API NUMBER: 051 24542 A orizontal Hole Oil & Gas	P.O. OKLAHOMA	NSERVATION DIVISION BOX 52000 CITY, OK 73152-2000 9 165:10-3-1)	Approval Date: Expiration Date	
rend reason: ADD FORMATION; UPDATE ORDERS		PERMIT TO DRILL		
	<u>AMEND F</u>	PERMIT TO DRILL		
SPOT LOCATION: SW SU SL SL	County: GRADY	H FROM <b>EAST</b> 1070		
Lease Name: LARRY 26-23-9-5	Well No: 5MXH	١	Well will be 220 feet from nea	rest unit or lease boundary.
Operator ROAN RESOURCES LLC Name:	Tel	ephone: 4058968453	OTC/OCC Number	24127 0
ROAN RESOURCES LLC 14701 HERTZ QUAIL SPRINGS PKWY		LARRY WAY 307 HOFFM		
OKLAHOMA CITY, OK 73	3134-2641	NORMAN	ОК	73026
1 MISSISSIPPIAN 2 WOODFORD 3 4 5 Species Orders: 653331	<b>Depth</b> 9880 9960	6 7 8 9 10		
Spacing Orders: 655130	Location Exception Orders:		Increased Density Orders	: 690546 690545
Pending CD Numbers: 201805378 201805379			Special Orders:	
Total Depth: 20440 Ground Elevation: 1328	Surface Casin	g: 430	Depth to base of Treatable Wa	ter-Bearing FM: 480
Under Federal Jurisdiction: No	Fresh Water Supply	Well Drilled: No	Surface Wate	r used to Drill: No
PIT 1 INFORMATION		Approved Method for disp	osal of Drilling Fluids:	
Type of Pit System: ON SITE Type of Mud System: WATER BASED		<ul> <li>A. Evaporation/dewater a</li> <li>B. Solidification of pit cor</li> </ul>	and backfilling of reserve pit. ntents.	
Chlorides Max: 5000 Average: 3000 Is depth to top of ground water greater than 10ft below base Within 1 mile of municipal water well? Y Wellhead Protection Area? Y	of pit? Y	D. One time land applica H. SEE MEMO	tion (REQUIRES PERMIT)	PERMIT NO: 18-3600
Pit is not located in a Hydrologically Sensitive Area. Category of Pit: 1A				
Liner required for Category: 1A				
Pit Location is NON HSA				
Fit Location is NON HSA				

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? Y Wellhead Protection Area? Y Pit is not located in a Hydrologically Sensitive Area. Category of Pit: 3 Liner required for Category: 3

Pit Location is NON HSA Pit Location Formation: CHICKASHA

## HORIZONTAL HOLE 1

Sec 23	Twp	9N	Rge	5W	County	GRADY
Spot Location	n of En	d Poir	nt: N\	N NE	NE	NW
Feet From:	NOF	RTH	1/4 Sec	ction Lin	ie: 65	5
Feet From:	WE	ST	1/4 Se	ction Lir	ne: 20	)50
Depth of Deviation: 9192						
Radius of Turn: 573						
Direction: 340						
Total Length: 10348						
Measured Total Depth: 20440						
True Vertical Depth: 9960						
End Point Location from Lease,						
Unit, or Property Line: 65						

Notes:	
Category	Description
HYDRAULIC FRACTURING	12/19/2018 - 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
INCREASED DENSITY - 690545	3/12/2019 - G75 - 23-9N-5W X655130 MSSP 1 WELL ROAN RESOURCES LLC 1-29-2019
INCREASED DENSITY - 690546	3/12/2019 - G75 - 26-9N-5W X653331 MSSP 1 WELL ROAN RESOURCS LLC 1-29-2019
МЕМО	12/19/2018 - G71 - PIT 1 & 2 - CONCRETE-LINED PIT PER OPERATOR REQUEST; PIT 2 - OBM TO VENDOR, OBM CUTTINGS PER DISTRICT

Category	Description
PENDING CD - 201805378	3/12/2019 - G75 - (E.O.) 26 & 23-9N-5W EST MULTIUNIT HORIZONTAL WELL X653331 MSSP, WDFD 26-9N-5W X655130 MSSP, WDFD 23-9N-5W (WDFD ADJACENT COMMON SOURCE OF SUPPLY TO MSSP) 50% 26-9N-5W 50% 23-9N-5W ROAN RESOURCES LLC REC 1-4-2019 (M. PORTER)
PENDING CD - 201805379	3/12/2019 - G75 - (E.O.) 26 & 23-9N-5W X653331 MSSP, WDFD 26-9N-5W X655130 MSSP, WDFD 23-9N-5W COMPL. INT. (26-9N-5W) NCT 150' FSL, NCT 0' FNL, NCT 1320' FWL COMPL. INT. (23-9N-5W) NCT 0' FSL, NCT 150' FNL, NCT 1320' FWL ROAN RESOURCES LLC REC 1-4-2019 (M. PORTER)
PUBLIC WATER SUPPLY WELL	12/19/2018 - G71 - BELLCO, 1 PWS/WPA, SW4 26-9N-5W
SPACING - 653331	3/12/2019 - G75 - (640)(HOR) 26-9N-5W EST MSSP, WDFD POE TO BHL (MSSP) NCT 660' FB POE TO BHL (WDFD) NCT 165' FNL & FSL, NCT 330' FEL & FWL
SPACING - 655130	3/12/2019 - G75 - (640)(HOR) 23-9N-5W EST MSSP, WDFD POE TO BHL (MSSP) NCT 660' FB POE TO BHL (WDFD) NCT 165' FNL & FSL, NCT 330' FEL & FWL