PI NUMBER: 051 24243 vrizontal Hole Oil & Gas	OKLAHOMA CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION P.O. BOX 52000 OKLAHOMA CITY, OK 73152-2000 (Rule 165:10-3-1)			Approval Date: Expiration Date:	01/04/2018 07/04/2018
	<u>P</u>	ERMIT TO DRILL			
WELL LOCATION: Sec: 20 Twp: 9N Rge: 7W	County: GRADY				
SPOT LOCATION: SW SE SE SW	FEET FROM QUARTER: FROM SO	OUTH FROM WEST			
	SECTION LINES: 24	7 2023			
Lease Name: KUHLMAN	Well No: 1	H-20	Well will be 247	feet from neares	st unit or lease boundary.
Operator GAEDEKE OIL & GAS OPERATING Name:	LLC	Telephone: 2142733339	отс	C/OCC Number:	22637 0
GAEDEKE OIL & GAS OPERATING LLC 3710 RAWLINS ST STE 1000	;		KEITH KUHLMAN & I AST PARKLAND DR	-	MAN
DALLAS, TX	75219-6409	YUKC	N	OK 7;	3099
Name       1     WOODFORD       2     3       4     5	Depth 12661	<b>Name</b> 6 7 8 9 10		Depth	1
Spacing Orders: No Spacing	Location Exception Or	ders:	Increase	ed Density Orders:	
Pending CD Numbers: 201707515			Special	Orders:	
Total Depth: 17488 Ground Elevation: 119	6 Surface Ca	using: 1200	Depth to bas	e of Treatable Water	-Bearing FM: 590
Under Federal Jurisdiction: No	Fresh Water Su	upply Well Drilled: No		Surface Water used to Drill: Yes	
PIT 1 INFORMATION		Approved Metho	d for disposal of Drilling Flui	ds:	
Type of Pit System: CLOSED Closed System Means St Type of Mud System: WATER BASED	eel Pits	D. One time lan	d application (REQUIRES	SPERMIT)	PERMIT NO: 17-33331
Chlorides Max: 3500 Average: 1000		H. SEE MEMO			
Is depth to top of ground water greater than 10ft below bas	e of pit? Y				
Within 1 mile of municipal water well? N					
Wellhead Protection Area? N					
Pit is not located in a Hydrologically Sensitive Area.					
Category of Pit: C					
Liner not required for Category: C					
Pit Location is NON HSA					
Pit Location Formation: DOG CREEK					

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 not located in a Hydrologically Sensitive Area. Category of Pit: C Liner not required for Category: C

Pit Location is NON HSA
Pit Location Formation: DOG CREEK

## HORIZONTAL HOLE 1

Sec 20	Twp	9N	Rge	7W	v c	ounty	GRADY
Spot Location	n of En	d Point:	N2	2	NW	NE	NW
Feet From:	NOF	RTH 1	I/4 Se	ctior	n Line:	85	
Feet From:	WE	ST <sup>7</sup>	1/4 Se	ctior	n Line:	16	50
Depth of Deviation: 12129							
Radius of Turn: 573							
Direction: 355							
Total Length: 4459							
Measured Total Depth: 17488							
True Vertical Depth: 12661							
End Point Location from Lease,							
Unit, or Property Line: 85							

Notes:	
Category	Description
COMPLETION INTERVAL	1/4/2018 - G75 - COMPLETION INTERVAL FOR WOODFORD WILL BE GREATER THAN 165' FNL AND FSL, GREATER THAN 330' FEL AND FWL PER OPERATOR
DEEP SURFACE CASING	1/3/2018 - 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	1/3/2018 - 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
MEMO	1/3/2018 - G71 - PIT 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST; PIT 2 - OBM TO VENDOR, OBM CUTTINGS PER DISTRICT

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. 051 24243 KUHLMAN 1H-20

PENDING CD - 201707515

Description

1/4/2018 - G75 - (640)(HOR) 20-9N-7W VAC OTHERS EXT 663532 WDFD, OTHERS POE TO BHL NCT 165' FNL & FSL, NCT 330' FEL & FWL REC 11-28-2017 (MINMIER)

API 051-24243

