

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

API NUMBER: 093 25170

Approval Date: 10/30/2018

Expiration Date: 04/30/2020

Horizontal Hole

Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 27 Twp: 20N Rge: 15W

County: MAJOR

SPOT LOCATION:

SE

SE

SE

SW

FEET FROM QUARTER: FROM

SOUTH

FROM

WEST

SECTION LINES:

235

2500

Lease Name: MEDILL 2015

Well No: 2-27H

Well will be 235 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

RICK UNWIN AND MARY S UNWIN  
PO BOX 894  
SEILING OK 73663

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	9226	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 664236

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201802850

Special Orders:

201802849

Total Depth: 13941

Ground Elevation: 1693

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 350

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

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

D. One time land application -- (REQUIRES PERMIT)

PERMIT NO: 18-35638

H. SEE MEMO

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: 500000 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 27 Twp 20N Rge 15W County MAJOR

Spot Location of End Point: N2 N2 NW NW

Feet From: NORTH 1/4 Section Line: 150

Feet From: WEST 1/4 Section Line: 660

Depth of Deviation: 8188

Radius of Turn: 477

Direction: 350

Total Length: 5004

Measured Total Depth: 13941

True Vertical Depth: 9226

End Point Location from Lease,  
Unit, or Property Line: 150

### Notes:

#### Category

#### Description

BOTTOM HOLE LOCATION

10/30/2018 - G58 - 150' FNL, 660' FWL PER REVISED STAKING PLAT DATED 10/30/2018

DEEP SURFACE CASING

10/29/2018 - GA8 - 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

10/29/2018 - GA8 - 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)

INTERMEDIATE CASING

10/29/2018 - GA8 - 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

10/29/2018 - GA8 - 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.

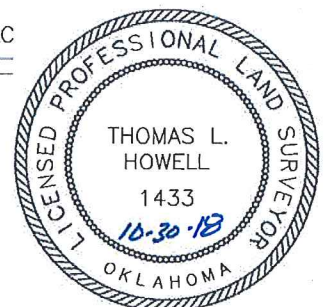
093 25170 MEDILL 2015 2-27H

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.

Category	Description
PENDING CD - 201802849	10/29/2018 - G58 - 27-20N-15W X664236 MSSP 2 WELLS NO OP NAMED REC 5/7/2018 (M. PORTER)
PENDING CD - 201802850	10/29/2018 - G58 - (I.O.) 27-20N-15W X664236 MSSP COMPL. INT. NCT 150' FNL, NCT 150' FSL, NCT 560' FWL NO OP. NAMED REC 5/7/2018 (M. PORTER)
SPACING - 664236	10/29/2018 - G58 - (640)(HOR) 27-20N-15W VAC 155067 CSTR EXT 634339 MSSP, OTHER POE TO BHL NCT 660' FB (COEXIST SP. ORDER 128563/143475 MSSLM)

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Office of the Conservation Division as to when Surface Casing will be run.





13800 Wireless Way, Okla. City, OK. 73134 (405) 843-4847 \* OUT OF STATE (800) 654-3219  
Certificate of Authorization No. 1293 LS

MAJOR

County, Oklahoma

235' FSL - 2500' FWL Section 27 Township 20N Range 15W I.M.



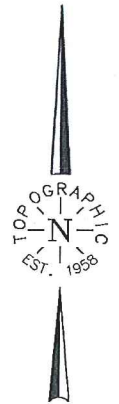
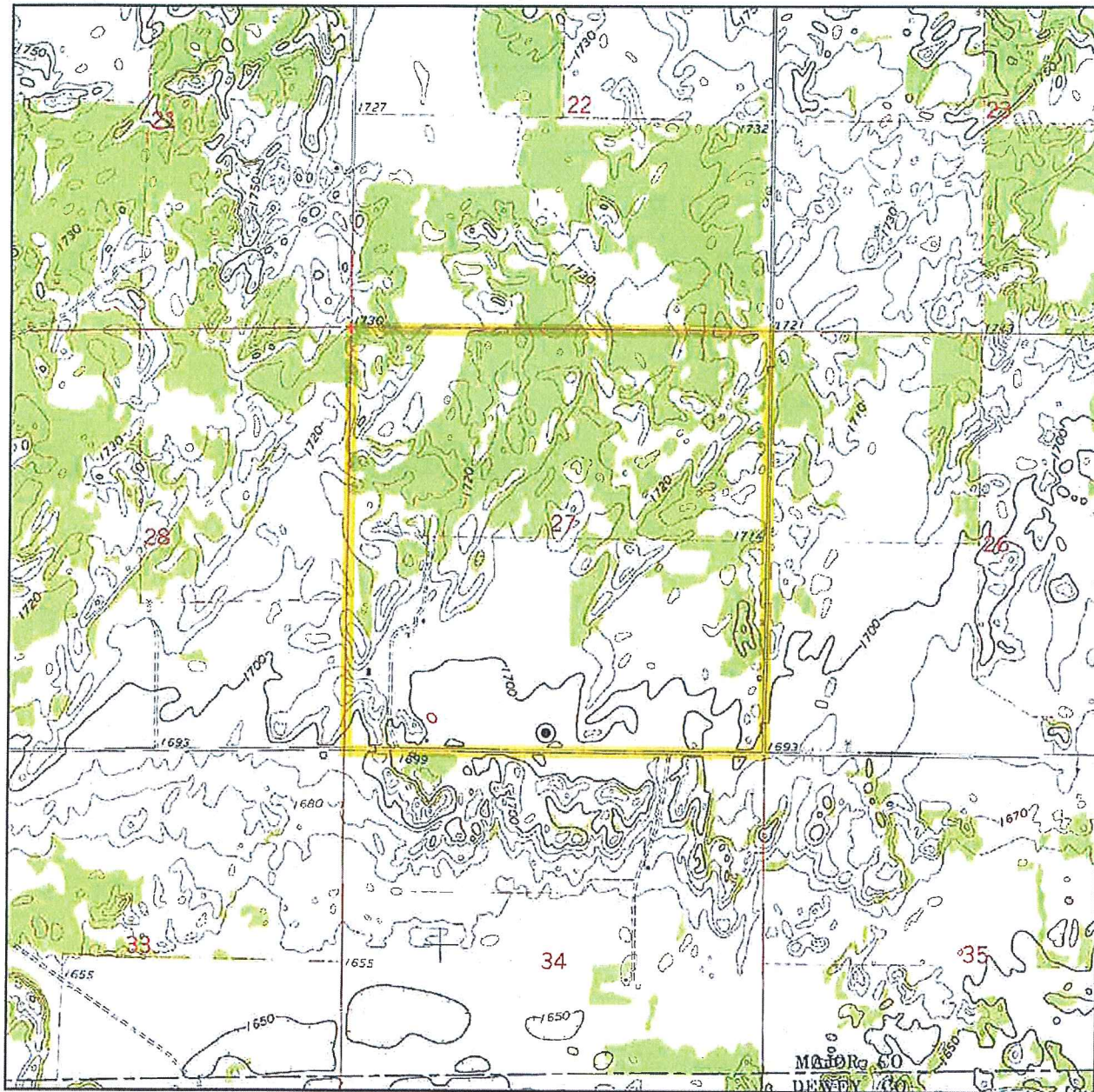
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# TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

Surveying and Mapping for the Energy Industry  
13800 Wireless Way, Oklahoma City, OK 73134 www.topographic.com  
Telephone Numbers: Local (405) 843-4847 Toll Free (800) 654-3219

## LOCATION & ELEVATION VERIFICATION MAP



Sec. 27 Twp. 20N Rng. 15W IM

County MAJOR State OK

Operator SANDRIDGE EXPLORATION & PRODUCTION, LLC

Description 235'FSL - 2500'FWL

Lease MEDILL 2015 2-27H

Elevation 1708' Gr. at stake

Above Background Data from  
U.S.G.S. Topographic Map  
Scale: 1"=2000'

Contour Interval 10'

When elevation is shown hereon it is the ground  
elevation of the location stake.  
Review this plat and inform us immediately of  
any possible discrepancy.



**TOPOGRAPHIC**  
LOYALTY INNOVATION LEGACY

**LAND SURVEYORS OF OKLAHOMA**

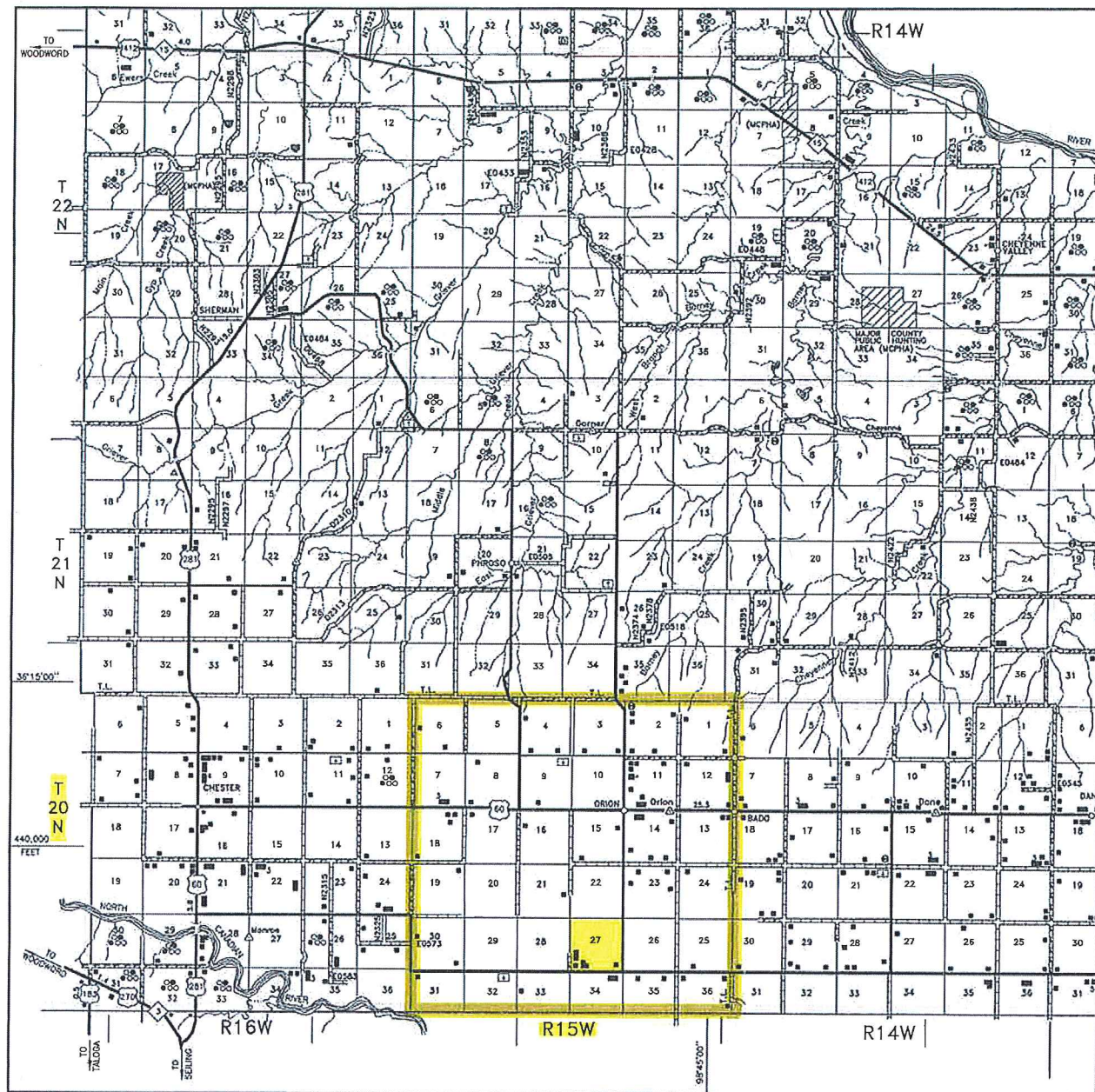
Oct. 11, 2018



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## VICINITY MAP



Scale: 1" = 3 Miles

Sec. 27 Twp. 20N Rng. 15W IM

County MAJOR State OK

Operator SANDRIDGE EXPLORATION & PRODUCTION, LLC



LAND SURVEYORS OF OKLAHOMA