

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

API NUMBER: 045 23745

Approval Date: 06/21/2018

Expiration Date: 12/21/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 21 Twp: 22N Rge: 26W

County: ELLIS

SPOT LOCATION:

FEET FROM QUARTER: FROM NORTH FROM EAST

SECTION LINES: 1980 2100

Lease Name: SHEFFIELD 21/28 JO

Well No: 1HC

Well will be 1980 feet from nearest unit or lease boundary.

Operator Name: MEWBOURNE OIL COMPANY

Telephone: 9035612900

OTC/OCC Number: 6722 0

MEWBOURNE OIL COMPANY

PO BOX 7698

TYLER, TX 75711-7698

ALVIN H. AND IVA ANN BARBER

ROUTE 2, BOX 186-C

SHATTUCK OK 73858

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

	Name	Depth	Name	Depth
1	PENNSYLVANIAN MISSOURI SERIES	7330	6	
2			7	
3			8	
4			9	
5			10	

Spacing Orders: 174054

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201803747  
201803749  
201803748

Special Orders:

Total Depth: 15576

Ground Elevation: 2315

**Surface Casing: 1999**

Depth to base of Treatable Water-Bearing FM: 660

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: 25000 Average: 7500

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: OGALLALA

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

PERMIT NO: 18-34680

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 BED AQUIFER

Pit Location Formation: OGALLALA

## HORIZONTAL HOLE 1

Sec 28 Twp 22N Rge 26W County ELLIS

Spot Location of End Point: SE SW SW SE

Feet From: SOUTH 1/4 Section Line: 165

Feet From: EAST 1/4 Section Line: 2100

Depth of Deviation: 6815

Radius of Turn: 569

Direction: 181

Total Length: 7867

Measured Total Depth: 15576

True Vertical Depth: 7330

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

### Notes:

#### Category

#### Description

DEEP SURFACE CASING

6/12/2018 - 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

6/12/2018 - 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](http://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](http://FRACFOCUS.ORG)

MEMO

6/12/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201803747

6/21/2018 - G58 - (668)(IRR UNIT) 28-22N-26W  
VAC 204096 CLVD, CGGV  
EST PMOS

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.

045 23745 SHEFFIELD 21/28 JO 1HC

Category	Description
PENDING CD - 201803748	6/21/2018 - G58 - (I.O.) 21 & 28-22N-26W EST MULTIUNIT HORIZONTAL WELL X174054 PMOS 21-22N-26W X201803747 PMOS 28-22N-26W 34% 21-22N-26W 66% 28-22N-26W NO OP. NAMED REC 5/29/2018 (FOREMAN)
PENDING CD - 201803749	6/21/2018 - G58 - (I.O.) 21 & 28-22N-26W EST MULTIUNIT HORIZONTAL WELL X174054 PMOS 21-22N-26W X201803747 PMOS 28-22N-26W COMPL. INT. (21-22N-26W) NCT 2640' FNL, NCT 0' FSL, NCT 1320' FEL COMPL. INT. (21-22N-26W) NCT 0' FNL, NCT 165' FSL, NCT 1320' FEL NO OP. NAMED REC 5/29/2018 (FOREMAN)
SPACING - 174054	6/21/2018 - G58 - (668)(IRR UNIT) 21-22N-26W EST OTHER EXT OTHER EXT 136792 PMOS, OTHERS
SPACING - 204096	6/21/2018 - G58 - (640) 28-22N-26W VAC OTHER EXT OTHER EXT CLVD, CGGV, (VAC BY 201803747) OTHERS

# TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

13800 WIRELESS WAY, OKLA. CITY, OKLA. 73134 \* LOCAL (405) 843-4847 \* OUT OF STATE (800) 654-3219

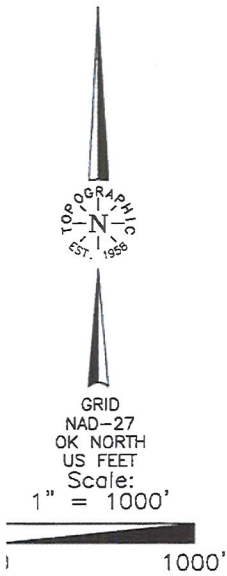
Certificate of Authorization No. 1293 LS

ELLIS

County, Oklahoma

045-23745

1980'FNL-2100'FEL Section 21 Township 22N Range 26W I.M.



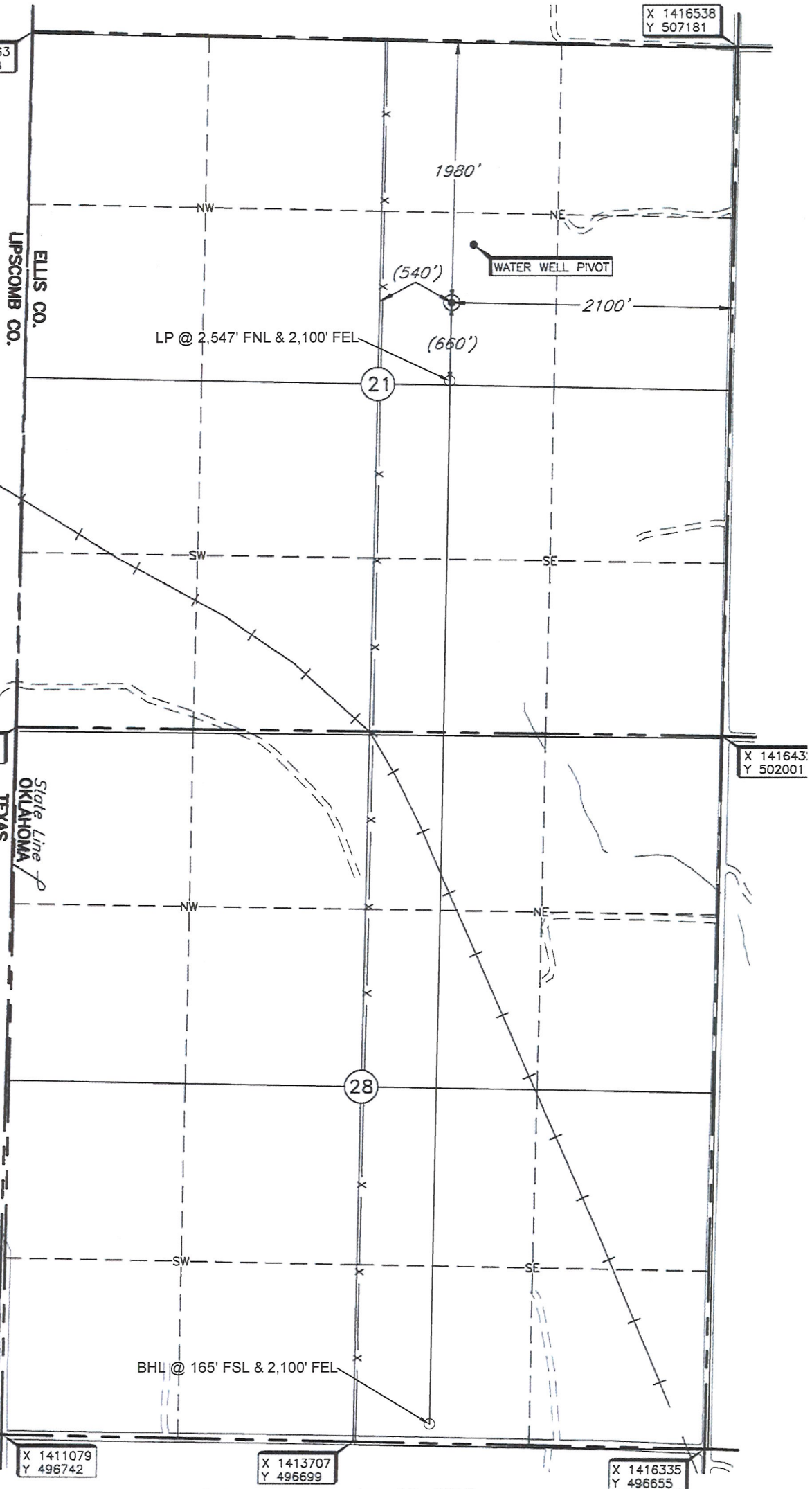
Distances shown in (parenthesis) are calculated based upon the Quarter Section being 2880 feet, those shown in brackets are based on G.D. (General Land Office) distances and have NOT been measured on the ground.

Operator: MEWBOURNE OIL COMPANY  
Lease Name: SHEFFIELD 21/28  
Topography & Vegetation Location fell in grass pasture, ± 468' SW of irrigation water well pivot

Good Drill Site? ☒ Yes  
Best Accessibility to Location From Northeast off county road  
Distance & Direction from Hwy Jct or Town From State Hwy 15/US Hwy 283 in Shattuck, Oklahoma, go ± 7 miles North on St. Hwy 15/US Hwy 283, then ± 5.5 miles West to the Northeast Corner of Section 21. T22N-R26W.

Reference Stakes or Alternate Location  
Stakes Set ☒ None

Well No.: JO #1HC  
ELEVATION: 2315' Gr. at Stake



THE INFORMATION SHOWN HEREIN IS FOR CONSTRUCTION PURPOSES ONLY

DATUM: NAD-27  
LAT: 36°22'17.5" N  
LONG: 99°59'21.1" W  
LAT: 36.371529877° N  
LONG: 99.989203350° W  
STATE PLANE COORDINATES (US FEET):  
ZONE: OK NORTH  
X: 1414398  
Y: 505252

Invoice # 291092 Date of Drawing: Apr. 12, 2018  
Date Staked: Apr. 9, 2018 NB

## CERTIFICATE:

I, Thomas L. Howell an Oklahoma Licensed Land Surveyor and an authorized agent of Topographic Land Surveyors of Oklahoma, do hereby certify to the information shown herein.

Thomas L. Howell  
Oklahoma Lic. No. 1433

