API NUMBER: 073 26171

Horizontal Hole 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: 07/25/2018
Expiration Date: 01/25/2019

PERMIT TO DRILL

WELL LOCATION: Sec: 33 Twp: 15N Rge: 9W County: KINGFISHER

SPOT LOCATION: SE SW SE SE FEET FROM QUARTER: FROM **SOUTH** FROM **EAST**
SECTION LINES: **300** **780**

Lease Name: **MIKE STROUD BIA 1509** **Well No:** **2-28-33MXH** **Well will be** **300** **feet from nearest unit or lease boundary.**

Operator Name: **MARATHON OIL COMPANY** Telephone: 7132962003 OTC/OCC Number: 1363 0

MARATHON OIL COMPANY
5555 SAN FELIPE ST
HOUSTON, TX 77056-2701

WWS, LLC.
P.O. BOX 58
OKARCHE OK 73762

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

	Name	Depth		Name	Depth
1	MISSISSIPPIAN SOLID	9030	6		
2			7		
3			8		
4			9		
5			10		

Spacing Orders: 198249, 161901, 672018

Location Exception Orders: 671948, 672015, 672016

Increased Density Orders: 670365, 677221

Pending CD Numbers:

Special Orders:

Total Depth: 20222 Ground Elevation: 1309 **Surface Casing: 630** Depth to base of Treatable Water-Bearing FM: 380

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

PIT 1 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits
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 not** located in a Hydrologically Sensitive Area.
Category of Pit: C
Liner not required for Category: C
Pit Location is NON HSA
Pit Location Formation: BLAINE

Approved Method for disposal of Drilling Fluids:

E. Haul to Commercial pit facility: Sec. 31 Twn. 12N Rng. 8W Cnty. 17 Order No: 587498
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 not** located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is NON HSA

Pit Location Formation: BLAINE

HORIZONTAL HOLE 1

Sec 28 Twp 15N Rge 9W County KINGFISHER

Spot Location of End Point: NW NW NE NE

Feet From: NORTH 1/4 Section Line: 50

Feet From: EAST 1/4 Section Line: 1022

Depth of Deviation: 8617

Radius of Turn: 800

Direction: 359

Total Length: 10348

Measured Total Depth: 20222

True Vertical Depth: 10715

End Point Location from Lease,
Unit, or Property Line: 50

Notes:

Category	Description
HYDRAULIC FRACTURING	7/16/2018 - 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
INCREASED DENSITY - 670365	7/20/2018 - G57 - 33-15N-9W X161901 MSSSD 8 WELLS MARATHON OIL COMPANY 11-22-2017
INCREASED DENSITY - 677221	7/20/2018 - G57 - 28-15N-9W X198249 MSSSD 7 WELLS MARATHON OIL COMPANY 5-3-2018
INTERMEDIATE CASING	7/16/2018 - 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

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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
LOCATION EXCEPTION - 671948	7/20/2018 - G57 - (I.O.) 33 & 28-15N-9W X198249 MSSSD 28-15N-9W X161901 MSSSD 33-15N-9W COMPL. INT. (33-15N-9W) NCT 150' FSL, NCT 0' FNL, NCT 330' FEL COMPL. INT. (28-15N-9W) NCT 0' FSL, NCT 150' FNL, NCT 330' FEL MARATHON OIL COMPANY 1-9-2018
LOCATION EXCEPTION - 672015	7/20/2018 - G57 - (I.O.) 28-15N-9W X165:10-3-28(C)(2)(B) MSSSD (MIKE STROUD BIA 1509 2-28-33MXH) MAY BE CLOSER THAN 600' TO THE STROUD 2, COLUMBIA 1-28, MJ 1-28, APOLLO 1-28, MIKE STROUD 1-28H, HUBBARD B1, SKYLAB 2-28 & PROPOSED HORIZONTAL WELLS MARATHON OIL COMPANY 1-10-2018
LOCATION EXCEPTION - 672016	7/20/2018 - G57 - (I.O.) 33-15N-9W X165:10-3-28(C)(2)(B) MSSSD (MIKE STROUD BIA 1509 2-28-33MXH) MAY BE CLOSER THAN 600' TO THE STROUD 33-A, DARRELL 1-33, THUNDERBULL USA 1-33, FIJI 1-33 & PROPOSED HORIZONTALL WELLS MARATHON OIL COMPANY 1-10-2018
MEMO	7/16/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT
SPACING - 161901	7/20/2018 - G57 - (640) 33-15N-9W EXT OTHERS EST MSSSD, OTHER
SPACING - 198249	7/20/2018 - G57 - (640) 28-15N-9W EXT OTHERS EXT 139333 MSSSD, OTHER
SPACING - 672018	7/20/2018 - G57 - (640) 33 & 28-15N-9W EST MULTIUNIT HORIZONTAL WELL X198249 MSSSD 28-15N-9W X161901 MSSSD 33-15N-9W 50% 33-15N-9W 50% 28-15N-9W MARATHON OIL COMPANY 1-10-2018

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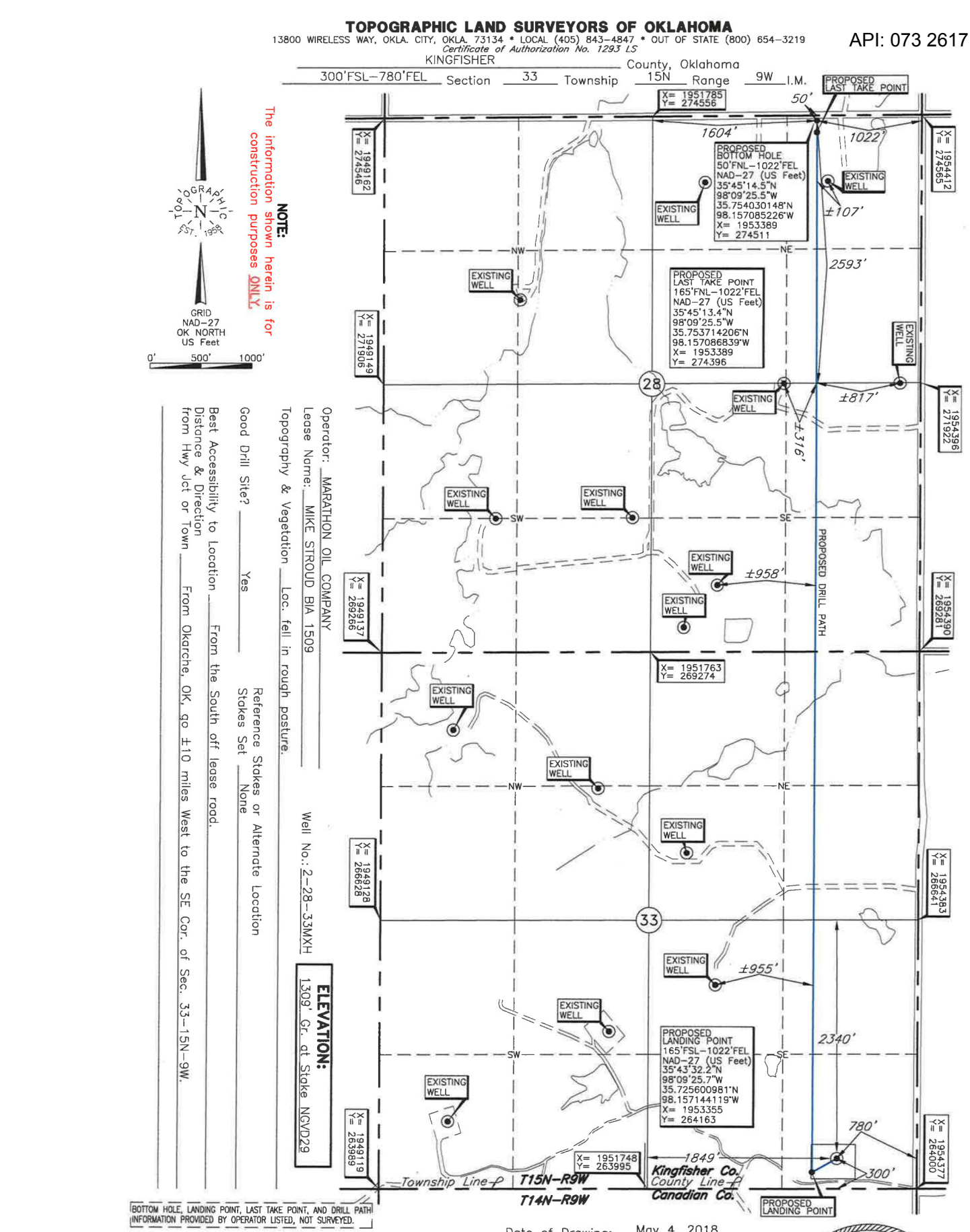
TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

13800 WIRELESS WAY, OKLA. CITY, OKLA. 73134 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219
Certificate of Authorization No. 1293 LS

API: 073 26171

KINGFISHER County, Oklahoma

300'FSL–780'FEL Section 33 Township 15N Range 9W I.M.



NOTE: The information shown herein is for construction purposes ONLY.

GRID NAD–27 OK NORTH US Feet

0' 500' 1000'

Operator: MARATHON OIL COMPANY

Lease Name: MIKE STROUD BIA 1509 Well No.: 2–28–33MXH

Topography & Vegetation Loc. fell in rough pasture. Good Drill Site? Yes

Best Accessibility to Location From the South off lease road. Stakes Set None

Distance & Direction from Hwy Jct or Town From Okarche, OK, go ±10 miles West to the SE Cor. of Sec. 33–15N–9W.

ELEVATION: 1309' Gr. at Stake NGVD29

BOTTOM HOLE, LANDING POINT, LAST TAKE POINT, AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED.

This information was gathered with a GPS receiver using Horiz. Ver. with a 1 ft foot accuracy

DATUM: NAD–27
LAT: 35°43'33.5"N
LONG: 98°09'22.8"W
LAT: 35.725974184°N
LONG: 98.156328479°W
STATE PLANE COORDINATES: (US Feet)
ZONE: OK NORTH
X: 1953597
Y: 264298

Date of Drawing: May 4, 2018

Invoice # 293519 Date Staked: Feb. 20, 2017 TR

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

LICENSED PROFESSIONAL LAND SURVEYOR
THOMAS L. HOWELL
1433
5-7-18
OKLAHOMA