PI NUMBER: 051 24630 vrizontal Hole Oil & Gas ulti Unit	OIL & GAS CO P.C OKLAHOMA	RPORATION COMMISSION NSERVATION DIVISION D. BOX 52000 CITY, OK 73152-2000 le 165:10-3-1)		05/10/2019 11/10/2020
	PER	MIT TO DRILL		
WELL LOCATION: Sec: 09 Twp: 9N Rge: SPOT LOCATION: SW NW NE NW	5W County: GRADY FEET FROM QUARTER: FROM NOR SECTION LINES: 335	TH FROM WEST 1585		
Lease Name: BIRDSTONE 4-33-9-5	Well No: 2MXI		Well will be 335 feet from neare	est unit or lease boundary.
Operator ROAN RESOURCES LLC Name:	Te	elephone: 4058968453	OTC/OCC Number:	24127 0
		SKAGGS	3-D FARMS INC.	
ROAN RESOURCES LLC		PO BOX 2		
14701 HERTZ QUAIL SPRINGS PKW	Y		& MARY ELLEN SKAGGS	
OKLAHOMA CITY, OK	73134-2641	TUTTLE		73089
Formation(s) (Permit Valid for Listed For Name 1 MISSISSIPPIAN 2 3 4 5 Spacing Orders: 654124 648701 Pending CD Numbers: 201902032 201902033	Depth 9633 Location Exception Orders	Name 6 7 8 9 10	Dep Increased Density Orders: Special Orders:	th
201902036 201902037 201902721				
Total Depth: 20193 Ground Elevation:	1328 Surface Casi	ng: 1500	Depth to base of Treatable Wate	er-Bearing FM: 200
Under Federal Jurisdiction: No	Fresh Water Suppl	y Well Drilled: No	Surface Water	used to Drill: No
PIT 1 INFORMATION		Approved Method for d	isposal of Drilling Fluids:	
Type of Pit System: ON SITE Type of Mud System: WATER BASED		A. Evaporation/dewate B. Solidification of pit of	er and backfilling of reserve pit. contents.	
Chlorides Max: 5000 Average: 3000 Is depth to top of ground water greater than 10ft below Within 1 mile of municipal water well? N	base of pit? Y	D. One time land appl H. SEE MEMO	ication (REQUIRES PERMIT)	PERMIT NO: 19-3652
Wellhead Protection Area? N Pit is located in a Hydrologically Sensitive Area.				
Category of Pit: 2				
Liner not required for Category: 2				
Pit Location is BED AQUIFER				
Pit Location is BED AQUIFER Pit Location Formation: DUNCAN				

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 BED AQUIFER Pit Location Formation: DUNCAN

HORIZONTAL HOLE 1

Sec	33	Twp	10N	Rge	5W		County	GRADY
Spot I	Locatior	n of En	d Point	: NI	Ξ	NW	NW	NE
Feet I	From:	NOF	RTH	1/4 Se	ction	Line	e: 65	5
Feet I	From:	EAS	т	1/4 Se	ction	Line	e: 20)50
Depth	of Dev	iation:	8939					
Radius of Turn: 575								
Direction: 9								
Total Length: 10350								
Measured Total Depth: 20193								
True Vertical Depth: 9633								
End Point Location from Lease,								
Unit, or Property Line: 65								

Notes:		
Category	Description	
DEEP SURFACE CASING	4/17/2019 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMM CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE SURFACE CASING	
HYDRAULIC FRACTURING	4/17/2019 - G71 - OCC 165:10-3-10 REQUIRES:	
	1) PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPE WELLS, NOTICE GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFI WELLS COMPLETED IN THE SAME COMMON SOURCE OF SUPPLY	FSET OPERATORS WITH
	2) WITH NOTICE ALSO GIVEN 48 HOURS IN ADVANCE OF HYDRAU WELLS TO BOTH THE OCC CENTRAL OFFICE AND LOCAL DISTRIC "FRAC NOTICE FORM" FOUND AT THE FOLLOWING LINK: OCCEWEB.COM/OG/OGFORMS.HTML; AND,	
	3) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING ING TO BE REPORTED TO FRACFOCUS WITHIN 60 DAYS AFTER THE C HYDRAULIC FRACTURING OPERATIONS, USING THE FOLLOWING	ONCLUSION THE
MEMO	4/17/2019 - G71 - PITS 1 & 2 - CONCRETE LINED PIT PER OPERATO RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT	R REQUEST, PIT 2 - OBM
PENDING CD - 201902032	5/6/2019 - G56 - (I.O.) 4-9N-5W, 33-10N-5W ESTABLISH MULTIUNIT HORIZONTAL WELL X654124 MSSP 4-9N-5W X648701 MSSP 33-10N-5W 50% 4-9N-5W 50% 33-10N-5W ROAN RESOURCES, LLC REC 5/7/2019 (MILLER) PER ATTORNEY FOR OPERATOR	
This permit does not address the right of ent	ry or settlement of surface damages.	051 24630 BIRDSTONE 4-33-9-5 2MXH

Category	Description
PENDING CD - 201902033	5/6/2019 - G56 - (I.O.) 4-9N-5W, 33-10N-5W X654124 MSSP 4-9N-5W X648701 MSSP 33-10N-5W COMPL INT (4-9N-5W) NCT 165' FSL, NCT 0' FNL, NCT 660' FEL COMPL INT (33-10N-5W) NCT 0' FSL, NCT 165' FNL, NCT 660' FEL NO OP NAMED REC 5/7/2019 (MILLER) PER ATTORNEY FOR OPERATOR
PENDING CD - 201902036	5/6/2019 - G56 - 4-9N-5W X654124 MSSP 3 WELLS NO OP NAMED REC 4/23/2019 (MINMIER)
PENDING CD - 201902037	5/6/2019 - G56 - 33-10-5W X648701 MSSP 3 WELLS NO OP NAMED REC 4/23/2019 (MINMIER)
PENDING CD - 201902721	5/10/2019 - G56 - (E.O.) 4-9N-5W X165:10-3-28(C)(2)(B) MSSP MAY BE CLOSER THAN 600' TO THE SMITH 4-4 WELL ROAN RESOURCES, LLC HEARING 5/17/2019 OK'D PER MCCOY
SPACING - 648701	5/6/2019 - G56 - (640)(HOR) 33-10N-5W VAC OTHER EXT 641851 MSSP, OTHER POE TO BHL NCT 660' FB (COEXIST SP. ORDER # 264865/357209/480763 MSSP)
SPACING - 654124	5/6/2019 - G56 - (640)(HOR) 4-9N-5W VAC 280305 MSSP SE4, OTHER EST MSSP, OTHER POE TO BHL NCT 660' FB (COEXIST SP # 280305 MSSP N2, SW4)

