

API NUMBER: 073 26769

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

Approval Date: 07/20/2021
Expiration Date: 01/20/2023

Multi Unit Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Section: 17 Township: 16N Range: 6W County: KINGFISHER

SPOT LOCATION: ☐ SW ☐ NE ☐ NE ☐ NW
FEET FROM QUARTER: FROM NORTH FROM WEST
SECTION LINES: 385 2170

Lease Name: CHURCH 1606 Well No: 2H-17X Well will be 385 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

KENNETH KARRENBROCK AND ALICIA G. KARRENBROCK,
HUSBAND AND WIFE, AS JOINT TENANTS
21380 N. 2880 RD.
KINGFISHER OK 73750

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

	Name	Code	Depth
1	MISSISSIPPI LIME	351MSSLM	7258
2	MISSISSIPPIAN (LESS CHESTER)	359MSNLC	7277

Spacing Orders: 643931 Location Exception Orders: No Exceptions Increased Density Orders: No Density Orders
588584

Pending CD Numbers: 202100922 Working interest owners' notified: *** Special Orders: No Special Orders
202100924
202100930
202100926
202100927

Total Depth: 17777 Ground Elevation: 1129 Surface Casing: 500 Depth to base of Treatable Water-Bearing FM: 180

Deep surface casing has been approved

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

Approved Method for disposal of Drilling Fluids:

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 21-37691
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: 20	Township: 16N	Range: 6W	Meridian: 1M	Total Length: 10307
County: KINGFISHER				Measured Total Depth: 17777
Spot Location of End Point: SW SE SE SW				True Vertical Depth: 8000
Feet From: SOUTH		1/4 Section Line: 85		End Point Location from
Feet From: WEST		1/4 Section Line: 2204		Lease, Unit, or Property Line: 85

NOTES:

Category	Description
DEEP SURFACE CASING	[7/13/2021 - GC2] - 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	<p>[7/13/2021 - GC2] - OCC 165:10-3-10 REQUIRES:</p> <p>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;</p> <p>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,</p> <p>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</p>
MEMO	[7/13/2021 - GC2] - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT
PENDING CD - 202100922	<p>[7/19/2021 - G56] - 17-16N-6W</p> <p>X643931 MSNLC</p> <p>2 WELLS</p> <p>NO OP NAMED</p> <p>REC 7/13/2021 (DENTON)</p>
PENDING CD - 202100924	<p>[7/19/2021 - G56] - 20-16N-6W</p> <p>X588584 MSSLM</p> <p>2 WELLS</p> <p>NO OP NAMED</p> <p>REC 7/13/2021</p>
PENDING CD - 202100926	<p>[7/19/2021 - G56] - (I.O.) 17 & 20-16N-6W</p> <p>EST MULTIUNIT HORIZONTAL WELL</p> <p>X588584 MSSLM, OTHER 20-16N-6W</p> <p>X643931 MSNLC, OTHER 17-16N-6W</p> <p>50% 20-16N-6W</p> <p>50% 17-16N-6W</p> <p>NO OP NAMED</p> <p>REC 7/13/2021 (DENTON)</p>
PENDING CD - 202100927	<p>[7/19/2021 - G56] - (I.O.) 17 & 20-16N-6W</p> <p>X588584 MSSLM, OTHER 20-16N-6W</p> <p>X643931 MSNLC, OTHER 17-16N-6W</p> <p>COMPL. INT. (20-16N-6W) NCT 165 FSL, NCT 0 FNL, NCT 1320 FWL</p> <p>COMPL. INT. (17-16N-6W) NCT 0 FSL, NCT 165 FNL, NCT 1320 FWL</p> <p>NO OP NAMED</p> <p>REC 7/13/2021 (DENTON)</p>
PENDING CD - 202100930	<p>[7/19/2021 - G56] - (I.O.) 17 & 20-16N-6W</p> <p>X165:10-3-28(C)(2)(B) MSSLM, MSNLC (CHURCH 1606 2H-17X)</p> <p>MAY BE CLOSER THAN 600' TO CHURCH 1H-17X, ZALABAK 2, BROOKS HENSLEY 1-17, MELISSA HENSLEY 1-17, GREENLEE 20-16-6 1H</p> <p>NO OP NAMED</p> <p>REC 7/13/2021 (DENTON)</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.

SPACING - 588584	[7/19/2021 - G56] - (640)(HOR) 20-16N-6W EXT OTHER VAC 185382 MSSLM REFORM 62655/105295 MSSLM TO 640 HOR DR & SP UNIT COMPL INT NCT 660' FB
SPACING - 643931	[7/19/2021 - G56] - (640)(HOR) 17-16N-6W VAC OTHER VAC 62655/105295 MSSLM SE4 VAC 195732 MSSLM, OTHER SE4 EXT 642858 MSNLC, OTHER COMPL INT NCT 660' FB (COEXIST WITH SP # 62655/105295 W2, NE4; SP # 522340)

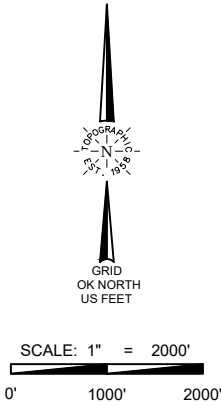
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073 26769 CHURCH 1606 2H-17X

WELL LOCATION
CHURCH 1606 2H-17X
OVINTIV MID-CONTINENT INC.
SECTION 17, TOWNSHIP 16N, RANGE 6W, I.M.
KINGFISHER COUNTY, OKLAHOMA

LEGEND

SECTION LINE
QUARTER SECTION LINE
16TH LINE
PROPOSED WELL BORE



SURFACE LOCATION

385' FNL & 2170' FWL
NAD-27
X= 2040847
Y= 316715
LAT.: 35°52'12.0" N
LONG.: 97°51'43.7" W
LAT.: 35.870000° N
LONG.: 97.862139° W
ELEV.: 1128' (NGVD29)
NAD-83
X= 2009248
Y= 316739
LAT.: 35°52'12.2" N
LONG.: 97°51'44.9" W
LAT.: 35.870043° N
LONG.: 97.862469° W
ELEV.: 1129' (NAVD88)

LANDING POINT

165' FNL & 2204' FWL
NAD-27
X= 2040879
Y= 316935
LAT.: 35°52'14.2" N
LONG.: 97°51'43.3" W
LAT.: 35.870604° N
LONG.: 97.862029° W
NAD-83
X= 2009281
Y= 316959
LAT.: 35°52'14.3" N
LONG.: 97°51'44.5" W
LAT.: 35.870647° N
LONG.: 97.862358° W

LAST TAKE POINT

165' FSL & 2204' FWL
NAD-27
X= 2040909
Y= 306708
LAT.: 35°50'33.0" N
LONG.: 97°51'43.1" W
LAT.: 35.842507° N
LONG.: 97.861979° W
NAD-83
X= 2009310
Y= 306732
LAT.: 35°50'33.2" N
LONG.: 97°51'44.3" W
LAT.: 35.842552° N
LONG.: 97.862309° W

BOTTOM HOLE

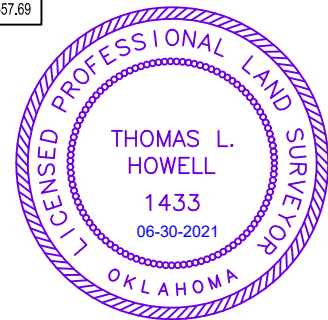
85' FSL & 2204' FWL
NAD-27
X= 2040909
Y= 306628
LAT.: 35°50'32.2" N
LONG.: 97°51'43.1" W
LAT.: 35.842288° N
LONG.: 97.861980° W
NAD-83
X= 2009310
Y= 306652
LAT.: 35°50'32.4" N
LONG.: 97°51'44.3" W
LAT.: 35.842332° N
LONG.: 97.862309° W

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.



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

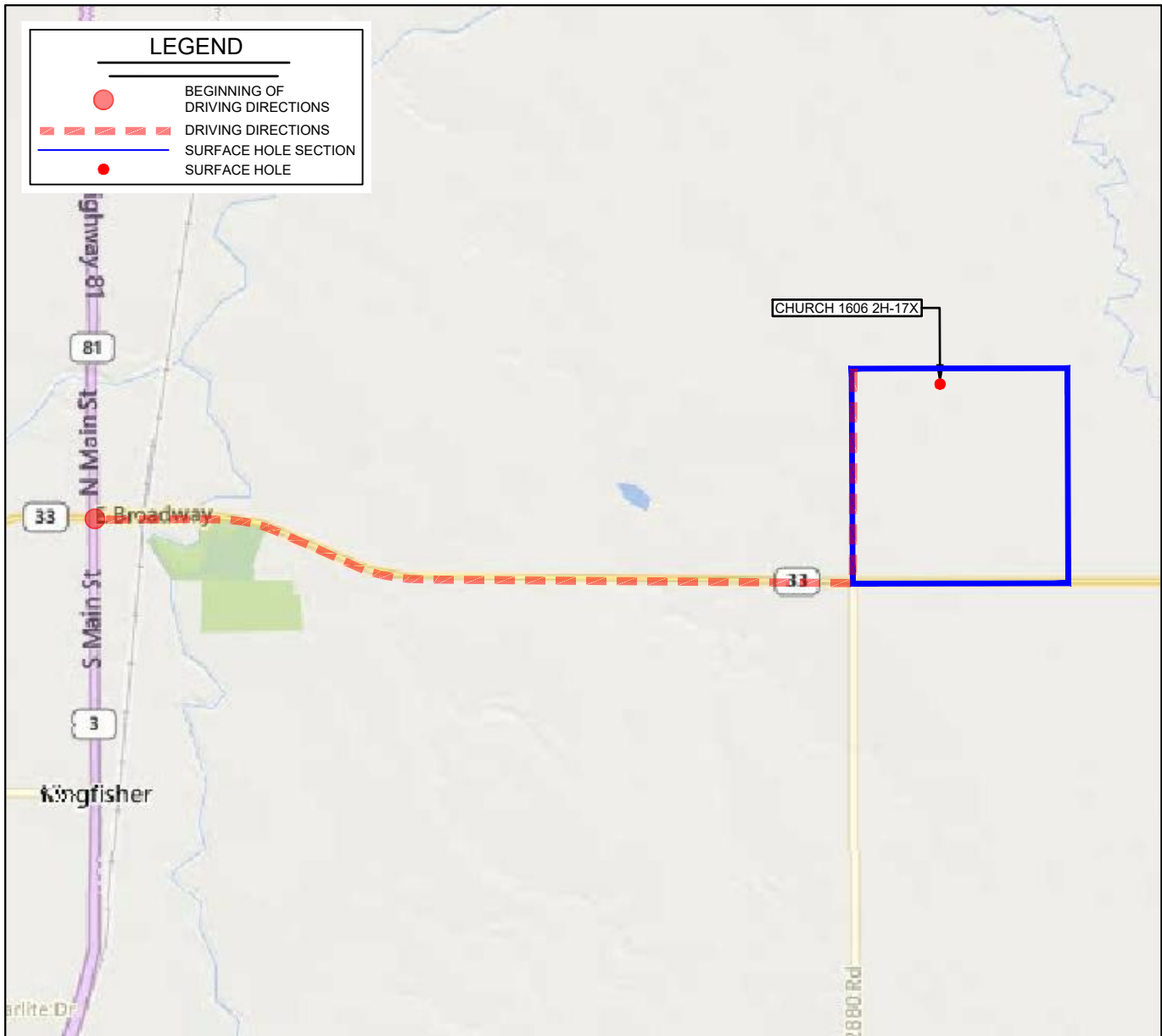
LEASE NAME & WELL NO. CHURCH 1606 2H-17X

SECTION 17 TWP 16N RGE 6W MERIDIAN I.M.
COUNTY KINGFISHER STATE OKLAHOMA
DESCRIPTION 385' FNL & 2170' FWL

CHURCH 1606 2H-17X	REVISION:	
	INT	DATE
DATE: 06/25/2021		
FILE:LO_CHURCH_1606_2H-17X		
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 RESULT OF STATIC GPS OBSERVATION PROCESSED THROUGH OPUS ON THE CONTROL POINT OCCUPIED WHILE MEASURING SAID LINES. OPUS RESULTS ARE CORRELATED TO OKLAHOMA COORDINATE SYSTEM THROUGH 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. ONLY 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 PLAT 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

VICINITY MAP



LEASE NAME & WELL NO. CHURCH 1606 2H-17X

SECTION 17 TWP 16N RGE 6W MERIDIAN I.M.

COUNTY KINGFISHER STATE OKLAHOMA

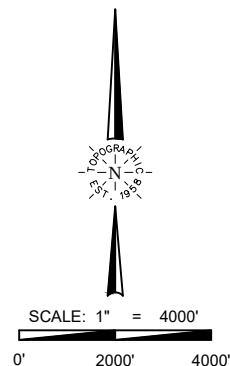
DESCRIPTION 385' FNL & 2170' FWL

DISTANCE & DIRECTION

FROM THE INTERSECTION OF OK-81 & OK-33 GO ± 3.6 MI. EAST
ON OK-33, THEN ± 1.0 MI. NORTH ON N2880 RD TO THE
NORTHWEST CORNER OF SECTION 17-T16N-R6W.

THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY OVINTIV MID-CONTINENT INC.. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE OKLAHOMA STATE PLANE COORDINATE SYSTEM, NORTH ZONE OF THE NORTH AMERICAN DATUM 1983, U.S. SURVEY FEET AND THE NORTH AMERICAN VERTICAL DATUM OF 1988.



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