API NUMBER: 125 23931

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)

11/13/2017 Approval Date: Expiration Date 05/13/2018

			PERMIT TO DRIL	<u>L</u>		
WELL LOCATION		Rge: 2E County: POT SE FEET FROM QUARTER: FROM SECTION LINES:	TAWATOMIE SOUTH FROM EA 550 169			
Lease Name:	CLEO	Well No:	1	Well will	be 165 feet from nearest unit or lease b	oundary.
Operator Name:	LIBERTY OPERATING	INC	Telephone: 40532	96200	OTC/OCC Number: 15227 0	
LIBERTY OPERATING INC 1827 ATCHISON DR NORMAN, OK 73069-8225				WILLFORD & ALMA HOPPER, ET AL 24944 PATTERSON ROAD TECUMSEH OK 74873		
Formation(s	s) (Permit Valid for L Name	Listed Formations Only):		Name	Depth	
4		•	6		•	
1 2	EARLSBORO BARTLESVILLE	4856 5000	6 7	1ST WILCOX 2ND WILCOX	5680 5720	
3	MISENER-HUNTON	5090	8	MCLISH	5950	
4	VIOLA	5400	9	OIL CREEK	6170	
5	SIMPSON DOLOMITE	5524	10		33	
Spacing Orders:	243689	Location Exception	n Orders:		Increased Density Orders:	

Pending CD Numbers: 201706334 Special Orders:

Total Depth: 6300 Ground Elevation: 1092 Surface Casing: 410 Depth to base of Treatable Water-Bearing FM: 360

Under Federal Jurisdiction: No Fresh Water Supply Well Drilled: No Surface Water used to Drill: No

Approved Method for disposal of Drilling Fluids: PIT 1 INFORMATION

Type of Pit System: ON SITE A. Evaporation/dewater and backfilling of reserve pit.

Type of Mud System: WATER BASED

H. MIN. SOIL COMPACTED PIT, NOTIFY DISTRICT PRIOR TO TESTING SOIL PIT LINER 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?

Chlorides Max: 8000 Average: 5000

is located in a Hydrologically Sensitive Area.

Category of Pit: 1B Liner required for Category: 1B Pit Location is BED AQUIFER Pit Location Formation: WELLINGTON

Notes:

Category Description

HYDRAULIC FRACTURING 10/18/2017 - G57 - 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

PENDING CD - 201706334 11/13/2017 - G57 - (80) E2 SE4 33-9N-7W SU

X243689 ERLB, BRVL, MSHR, VIOL, SMPSD, WLCX2 X669850 WLCX1, MCLS, OLCK

NCT 500' FSL. NCT 165' FEL

NO OP. NAMED

REC 10/11/17 (THOMAS)

SPACING - 243689 11/13/2017 - G57 - (80) E2 33-9N-2E SU NE/SW

EST ERLB, BRVL, SMPSD EXT 145545 MSRH, VIOL, WLCX2

SPACING - 669850 11/13/2017 - G57 - (80) SE4 33-9N-2E SU NE/SW

EXT 598064 WLCX1 EST MCLS, OLCK

SURFACE LOCATION 11/13/2017 - G57 - 550' FSL. 165' FEL SE4 33-9N-2E PER STAKING PLAT

API 125 23931

POTTAWATOMIE __ County, Oklahoma 550'FSL-165'FEL for Section 33 Township <u>9N Range 2E I.M.</u> information shown herein is construction purposes ONLY. information shown herein 2269617 686838 X= 2272275 Y= 686862 0 The X= 2269667 Y= 684223 22723 68423 GRID 0 OK SOUTH US Feet 500" 1000 165 Township Line P 19N - R2E 18N - R2E 2nd Standard Parallel North Operator: LIBERTY OPERATING **ELEVATION:** Lease Name: CLEO Well No .: 1092' Gr. at Stake Topography & Vegetation Loc. fell in brush, ±105' South of E-W fence Reference Stakes or Alternate Location Good Drill Site? ____ Yes Stakes Set __ Best Accessibility to Location From East off county road Distance & Direction From Pink, OK, go ±0.5 mile East on St. Hwy. 9, then ±4 miles from Hwy Jct or Town South, then ±1 mile East to the SE Cor. of Sec. 33-T9N-R2E Date of Drawing: Sept. 15, 2017 DATUM: NAD-27 Invoice # 281053 Date Staked: Sept. 13, 2017 ESSIONAL TR OROK OROK LAT: 35°12'15.9"N LONG: 97°05'20.4"W **CERTIFICATE:** LAT: __35.204429654°N CENSED Thomas L. Howell SURVE THOMAS L. _an Oklahoma Licensed Land LONG: 97.088997440°W Surveyor and an authorized agent of Topographic Land HOWELL Surveyors of Oklahoma, do hereby certify to the STATE PLANE COORDINATES: (US Feet) 1433 information shown herein This pered ZONE: OK SOUTH 2272167 X: OKLAHOMP 682161 Oklahoma Lic. No. ___