PI NUMBER: 051 24533	P.(ONSERVATION D O. BOX 52000		Approval Date		
rizontal Hole Oil & Gas Iti Unit	OKLAHOMA CITY, OK 73152-2000 (Rule 165:10-3-1)			Expiration Da	te: 06/14/2020	
	PE	RMIT TO DRILL				
WELL LOCATION: Sec: 31 Twp: 9N Rge: 6W	County: GRADY					
	FEET FROM QUARTER: FROM SOL SECTION LINES: 160	ITH FROM EAST 460				
Lease Name: NITA FAY 31-30-9-6	Well No: 4M)	кн	Well w	rill be 160 feet from ne	arest unit or lease boundary.	
Operator ROAN RESOURCES LLC Name:	r	elephone: 405896845	53	OTC/OCC Numbe	r: 24127 0	
ROAN RESOURCES LLC						
14701 HERTZ QUAIL SPRINGS PKWY		N	TA MAYE VOI	GHT (CAMPBELL)		
	72424 2644	14	01 STATE HW	Y. 92	. 92	
OKLAHOMA CITY, OK 7	73134-2641	т	JTTLE	ОК	73089	
Formation(s) (Permit Valid for Listed Form Name 1 MISSISSIPPIAN 2 3	Depth 11912	6 7 8	Name	٦	lepth	
4 5 Spacing Orders: 684321 684322	Location Exception Orde	9 10 rs:		Increased Density Order	rs: 687831 687832	
5 Spacing Orders: ⁶⁸⁴³²¹	Location Exception Orde	10		Increased Density Order		
5 Spacing Orders: 684321 684322 Pending CD Numbers: 201808461		10 rs:			687832	
5 Spacing Orders: 684321 684322 Pending CD Numbers: 201808461 201808462	³ Surface Cas	10 rs:		Special Orders: Depth to base of Treatable W	687832	
5 Spacing Orders: 684321 684322 Pending CD Numbers: 201808461 201808462 Total Depth: 22432 Ground Elevation: 126	³ Surface Cas	10 rs: ing: 1500 Dly Well Drilled: No	Tethod for disposal o	Special Orders: Depth to base of Treatable W Surface Wa	687832 /ater-Bearing FM: 380	
5 Spacing Orders: 684321 684322 Pending CD Numbers: 201808461 201808462 Total Depth: 22432 Ground Elevation: 126 Under Federal Jurisdiction: No	³ Surface Cas	10 rs: ing: 1500 Dly Well Drilled: No Approved N	lethod for disposal o	Special Orders: Depth to base of Treatable W Surface Wa	687832 /ater-Bearing FM: 380	
5 Spacing Orders: 684321 684322 Pending CD Numbers: 201808461 201808462 Total Depth: 22432 Ground Elevation: 126 Under Federal Jurisdiction: No PIT 1 INFORMATION	³ Surface Cas	10 rs: ing: 1500 bly Well Drilled: No Approved M A. Evapore	lethod for disposal o ation/dewater and ba	Special Orders: Depth to base of Treatable W Surface War of Drilling Fluids: ackfilling of reserve pit.	687832 /ater-Bearing FM: 380 ter used to Drill: No	
5 Spacing Orders: 684321 684322 Pending CD Numbers: 201808461 201808462 Total Depth: 22432 Ground Elevation: 126 Under Federal Jurisdiction: No PIT 1 INFORMATION Type of Pit System: ON SITE	³ Surface Cas	10 rs: ing: 1500 bly Well Drilled: No Approved M A. Evapore D. One tirr	lethod for disposal o ation/dewater and ba le land application	Special Orders: Depth to base of Treatable W Surface Wat	687832 /ater-Bearing FM: 380 ter used to Drill: No	
5 Spacing Orders: 684321 684322 Pending CD Numbers: 201808461 201808462 Total Depth: 22432 Ground Elevation: 126 Under Federal Jurisdiction: No 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 Within 1 mile of municipal water well? N	3 Surface Cas	10 rs: ing: 1500 bly Well Drilled: No Approved M A. Evapore	lethod for disposal o ation/dewater and ba le land application	Special Orders: Depth to base of Treatable W Surface War of Drilling Fluids: ackfilling of reserve pit.	687832 /ater-Bearing FM: 380	
5 Spacing Orders: 684321 684322 Pending CD Numbers: 201808461 201808462 Total Depth: 22432 Ground Elevation: 126 Under Federal Jurisdiction: No 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 Within 1 mile of municipal water well? N Wellhead Protection Area? N	3 Surface Cas	10 rs: ing: 1500 bly Well Drilled: No Approved M A. Evapore D. One tirr	lethod for disposal o ation/dewater and ba le land application	Special Orders: Depth to base of Treatable W Surface War of Drilling Fluids: ackfilling of reserve pit.	687832 /ater-Bearing FM: 380 ter used to Drill: No	
5 Spacing Orders: 684321 684322 Pending CD Numbers: 201808461 201808462 Total Depth: 22432 Ground Elevation: 126 Under Federal Jurisdiction: No 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 Within 1 mile of municipal water well? N Wellhead Protection Area? N Pit is not located in a Hydrologically Sensitive Area.	3 Surface Cas	10 rs: ing: 1500 bly Well Drilled: No Approved M A. Evapore D. One tirr	lethod for disposal o ation/dewater and ba le land application	Special Orders: Depth to base of Treatable W Surface War of Drilling Fluids: ackfilling of reserve pit.	687832 /ater-Bearing FM: 380 ter used to Drill: No	
5 Spacing Orders: 684321 684322 Pending CD Numbers: 201808461 201808462 Total Depth: 22432 Ground Elevation: 126 Under Federal Jurisdiction: No 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 Within 1 mile of municipal water well? N Wellhead Protection Area? N Pit is not located in a Hydrologically Sensitive Area. Category of Pit: 2	3 Surface Cas	10 rs: ing: 1500 bly Well Drilled: No Approved M A. Evapore D. One tirr	lethod for disposal o ation/dewater and ba le land application	Special Orders: Depth to base of Treatable W Surface War of Drilling Fluids: ackfilling of reserve pit.	687832 /ater-Bearing FM: 380 ter used to Drill: No	
5 Spacing Orders: 684321 684322 Pending CD Numbers: 201808461 201808462 Total Depth: 22432 Ground Elevation: 126 Under Federal Jurisdiction: No 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 Within 1 mile of municipal water well? N Wellhead Protection Area? N Pit is not located in a Hydrologically Sensitive Area.	3 Surface Cas	10 rs: ing: 1500 bly Well Drilled: No Approved M A. Evapore D. One tirr	lethod for disposal o ation/dewater and ba le land application	Special Orders: Depth to base of Treatable W Surface War of Drilling Fluids: ackfilling of reserve pit.	687832 /ater-Bearing FM: 380 ter used to Drill: No	

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 not located in a Hydrologically Sensitive Area. Category of Pit: 3 Liner required for Category: 3

Pit Location is NON HSA Pit Location Formation: DOG CREEK

HORIZONTAL HOLE 1

Sec	30	Twp	9N	Rge	6W	/	County	GRADY
Spot	Locatior	n of En	d Point:	N\	Ν	NE	NW	NE
Feet	From:	NOF	RTH 🤆	I/4 Se	ctior	n Line	e: 65	5
Feet	From:	EAS	ST [·]	1/4 Se	ctior	n Line	e: 19	000
Depth	of Dev	iation:	11198					
Radius of Turn: 573								
Direction: 345								
Total Length: 10334								
Measured Total Depth: 22432								
True Vertical Depth: 11912								
End Point Location from Lease,								
Unit, or Property Line: 65								

Notes:	
Category	Description
DEEP SURFACE CASING	11/2/2018 - 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	11/2/2018 - 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 - 687831	12/14/2018 - G75 - 31-9N-6W X684322 MSSP 1 WELL ROAN RESOURCES LLC 12-6-2018
INCREASED DENSITY - 687832	12/14/2018 - G75 - 30-9N-6W X684321 MSSP 1 WELL ROAN RESOURCES LLC 12-6-2018

051 24533 NITA FAY 31-30-9-6 4MXH

Category	Description
МЕМО	11/2/2018 - G71 - PIT 1 & 2 - CONCRETE-LINED PIT PER OPERATOR REQUEST; PIT 2 - OBM TO VENDOR, OBM CUTTINGS PER DISTRICT
PENDING CD - 201808461	12/14/2018 - G75 - (I.O.) 31 & 30-9N-6W EST MULTIUNIT HORIZONTAL WELL X684322 MSSP, OTHER 31-9N-6W X684321 MSSP, OTHER 30-9N-6W 50% 31-9N-6W 50% 30-9N-6W NO OP. NAMED REC 11-6-2018 (P. PORTER)
PENDING CD - 201808462	12/14/2018 - G75 - (I.O.) 31 & 30-9N-6W X684322 MSSP, OTHER 31-9N-6W X684321 MSSP, OTHER 30-9N-6W X165:10-3-28 (C)(2)(B) MAY BE CLOSER THAN 600' TO EXISTING/PROPOSED WELL COMPL. INT. (31-9N-6W) NCT 150' FSL, NCT 0' FNL, NCT 1900' FEL COMPL. INT. (30-9N-6W) NCT 0' FSL, NCT 150' FNL, NCT 1900' FEL NO OP. NAMED REC 11-6-2018 (P. PORTER)
SPACING - 684321	12/14/2018 - G75 - (640)(HOR) 30-9N-6W VAC OTHER VAC 160440 MSSLM EXT 672547 MSSP, OTHERS POE TO BHL NCT 660' FB
SPACING - 684322	12/14/2018 - G75 - (640)(HOR) 31-9N-6W VAC OTHER VAC 160440 MSSLM EXT 672547 MSSP, OTHERS POE TO BHL NCT 660' FB

