API NUMBER: 087 22173

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: 08/10/2018
Expiration Date: 02/10/2019

PERMIT TO DRILL

	WELL LOCATION:	Sec:	12	Twp:	7N	Rge:	4W	County:	MCCLAIN
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SPOT LOCATION: NE SW SE SE FEET FROM QUARTER: FROM SOUTH FROM EAST SECTION LINES: 385 925

Lease Name: SPAULDING 13-7-4 Well No: 2MH Well will be 385 feet from nearest unit or lease boundary.

Operator ROAN RESOURCES LLC Telephone: 4052412150 OTC/OCC Number: 24127 0

ROAN RESOURCES LLC

14701 HERTZ QUAIL SPRINGS PKWY

OKLAHOMA CITY, OK 73134-2641

DAVID & MARY SPAULDING 10200 BETHEL ROAD

NORMAN OK 73026

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	9740 6		
2		7		
3		8		
4		9		
5		10		
Spacing Orders:	664084	Location Exception Orders:		Increased Density Orders:

Pending CD Numbers: 201806180 Special Orders:

Total Depth: 15001 Ground Elevation: 1166 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 260

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

Wellhead Protection Area?

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 Formation: DUNCAN

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)

H. SEE MEMO

PERMIT NO: 18-35083

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 13 Twp 7N Rge 4W County MCCLAIN

Spot Location of End Point: SW SW SE SE
Feet From: SOUTH 1/4 Section Line: 65
Feet From: EAST 1/4 Section Line: 1250

Depth of Deviation: 9033 Radius of Turn: 573 Direction: 185

Total Length: 5068

Measured Total Depth: 15001

True Vertical Depth: 9740

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

Notes:

Category Description

DEEP SURFACE CASING 8/6/2018 - 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 8/6/2018 - 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

MEMO 8/6/2018 - G71 - PIT 1 & 2 - CONCRETE-LINED PIT PER OPERATOR REQUEST; PIT 2 - OBM TO

VENDOR, OBM CUTTINGS PER DISTRICT

PENDING CD - 201806180 8/7/2018 - G75 - (E.O.) 13-7N-4W

X664084 MSSP

COMPL. INT. NCT 150' FNL, NCT 150' FSL, NCT 1000' FEL

ROAN RESOURCES, LLC REC 8-9-2018 (M. PORTER)

Category Description

SPACING - 664084

8/7/2018 - G75 - (640)(HOR) 13-7N-4W EST MSSP, OTHER POE TO BHL NCT 660' FB

# API 087-22173

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

Approval Date: Expiration Date:

API NUMBER:

000 00000

Horizontal Hole

Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: Twp: SPOT LOCATION: Lease Name: SPAULDING 13-7-4 Operator 24127 0 Name:

ROAN RESOURCES LLC

14701 HERTZ QUAIL SPRINGS PKWY

OKLAHOMA CITY.

73134-2641 OK

DAVID & MARY SPAULDING

10200 BETHEL ROAD

NORMAN

OK 73026

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	9740	6	
2			7	
3			8	
4			9	
5			10	

201806180 CE.O. Hearing location exception 8-9-2018 Pending CD Numbers:

Location Exception Orders:

Total Depth: 15001

Spacing Orders:

Ground Elevation: 1166

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 260

Deep surface casing has been approved

Increased Density Orders:

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: No

Pit 1: water-based, onsite SK-3K pm chlorides

Pita: oil-based, onsite 300K-200K ppm chloridos

# TEMPORARY AUTHORIZATION TO DRILL

Expiration Date: 8-14-2018 Hilling OAC 165: 10-3-1 (L)

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: 18-35083

HPit 1+2-concrete. - lined pit por operator request; Pita-OBM to vendor, obm cuttings per District

#### HORIZONTAL HOLE 1

Sec 13 Twp 7N Rge 4W County MCCLAIN

Spot Location of End Point: Sw. sw SE SELIC ATION

Feet From: SOUTH 1/4 Section Line: 1250

Feet From: FosT 1/4 S Depth of Deviation: Q 0 33

Radius of Turn: 573

Intent to Drill

Direction: \ 85

Total Length: 506 8'
Measured Total Depth: 15001
True Vertical Depth: 9740
End Point Location from Lease,
Unit, or Property Line: 65

