

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

API NUMBER: 043 23658

Approval Date: 10/01/2018

Expiration Date: 04/01/2020

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 18 Twp: 19N Rge: 15W

County: DEWEY

SPOT LOCATION: ☐ SW ☐ SW ☐ SE ☐ SE FEET FROM QUARTER: FROM SOUTH FROM EAST

SECTION LINES: 200 1130

Lease Name: REGINA 1915

Well No: 2-18H

Well will be 200 feet from nearest unit or lease boundary.

Operator SANDRIDGE EXPLORATION & PRODUCTION LLC
Name:

Telephone: 4054295610

OTC/OCC Number: 22281 0

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

GAY G WION, TRUSTEE
6949 S. UTICA PLACE
GAY G. WION REV. TRUST
TULSA OK 74136

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	9882	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 664121

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201804528
201804529

Special Orders:

Total Depth: 14517

Ground Elevation: 1835

Surface Casing: 510

Depth to base of Treatable Water-Bearing FM: 260

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 BED AQUIFER

Pit Location Formation: RUSH SPRINGS

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

PERMIT NO: 18-35201

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: 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 BED AQUIFER

Pit Location Formation: RUSH SPRINGS

HORIZONTAL HOLE 1

Sec 18 Twp 19N Rge 15W County DEWEY

Spot Location of End Point: NW NE NE NE

Feet From: NORTH 1/4 Section Line: 150

Feet From: EAST 1/4 Section Line: 430

Depth of Deviation: 9400

Radius of Turn: 583

Direction: 3

Total Length: 4200

Measured Total Depth: 14517

True Vertical Depth: 9923

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

Notes:

Category

Description

HYDRAULIC FRACTURING

8/21/2018 - 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; 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

8/21/2018 - 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

8/21/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201804528

9/28/2018 - G56 - 18-19N-15W
X664121 MSSP
3 WELLS
NO OP. NAMED
REC 7/2/2018 (MURER)

This permit does not address the right of entry or settlement of surface damages.

043 23658 REGINA 1915 2-18H

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 - 201804529	9/28/2018 - G56 - (I.O.) 18-19N-15W X664121 MSSP COMPL. INT. NCT 150' FNL, NCT 150' FSL, NCT 330' FEL NO OP. NAMED REC 7/2/2018 (MURER)
SPACING - 664121	9/28/2018 - G56 - (640)(HOR) 18-19N-15W EXT. 660028 MSSP, OTHER POE TO BHL NLT 660' FB COEXIST WITH SP. ORDER 120278 CSTR

35-043-23658

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

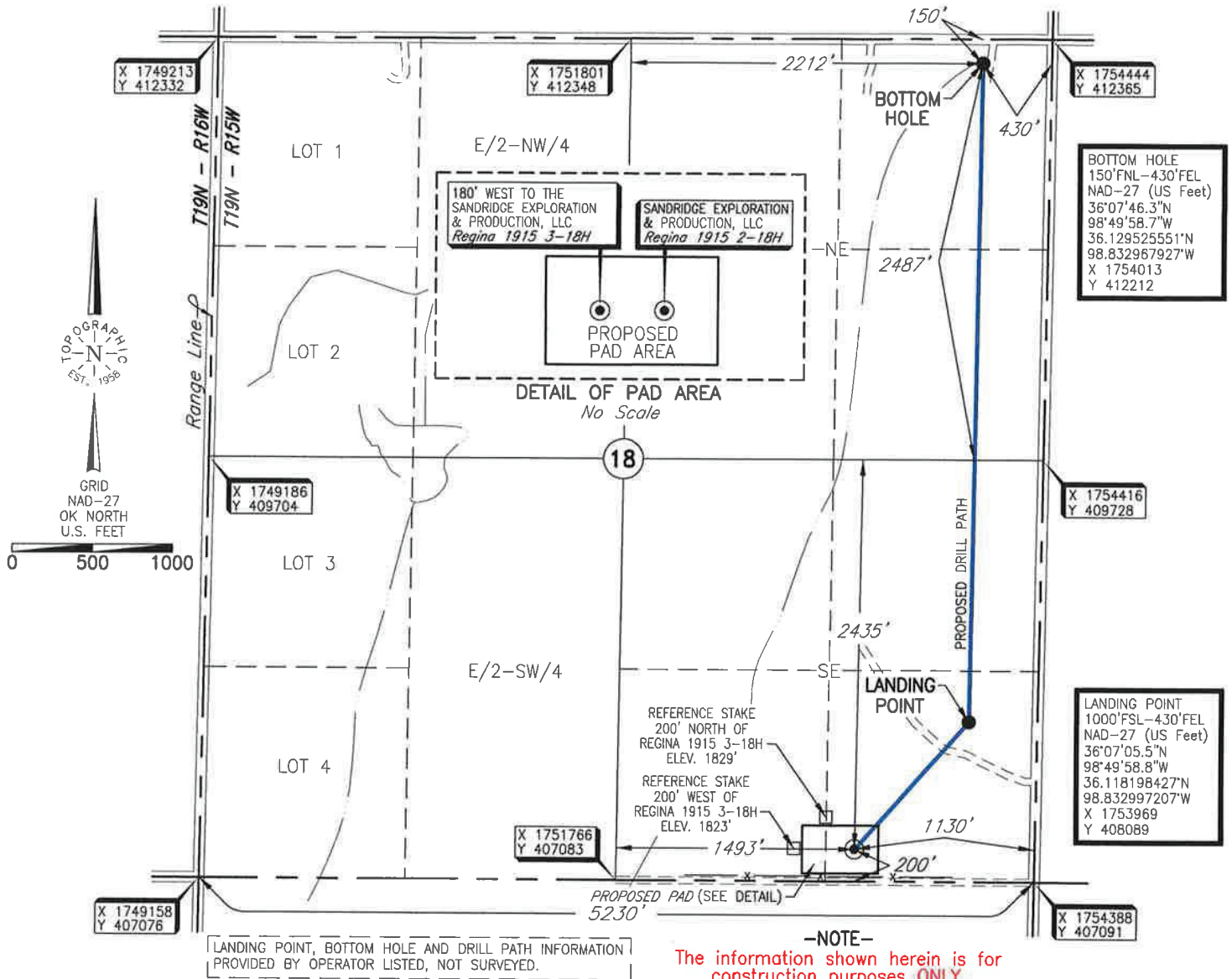
13800 WIRELESS WAY., OKLA. CITY, OKLA. 73134 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219

Certificate of Authorization No. 1293 LS

DEWEY

County, Oklahoma

200'FSL - 1130'FEL Section 18 Township 19N Range 15W I.M.



Operator: SANDRIDGE EXPLORATION & PRODUCTION, LLC

Lease Name: REGINA 1915

Well No.: 2-18H

ELEVATION:

1835' Gr. at Stake NGVD29

Topography & Vegetation Location fell in sloped pasture and scattered brush, ±164' North of E-W fence.

Good Drill Site? Yes Reference Stakes Set (1) 200' North - Elev. 1829' (2) 200' West - Elev. 1823' of the proposed Regina 1915 3-18H well stake

Best Accessibility to Location From South off lease road.

Distance & Direction

from Hwy Jct or Town From Seiling, Ok., go ±0.4 miles South on U.S. Hwy. 281, then ±5.2 miles East, then ±2 miles South to the SE corner of Section 18, T19N - R15W.

DATUM: NAD-27
 LAT: 36°06'57.5"N
 LONG: 98°50'7.3"W
 LAT: 36.115978668°N
 LONG: 98.835372666°W
 STATE PLANE
 COORDINATES: (US Feet)
 ZONE: OK NORTH
 X: 1753260
 Y: 407287

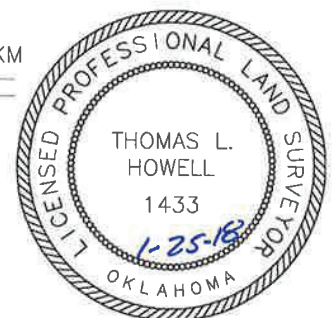
Invoice # 287012 Date of Drawing: January 18, 2018
 Date Staked: January 16, 2018

RKM

CERTIFICATE:

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

Oklahoma Lic. No. 1433



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