API NUMBER: 051 24478

Oil & Gas

Horizontal Hole

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

Approval Date: 09/18/2018 03/18/2020 **Expiration Date**

PERMIT TO DRILL

WELL LOCATION: Sec: 09 9N Rge: 6W County: GRADY Twp:

FEET FROM QUARTER: FROM SPOT LOCATION: FROM SOUTH WEST SE SE SE lsw SECTION LINES:

130 2335

Lease Name: I'LL HAVE ANOTHER 9-4-9-6 Well No: 4MXH Well will be 130 feet from nearest unit or lease boundary.

ROAN RESOURCES LLC Operator OTC/OCC Number: Telephone: 4058968453 24127 0 Name:

ROAN RESOURCES LLC

14701 HERTZ QUAIL SPRINGS PKWY

OKLAHOMA CITY. OK 73134-2641 VIRGINIA HOGLAND LIVING TRUST 3920 GREEN HILLS COURT

NORMAN OK 73072

Special Orders:

Formation(s) (Permit Valid for Listed Formations Only):

Name Depth Name Depth MISSISSIPPIAN 1 11050 6 2 7 8 3 4 9 10 144013 Spacing Orders: Location Exception Orders: Increased Density Orders:

Pending CD Numbers: 201807030 201807027

201807028

201807029

Total Depth: 21463 Ground Elevation: 1347 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 320

Under Federal Jurisdiction: No Fresh Water Supply Well Drilled: No Surface Water used to Drill: 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 of pit? Y

Within 1 mile of municipal water well? N

located in a Hydrologically Sensitive Area.

Category of Pit: 1B Liner required for Category: 1B Pit Location is AP/TE DEPOSIT Pit Location Formation:

Wellhead Protection Area?

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: 18-35312

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 located in a Hydrologically Sensitive Area.

Category of Pit: 3

Liner required for Category: 3
Pit Location is AP/TE DEPOSIT
Pit Location Formation: TERRACE

HORIZONTAL HOLE 1

Sec 04 Twp 9N Rge 6W County **GRADY** NW Spot Location of End Point: ΝE NW NF Feet From: NORTH 1/4 Section Line: 65 Feet From: WEST 1/4 Section Line: 1750

Depth of Deviation: 10377
Radius of Turn: 477
Direction: 355

Total Length: 10337

Measured Total Depth: 21463
True Vertical Depth: 11100
End Point Location from Lease,
Unit, or Property Line: 65

Notes:

MEMO

Category Description

DEEP SURFACE CASING 9/4/2018 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS OF

CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR

SURFACE CASING

HYDRAULIC FRACTURING 9/4/2018 - 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

9/4/2018 - G71 - PITS 1 & 2 - CONCRETE LINED PIT PER OPERATOR REQUEST, PIT 2 - OBM

RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201807027 9/4/2018 - G58 - 4-9N-6W

X144013 MSSP 1 WELL NO OP. NAMED

REC 9/17/2018 (THOMAS)

Category Description

PENDING CD - 201807028 9/4/2018 - G58 - 9-9N-6W

X144013 MSSP 1 WELL

NO OP. NAMED

REC 9/17/2018 (THOMAS)

PENDING CD - 201807029 9/4/2018 - G58 - (E.O.) 9 & 4-9N-6W

EST MULTIUNIT HORIZONTAL WELL

X144013 MSSP 50% 9-9N-6W 50% 4-9N-6W NO OP. NAMED

REC 9/17/2018 (THOMAS)

PENDING CD - 201807030 9/4/2018 - G58 - (E.O.) 9 & 4-9N-6W

X144013 MSSP

X165:10-3-28(C)(2)(B) MAY BE CLOSER THAN 600' TO EXISTING/PROPOSED WELL

COMPL. INT. (9-9N-6W) NCT 165' FSL, NCT 0' FNL, NCT 1320' FWL COMPL. INT. (4-9N-6W) NCT 0' FSL, NCT 165' FNL, NCT 1320' FWL

NO OP. NAMÈD

REC 9/17/2018 (THOMAS)

SPACING - 144013 9/4/2018 - G58 - (640) 4 & 9-9N-6W

EXT OTHERS
EST MSSP, OTHERS

