

API NUMBER: 003 23095 A

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

Approval Date: 11/06/2014

Expiration Date: 05/06/2015

Horizontal Hole Oil & Gas

Amend reason: CORRECTION OF LAT 1 BHL & UPDATE
ORDER

AMEND PERMIT TO DRILL

WELL LOCATION: Section: 21 Township: 27N Range: 10W County: ALFALFA

SPOT LOCATION: SW SW SE SW FEET FROM QUARTER: FROM SOUTH FROM WEST
SECTION LINES: 200 1440

Lease Name: GHC 2710 Well No: 1-28H Well will be 200 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

CHARLES BROWNSON
3309 ASPEN COURT
JOLIET IL 60431

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

Name	Code	Depth
1 MISSISSIPPIAN	359MSSP	5210

Spacing Orders: 627407

Location Exception Orders: 644411

Increased Density Orders: No Density

Pending CD Numbers: No Pending

Working interest owners' notified: ***

Special Orders: No Special

Total Depth: 11200 Ground Elevation: 1151

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 320

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: 14-28751
E. Haul to Commercial pit facility	Sec. 15 Twn. 24N Rng. 7W Cnty. 47 Order No: 623842	
H. (Other)	CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST	

PIT 1 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED

Chlorides Max: 10000 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: ALLUVIAL

Pit Location Formation: ALLUVIUM

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: 28	Township: 27N	Range: 10W	Meridian: IM	Total Length: 3805
	County: ALFALFA			Measured Total Depth: 10592
Spot Location of End Point: SW	SE	SW	SW	True Vertical Depth: 5348
Feet From: SOUTH	1/4 Section Line: 201			End Point Location from
Feet From: WEST	1/4 Section Line: 684			Lease, Unit, or Property Line: 201

HORIZONTAL HOLE 2

Section: 28	Township: 27N	Range: 10W	Meridian: IM	Total Length: 4454
	County: ALFALFA			Measured Total Depth: 10509
Spot Location of End Point: SW	SE	SE	SW	True Vertical Depth: 5326
Feet From: SOUTH	1/4 Section Line: 200			End Point Location from
Feet From: WEST	1/4 Section Line: 2071			Lease, Unit, or Property Line: 200

NOTES:

Category	Description
DEEP SURFACE CASING	10/27/2014 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY FOR ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON CONDUCTOR OR SURFACE CASING
HYDRAULIC FRACTURING	<p>[11/9/2021 - 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>
LOCATION EXCEPTION - 644411	<p>2/9/2022 - GC2 - (F.O.)(IRR UNIT) N2, SW4, W2 SE4, & SE4 SE4 28-27N-10W X627407 MSSP</p> <p>SHL 176' FSL, 1439' FWL 21-27N-10W</p> <p>COMPL. INT. (LAT 1) 564' FNL, 1370' FWL, 201' FSL, 684' FWL</p> <p>COMPL. INT. (LAT 2) 422' FNL, 1388' FWL, 200' FSL, 2071' FWL</p> <p>SANDRIDGE EXPLOR. & PROD., LLC</p> <p>8-24-2015</p>
SPACING - 627407	<p>11/5/2014 - G75 - (600)(HOR)(IRR UNIT) 28-27N-10W LESS NE4 SE4</p> <p>EST MSSP</p> <p>COMPL. INT. NLT 660' FB</p>