API NUMBER: 043 23714

Oil & Gas

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

Approval Date: 12/05/2019
Expiration Date: 06/05/2021

PERMIT TO DRILL

WELL LOCATION:	Sec:	05	Twp:	17N	Rge: 17W	County:	DEWEY
----------------	------	----	------	-----	----------	---------	-------

SPOT LOCATION: NE NW NE NE FEET FROM QUARTER: FROM NORTH FROM EAST SECTION LINES: 200 950

Lease Name: THOMSEN 32 PA Well No: 1HS Well will be 200 feet from nearest unit or lease boundary.

Operator MEWBOURNE OIL COMPANY Telephone: 9035612900 OTC/OCC Number: 6722 0

MEWBOURNE OIL COMPANY

PO BOX 7698

Horizontal Hole

TYLER, TX 75711-7698

KENNETH D. & CONNIE L. THOMSEN 70744 NORTH 2220 ROAD

TALOGA OK 73667

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

	Name	Depth	Name	Depth
1	SKINNER	8870	6	
2			7	
3			8	
4			9	
5			10	
Spacing Orders:	167063	Location Exception Orders:	703328	Increased Density Orders:

Pending CD Numbers: Special Orders:

Total Depth: 13876 Ground Elevation: 1711 Surface Casing: 1999 Depth to base of Treatable Water-Bearing FM: 110

Deep surface casing has been approved

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: 19-37108

H. SEE MEMO

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 32 Twp 18N Rge 17W County **DEWEY** Spot Location of End Point: C NW NF NF Feet From: NORTH 1/4 Section Line: 330 EAST Feet From: 1/4 Section Line: 990

Depth of Deviation: 8382 Radius of Turn: 578 Direction: 360

Total Length: 4588

Measured Total Depth: 13876

True Vertical Depth: 8890

End Point Location from Lease,
Unit, or Property Line: 0

Notes:

Category Description

DEEP SURFACE CASING 12/4/2019 - 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 12/4/2019 - 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:

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

INTERMEDIATE CASING 12/4/2019 - G71 - DUE TO THE KNOWN POTENTIAL RISK OF ENCOUNTERING AN OVER-

PRESSURED ZONE IN THE MORROW SERIES IN THIS AREA, THE TECHNICAL MANAGER RECOMMENDS SETTING AN INTERMEDIATE STRING OF CASING IMMEDIATELY ABOVE THE

MORROW SERIES

LOCATION EXCEPTION - 703328

(201904395)

12/5/2019 - GC2 - (I.O.) 32-18N-17W

X167063 SKNR

COMPL. INT. NCT 330' FSL, NCT 330' FNL, NCT 660' FEL

NO OP. NAMED

10-7-2019

MEMO 12/4/2019 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS (REQUIRED - CANADIAN RIVER),

PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

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.

043 23714 THOMSEN 32 PA 1HS

12/5/2019 - GC2 - (640) 32-18N-17W EXT OTHERS EXT 103050 SKNR, OTHER

SPACING - 167063

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

13800 Wireless Way, Okla. City, OK. 73134 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219

Certificate of Authorization No. 1293 LS DEWEY County, Oklahoma 200'FNL-1650'FWL-NE/4 Section Township 17N Range 4289'FWL 200'FNL API: 043-23714 X 1691230 Y 365690 X 1693868 Y 365655 X 1696506 Y 365621 BHL @ 330' FNL & 990' FEL-X 1691220 Y 363066 X 1696478 Y 362981 32 NW/4-SE/4 NE/4-SE/4 NAD-27 OK NORTH US FEET LP @ 379' FSL & 957' FEL Scale: 1" = 1000' Lot 1 X 1691211 Y 360442 X 1693850 Y 360404 X 1696451 Y 360366 ownship Line T18N-R17W 1000' T17N-R17W >200 1650 4289-950' ANCIENT BANK Lot 6 Lot 1 Lot 5 Lot 7 2434 S/2-NW/4 SW-NE Lot 2 X 1691178 Y 357818 NOTES: • THE INFORMATION SHOWN HEREIN IS FOR CONSTRUCTION PURPOSES ONLY Operator: MEWBOURNE OIL COMPANY **ELEVATION:** Lease Name: THOMSEN 32PA Well No.: #1HS 1711' Gr. at Stake Topography & Vegetation Loc. fell in level alfalfa field Reference Stakes or Alternate Location Yes Good Drill Site? _ Stakes Set __ From North off county road Best Accessibility to Location _ Distance & Direction from Hwy Jct or Town From North side of river at Taloga, OK., on US Hwy 183, go ±5.0 mi. West, then ±3.5 mi. South, then ±1.0 mi. East to the NW Cor. of Sec. 5-T17N-R17W Revision X B Date of Drawing: Nov. 22, 2019 DATUM: NAU-2. 1 AT: __35'59'06.2"N Project # 127909 Date Staked: Jul. 10, 2019 ESSIONAL AC LONG: 99'01'45.2"W **CERTIFICATE:** LAT: _ 35.985049593° T. Wayne Fisch _an Oklahoma Licensed Land T. WAYNE LONG: 99.029233974° W Surveyor and an authorized agent of Topographic Land Surveyors of Oklahoma, do hereby certify to the SURVE STATE PLANE COORDINATES: (US Feet) FISCH 1378 information shown herein ZONE: OK NORTH 2-2-201 T. Ways Just 1695497 ZAHOMA DI

was receiver accuracy.

tion GPS Vert.

This ered ±1 fo

360180

Oklahoma Lic. No. _