API NUMBER: 051 24603 **OKLAHOMA CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION** P.O. BOX 52000 **OKLAHOMA CITY, OK 73152-2000** (Rule 165:10-3-1)

04/04/2019 Approval Date: Expiration Date: 10/04/2020

Horizontal Hole

Multi Unit

Oil & Gas

PERMIT TO DRILL

OT LOCATION	I: SW SW SE SE	FEET FROM QUARTER: FROM SECTION LINES:	SOUTH FROM 220	EAST 1070	
Lease Name:	LEROY COATS 19-18-9-5	Well No:	5MXH	W	ell will be 220 feet from nearest unit or lease boundar
Operator Name:	ROAN RESOURCES LLC		Telephone:	1058968453	OTC/OCC Number: 24127 0
ROAN RESOURCES LLC 14701 HERTZ QUAIL SPRINGS PKWY				DONNA JEAN COATS 2078 EAST SOONER ROAD	
OKLAHOMA CITY, OK 73134-2641				TUTTLE	OK 73089
ormation(s) (Permit Valid for Listed Fo	ormations Only):			
	Name	Depth		Name	Depth
	Name MISSISSIPPIAN	Depth 10452		Name 6	Depth
					Depth
1				6	Depth
1 2 3 4				6 7	Depth
1 2 3				6 7 8	Depth
1 2 3 4 5				6 7 8 9	Depth Increased Density Orders:
1 2 3 4 5 pacing Orders:	MISSISSIPPIAN 411108 402958	10452		6 7 8 9	
1 2 3 4	MISSISSIPPIAN 411108 402958	10452		6 7 8 9	Increased Density Orders:
1 2 3 4 5 pacing Orders:	411108 402958 abers: 201901461	10452		6 7 8 9	Increased Density Orders:

Fresh Water Supply Well Drilled: No

Surface Casing: 1500

Under Federal Jurisdiction:

Total Depth: 20688

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 of pit? Y

Ground Elevation: 1344

Within 1 mile of municipal water well? N Wellhead Protection Area?

Pit is not located in a Hydrologically Sensitive Area.

Category of Pit: 2

Liner not required for Category: 2 Pit Location is NON HSA

Pit Location Formation: CHICKASHA Approved Method for disposal of Drilling Fluids:

A. Evaporation/dewater and backfilling of reserve pit.

B. Solidification of pit contents.

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 19-36376

Depth to base of Treatable Water-Bearing FM: 360

Surface Water used to Drill: No

H. SEE MEMO

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: CHICKASHA

HORIZONTAL HOLE 1

County Sec. 18 Twp 9N Rge 5W **GRADY** Spot Location of End Point: NW ΝE ΝE NF Feet From: NORTH 1/4 Section Line: 65 EAST Feet From: 1/4 Section Line: 400

Depth of Deviation: 9543 Radius of Turn: 573

Direction: 5

Total Length: 10245

Measured Total Depth: 20688

True Vertical Depth: 10452

End Point Location from Lease,
Unit, or Property Line: 65

Notes:

Category Description

DEEP SURFACE CASING 3/15/2019 - 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 3/15/2019 - 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 3/15/2019 - G71 - PIT 1 & 2 - CONCRETE-LINED PIT PER OPERATOR REQUEST; PIT 2 - OBM TO

VENDOR, OBM CUTTINGS

PER DISTRICT

Category Description

PENDING CD - 201901461 4/3/2019 - G75 - (I.O.) 19 & 18-9N-5W

EST MULTIUNIT HORIZONTAL WELL

XOTHER

X411108 MSSP 19-9N-5W X402958 MSSP 18-9N-5W

50% 19-9N-5W 50% 18-9N-5W

ROAN RESOURCES, LLC REC 4-2-2019 (DENTON)

PENDING CD - 201901462 4/3/2019 - G75 - (I.O.) 19 & 18-9N-5W

XOTHER

X411108 MSSP 19-9N-5W X402958 MSSP 18-9N-5W

X165:10-3-28(C)(2)(B) MAY BE CLOSER THAN 600' TO UMBACH 2-18 COMPL. INT. (19-9N-5W) NCT 165' FSL, NCT 0' FNL, NCT 330' FEL COMPL. INT. (18-9N-5W) NCT 0' FSL, NCT 165' FNL, NCT 330' FEL

NO OP. NAMÈD

REC 4-2-2019 (DENTON)

PENDING CD - 201901465 4/3/2019 - G75 - 18-9N-5W

X402958 MSSP 2 WELLS NO OP. NAMED

REC 4-2-2019 (DENTON)

PENDING CD - 201901467 4/3/2019 - G75 - 19-9N-5W

X411108 MSSP 2 WELLS NO OP. NAMED

REC 4-2-2019 (DENTON)

SPACING - 402958 4/3/2019 - G75 - (640) 18-9N-5W

EXT 257426 MSSP

SPACING - 411108 4/3/2019 - G75 - (640) 19-9N-5W

EXT 402958 MSSP

1. BEARINGS, DISTANCES & ACREAGE ARE GRID, NAD 27 US OK SOUTH ZONE AND ARE OBTAINED BY NORMAL GPS TECHNIQUES.
2. ELEVATIONS ARE BASED ON NAVD BB COMPUTED USING GEORD 128.
3. THIS SURREY IS FOR AN OIL & GAS SUB-SURFACE LESSE AND IS NOT A BOUNDARY SURVEY.
5. THIS SURVEY IS FOR AN OIL & GAS SUB-SURFACE LESSE AND IS NOT A BOUNDARY SURVEY.
6. THIS SURVEY COMPULES WITH THE CUENT.
6. THIS SURVEY COMPULES WITH THE US PUBLIC LAND SURVEY SYSTEM AND MEETS THE OKLAHOMA MINIMUM STANDARS FOR THE PRACTICE OF LAND SURVEYMEN AS ADOPTED BY THE OKLAHOMA STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS, EFFECTIVE JULY 25, 2013.
7. THIS IS NOT A BOUNDARY SURVEY.
8. TO SUB-SURVEY SURVEY SURVEY.
8. TO SUB-SURVEY SURVEY.
8. THIS IS NOT A BOUNDARY SURVEY.
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9. THE SURVEY SURFACE HOLE LOCATION EXISTING WELLHEAD PENETRATION POINT PROPOSED WELL LOCATION SET
SURFACE LOCATION OBTAINED FROM OCC PROPOSED LATERAL FIRST TAKE POINT PROPERTY OF P SURVEY LINE INIS PERMIT PLAT HAS BEEN PREPARED FROM A SURVEY PLAT ON FILE IN THE OFFICE OF JOHN F. WATSON & COMPANY, MI TEXAS.

I, THE UNDERSYMBED, DO HEREBY CERTIFY THAT THE SURVEY INFORMATION FOUND ON THIS PLAT WAS DERIVED FROM ACTUAL FIELD NOTES' OF ON-THE-GROUND SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY ANOMILEDSE AND BELIEF. John F. Watson & Company CA#5957 EXPIRATION 6-30-2019 LAND & DEVELOPMENT SERVICES PROFESSIONAL LAND SURVEYORS 200 N LORAINE #220 MIDLAND, TX 79701 REV: - AFE NO.: -JOB NO.: 19-0033 200 N. Loraine, Stc. 220 Midland, Texas 79701 (432) 520-2400 SHEET 1 OF 1 VER: 1 DRAWN BY: LLF FIELD BOOK: SERVER