

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

API NUMBER: 017 25583

Approval Date: 01/02/2020

Expiration Date: 07/02/2021

Horizontal Hole  
Oil & Gas  
Multi Unit

PERMIT TO DRILL

WELL LOCATION: Sec: 11 Twp: 14N Rge: 7W County: CANADIAN

SPOT LOCATION: ☐ NE ☐ SE ☐ SW ☐ SE FEET FROM QUARTER: FROM SOUTH FROM EAST

SECTION LINES: 678 1616

Lease Name: BRUEGGEN 1407

Well No: 5H-2X

Well will be 678 feet from nearest unit or lease boundary.

Operator Name: NEWFIELD EXPLORATION MID-CON INC

Telephone: 2812105100; 9188781

OTC/OCC Number: 20944 0

NEWFIELD EXPLORATION MID-CON INC  
4 WATERWAY AVE STE 100  
THE WOODLANDS, TX 77380-2764

CYNTHIA K SCHROEDER  
15438 W 149TH STREET  
OLATHE KS 66062

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	8073	6	
2 WOODFORD	8557	7	
3		8	
4		9	
5		10	

Spacing Orders: 604466  
705658

Location Exception Orders: 705664  
705659

Increased Density Orders: 705330  
705331  
705332  
705333

Pending CD Numbers:

Special Orders:

Total Depth: 18623

Ground Elevation: 1143

**Surface Casing: 1500**

Depth to base of Treatable Water-Bearing FM: 210

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: 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

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 19-37171  
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 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.

## 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

## HORIZONTAL HOLE 1

Sec 02 Twp 14N Rge 7W County CANADIAN

Spot Location of End Point: NE NE NW NE

Feet From: NORTH 1/4 Section Line: 85

Feet From: EAST 1/4 Section Line: 1420

Depth of Deviation: 7771

Radius of Turn: 542

Direction: 360

Total Length: 10000

Measured Total Depth: 18623

True Vertical Depth: 8557

End Point Location from Lease,  
Unit, or Property Line: 85

### Notes:

#### Category

#### Description

#### DEEP SURFACE CASING

12/30/2019 - 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

#### EXCEPTION TO THE RULE - 705664 (201904752)

1/2/2020 - GC2 - (I.O.) 2 & 11-14N-7W  
X165:10-3-28(C)(2)(B) MSSP, WDFD (BRUEGGEN 1407 5H-2X)  
MAY BE CLOSER THAN 600' TO BRUEGGEN 1407 2H-2X, BRUEGGEN 1407 3H-2X, BRUEGGEN 1407 4H-2X, BRUEGGEN 1407 6H-2X, BRUEGGEN 1407 7H-2X, BRUEGGEN 8H-2X, BRUEGGEN 1407 2X, VOSS 11-6  
NO OP. NAMED  
11-26-2019

#### HYDRAULIC FRACTURING

12/30/2019 - 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: [OCCWEB.COM/OG/OGFORMS.HTML](http://OCCWEB.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)

#### INCREASED DENSITY - 705330 (201904734)

1/2/2020 - GC2 - (I.O.) 2-14N-7W  
X604466 MSSP  
6 WELLS  
NEWFIELD EXPLORATION MID-CONTINENT INC  
11-19-2019

This permit does not address the right of entry or settlement of surface damages.

017 25583 BRUEGGEN 1407 5H-2X

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.

INCREASED DENSITY - 705331 (201904735)	1/2/2020 - GC2 - 2-14N-7W X604466 WDFD 7 WELLS NEWFIELD EXPLORATION MID-CONTINENT INC 11-19-2019
INCREASED DENSITY - 705332 (201904736)	1/2/2020 - GC2 - (I.O.) 11-14N-7W X604466 MSSP 6 WELLS NEWFIELD EXPLORATION MID-CONTINENT INC 11-19-2019
INCREASED DENSITY - 705333 (201904737)	1/2/2020 - GC2 - 11-14N-7W X604466 WDFD 7 WELLS NEWFIELD EXPLORATION MID-CONTINENT INC 11-19-2019
LOCATION EXCEPTION - 705659 (201904747)	1/2/2020 - GC2 - (I.O.) 2 & 11-14N-7W X604466 MSSP, WDFD, OTHER 2 & 11-14N-7W COMPL. INT. (11-14N-7W) NCT 165' FSL, NCT 0' FNL, NCT 1,320' FEL COMPL. INT. (2-14N-7W) NCT 0' FSL, NCT 165' FNL, NCT 1,320' FEL NEWFIELD EXPLORATION MID-CONTINENT INC 11-26-2019
MEMO	12/30/2019 - G71 - PIT 1 & 2 - CLOSED SYSTEM = STEEL PITS (REQUIRED - UNCLE JOHN CREEK), WBM/CUTTINGS & OBM CUTTINGS CAPTURED IN STEEL HALF PITS, WBM/CUTTINGS WILL BE SOIL FARMED, OBM CUTTINGS TRANSFERRED TO R360 587498 (31-12N-8W), CANADIAN CO, PIT 2 - OBM TO VENDOR
SPACING - 604466	1/2/2020 - GC2 - (640)(HOR) 2 & 11-14N-7W VAC OTHER VAC 127148 MSSLM VAC 286856 MCSMN EXT 599529 MSSP, WDFD, OTHER COMPL. INT. (MSSP) NCT 660' FB COMPL. INT. (WDFD) NCT 165' FNL/FSL, NCT 330' FEL/FWL
SPACING - 705658 (201904746)	1/2/2020 - GC2 - (I.O.) 2 & 11-14N-7W EST MULTIUNIT HORIZONTAL WELL X604466 MSSP, WDFD 2 & 11-14N-7W 50% 2-14N-7W 50% 11-14N-7W NEWFIELD EXPLORATION MID-CONTINENT INC 11-26-2019

CANADIAN

COUNTY, OKLAHOMA

678° FSL - 1616° FEL SECTION 11 TOWNSHIP 14N RANGE 7W 1 M.

API: 017-25583



NOTES:

- THE INFORMATION SHOWN HEREIN IS FOR CONSTRUCTION PURPOSES ONLY.
- ALL BEARINGS SHOWN ARE GRID, NAD-83, OKLAHOMA NORTH.
- LANDING POINT, LAST TAKE POINT, BOTTOM HOLE AND DRILL PATH INFORMATION PROVIDED BY CLIENT LISTED, NOT SURVEYED.

SURFACE LOCATION

DATUM: NAD-27  
LAT: 35°41'54.9" N  
LONG: 97°54'38.5" W  
LAT: 35.698583° N  
LONG: 97.910707° W  
STATE PLANE  
COORDINATES: (US Feet)  
ZONE: OK NORTH  
X: X 2026514  
Y: Y 254302

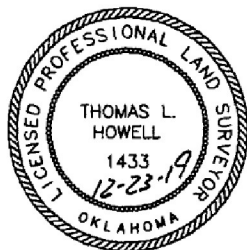
DATUM: NAD-83  
LAT: 35°41'55.1" N  
LONG: 97°54'39.7" W  
LAT: 35.698631° N  
LONG: 97.911035° W  
STATE PLANE  
COORDINATES: (US Feet)  
ZONE: OK NORTH  
X: X 1994916  
Y: Y 254326

(This information was gathered with a GPS receiver with ±1 foot Horiz/Vert accuracy)

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.

Oklahoma Reg. No. 1433



OPERATOR: NEWFIELD EXPLORATION MID-CON INC

LEASE NAME: WELL NO: BRUEGGEN 1407 WELL NO: 5H-2X

TOPOGRAPHY & VEGETATION LOCATION FELL IN SLOPED PASTURE

GOOD DRILL SITE? Yes REFERENCE STAKES OR ALTERNATE LOCATION STAKES SET: None

BEST ACCESSIBILITY TO LOCATION: From East off county road

DISTANCE & DIRECTION: From Okarche, OK, go South ±2 miles on US Hwy. 81/St. Hwy. 3, then East ±3 miles to the Southeast corner of Section 11-T14N-R7W

ELEVATION:

1143' Gr. at Stake (NGVD29)

1143' Gr. at Stake (NAVD88)

PROJECT # 131997

DATE OF DRAWING: DECEMBER 23, 2019

DATE STAKED: DECEMBER 20, 2019

DRAWN BY: DM

REVISION: 1

FILE NAME: LO BRUEGGEN 1407 5H-2X REV1

BOTTOM HOLE  
85° FNL - 1420° FEL  
NAD-27  
35°43'32.8" N  
97°54'36.0" W  
X 2026714  
Y 264203  
NAD-83  
35°43'33.0" N  
97°54'37.2" W  
X 1995116  
Y 264227

LAST TAKE POINT  
165° FNL - 1420° FEL  
NAD-27  
35°43'32.0" N  
97°54'36.0" W  
X 2026713  
Y 264123  
NAD-83  
35°43'32.2" N  
97°54'37.2" W  
X 1995115  
Y 264147

NAD-27  
X 2022844.94  
Y 264282.36  
NAD-83  
X 1991246.81  
Y 264316.29

NAD-27  
X 2025491.26  
Y 264289.41  
NAD-83  
X 1993893.12  
Y 264313.34

NAD-27  
X 2028134.74  
Y 264286.93  
NAD-83  
X 1996536.60  
Y 264310.88

NAD-27  
X 2022826.72  
Y 261571.03  
NAD-83  
X 1991228.61  
Y 261594.85

NAD-27  
X 2022806.47  
Y 258930.37  
NAD-83  
X 1991208.38  
Y 258954.30

NAD-27  
X 2025448.50  
Y 258928.24  
NAD-83  
X 1993850.41  
Y 258952.16

NAD-27  
X 2028110.02  
Y 261567.79  
NAD-83  
X 1996511.91  
Y 261591.75

NAD-27  
X 2028090.32  
Y 258926.20  
NAD-83  
X 1996492.23  
Y 258950.17

NAD-27  
X 2022804.75  
Y 256200.25  
NAD-83  
X 1991208.88  
Y 256304.18

NAD-27  
X 2022803.09  
Y 253630.10  
NAD-83  
X 1991205.03  
Y 253654.05

NAD-27  
X 2028113.19  
Y 256278.78  
NAD-83  
X 1996515.11  
Y 256302.73

NAD-27  
X 2028135.97  
Y 253631.05  
NAD-83  
X 1996537.88  
Y 253655.06

LANDING POINT  
165° FSL - 1420° FEL  
NAD-27  
35°41'49.8" N  
97°54'36.1" W  
X 2026715  
Y 253790  
NAD-83  
35°41'50.0" N  
97°54'37.3" W  
X 1995116  
Y 253814

NAD-27  
X 2025466.12  
Y 253619.45  
NAD-83  
X 1993868.06  
Y 253643.42

SURFACE LOCATION  
678° FSL - 1616° FEL