

API NUMBER: 093 25225 A

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

Approval Date: 04/11/2022
Expiration Date: 10/11/2023

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Section: 18 Township: 20N Range: 14W County: MAJOR

SPOT LOCATION: ☐ NW ☐ NE ☐ NE ☐ NW FEET FROM QUARTER: FROM NORTH FROM WEST
SECTION LINES: 265 2210

Lease Name: HARLEY 2014 Well No: 2-18H Well will be 265 feet from nearest unit or lease boundary.
Operator Name: SANDRIDGE EXPLORATION & PRODUCTION Telephone: 4052092407 OTC/OCC Number: 22281 0

SANDRIDGE EXPLORATION & PRODUCTION LLC
1 E SHERIDAN AVE #500
OKLAHOMA CITY, OK 73104-2496

MICHAEL CURTIS PEMBROOK
52496 S CR 252
FAIRVIEW OK 73737

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

Name	Code	Depth
1 MISSISSIPPI SOLID	351MSSSD	8872

Spacing Orders: 143398

Location Exception Orders: 724755

Increased Density Orders: 724754

Pending CD Numbers: No Pending

Working interest owners' notified: ***

Special Orders: No Special

Total Depth: 13850

Ground Elevation: 1776

Surface Casing: 800

Depth to base of Treatable Water-Bearing FM: 430

Deep surface casing has been approved

Under Federal Jurisdiction: No
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: 18-36039

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: 8000 Average: 5000

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

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

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.

HORIZONTAL HOLE 1

Section: 18	Township: 20N	Range: 14W	Meridian: IM	Total Length: 4929
County: MAJOR				Measured Total Depth: 13850
Spot Location of End Point: SE	SE	SE	SW	True Vertical Depth: 8958
Feet From: SOUTH	1/4 Section Line: 150		End Point Location from	
Feet From: WEST	1/4 Section Line: 2380		Lease, Unit, or Property Line: 150	

NOTES:

Category	Description
DEEP SURFACE CASING	[4/5/2022 - 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>[4/5/2022 - 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>
INCREASED DENSITY - 724754 (202200699)	<p>[4/11/2022 - GC2] - 18-20N-14W X143398 MSSSD 1 WELL SANDRIDGE EXPLORATION AND PRODUCTION, LLC 4/7/2022</p>
INTERMEDIATE CASING	[4/5/2022 - GC2] - 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
LOCATION EXCEPTION - 724755 (202200700)	<p>[4/11/2022 - GC2] - (I.O) 18-20N-14W X143398 MSSSD COMPL. INT. NCT 165' FNL, NCT 165' FSL, NCT 2000' FWL SANDRIDGE EXPLORATION AND PRODUCTION, LLC 4-7-2022</p>
MEMO	[4/5/2022 - GC2] - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT
SPACING - 143398	<p>[4/11/2022 - GC2] - (640) 18-20N-14W EXT 87492 MSSSD. OTHERS EXT OTHER</p>

