15"N Lon: 98°54'20.89"W Lat: 35.80587437 Lon: -98.90580391 X: 1731404 Y: 294597

Landing Point: Lat: 35°48'21.32"N Lon: 98°54'22.22"W Lat: 35.80592110 Lon: -98.90617268 X: 1699801 Y: 294623

Landing Point: Lat: 35°48'21.15"N Lon: 98°54'20.89"W Lat: 35.80587437 Lon: -98.90580391 X: 1731404 Y: 294597

Bottom Hole Loc.: Lat: 35°47'02.28"N Lon: 98°54'22.35"W Lat: 35.78396556 Lon: -98.90620763 X: 1699716 Y: 286631

Bottom Hole Loc.: Lat: 35°47'02.11"N Lon: 98°54'21.02"W Lat: 35.78391838 Lon: -98.90583927 X: 1731319 Y: 286606

15' North and 15' East of existing fence corner. Y:297023 -2646' DEWEY CO "EW 83 RD. T15N - R16W LOT4 LOT 3 LOT 2 LOT 1 2646 4 SURFACE HOLE LOC./L 0 SV. 230 RD. Y:291732 :291745 <u>"EW 84 RD."</u> 7992 S00°37'W-9 2640 BOTTOM HOLE LOC. 165' FSL - 2430' FEL "EW 85 RD -2639 Y:286465 Y:286468

-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.

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 #7600-A

Date Staked: 01/22/18 Date Drawn: 01/30/18 By: P.B.

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.

02/01/18

LANCE G. MATHIS **OK LPLS 1664**

WILLIAM SESSIONAL SURVEYON LANCE G. **MATHIS** 1664 OKLAHOMA "LAHOM"



S.H.L. Sec. 4-15N-16W I.M. B.H.L. Sec. 9-15N-16W I.M.

Operator: CITIZEN ENERGY, LLC

Lease Name and No.: MANNERING 1H-4-9

Footage: 2390' FNL - 2430' FEL Gr. Elevation: 1833'

Landing Point: 2390' FNL - 2430' FEL

Section: 4 Township: 15N Range: 16W I.M.

Bottom Hole Location: 165' FSL - 2430' FEL

Section: 9 Township: 15N Range: 16W I.M.

County: Custer State of Oklahoma

SECTION 9-15N-16W

1. L&N EXPLORATION INC.

FERGUSON 1-9 FERGUSON 1

2310' FSL - 740' FWL (SE/4) OCC STATUS: PA 2. OTC/OCC NOT ASSIGNED

1620' FSL - 1320' FWL (SE/4)

OCC STATUS: PA

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 #7600-A

Date Staked: 01/22/18 By: C.K. Date Drawn: 01/30/18 By: P.B.

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



Topographic Vicinity Map

Operator: CITIZEN ENERGY, LLC

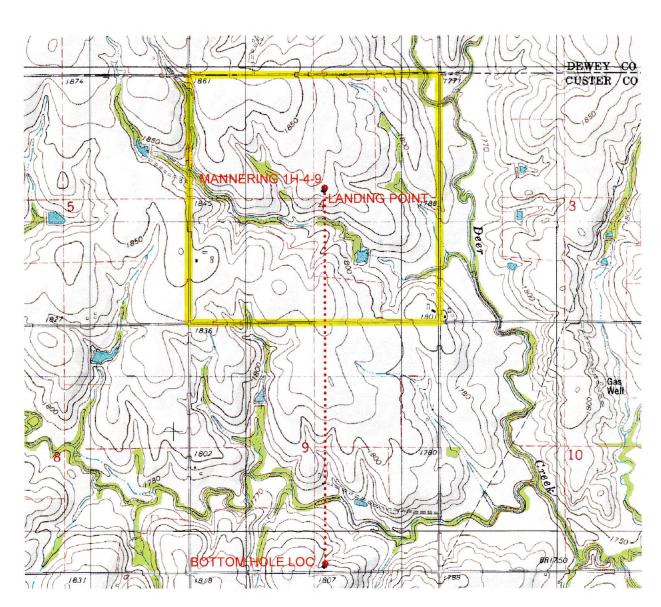
Lease Name and No.: MANNERING 1H-4-9 Surface Hole Location: 2390' FNL - 2430' FEL

Landing Point: 2390' FNL - 2430' FEL Sec. 4 Twp. 15N Rng. 16W I.M. Bottom Hole Location: 165' FSL - 2430' FEL Sec. 9 Twp. 15N Rng. 16W I.M. County: Custer State of Oklahoma

Ground Elevation at Surface Hole Location: 1833'



Scale 1" = 2000' Contour Interval: 10'



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

Date Staked: 01/22/18

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.

