API NUMBER: 051 24230

Oil & Gas

Horizontal Hole

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

Approval Date: 12/01/2017
Expiration Date: 06/01/2018

PERMIT TO DRILL

WELL LOCATION:	Sec:	36	Twp:	10N	Rge:	7W	County	r: GRA	DY		
SPOT LOCATION:	SE	SW	S	W	SE		FEET FROM QUARTER:	FROM	SOUTH	FROM	EAST
							SECTION LINES:		250		2285
Lease Name: E	BERGIN						We	ell No:	2H-36		

Well will be 250 feet from nearest unit or lease boundary.

Operator GAEDEKE OIL & GAS OPERATING LLC Telephone: 2142733339 OTC/OCC Number: 22637 0

GAEDEKE OIL & GAS OPERATING LLC 3710 RAWLINS ST STE 1000

DALLAS, TX 75219-6409

WAYNE BERGIN

128 COUNTY RD

TUTTLE

OK 73089

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	10631	6	
2			7	
3			8	
4			9	
5			10	
Spacing Orders:	658731	Location Exception Orders:	201707209	Increased Density Orders:
Spacing Orders:	000731	Location Exception Orders:	201707209 	Increased Density Orders:

Pending CD Numbers: Special Orders:

Total Depth: 15756 Ground Elevation: 1321 Surface Casing: 1200 Depth to base of Treatable Water-Bearing FM: 260

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

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

Chlorides Max: 3500 Average: 1000

H. SEE MEMO

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

Weilliead Flotection Area?

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

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PERMIT NO: 17-33328

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

Weinlead Froteotion / trod.

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 36 Twp 10N Rge 7W County GRADY Spot Location of End Point: N2 N2 N2 NF Feet From: NORTH 1/4 Section Line: 245 EAST Feet From: 1/4 Section Line: 1320

Depth of Deviation: 10462 Radius of Turn: 515

Direction: 11

Total Length: 4485

Measured Total Depth: 15756

True Vertical Depth: 11200

End Point Location from Lease,
Unit, or Property Line: 85

Notes:

Category Description

DEEP SURFACE CASING 11/20/2017 - 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 11/20/2017 - 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

LOCATION EXCEPTION - 201707209 12/1/2017 - G58 - (I.O.) 36-10N-7W

X658731 MSSP

SHL NCT 250' FSL, NCT 2285' FEL

COMPL. INT. NCT 165' FSL, NCT 165' FNL, NCT 1250' FEL

NO OP. NAMED

REC 11/28/2017 (MINMIER)

MEMO 11/20/2017 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2

- OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

Category Description

SPACING - 658731 12/1/2017 - G58 - (640)(HOR) 36-10N-7

12/1/2017 - G58 - (640)(HOR) 36-10N-7W VAC 107705 CSTR VAC 599336 MSSLM EST MSSP

POE TO BHL NCT 660' FB

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.

