

API NUMBER: 073 26733

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

Approval Date: 02/09/2021
Expiration Date: 08/09/2022

Multi Unit Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Section: 20 Township: 16N Range: 7W County: KINGFISHER

SPOT LOCATION: SW SE SW NE FEET FROM QUARTER: FROM NORTH FROM EAST
SECTION LINES: 2420 1653

Lease Name: M&M FED 1607 Well No: 2H-20X Well will be 1653 feet from nearest unit or lease boundary.
Operator Name: OVINTIV MID-CONTINENT INC. Telephone: 2812105100; 9188781290; OTC/OCC Number: 20944 0

OVINTIV MID-CONTINENT INC.
4 WATERWAY AVE STE 100
THE WOODLANDS, TX 77380-2764

JOYCE K. BROWN
P.O. BOX 418
KINGFISHER OK 73750

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

Name	Code	Depth
1 MISSISSIPPIAN (LESS CHESTER)	359MSNLC	7981

Spacing Orders: 642257 Location Exception Orders: 716598 Increased Density Orders: 716586
662148 716603 716587
716597

Pending CD Numbers: No Pending Working interest owners' notified: *** Special Orders: No Special Orders

Total Depth: 18392 Ground Elevation: 1061 Surface Casing: 470 Depth to base of Treatable Water-Bearing FM: 220

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

Approved Method for disposal of Drilling Fluids:

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 21-37508
E. Haul to Commercial pit facility Sec. 31 Twn. 12N Rng. 8W Cnty. 17 Order No: 587498
H. (Other) SEE MEMO

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: BISON

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: BISON

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.

MULTI UNIT HOLE 1

Section: 29	Township: 16N	Range: 7W	Meridian: IM	Total Length: 7500
County: KINGFISHER				Measured Total Depth: 18392
Spot Location of End Point: SW	SE	SW	SW	True Vertical Depth: 8200
Feet From: SOUTH	1/4 Section Line: 85			End Point Location from
Feet From: WEST	1/4 Section Line: 860			Lease, Unit, or Property Line: 85

NOTES:

Category	Description
EXCEPTION TO RULE - 716603	[2/9/2021 - G56] - (I.O.) 20 & 29-16N-7W X165:10-3-28(C)(2)(B) MSNLC (M&M FED 1607 2H-20X) MAY BE CLOSER THAN 600' TO EXISTING AND/OR PROPOSED WELLS OVINTIV MID CON INC 1/28/2021
HYDRAULIC FRACTURING	[2/4/2021 - GC2] - OCC 165:10-3-10 REQUIRES: 1) NOTICE SHALL BE GIVEN AT LEAST 5 BUSINESS DAYS PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS ON A HORIZONTAL WELL TO OPERATORS PRODUCING WELLS WITHIN 1 MILE OF THE COMPLETION INTERVAL OF THE SUBJECT WELL. THE NOTICE TO SUCH OPERATORS SHALL CONTAIN THE INFORMATION IN FORM 6000NOO. IF THE HYDRAULIC FRACTURING OPERATIONS SCHEDULE CHANGES AFTER NOTICE HAS BEEN PROVIDED, RESULTING IN A DELAY OF OPERATIONS OF MORE THAN 5 DAYS FROM THE INITIAL NOTICE, NEW NOTICE IS REQUIRED TO BE GIVEN; 2) NOTICE WILL BE GIVEN TO THE OCC CENTRAL OFFICE AND LOCAL DISTRICT OFFICES AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS. FORM 6000NHF SHALL BE USED AND IS FOUND AT THIS LINK: OCCEWEB.COM/OG/OGFORMS.HTML ; AND, 3) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS IS TO BE REPORTED TO FRACFOCUS WITHIN 60 DAYS AFTER THE CONCLUSION OF HYDRAULIC FRACTURING OPERATIONS, FOUND AT FRACFOCUS.ORG
INCREASED DENSITY - 716586	[2/9/2021 - G56] - 20-17N-6W X642257 MSNLC 7 WELLS OVINTIV MID-CON INC 1/28/2021
INCREASED DENSITY - 716587	[2/9/2021 - G56] - 29-16N-7W X662148 MSNLC 3 WELLS OVINTIV MID-CON INC 1/28/2021
LOCATION EXCEPTION - 716598	[2/9/2021 - G56] - (I.O.) 20 & 29-16N-7W X642257 MSNLC 20-16N-7W X662148 MSNLC 29-16N-7W COMPL INT (20-16N-7W) NCT 2200' FNL, NCT 0' FSL, NCT 1500' FWL COMPL INT (29-16N-7W) NCT 0' FNL, NCT 165' FSL, NCT 810' FWL OVINTIV MID-CON INC 1/28/2021
MEMO	[2/4/2021 - GC2] - CLOSED SYSTEM=STEEL PITS (REQUIRED - DEEP INDIAN CREEK), OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT
SPACING - 642257	[2/9/2021 - G56] - (640)(HOR) 20-16N-7W EXT OTHER EST MSNLC COMPL INT NLT 660' FB
SPACING - 662148	[2/9/2021 - G56] - (640)(HOR) 29-16N-7W EXT 652847 MSNLC, OTHER COMPL INT NLT 660' FB
SPACING - 716597	[2/9/2021 - G56] - (I.O.) 20 & 29-16N-7W EST MULTIUNIT HORIZONTAL WELL X642257 MSNLC 20-16N-7W X662148 MSNLC 29-16N-7W 33% 20-16N-7W 67% 29-16N-7W OVINTIV MID-CON INC 1/28/2021

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.

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.

WELL LOCATION
M&M FED 1607 2H-20X
OVINTIV MID-CONTINENT INC.
SECTION 20, TOWNSHIP 16N, RANGE 7W I.M.
KINGFISHER COUNTY, OKLAHOMA

LEGEND

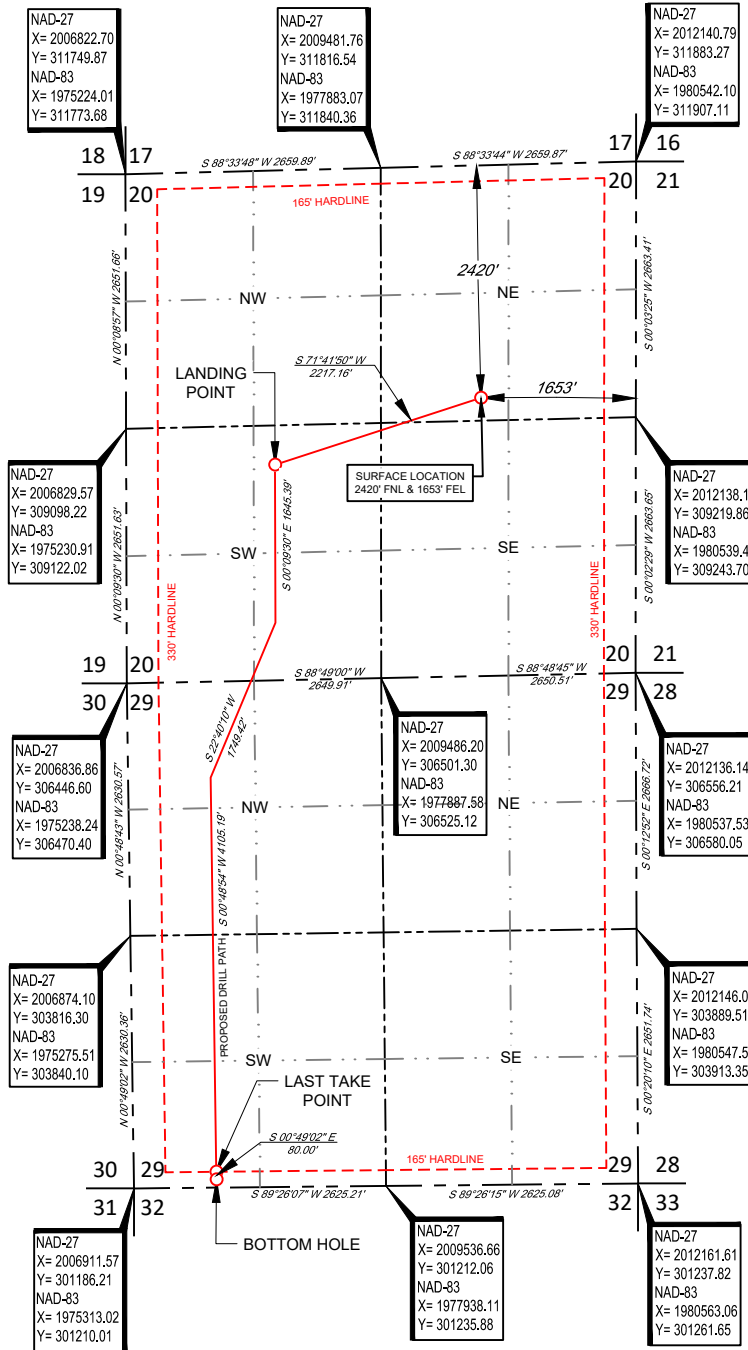
SECTION LINE
QUARTER SECTION LINE
16TH LINE
PROPOSED WELL BORE



SCALE: 1" = 2000'
0' 1000' 2000'

LANDING POINT
2245' FSL & 1550' FWL
NAD-27
X= 2008381
Y= 308724
LAT.: 35°50'53.2" N
LONG.: 97°58'18.2" W
LAT.: 35.848123° N
LONG.: 97.971723° W
NAD-83
X= 1976782
Y= 308748
LAT.: 35°50'53.4" N
LONG.: 97°58'19.4" W
LAT.: 35.848166° N
LONG.: 97.972055° W

LAST TAKE POINT
165' FSL & 860' FWL
NAD-27
X= 2007769
Y= 301360
LAT.: 35°49'40.4" N
LONG.: 97°58'25.7" W
LAT.: 35.827892° N
LONG.: 97.973793° W
NAD-83
X= 1976171
Y= 301383
LAT.: 35°49'40.6" N
LONG.: 97°58'26.8" W
LAT.: 35.827935° N
LONG.: 97.974124° W



SURFACE LOCATION
2420' FNL & 1653' FEL
NAD-27
X= 2010486
Y= 309420
LAT.: 35°51'00.1" N
LONG.: 97°57'52.6" W
LAT.: 35.850034° N
LONG.: 97.964619° W
ELEV: 1061' (NGVD29)
NAD-83
X= 1978887
Y= 309444
LAT.: 35°51'00.3" N
LONG.: 97°57'53.8" W
LAT.: 35.850077° N
LONG.: 97.964951° W
ELEV: 1062' (NAVD88)

BOTTOM HOLE
85' FSL & 860' FWL
NAD-27
X= 2007770
Y= 301280
LAT.: 35°49'39.6" N
LONG.: 97°58'25.6" W
LAT.: 35.827672° N
LONG.: 97.973789° W
NAD-83
X= 1976172
Y= 301303
LAT.: 35°49'39.8" N
LONG.: 97°58'26.8" W
LAT.: 35.827715° N
LONG.: 97.974121° W

SURVEYOR'S CERTIFICATE:

I, THOMAS L. HOWELL, AN OKLAHOMA LICENSED LAND SURVEYOR AND AN AUTHORIZED AGENT OF TOPOGRAPHIC LAND SURVEYORS, DO HEREBY CERTIFY TO THE INFORMATION SHOWN HEREIN.



TOPOGRAPHIC
LOYALTY INNOVATION LEGACY
13800 WIRELESS WAY • OKLAHOMA CITY, OKLAHOMA 73134
TELEPHONE: (405) 843-4847 OR (800) 654-3219
CERTIFICATE OF AUTHORIZATION NO. 1292 LS
WWW.TOPOGRAPHIC.COM



Thomas L. Howell
THOMAS L. HOWELL, P.L.S. No. 1433

Authorized Agent of Topographic Land Surveyors

LEASE NAME & WELL NO. M&M FED 1607 2H-20X

SECTION 20 TWP 16N RGE 7W MERIDIAN I.M.
COUNTY KINGFISHER STATE OKLAHOMA
DESCRIPTION 2420' FNL & 1653' FEL

M&M FED 1607 2H-20X	REVISION:	
	INT	DATE
DATE: 09/28/2020		
FILE:LO_M&M_FED_1607_2H-20X		
DRAWN BY: KEU		
SHEET: 1 OF 1		

- NOTES:
1. ORIGINAL DOCUMENT SIZE: 8.5" X 14"
 2. ALL BEARINGS SHOWN HEREON ARE GRID, OKLAHOMA COORDINATE SYSTEM OF 1983 NORTH ZONE ACCORDING TO THE RESULTS OF STATIC GPS OBSERVATIONS PROCESSED THROUGH OPUS ON THE CONTROL POINT OCCUPIED WHILE MEASURING SAID LINES. OPUS RESULTS ARE CORRELATED TO THE OKLAHOMA COORDINATE SYSTEM OF 1983 NORTH ZONE AND THE NORTH AMERICAN VERTICAL DATUM OF 1988.
 3. OKLAHOMA COORDINATE SYSTEM OF 1927 AND NATIONAL GEOGRAPHIC VERTICAL DATUM OF 1929 INFORMATION CONVERTED FROM OKLAHOMA COORDINATE SYSTEM OF 1983 AND NORTH AMERICAN VERTICAL DATUM OF 1988.
 4. CERTIFICATION IS MADE ONLY TO THE LOCATION OF THIS EASEMENT/LOCATION, IN RELATION TO THE EVIDENCE FOUND DURING A FIELD SURVEY, MADE ON THE GROUND, UNDER MY SUPERVISION, AND USING DOCUMENTATION PROVIDED BY OVINTIV MID-CONTINENT INC. ANY UTILITIES/EASEMENTS THAT WERE VISIBLE ON THE DATE OF THIS SURVEY, WITHIN/ADJOINING THIS EASEMENT/LOCATION, HAVE BEEN LOCATED AS SHOWN HEREON OF WHICH I HAVE KNOWLEDGE. THIS CERTIFICATION IS LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAN AND IS NON-TRANSFERABLE, AND MADE FOR THIS TRANSACTION ONLY.
 5. LANDING POINT, BOTTOM HOLE, AND DRILL PATH INFORMATION PROVIDED BY OPERATOR AS SHOWN AND ARE NOT SURVEYED LOCATIONS.
 6. THE INFORMATION SHOWN HEREIN IS FOR CONSTRUCTION PURPOSES ONLY