API NUMBER: 087 22172

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
			\neg	$\overline{}$		\neg		

SPOT LOCATION: NE SW SE SE FEET FROM QUARTER: FROM SOUTH FROM EAST SECTION LINES: 385 945

Lease Name: SPAULDING 13-7-4 Well No: 1WH 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):

I	Name	Depth	Name	Depth
1	WOODFORD	9780 6		
2		7		
3		8		
4		9		
5		10	0	
Spacing Orders:	664084	Location Exception Orders:		Increased Density Orders:

Pending CD Numbers: 201806179 Special Orders:

201806187

Total Depth: 15070 Ground Elevation: 1165 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? 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 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) PERMIT NO: 18-35084

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 BED AQUIFER

Pit Location Formation: DUNCAN

HORIZONTAL HOLE 1

Sec 13 Twp 7N Rge 4W County MCCLAIN

Spot Location of End Point: SE SW SW SE
Feet From: SOUTH 1/4 Section Line: 65
Feet From: EAST 1/4 Section Line: 2000

Depth of Deviation: 9104
Radius of Turn: 573
Direction: 190
Total Length: 5066

Measured Total Depth: 15070

True Vertical Depth: 9790

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

Notes:

MEMO

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

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

VENDOR, OBM CUTTINGS PER DISTRICT

PENDING CD - 201806179 8/7/2018 - G75 - (E.O.) 13-7N-4W

X664084 WDFD

COMPL. INT. NCT 150' FNL, NCT 150' FSL, NCT 1750' FEL

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

Category Description

8/7/2018 - G75 - 13-7N-4W X664084 WDFD PENDING CD - 201806187

1 WELL

ROAN RESOURCES, LLC HEARING 8-27-2018

SPACING - 664084 8/7/2018 - G75 - (640)(HOR) 13-7N-4W

EST WDFD, OTHER

POE TO BHL NCT 165' TO NL & SL, NCT 330' TO EL & WL

API NUMBER: 000 00000

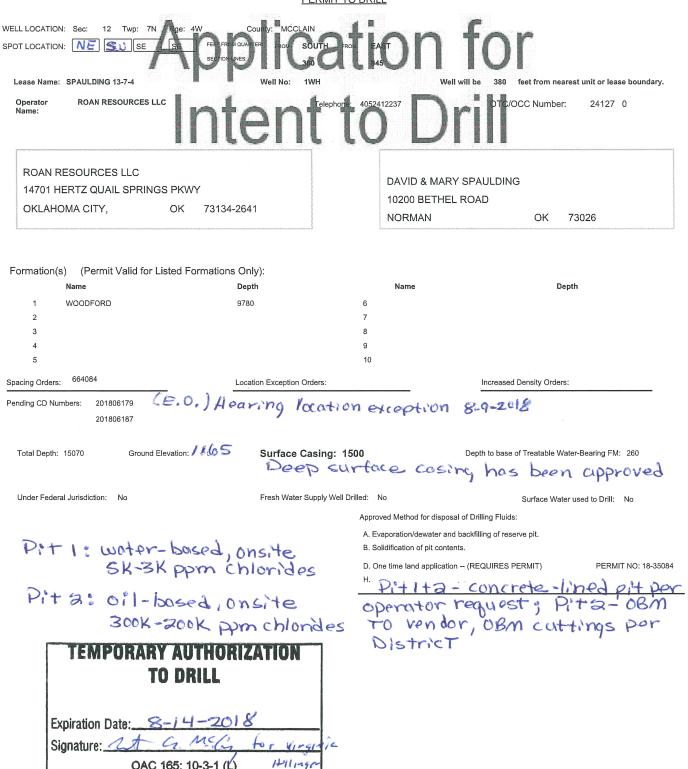
Oil & Gas

Horizontal Hole

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Approval Date: Expiration Date:

PERMIT TO DRILL



HORIZONTAL HOLE 1

County MCCLAIN FOR SILCATION FOR Line: 2000 Sec 13 Spot Location of End Point: SE EOST 1/4 Section Line: Feet From: Intent to Drill

Depth of Deviation: <a> 104

Radius of Turn: 573

Direction: 190

Total Length: 5066 Measured Total Depth: 15070 True Vertical Depth: 9790

End Point Location from Lease,

Unit, or Property Line: 65

