

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

API NUMBER: 093 25125

Approval Date: 02/06/2018

Expiration Date: 08/06/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

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

County: MAJOR

SPOT LOCATION:

SE

SW

SE

SW

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 280 1720

Lease Name: KASPER 2015

Well No: 3-28H

Well will be 280 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

THE UNWIN FAMILY TRUST
861 COUNTY ROAD R
PLAINVIEW TX 79072

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

	Name	Depth	Name	Depth
1	MERAMEC	9290	6	
2			7	
3			8	
4			9	
5			10	

Spacing Orders: 132765

Location Exception Orders:

Increased Density Orders: 666888

Pending CD Numbers: 201800196

Special Orders:

Total Depth: 13927

Ground Elevation: 1704

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 380

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 28 Twp 20N Rge 15W County MAJOR

Spot Location of End Point: N2 N2 NE NW

Feet From: NORTH 1/4 Section Line: 150

Feet From: WEST 1/4 Section Line: 1980

Depth of Deviation: 8897

Radius of Turn: 750

Direction: 5

Total Length: 3852

Measured Total Depth: 13927

True Vertical Depth: 9290

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

Notes:

Category

Description

DEEP SURFACE CASING

1/18/2018 - 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

1/18/2018 - 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 - 666888

1/24/2018 - G75 - 28-20N-15W
X132765 MRMCM, OTHER
5 WELLS
SANDRIDGE EXPLOR. & PROD., L.L.C.
8-11-2017

INTERMEDIATE CASING

1/18/2018 - 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

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

093 25125 KASPER 2015 3-28H

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
MEMO	1/18/2018 - G71 - PIT 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST; PIT 2 - OBM TO VENDOR, OBM CUTTINGS PER DISTRICT
PENDING CD - 201800196	1/24/2018 - G75 - (I.O.) 28-20N-15W X132765 MPMC COMPL. INT. NCT 150' FSL, NCT 150' FNL, NCT 1320' FWL NO OP. NAMED REC 2-5-2018 (NORRIS)
SPACING - 132765	1/23/2018 - G75 - (640) 28-20N-15W EST OTHER EXT OTHER EXT 128899 MPMC, OTHERS

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

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

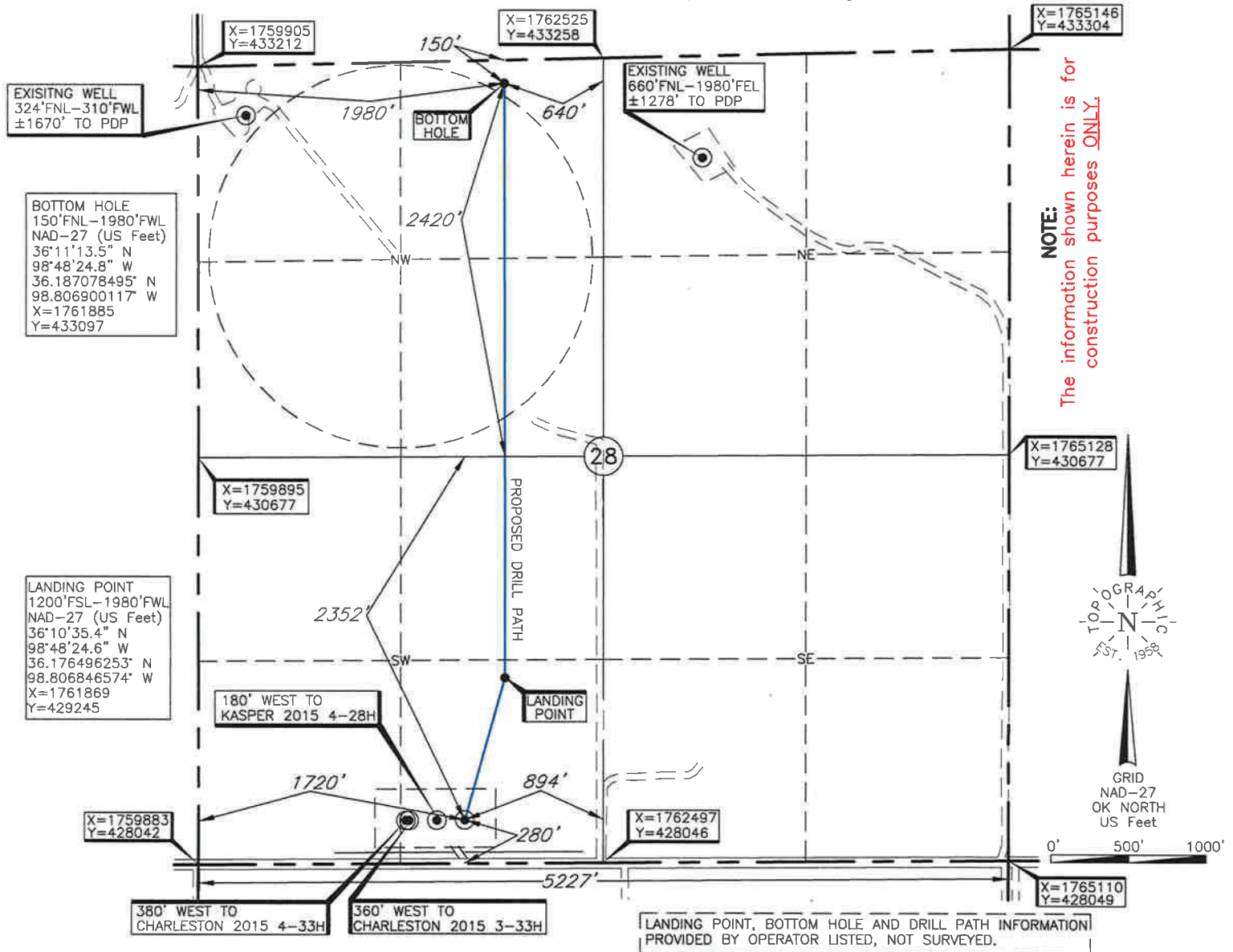
Certificate of Authorization No. 1293 LS

MAJOR

County, Oklahoma

API 093-25125

280'FSL - 1720'FWL Section 28 Township 20N Range 15W I.M.



Operator: SANDRIDGE EXPLORATION & PRODUCTION, LLC

Lease Name: KASPER 2015

Well No.: 3-28H

ELEVATION:

1704' Gr. at Stake

Topography & Vegetation Loc. fell in rolling pasture, ±204' North of E-W 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 Seiling, OK, go ±2.5 mi. North on US Hwy. 281 towards Chester, OK, then ±4.0 mi.

East on county road, then ±1.0 mi. South, then ±2.0 mi. East to the SW Cor. of Sec. 28-T20N-R15W

Date of Drawing: Jan. 02, 2018

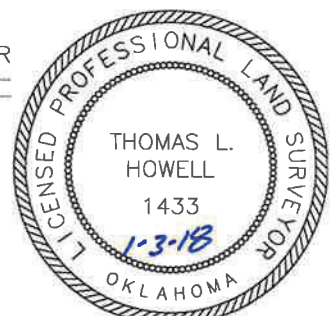
Invoice # 286420B Date Staked: Dec. 28, 2017

TR

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°10'26.3"N
LONG: 98°48'27.8"W
LAT: 36.173962041° N
LONG: 98.807716701° W
STATE PLANE
COORDINATES: (US Feet)
ZONE: OK NORTH
X: 1761604
Y: 428325

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