

API NUMBER: 019 26395

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

Approval Date: 06/08/2020
Expiration Date: 12/08/2021

Directional Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Section: 07 Township: 2S Range: 2W County: CARTER

SPOT LOCATION: NE NW NE SW FEET FROM QUARTER: FROM SOUTH FROM WEST
SECTION LINES: 2495 1880

Lease Name: SW WILDCAT JIM DEESE UNIT Well No: 19-2-1 Well will be 1880 feet from nearest unit or lease boundary.

Operator Name: MACK ENERGY CO Telephone: 5802525580; 5802525580 OTC/OCC Number: 11739 0

MACK ENERGY CO
PO BOX 400
DUNCAN, OK 73534-0400

BRADY/DRIVER CO TC CRAIGHEAD
PO BOX 576
ARDMORE OK 73402

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

Name	Code	Depth
1 DEESE	404DEESS	2800

Spacing Orders: 701901 Location Exception Orders: No Exceptions Increased Density Orders: No Density Orders

Pending CD Numbers: No Pending Special Orders: No Special Orders

Total Depth: 4350 Ground Elevation: 1053 Surface Casing: 1260 Depth to base of Treatable Water-Bearing FM: 1210

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

Approved Method for disposal of Drilling Fluids:
A. Evaporation/dewater and backfilling of reserve pit.
D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 20-37317

PIT 1 INFORMATION

Type of Pit System: ON SITE
Type of Mud System: WATER BASED
Chlorides Max: 5000 Average: 3000
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: 2
Liner not required for Category: 2
Pit Location is: BED AQUIFER
Pit Location Formation: GARBER

DIRECTIONAL HOLE 1

Section: 7 Township: 2S Range: 2W
County: CARTER
Spot Location of End Point: NW NE NE SW
Feet From: SOUTH 1/4 Section Line: 2398
Feet From: WEST 1/4 Section Line: 2307
Measured Total Depth: 4442
True Vertical Depth: 4400
End Point Location from Lease, Unit, or Property Line: 2307

NOTES:

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.

Category	Description
HYDRAULIC FRACTURING	<p>6/5/2020 - 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: OCCEWEB.COM/OG/OGFORMS.HTML; 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: FRACFOCUS.ORG</p>
SPACING - 701901	<p>6/8/2020 - GC2 - (UNIT) NE4 SW4 7-2S-2W EST SW WILDCAT JIM DEESE OPERATING UNIT FOR THE DEESE</p>

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.

API:019-26395

Well Location Plat

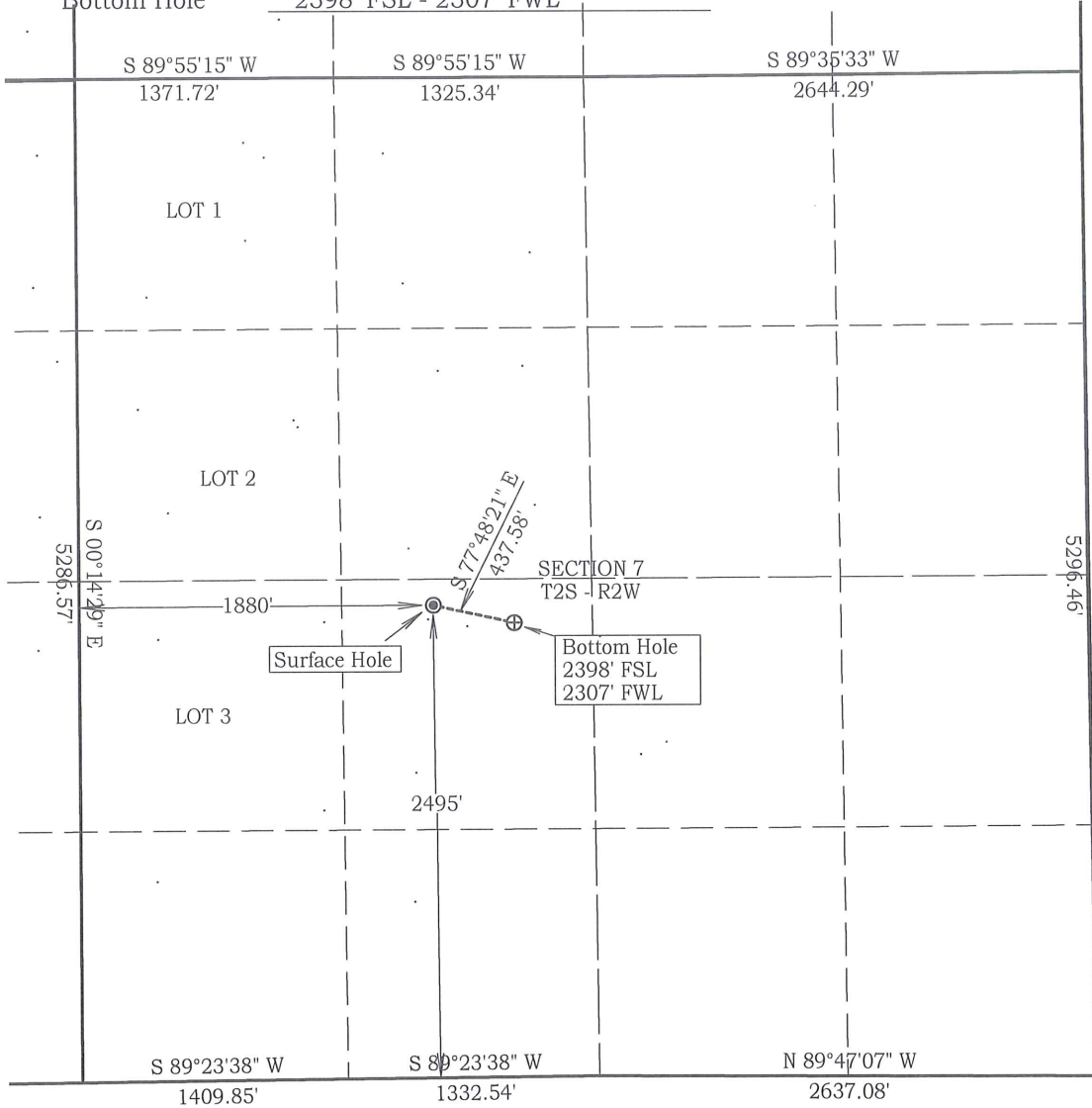
M & M Land Surveying, Inc.
520 "E" Street NW. Ardmore, OK. 73401
Office 580-226-0446 Mobile 580-221-4999

Company Name: Mack Energy Lease Name: SW WJDU #19-2-I

Section 7 Township 2 South Range 2 West County Carter Oklahoma

Surface Location 2495' FSL - 1880' FWL Elevation N/A Good Location? Yes

Bottom Hole 2398' FSL - 2307' FWL



Topography
Pasture 15' East of SW
WJDU 19-1



SCALE 1" = 1000'
0' 1000'

Job # 19333
Date 6/3/2020

NAD 83 OK North
Surface Location
Latitude: 34.39765°
Longitude: 97.45122°
N= 387,776'
E=2,134,045'

Bottom Hole
Latitude: 34.397390°
Longitude: 97.449804°
N= 387,684'
E=2,134,473'

Best Accessibility to Location
From the North or East

Distance & From the Jct Samedan Road and Ranch Road go 1.5 miles South on
Direction From Samedan Road to a point ± 660' East of the Northwest Corner of SW/4 of
Highway or Town Section 7.

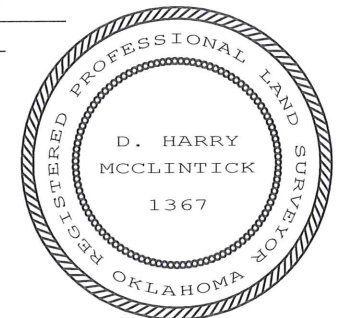
CERTIFICATE:

I, D. Harry McClintick, a Registered Land Surveyor in the state of Oklahoma, do hereby certify that the above described Well Location was calculated and is accurately shown on this plat.

D. Harry McClintick
D. Harry McClintick, R.P.L.S. # 1367, CA # 3093

This location has been calculated from Latitude and Longitude coordinates provided to me by Mack Energy and have not been verified.

The distances shown in parenthesis () are calculated distances based on the quarter section being 2640' and have not been measured.



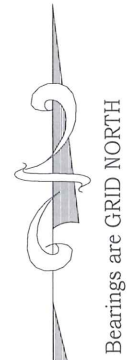
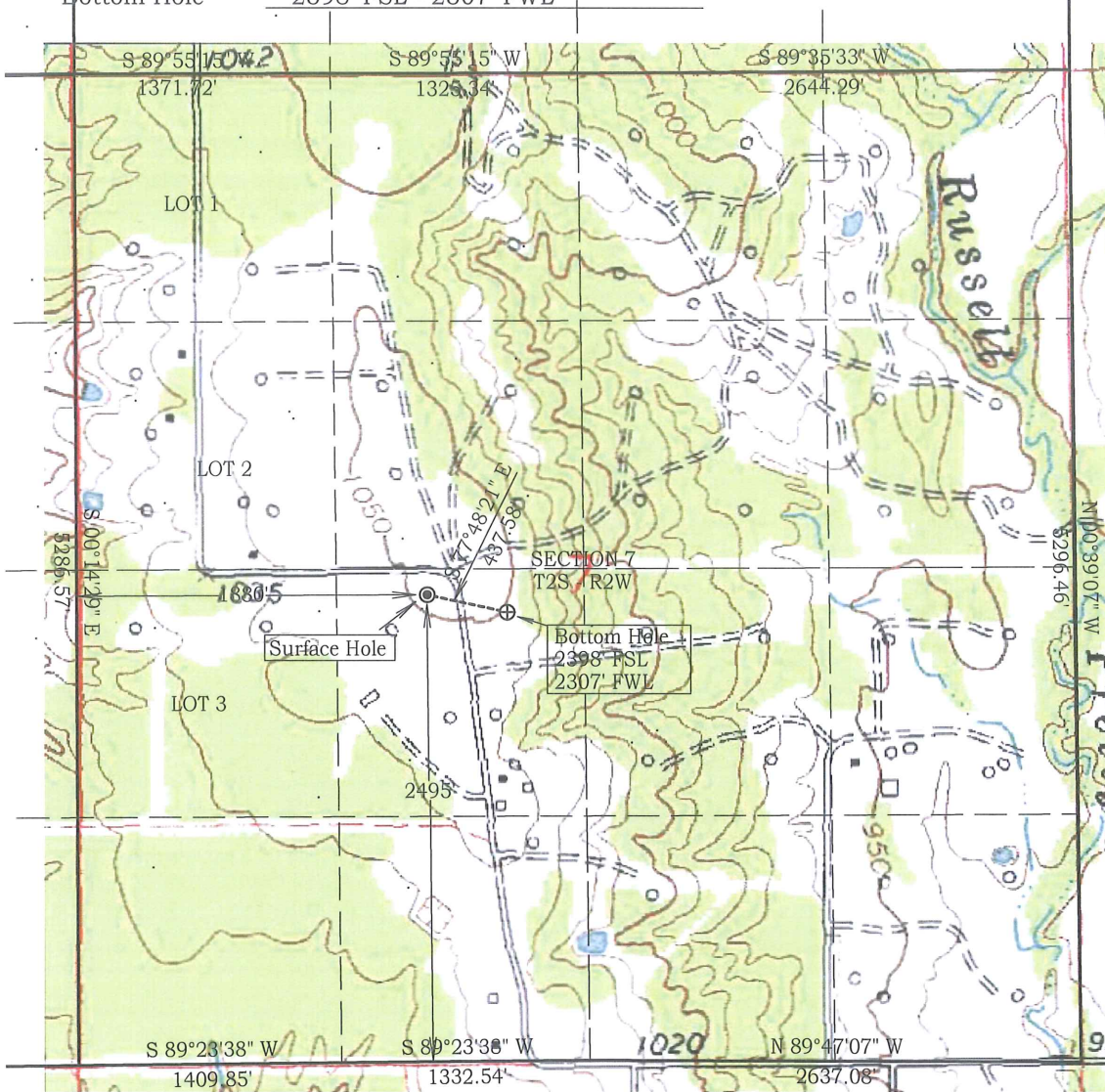
Well Location Plat

M & M Land Surveying, Inc.
 520 "E" Street NW. Ardmore, OK. 73401
 Office 580-226-0446 Mobile 580-221-4999

Company Name: Mack Energy Lease Name: SW WJDU #19-2-I
 Section 7 Township 2 South Range 2 West County Carter Oklahoma

Surface Location 2495' FSL - 1880' FWL Elevation N/A Good Location? Yes
 Bottom Hole 2398' FSL - 2307' FWL

Topography
Pasture 15' East of SW
WJDU 19-1



SCALE 1" = 1000'
 0' 1000'

Job # 19333
 Date 6/3/2020
NAD 83 OK North
 Surface Location
 Latitude: 34.39765°
 Longitude: 97.45122°
 N= 387,776'
 E=2,134,045'
 Bottom Hole
 Latitude: 34.397390°
 Longitude: 97.449804°
 N= 387,684'
 E=2,134,473'

Best Accessibility to Location
From the North or East

Distance & From the Jct Samedan Road and Ranch Road go 1.5 miles South on
 Direction From Samedan Road to a point ± 660' East of the Northwest Corner of SW/4 of
 Highway or Town Section 7.

CERTIFICATE:

I, D. Harry McClintick, a Registered Land Surveyor in the state of Oklahoma, do hereby certify that the above described Well Location was calculated and is accurately shown on this plat.

[Signature]
 D. Harry McClintick, R.P.L.S. # 1367, CA # 3093

This location has been calculated from Latitude and Longitude coordinates provided to me by Mack Energy and have not been verified.

The distances shown in parenthesis () are calculated distances based on the quarter section being 2640' and have not been measured.

