API NUMBER: 087 22282

Oil & Gas

Straight Hole

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

Approval Date:	12/03/2019
Expiration Date:	06/03/2021

PERMIT TO DRILL

WELL LOCATION SPOT LOCATION Lease Name: Operator Name:	i: NE NW NW	Rge: 3W NE FEET FRO SECTION	County: MCC OM QUARTER: FROM LINES: Well No:	SOUTH FROM 2640 1-27 Telephone:	440	Well will be	440 feet from nearest OTC/OCC Number:	unit or lease boundary.
110 N R	O OIL COMPANY OBINSON AVE STE 400 OMA CITY,) OK 73102	2-9022		20	TATE OF OKLAHOM 04 N ROBINSON, SU KLAHOMA CITY	JITE 900	102
Formation(s	e) (Permit Valid for Lis Name	ted Formation	s Only): Depth		1	Name	Depth	
1	DEESE		7400		6			
2	WOODFORD		7665		7			
3	HUNTON		7725		8			
4	VIOLA		8300		9			
5	SIMPSON		8835		10			
Spacing Orders:	683979		Location Exception	Orders:		Incre	eased Density Orders:	
Pending CD Nun	nbers:					Spec	cial Orders:	
Total Depth:	9400 Ground Elev	ration: 1017	Surface	Casing: 500)	Depth	to base of Treatable Water-B	Bearing FM: 310
Under Federa	I Jurisdiction: No		Fresh Water	Supply Well Drill	ed: No		Surface Water use	ed to Drill: Yes

Approved Method for disposal of Drilling Fluids:

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

H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

Is depth to top of ground water greater than 10ft below base of pit? Y

Type of Mud System: WATER BASED

Chlorides Max: 5000 Average: 3000

Within 1 mile of municipal water well? N

Pit is located in a Hydrologically Sensitive Area.

Type of Pit System: CLOSED Closed System Means Steel Pits

Category of Pit: C

Wellhead Protection Area?

PIT 1 INFORMATION

Liner not required for Category: C

Pit Location is BED AQUIFER

Pit Location Formation: PURCELL

Notes:

PERMIT NO: 19-37094

Category Description

HYDRAULIC FRACTURING 11/27/2019 - 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

SPACING - 683979 11/27/2019 - GB6 - (60) S2 SW4 SE4 22 AND NW4 NE4 27 -5N-3W

(20) N2 SW4 SE4 22-5N-3W LD (NE4 SW4 SE4)

(40) SW4 NE4 27-5N-3W

VAC 38065 DSNLY, SPSDS IN SW4 SE4 22-5N-3W

VAC 39522 HNTN IN SW4 SE4 22-5N-3W VAC 308354 OLCK, MCLS IN W2 NE4 27-5N-3W

VAC 421584 HRTNL, WDFD, HNTN, VIOL, SDLBR IN NW4 NE4 27-5N-3W

EST DEESS, WDFD, HNTN, VIOL, SMPS

WATERSHED STRUCTURE 11/27/2019 - G71 - WELL WITHIN 1/2 MILE OF AN OKLAHOMA CONSERVATION COMMISSION

WATERSHED STRUCTURE. CONTACT THE LOCAL CONSERVATION DISTRICT OFFICE AT (405)

527-3452 PRIOR TO DRILLING

1200

OKLAHOM

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA 13800 Wireless Way, Okla. City, OK. 73134 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219 Certificate of Authorization No. 1293 LS **MCCLAIN** _ County, Oklahoma 0'FNL - 2203'FEL __ Section ____27 __ Township ___5N __ Range __3W _I.M. Н X 2151689 Y 564778 X 2149046 Y 564764 2203 DHE (2640') GRID DHE OK SOUTH US FEET Scale: = 1000' X 2151700 Y 562141 1000' NOTES: Distances shown in (parenthesis) are calculated based upon the Quarter Section being 2640 feet, those shown in [brackets] are based on GLO (General Land Office) distances and have NOT been measured on the ground. • THE INFORMATION SHOWN HEREIN IS FOR CONSTRUCTION PURPOSES ONLY Operator: OKLAND OIL COMPANY **ELEVATION:** Well No.: __1-27 Lease Name: RAY 1017' Gr. at Stake Topography & Vegetation Loc. fell in slopping pasture with scattered trees Reference Stakes or Alternate Location Yes Good Drill Site? __ Stakes Set _ None From NW corner of Sec. 27 on trail road Best Accessibility to Location _ Distance & Direction from Hwy Jct or Town From Jct. St. Hwy. 59 and Santa Fe. Ave. East of Payne, OK, go ±1.0 mi. South on H JESSIONA Santa Fe. Ave., then ±0.3 mi. East to fence, then ±0.3 mi. across pasture the loc. in the NE/4 of Sec. 27-T5N-R3W WOFESSIONAL Quarter Revision X A Nov. 26, 2019 Date of Drawing: _ DATUM: <u>NAD-27</u> LAT: <u>34°53'03.3"N</u> Project # 131518 Date Staked: Nov. 22, 2019 LONG: 97'30'05.6"W **CERTIFICATE:** LAT: 34.884240300° N DAN W. ROGERS _an Oklahoma Licensed Land LONG: 97.501567603° W Surveyor and an authorized agent of Topographic Land **ROGERS**

Surveyors of Oklahoma, do hereby certify to the

information shown herein

Oklahoma Lic. No.

STATE PLANE

COORDINATES: (US Feet)

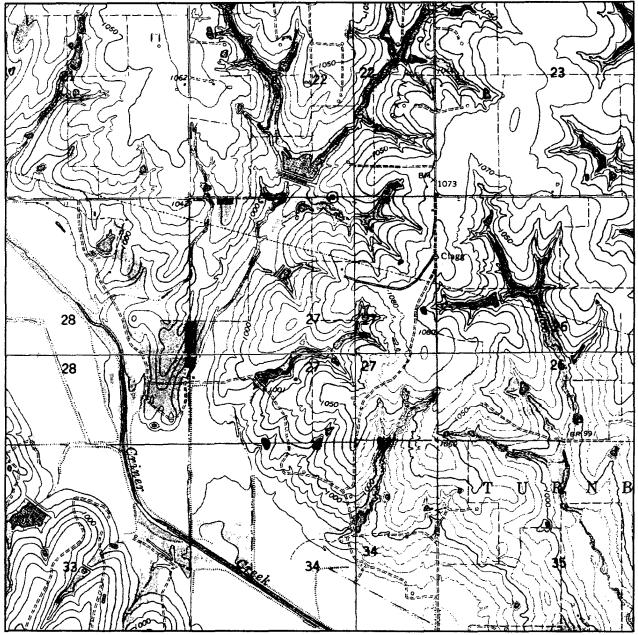
ZONE: OK SOUTH 2149486

564766

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

Surveying and Mapping for the Energy Industry
13800 Wireless Way, Okia. City, OK. 73134 www.topographic.com
Telephone Numbers: Local (405) 843-4847 Toll Free (800) 654-3219

LOCATION & ELEVATION VERIFICATION MAP



Sec. 27 Twp. 5N Rng. 3W IM

County MCCLAIN State OK

Operator OKLAND OIL COMPANY

Description 0'FNL - 2203'FEL

Lease RAY 1-27

Elevation____1017' 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.

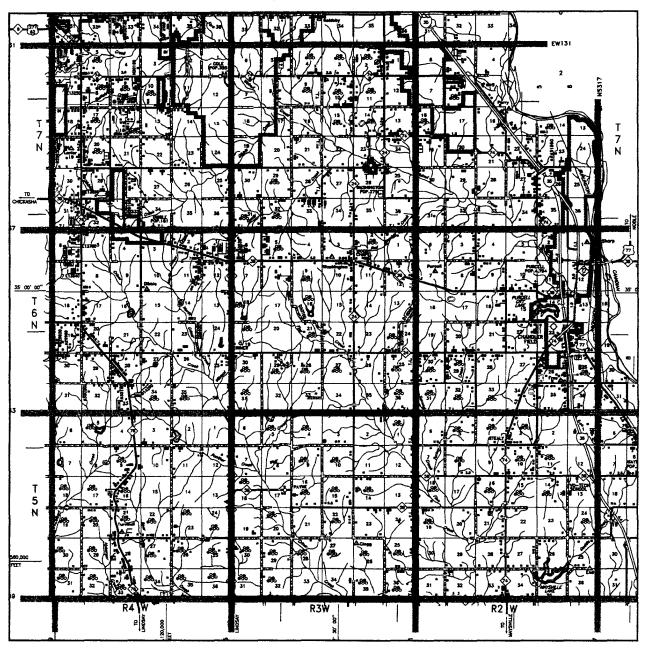


LAND SURVEYORS OF OKLAHOMA

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VICINITY MAP



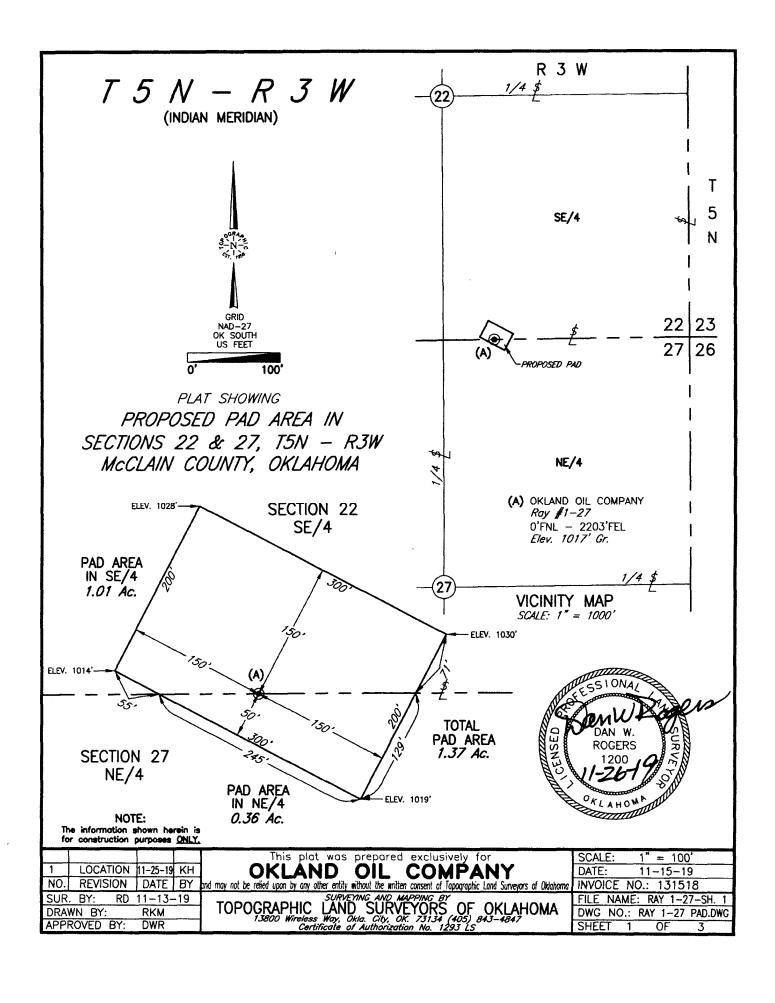
Scale: 1'' = 3 Miles

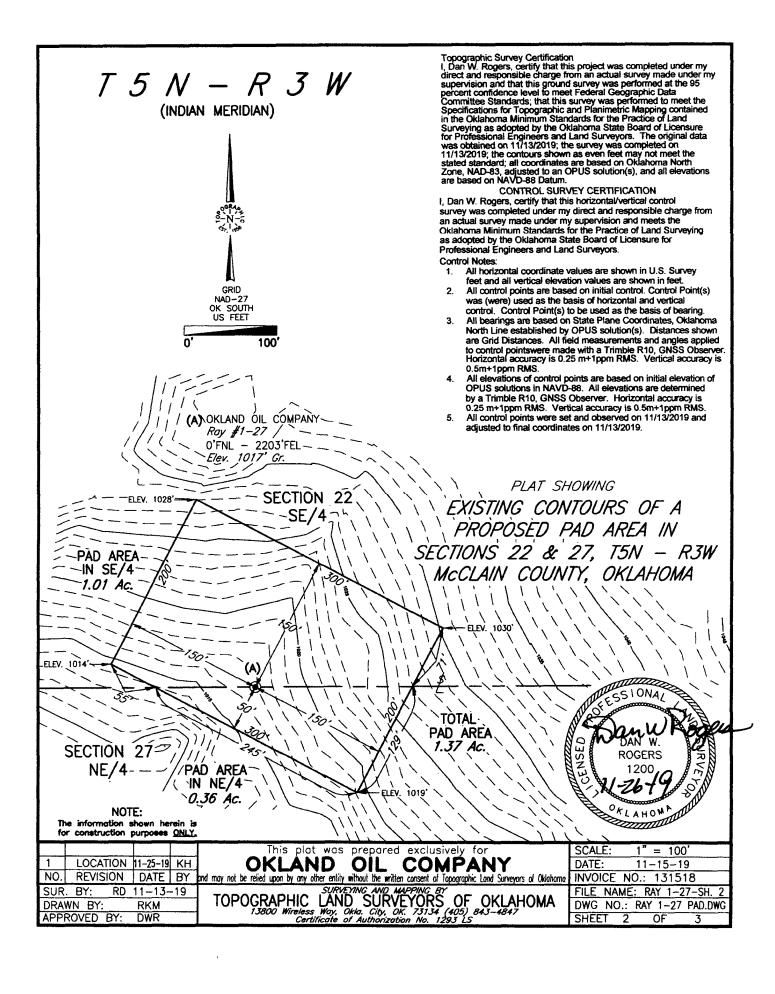
OGRAN

1998

Sec	27	Twp		5N Rng	. <u> </u>	3W	 IM
County_		MCCLAIN	<u> </u>	State_		OK	
Operator		OKLAND	Oll	COMPANY			







15 N - R 3 W (INDIAN MERIDIAN)



PAD REPORT

TOP OF PAD ELEVATION: 1021.0250 CUT SLOPE: 33.33% 3.000:1 18.43* FILL SLOPE: 33.33% 3.000:1 18.43* BALANCE TOLERANCE (C.Y.): 0.00 CUT SWELL FACTOR: 1.00 FILL SHRINK FACTOR: 1.00

PAD EARTHWORK VOLUMES CUT: 115,433.1 C.F., 4,275.30 C.Y. FILL: 115,433.1 C.F., 4,275.30 C.Y. AREA: 78609.1 SQ.FT., 1.805 ACRES

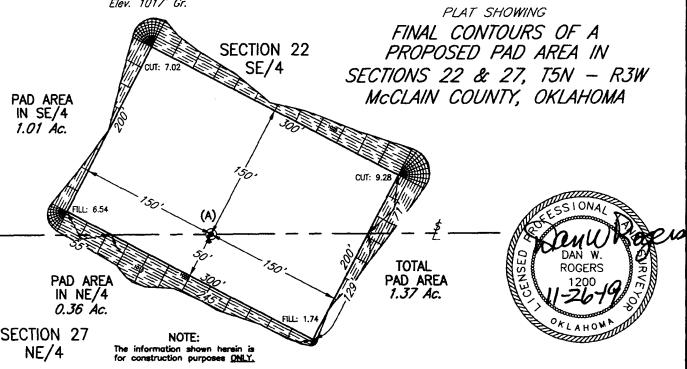
(A) OKLAND OIL COMPANY Ray #1-27 0'FNL - 2203'FEL Elev. 1017' Gr.

Topographic Survey Certification
I, Dan W. Rogers, certify that this project was completed under my direct and responsible charge from an actual survey made under my supervision and that this ground survey was performed at the 95 percent confidence level to meet Federal Geographic Data Committee Standards; that this survey was performed to meet the Specifications for Topographic and Planimetric Mapping contained in the Oklahoma Minimum Standards for the Practice of Land Surveying as adopted by the Oklahoma State Board of Licensure for Professional Engineers and Land Surveyors. The original data was obtained on 11/13/2019; the survey was completed on 11/13/2019; the survey was completed on 11/13/2019; the original data was obtained on 11/13/2019; the survey was completed on 11/13/2019; the Original Surveyors. The original data was obtained on 11/13/2019; the survey was completed on 11/13/2019; the Survey was compl

CONTROL SURVEY CERTIFICATION I, Dan W. Rogers, certify that this horizontal/vertical control survey was completed under my direct and responsible charge from an actual survey made under my supervision and meets the Oklahoma Minimum Standards for the Practice of Land Surveying as adopted by the Oklahoma State Board of Licensure for Professional Engineers and Land Surveyors.

Control Notes:

- All horizontal coordinate values are shown in U.S. Survey
- feet and all vertical elevation values are shown in feet.
 All control points are based on initial control. Control Point(s) was (were) used as the basis of horizontal and vertical control. Control Point(s) to be used as the basis of bearing.
- All bearings are based on State Plane Coordinates, Oklahoma North Line established by OPUS solution(s). Distances shown are Grid Distances. All field measurements and angles applied to control pointswere made with a Trimble R10, GNSS Observer. Horizontal accuracy is 0.25 m+1ppm RMS. Vertical accuracy is 0.5m+1ppm RMS.
- All elevations of control points are based on initial elevation of OPUS solutions in NAVD-88. All elevations are determined by a Trimble R10, GNSS Observer. Horizontal accuracy is 0.25 m+1ppm RMS. Vertical accuracy is 0.5m+1ppm RMS.
- All control points were set and observed on 11/13/2019 and adjusted to final coordinates on 11/13/2019.



			This plat was prepared exclusively for	SCALE: 1" = 100'
1	LOCATION	11-25-19 K	OKLAND OIL COMPANY	DATE: 11-15-19
NO	D. REVISION	DATE B	Y and may not be relied upon by any other entity without the written consent at Topographic Land Surveyors of Oklahoma	INVOICE NO.: 131518
DR	AWN BY:	11-13-19 RKM	TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA I	FILE NAME: RAY 1-27-SH. 3 DWG NO.: RAY 1-27 PAD.DWG
ΑP	PROVED BY:	DWR	— 13800 Wireless Way, Okla. City, OK. 73134 (405) 843-4847 Certificate of Authorization No. 1293 LS	SHEET 3 OF 3