

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

API NUMBER: 093 25113

Approval Date: 12/20/2017

Expiration Date: 06/20/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 28 Twp: 20N Rge: 15W County: MAJOR

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

SECTION LINES: 225 1640

Lease Name: CHARLESTON 2015 Well No: 2-33H Well will be 225 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

JAMES & DOROTHY CAMPBELL  
9764 HWY. 60  
FAIRVIEW OK 73737

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

Name	Depth	Name	Depth
1 MISS'AN LM	9290	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 125423

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201707684  
201707683

Special Orders:

Total Depth: 14523

Ground Elevation: 1695

**Surface Casing: 1500**

Depth to base of Treatable Water-Bearing FM: 370

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

E. Haul to Commercial pit facility: Sec. 33 Twn. 26N Rng. 15W Cnty. 151 Order No: 627651

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 AP/TE DEPOSIT

Pit Location Formation: TERRACE

## HORIZONTAL HOLE 1

Sec 33 Twp 20N Rge 15W County DEWEY

Spot Location of End Point: SW SE SW SE

Feet From: SOUTH 1/4 Section Line: 150

Feet From: EAST 1/4 Section Line: 1900

Depth of Deviation: 9033

Radius of Turn: 750

Direction: 185

Total Length: 4312

Measured Total Depth: 14523

True Vertical Depth: 9411

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

### Notes:

#### Category

#### Description

#### DEEP SURFACE CASING

12/14/2017 - 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

12/14/2017 - 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](http://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](http://FRACFOCUS.ORG)

#### INTERMEDIATE CASING

12/14/2017 - 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

12/14/2017 - G71 - PIT 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST; PIT 2 - OBM TO VENDOR, OBM CUTTINGS PER DISTRICT

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.

093 25113 CHARLESTON 2015 2-33H

Category	Description
PENDING CD - 201707683	12/20/2017 - G75 - 33-20N-15W X125423 MPLM 3 WELLS NO OP. NAMED REC 12-11-2017 (THOMAS)
PENDING CD - 201707684	12/20/2017 - G75 - (I.O.) 33-20N-15W X125423 MPLM COMPL. INT. NCT 150' FNL, NCT 150' FSL, NCT 1320' FEL NO OP. NAMED REC 12-11-2017 (THOMAS)
SPACING - 125423	12/20/2017 - G75 - (640) 33-20N-15W EXT OTHER EXT 78076/120278 MPLM, OTHERS

# TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

6709 NORTH CLASSEN BLVD., OKLA. CITY, OKLA. 73116 \* LOCAL (405) 843-4847 \* OUT OF STATE (800) 654-3219

Certificate of Authorization No. 1293 LS

API 093-25113

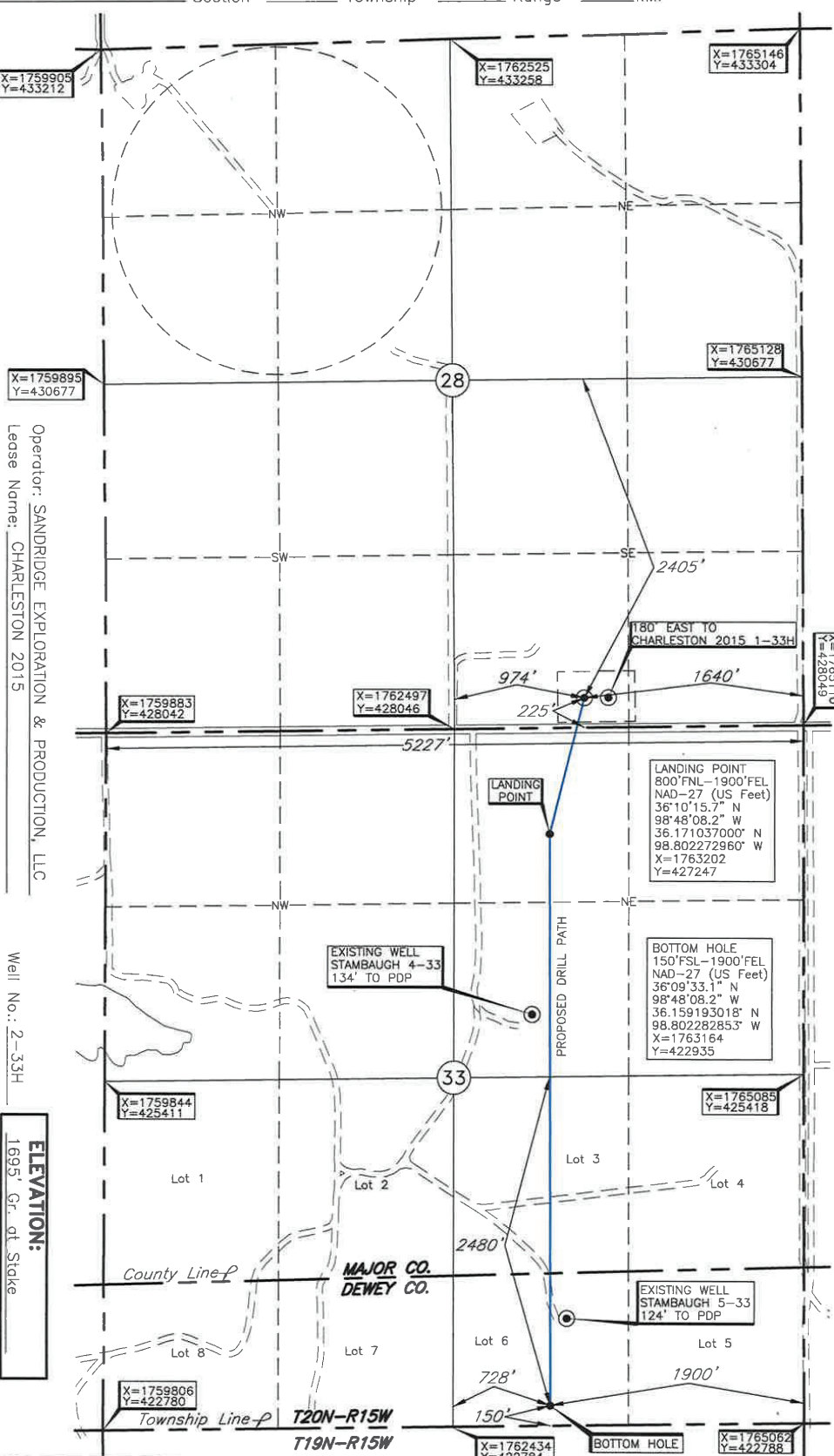
MAJOR

County, Oklahoma

225' FSL - 1640' FEL Section 28 Township 20N Range 15W I.M.



**NOTE:**  
The information shown herein is for construction purposes ONLY.



Operator: SANDRIDGE EXPLORATION & PRODUCTION, LLC  
 Lease Name: CHARLESTON 2015  
 Well No.: 2-33H  
 Topography & Vegetation: Loc. fell in rolling, plowed sandy field  
 ELEVATION: 1695' Gr. at Stake  
 Good Drill Site? Yes  
 Reference Stakes or Alternate Location: Stakes Set None  
 Best Accessibility to Location: From South off county road  
 Distance & Direction: From Sealing, OK, go  $\pm 2.5$  mi. North on US Hwy. 281, then  $\pm 4.0$  mi. East on county road, then  $\pm 1.0$  mi. South, then  $\pm 3.0$  mi. East to the SE Cor. of Sec. 28-T20N-R15W

LANDING POINT, BOTTOM HOLE AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED.

DATUM: NAD-27  
 LAT:  $36^{\circ}10'25.9''$  N  
 LONG:  $98^{\circ}48'05.0''$  W  
 LAT:  $36.173859934^{\circ}$  N  
 LONG:  $98.801388675^{\circ}$  W  
 STATE PLANE COORDINATES: (US Feet)  
 ZONE: OK NORTH  
 X: 1763472  
 Y: 428272

Date of Drawing: Oct. 16, 2017  
 Invoice # 282278A Date Staked: Oct. 10, 2017

## 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

Thomas L. Howell  
 Oklahoma Lic. No. 1433

