API NUMBER: 117 23700 Α **OKLAHOMA CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION** P.O. BOX 52000 **OKLAHOMA CITY, OK 73152-2000** (Rule 165:10-3-1)

Approval Date:	12/26/2018
Expiration Date:	06/26/2020

Straight Hole Oil & Gas

Amend reason: ADD FORMATION; CHANGE TOTAL DEPTH

AMEND PERMIT TO DRILL

WELL LOCATION:	Sec: 2	20 Twp:	21N	Rge:	8E	County	PAWI	NEE		
SPOT LOCATION:	NW	NW N	W	NE		FEET FROM QUARTER:	FROM	NORTH	FROM	WEST
						SECTION LINES:		140		290
Lease Name: D	L MURPH	IY				We	II No:	27		

MID-CON ENERGY OPERATING LLC Operator Name:

Telephone: 9187437575; 9187437

OTC/OCC Number: 23271 0

Well will be 2350 feet from nearest unit or lease boundary.

MID-CON ENERGY OPERATING LLC 2431 E 61ST ST STE 850

TULSA. 74136-1236 OK

JEFF & ANN OLMSTEAD 2431 E. 61ST ST., STE, 850

Approved Method for disposal of Drilling Fluids:

A. Evaporation/dewater and backfilling of reserve pit.

TULSA OK 74136

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

	Name	Depth		Name		Depth
1	LAYTON	1200	6	BARTLESVILLE		2250
2	CHECKERBOARD	1500	7			
3	CLEVELAND	1600	8			
4	BIG LIME	1900	9			
5	OSWEGO	1950	10			
Spacing Orders:	609199	Location Exception Orders:			Increased Density Or	ders:

Pending CD Numbers: Special Orders:

Total Depth: 2400 Ground Elevation: 812 Depth to base of Treatable Water-Bearing FM: 250 Surface Casing: 300

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

PIT 1 INFORMATION Type of Pit System: ON SITE Type of Mud System: WATER BASED Chlorides Max: 5000 Average: 3000

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?

is located in a Hydrologically Sensitive Area.

Category of Pit: 2

Liner not required for Category: 2 Pit Location is BED AQUIFER Pit Location Formation:

Notes:

Category Description

HYDRAULIC FRACTURING 12/16/2018 - 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

SPACING - 609199 2/7/2019 - G75 - (UNIT) S2 17 & 20-21N-8E

EST CLEVELAND FIELD UNIT TOP CGGV TO BASE ABCK