

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 A

Approval Date: 10/30/2018
Expiration Date: 04/30/2020

Horizontal Hole Oil & Gas

Amend reason: BHL CHANGE AND ADD EXCEPTION TO 600' RULE

AMEND 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
201802849
201808992

Special Orders:

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: NW NE NW NW

Feet From: NORTH 1/4 Section Line: 150

Feet From: WEST 1/4 Section Line: 880

Depth of Deviation: 8600

Radius of Turn: 626

Direction: 360

Total Length: 4300

Measured Total Depth: 13941

True Vertical Depth: 9250

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

Notes:

Category

Description

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: 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

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)
PENDING CD - 201808992	11/16/2018 - G58 - (E.O.) 27-20N-15W X165:10-3-28(C)(2)(B) MSSP (MEDILL 2015 2-27H) MAY BE CLOSER THAN 600' FROM THE F.C. UNWIN "A" 1 WELL REC 11/6/2018 (JACKSON)
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)

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.

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

X	17651	+6
Y	43330	

767753
33290

X 1770361
Y 433275

X: 1765.12
Y: 4396.77

X 1770347
Y 430654

X 1765110
Y 428049

X 1770333
Y 428031

70347
9654

GRAPHIC
N
EST. 1998

GRID
NAD-27
OK NORTH
US Feet

0' 500' 1000'

1693' Gr. at Stake

Stakes Set Alt. 260' FSL-300' FWL; Elev. 1708' Gr.

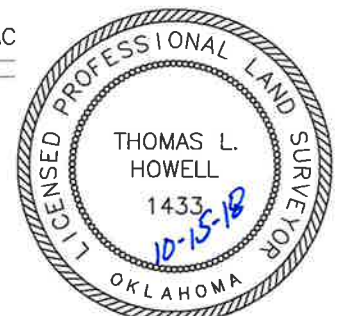
Distance & Direction
from Hwy Jct or Town From Jct. US Hwy. 281 N-S and US Hwy. 60 East at Chester, OK, go ± 7.0 mi. East
on US Hwy. 60, then ± 3.0 mi. South to the SW Cor. of Sec. 27-T20N-R15W

Invoice # 304721 Date Staked: Oct. 11, 2018

AC

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

Thomas L. Hawes
Oklahoma Lic. No. 1433



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

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

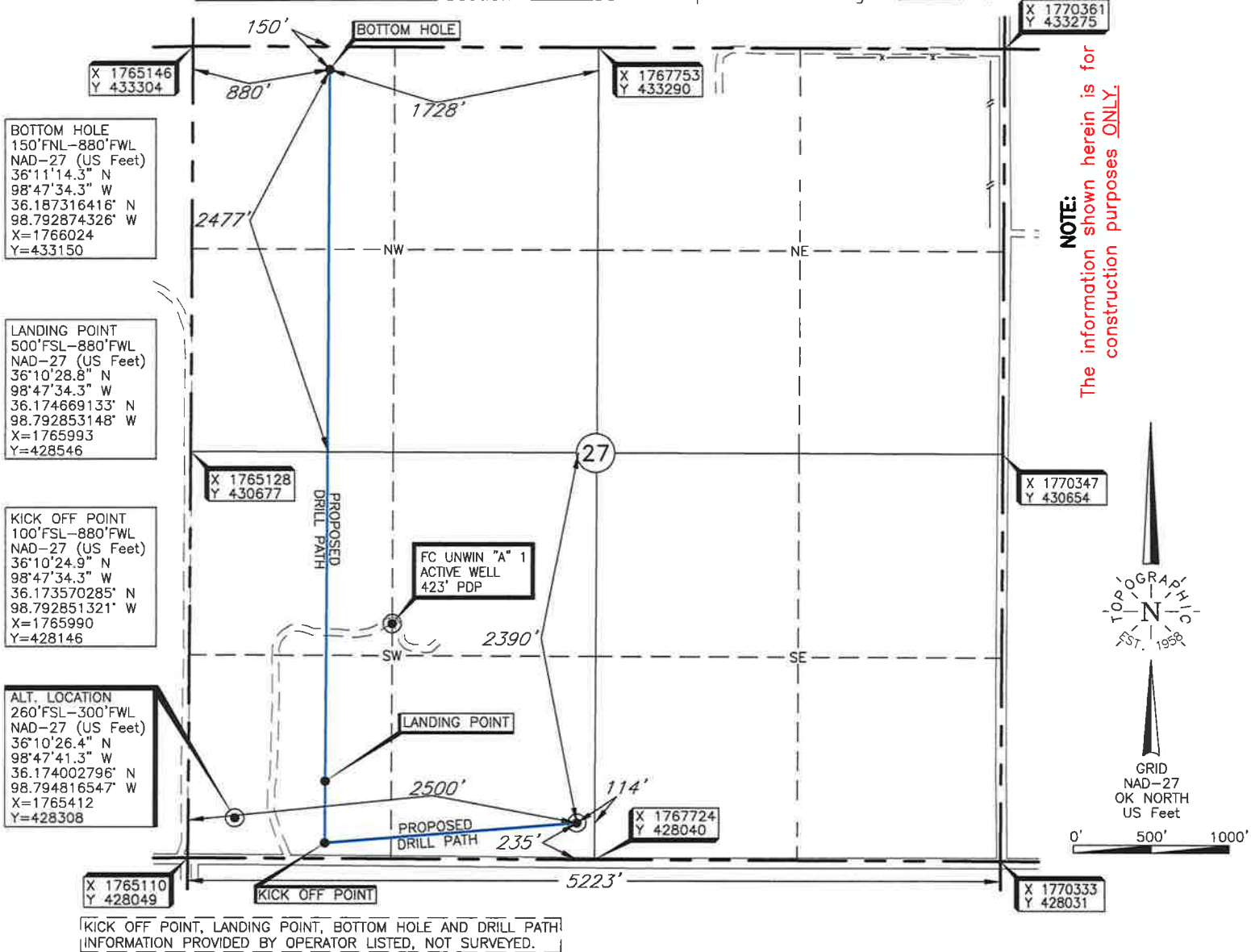
13800 Wireless Way, Okla. City, OK. 73134 (405) 843-4847 * OUT OF STATE (800) 654-3219
Certificate of Authorization No. 1293 LS

093-25170

MAJOR

County, Oklahoma

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



Operator: SANDRIDGE EXPLORATION & PRODUCTION, LLC

Lease Name: MEDILL 2015

Well No.: 2-27H

ELEVATION:

1693' Gr. at Stake

Topography & Vegetation Loc. fell in sloped sandy irrigated wheat field, outside of circle;

Alt. loc. fell in rolling sandy pasture, ±210' West of power line, ±533' West of shop building

Reference Stakes or Alternate Location

Good Drill Site? Yes; Alt. Yes

Stakes Set Alt. 260'FSL-300'FWL; Elev. 1708' Gr.

Best Accessibility to Location From South off county road

Distance & Direction

from Hwy Jct or Town From Jct. US Hwy. 281 N-S and US Hwy. 60 East at Chester, OK, go ±7.0 mi. East
on US Hwy. 60, then ±3.0 mi. South to the SW Cor. of Sec. 27-T20N-R15W

Date of Drawing: Oct. 13, 2018

Invoice # 304721

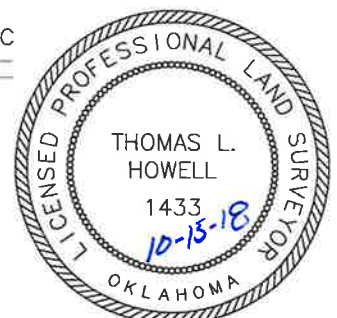
Date Staked: Oct. 11, 2018

AC

CERTIFICATE:

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Thomas L. Howell
Oklahoma Lic. No. 1433



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

DATUM: NAD-27
LAT: 36°10'26.3"N
LONG: 98°47'14.5"W
LAT: 36.173962408° N
LONG: 98.787363750° W
STATE PLANE
COORDINATES: (US Feet)
ZONE: OK NORTH
X: 1767611
Y: 428275

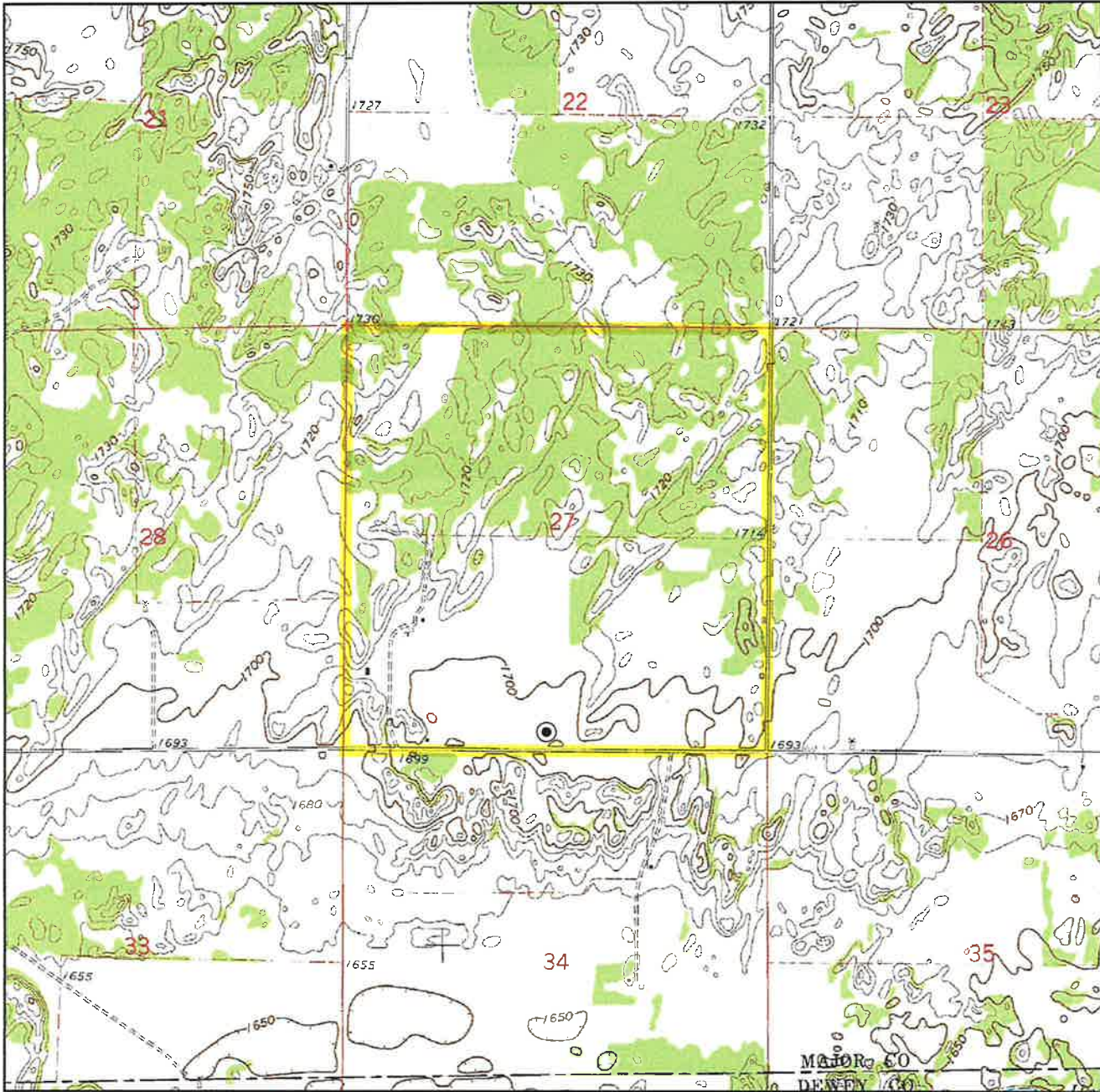
TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

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

LAND SURVEYORS OF OKLAHOMA