

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

API NUMBER: 153 23620

Approval Date: 04/17/2018

Expiration Date: 10/17/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 02 Twp: 20N Rge: 17W County: WOODWARD

SPOT LOCATION:     FEET FROM QUARTER: FROM SOUTH FROM EAST

SECTION LINES: 200 230

Lease Name: HEDRICK 2017 Well No: 1-11H14H Well will be 200 feet from nearest unit or lease boundary.

Operator Name: SANDRIDGE EXPLORATION & PRODUCTION LLC

Telephone: 4054295610

OTC/OCC Number: 22281 0

SANDRIDGE EXPLORATION & PRODUCTION LLC  
123 ROBERT S KERR AVE STE 1702  
OKLAHOMA CITY, OK 73102-6406

NELSON DON AND PAMELA DELYNN LOUTHAN  
225512 E. CR 54  
CHESTER OK 73838

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN (EX CHESTER)	9085	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201801730  
201801729  
201801731  
201801732

Special Orders:

Total Depth: 16636

Ground Elevation: 1717

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 290

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: Yes

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: 10000 Average: 5000

E. Haul to Commercial pit facility: Sec. 33 Twn. 26N Rng. 15W Cnty. 151 Order No: 627651

Is depth to top of ground water greater than 10ft below base of pit? Y

H. SEE MEMO

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 AP/TE DEPOSIT

Pit Location Formation: TERRACE

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 located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is AP/TE DEPOSIT

Pit Location Formation: TERRACE

HORIZONTAL HOLE 1

Sec 14 Twp 20N Rge 17W County WOODWARD

Spot Location of End Point: SW SE SE NE

Feet From: NORTH 1/4 Section Line: 2471

Feet From: EAST 1/4 Section Line: 430

Depth of Deviation: 8713

Radius of Turn: 402

Direction: 180

Total Length: 7292

Measured Total Depth: 16636

True Vertical Depth: 9307

End Point Location from Lease,  
Unit, or Property Line: 430

Notes:

Category

Description

DEEP SURFACE CASING

3/14/2018 - 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

3/14/2018 - 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](http://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](http://FRACFOCUS.ORG)

INTERMEDIATE CASING

3/14/2018 - 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

MEMO

3/14/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, 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 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.

153 23620 HEDRICK 2017 1-11H14H

Category	Description
PENDING CD - 201801729	4/2/2018 - G56 - (320) 14-20N-17W LD NLT 660' FB VAC 129845 STGV, STLS, SPWR, OSGE EST MSNLC REC 3-27-2018 (MINMIER)
PENDING CD - 201801730	4/2/2018 - G56 - (E.O.)(640) 11-20N-17W VAC 129845 STGV, STLS, SPWR, OSGE EST MSNLC REC 4-17-2018 (MURER)
PENDING CD - 201801731	4/2/2018 - G56 - (E.O.) 11 & N2 14-20N-17W EST MULTIUNIT HORIZONTAL WELL X201801729 MSNLC N2 14-20N-17W X201801730 MSNLC 11-20N-17W 33.33% N2 14-20N-17W 66.67% 11-20N-17W SANDRIDGE EXPLOR. & PROD., LLC REC 4-17-2018 (MURER)
PENDING CD - 201801732	4/2/2018 - G56 - (E.O.) N2 14 & 11-20N-17W X201801729 MSNLC N2 14-20N-17W X201801730 MSNLC 11-20N-17W COMPL. INT. (N2 14-20N-17W) NCT 150' FSL, NCT 0' FNL, NCT 330' FEL COMPL. INT. (11-20N-17W) NCT 0' FSL NCT 150' FNL, NCT 330' FEL SANDRIDGE EXPLOR. & PROD., LLC REC 4-17-2018 (MURER)