

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

API NUMBER: 093 25156 A

Approval Date: 08/28/2018
Expiration Date: 02/28/2020

Horizontal Hole Oil & Gas

Amend reason: FORMATION, LOCATION EXCEPTION CD, TOTAL DEPTH

AMEND PERMIT TO DRILL

WELL LOCATION: Sec: 14 Twp: 20N Rge: 15W County: MAJOR
SPOT LOCATION: NW NW NE NW FEET FROM QUARTER: FROM NORTH FROM WEST
SECTION LINES: 260 1525

Lease Name: COTTER 2015 Well No: 1-11H2H Well will be 260 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

JAMES L. WARNER
55283 S. COUNTY RD
FAIRVIEW OK 73737

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

Name	Depth	Name	Depth
1 MISS'AN LM	8960	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 141045 Location Exception Orders: Increased Density Orders: 683621
Pending CD Numbers: 201807705 Special Orders:

Total Depth: 13960 Ground Elevation: 1783 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 450

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: 18-35202
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 11 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: 8247

Radius of Turn: 477

Direction: 350

Total Length: 4964

Measured Total Depth: 13960

True Vertical Depth: 9000

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

Notes:

Category

Description

DEEP SURFACE CASING

8/21/2018 - 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

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

INCREASED DENSITY - 683621

11/6/2018 - G58 - 11-20N-15W
X141045 MPLM
1 WELL
SANDRIDGE EXPLORATION AND PRODUCTION, LLC
9/24/2018

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

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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 25156 COTTER 2015 1-11H2H

Category	Description
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 - 201807705	11/6/2018 - G58 - (I.O.) 11-20N-15W X141045 MPLM COMPL. INT. NCT 150' FSL, NCT 150' FNL, NCT 560' FWL NO OP. NAMED REC 10/15/2018 (THOMAS)
SPACING - 141045	8/28/2018 - G58 - (640) 11-20N-15W EXT OTHERS EST MPLM

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

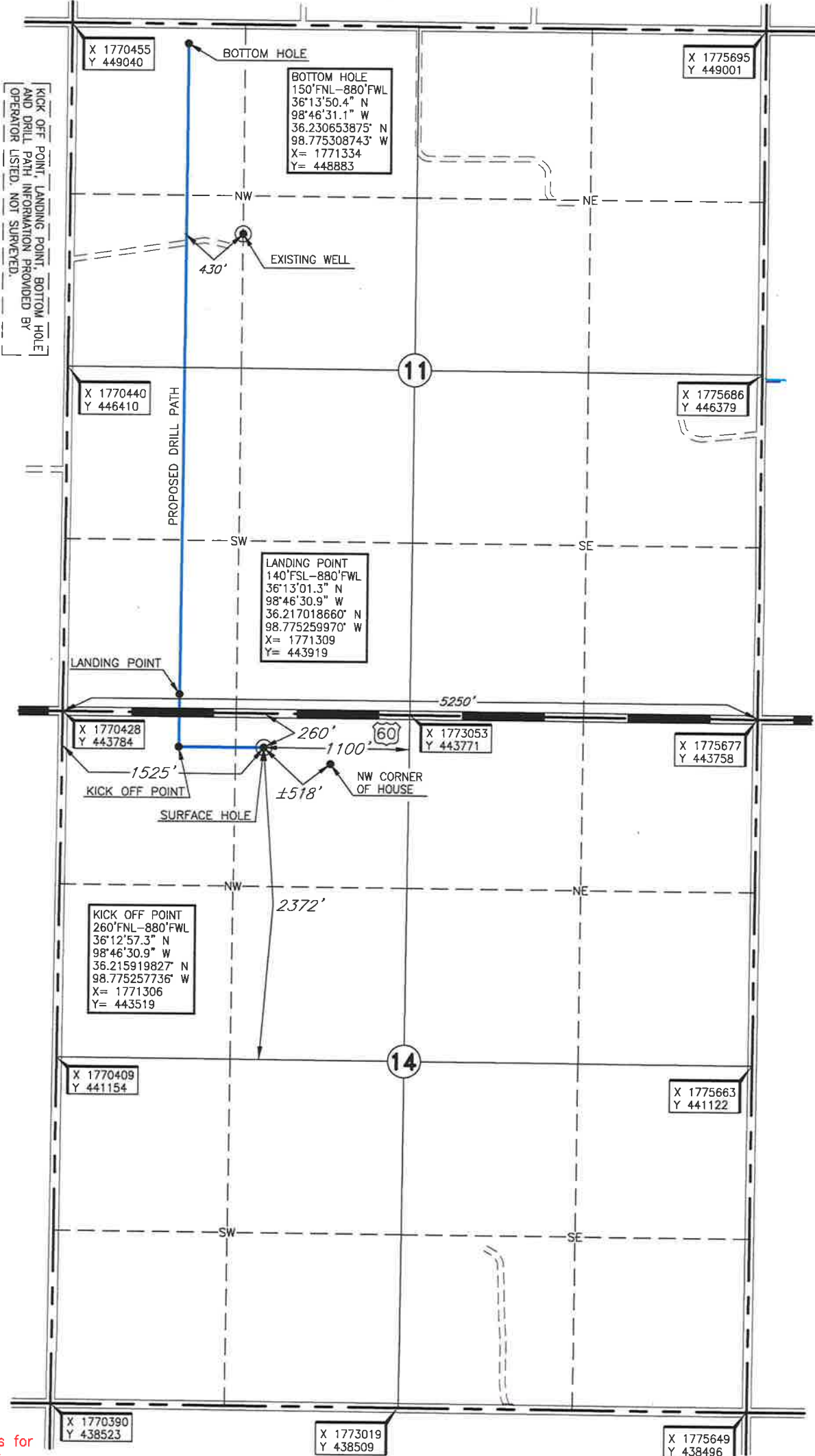
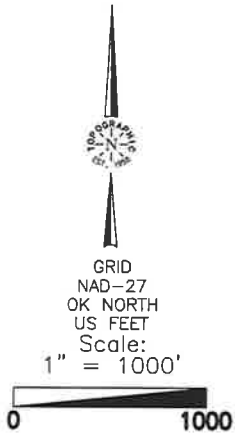
13800 WIRELESS WAY, OKLA. CITY, OKLA. 73134 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219
Certificate of Authorization No. 1293 LS

093-25156

MAJOR

County, Oklahoma

260'FNL - 1525'FWL Section 14 Township 20N Range 15W I.M.



Operator: SANDRIDGE EXPLORATION & PRODUCTION, LLC
Lease Name: COTTER 2015

Well No.: 1-11H

ELEVATION: 1783' Gr. at Stake

Topography & Vegetation Loc. fell on rolling pasture, $\pm 518'$ NW of NW Corner of a House
Good Drill Site? Yes
Best Accessibility to Location From North off US Hwy 60
Distance & Direction From Fairview, OK, go ± 18 miles West on U.S. Highway 60 to the Northwest Corner of Section 14-T20N-R15W.

NOTE:

The information shown herein is for construction purposes ONLY.

Revision ☒ B

Date of Drawing: Oct. 03, 2018

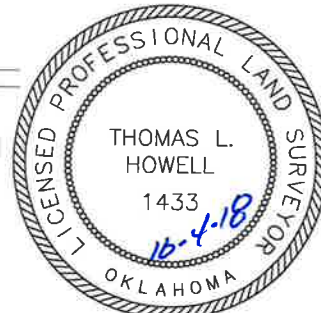
Invoice # 296947

Date Staked: June 22, 2018 JP

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°12'57.3" N
LONG: 98°46'23.1" W
LAT: 36.215925627° N
LONG: 98.773071861° W
STATE PLANE COORDINATES (US FEET):
ZONE: OK NORTH
X: 1771951
Y: 443516

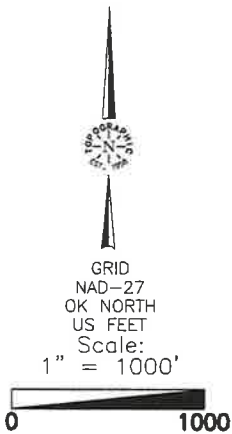
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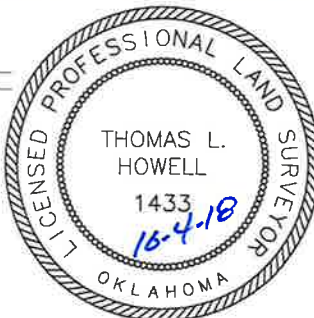
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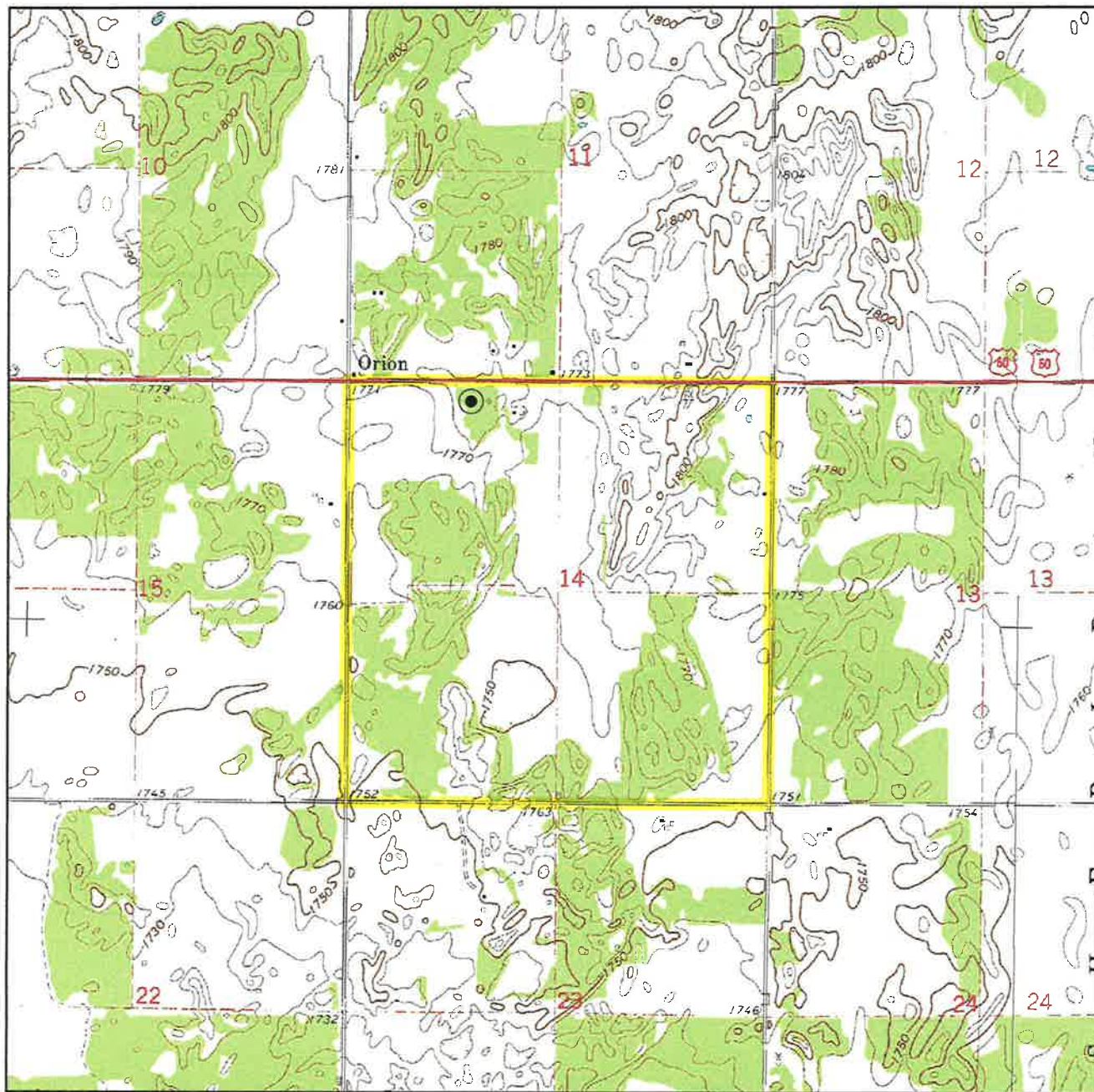
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TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

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. 14 Twp. 20N Rng. 15W IM

County MAJOR State OK

Operator SANDRIDGE EXPLORATION & PRODUCTION, LLC

Description 260'FNL - 1525'FWL

Lease COTTER 2015 1-11H

Elevation 1783' 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.



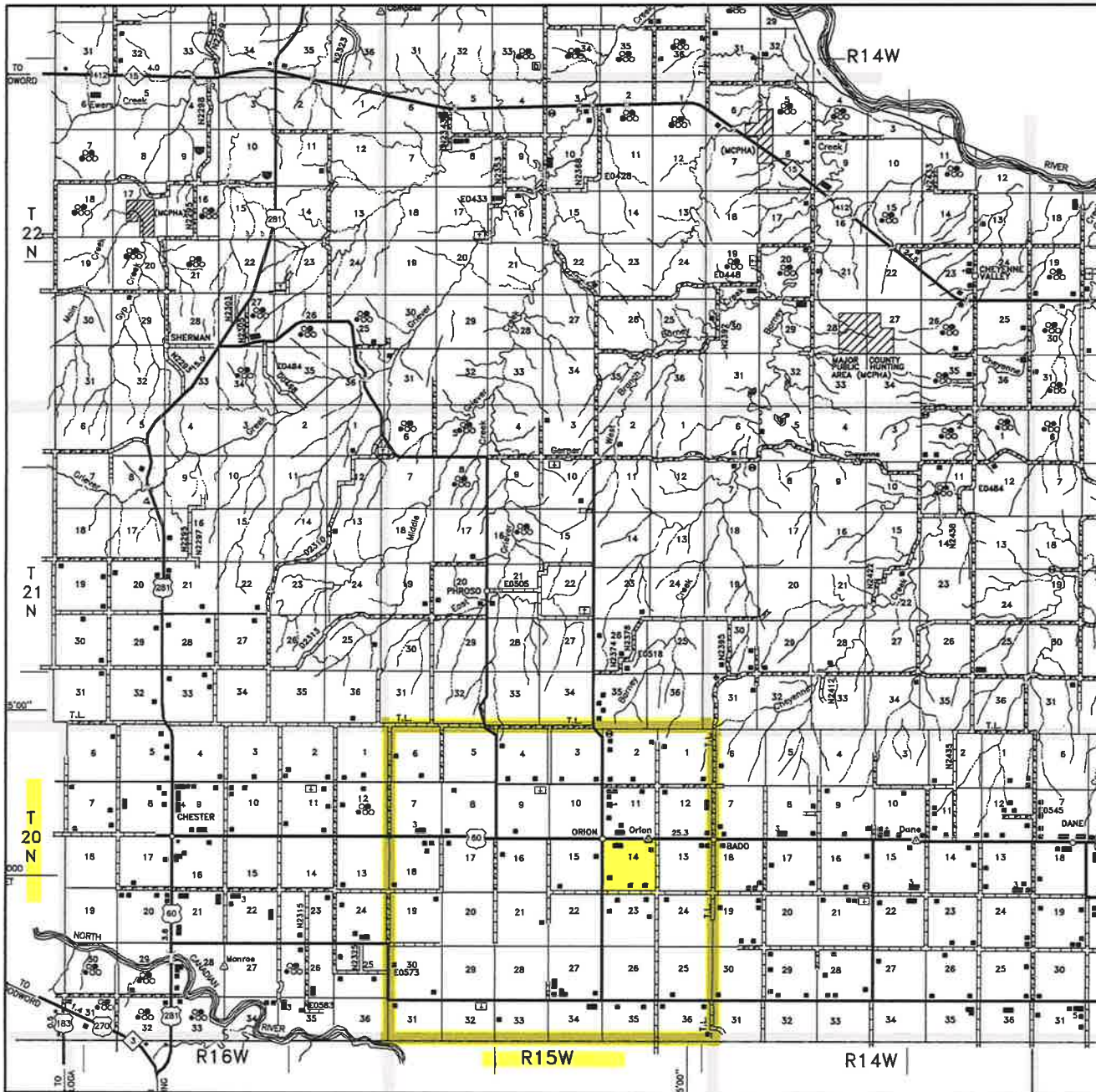
LAND SURVEYORS OF OKLAHOMA

JUNE 22, 2018

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

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VICINITY MAP



Scale: 1" = 3 Miles

Sec. 14 Twp. 20N Rng. 15W IM

County MAJOR State OK

Operator SANDRIDGE EXPLORATION & PRODUCTION, LLC



LAND SURVEYORS OF OKLAHOMA