PI NUMBER: 017 25384 vrizontal Hole Oil & Gas ulti Unit	OIL & GAS (F OKLAHOI	CORPORATION CO CONSERVATION D P.O. BOX 52000 MA CITY, OK 7315 Rule 165:10-3-1)	IVISION	Approval Date: Expiration Date:	02/04/2019 08/04/2020
	Р	ERMIT TO DRILL			
	<u>-</u>				
WELL LOCATION: Sec: 32 Twp: 11N Rge: 8W	County: CANAD	IAN			
SPOT LOCATION: SW NE NE NW F	FEET FROM QUARTER: FROM	ORTH FROM WEST			
	SECTION LINES: 34	45 2245			
Lease Name: MIDDLEGROUND 32-5-11-8		WXH	Well will be	345 feet from near	est unit or lease boundary.
Operator ROAN RESOURCES LLC Name:		Telephone: 40589684	53	OTC/OCC Number:	24127 0
ROAN RESOURCES LLC 14701 HERTZ QUAIL SPRINGS PKWY			MMIE LEE & SHELI 96 CS 2790	LY R. VICKREY	
OKLAHOMA CITY, OK 7	3134-2641	M	INCO	OK	73059
Name 1 WOODFORD 2 3 3 4 5 5 Spacing Orders: 659498 Pending CD Numbers: 201810836 201810837 201810833	Depth 12364 Location Exception Or	6 7 8 9 10		Dep ncreased Density Orders:	th
201900412 Total Depth: 22924 Ground Elevation: 1303	Surface Ca	asing: 1500	Depth	to base of Treatable Wat	er-Bearing FM: 340
Under Federal Jurisdiction: No	Fresh Water St	upply Well Drilled: No		Surface Water	used to Drill: No
PIT 1 INFORMATION		Approved M	lethod for disposal of Drilli	ng Fluids:	
Type of Pit System: ON SITE			ation/dewater and backfillir	-	
Type of Mud System: WATER BASED			ation of pit contents.	-	
Chlorides Max: 5000 Average: 3000		D. One tin	ne land application (REQ		PERMIT NO: 19-3611
Is depth to top of ground water greater than 10ft below base	of pit? Y	H. SEE M			No. 10 0011
Within 1 mile of municipal water well? N Wellhead Protection Area? N Pit is located in a Hydrologically Sensitive Area.					
Wellhead Protection Area? N					
Wellhead Protection Area? N Pit is located in a Hydrologically Sensitive Area.					

PIT 2 INFORMATION Type of Pit System: ON SITE 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 located in a Hydrologically Sensitive Area. Category of Pit: 3 Liner required for Category: 3

Pit Location is ALLUVIAL Pit Location Formation: ALLUVIUM

HORIZONTAL HOLE 1

Sec	05	Twp	10N	Rge	8W	/ (County	GRADY
Spot	Locatior	of End	d Poin	t: S\	Ν	SE	SE	SW
Feet	From:	SOL	ΙΤΗ	1/4 Se	ctior	Line:	6	5
Feet	From:	WES	ST	1/4 Se	ctior	n Line:	: 2	205
Depth of Deviation: 11741								
Radius of Turn: 573								
Direction: 181								
Total Length: 10283								
Measured Total Depth: 22924								
True Vertical Depth: 12364								
End Point Location from Lease,								
Unit, or Property Line: 65								

Notes:	
Category	Description
DEEP SURFACE CASING	1/11/2019 - 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	1/11/2019 - 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
MEMO	1/11/2019 - G71 - PIT 1 & 2 - CONCRETE-LINED PIT PER OPERATOR REQUEST; PIT 2 - OBM TO VENDOR, OBM CUTTINGS PER DISTRICT
PENDING CD - 201810833	2/4/2019 - G75 - 32-11N-8W X659498 WDFD 4 WELLS NO OP. NAMED HEARING 2-5-2019

017 25384 MIDDLEGROUND 32-5-11-8 5WXH

Category	Description
PENDING CD - 201810836	2/4/2019 - G75 - (I.O.) 32-11N-8W & 5-10N-8W EST MULTIUNIT HORIZONTAL WELL X659498 WDFD 50% 32-11N-8W 50% 5-10N-8W NO OP. NAMED REC 1-22-2019 (P. PORTER)
PENDING CD - 201810837	2/4/2019 - G75 - (I.O.) 32-11N-8W & 5-10N-8W X659498 WDFD X165:10-3-28(C)(2)(B) MAY BE CLOSER THAN 600' TO EXISTING/PROPOSED WELL COMPL. INT. (32-11N-8W) NCT 150' FNL, NCT 0' FSL, NCT 1500' FWL COMPL. INT. (5-10N-8W) NCT 0' FNL, NCT 150' FSL, NCT 1500' FWL NO OP. NAMED REC 1-22-2019 (P. PORTER)
PENDING CD - 201900412	2/4/2019 - G75 - 5-10N-8W X659498 WDFD 4 WELLS NO OP. NAMED HEARING 2-5-2019
SPACING - 659498	2/4/2019 - G75 - (640)(HOR) 32-11N-8W & 5-10N-8W VAC OTHER VAC 144223 WDFD 32-11N-8W VAC 559071 WDFD 5-10N-8W EST WDFD, OTHER POE TO BHL NCT 165' FNL & FSL, NCT 330' FEL & FWL

API 017-25384

