

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

API NUMBER: 093 25157

Approval Date: 08/30/2018

Expiration Date: 02/28/2019

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 04 Twp: 21N Rge: 12W County: MAJOR  
SPOT LOCATION: ☐ SW ☐ SW ☐ SE ☐ SE FEET FROM QUARTER: FROM SOUTH FROM EAST  
SECTION LINES: 235 1040

Lease Name: CRAIN 2112 Well No: 1-9H 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

TRENT W. MARTENS  
253054 E. COUNTY RD 49  
FAIRVIEW OK 73737

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	7370	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201805142  
201805143

Special Orders:

Total Depth: 12382 Ground Elevation: 1283 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 not located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is NON HSA

Pit Location Formation: FLOWERPOT

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 18-34999  
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 not located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is NON HSA

Pit Location Formation: FLOWERPOT

HORIZONTAL HOLE 1

Sec 09 Twp 21N Rge 12W County MAJOR

Spot Location of End Point: SW SE SE SE

Feet From: SOUTH 1/4 Section Line: 150

Feet From: EAST 1/4 Section Line: 430

Depth of Deviation: 6831

Radius of Turn: 382

Direction: 175

Total Length: 4950

Measured Total Depth: 12382

True Vertical Depth: 7464

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

Notes:

Category

Description

DEEP SURFACE CASING

7/31/2018 - G71 - 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

7/31/2018 - 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](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)

MEMO

7/31/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201805142

8/8/2018 - G57 - (640) 9-21N-12W  
VAC 105910/150056/139575 CSTR, MNNG, MPMC, OSGE  
EST MSSP  
REC 8-27-2018 (MILLER)

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 25157 CRAIN 2112 1-9H

Category

PENDING CD - 201805143

Description

8/8/2018 - G57 - (I.O.) 9-21N-12W  
X201805142 MSSP  
COMPL. INT. NCT 150' FNL, NCT 150' FSL, NCT 330' FEL  
NO OP. NAMED  
REC 8-27-2018 (MILLER)

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.



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

Operator: SANDRIDGE EXPLORATION & PRODUCTION, LLC  
Lease Name: CRAIN 2112  
Topography & Vegetation: Loc. fell in sloped cut wheat field, ±230' West of possible pipeline  
Good Drill Site? Yes  
Reference Stakes or Alternate Location  
Stakes Set None  
Best Accessibility to Location From South off county road  
Distance & Direction from Hwy Jct or Town From Fairview, OK, go ±3.5 mi. North on St. Hwy. 8 to the SE  
Cor. of Sec. 4-T21N-R12W

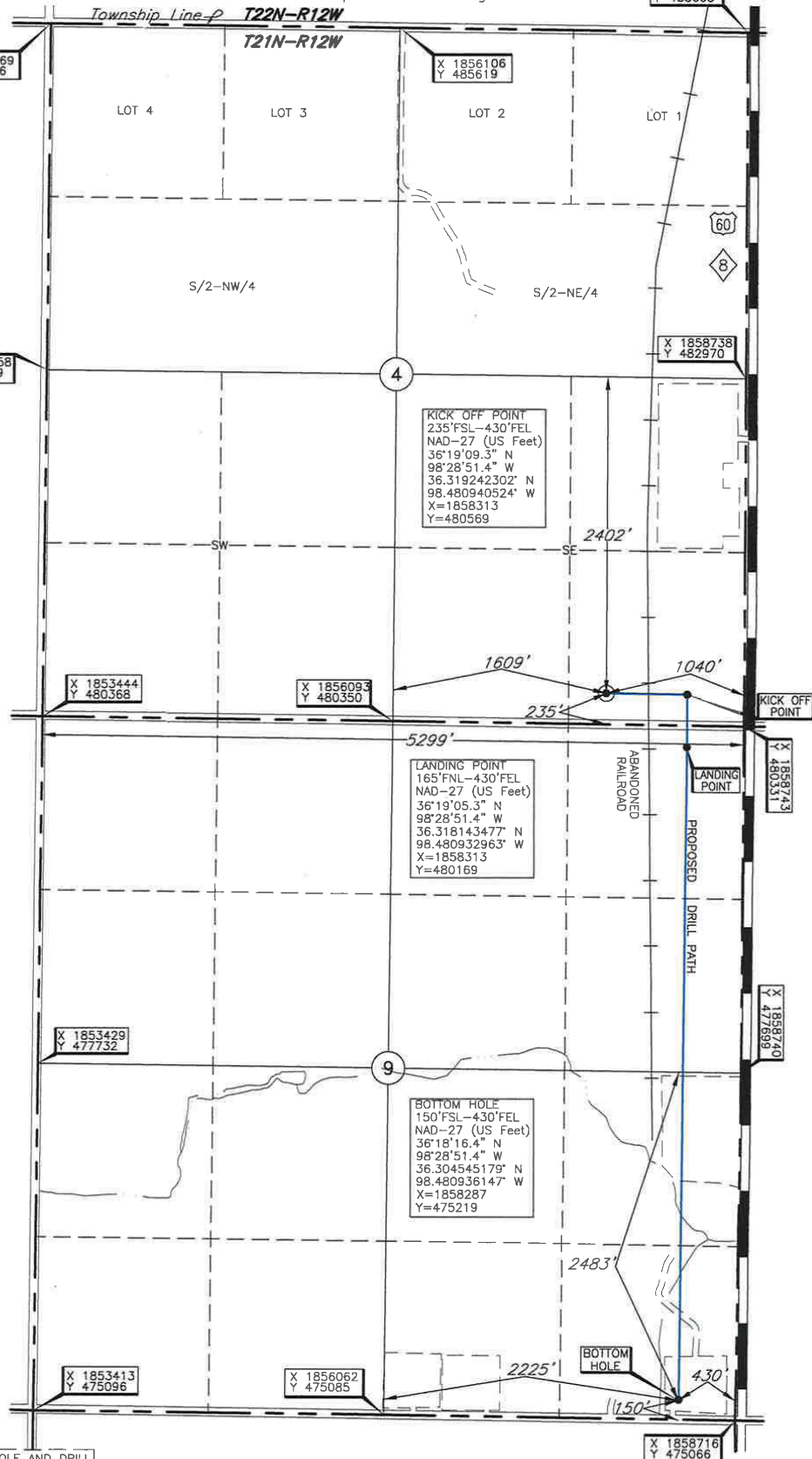
Well No.: 1-9H

ELEVATION:  
1283' Gr. at Stake

MAJOR Section 4 Township 21N Range 12W I.M.

235' FSL - 1040' FFL Township Line - T22N-R12W

T21N-R12W



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

Revision ☒ A Date of Drawing: Jul. 05, 2018

Invoice # 297937 Date Staked: Jul. 02, 2018

AC

**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



DATUM: NAD-27  
LAT: 36°19'09.3"N  
LONG: 98°28'58.8"W  
LONG: 36.319245583° N  
LONG: 98.483010909° W  
STATE PLANE  
COORDINATES: (US Feet)  
ZONE: OK NORTH  
X: 1857703  
Y: 480574

This information was gathered with a GPS receiver with a foot foot 1 ft accuracy.