API NUMBER: 017 25349

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

Approval Date: 01/07/2019
Expiration Date: 07/07/2020

Horizontal Hole Multi Unit Oil & Gas

PERMIT TO DRILL

VELL LOCATION: SPOT LOCATION: Lease Name: I Operator Name:		FEET FROM QUARTER: FROM	SOUTH FROM 275 3MXH	WEST 840 4058968453	Well will be 275 feet from nearest unit or lease boundary OTC/OCC Number: 24127 0
1	SOURCES LLC RTZ QUAIL SPRINGS PKW MA CITY, OK	/Y 73134-2641			CE, RUTH LOUISE LIFE ESTATE V MEMORIAL RD I OK 73099
	Name	Depth		Name	Depth
	MISSISSIPPIAN	8432		6	
2				7	
3				8	
4 5				9	
Spacing Orders:	687128 687130	Location Exception O			Increased Density Orders:
ending CD Numb	201810563 201810564 201810559 201810560				Special Orders:
Total Depth: 18	8992 Ground Elevation:	1277 Surface (Casing: 150	10	Depth to base of Treatable Water-Bearing FM: 420

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

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: 18-35819

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 04 Twp 13N Rge 6W County CANADIAN

Spot Location of End Point: NW NW NE NW
Feet From: NORTH 1/4 Section Line: 65
Feet From: WEST 1/4 Section Line: 1400

Depth of Deviation: 7530 Radius of Turn: 574

Direction: 3

Total Length: 10560

Measured Total Depth: 18992
True Vertical Depth: 8432
End Point Location from Lease,
Unit, or Property Line: 65

Notes:

Category Description

DEEP SURFACE CASING 1/4/2019 - 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 1/4/2019 - 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 1/4/2019 - G71 - PITS 1 & 2 - CONCRETE LINED PIT PER OPERATOR REQUEST, PIT 2 - OBM

RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201810559 1/7/2019 - GB1 - 4-13N-6W

X687128 MSSP, OTHER 4 WELLS; 2 MSSP, 2 OTHER

NO OP. NAMED HEARING 1/8/2019 Category Description

PENDING CD - 201810560 1/7/2019 - GB1 - 9-13N-6W

X687130 MSSP, OTHER 4 WELLS; 2 MSSP, 2 OTHER

NO OP. NAMED HEARING 1/8/2019

PENDING CD - 201810563 1/7/2019 - GB1 - (E.O.) 4 & 9-13N-6W

EST MULTIUNIT HORIZONTAL WELL X687128 MSSP, OTHER 4-13N-6W X687130 MSSP, OTHER 9-13N-6W

50% 4-13N-6W 50% 9-13N-6W

ROAN RESOURCES LLC REC. 12/21/2018 (DENTON)

PENDING CD - 201810564 1/7/2019 - GB1 - (E.O.) 4 & 9-13N-6W

X687128 MSSP, OTHER 4-13N-6W X687130 MSSP, OTHER 9-13N-6W

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

WELL

COMPL. INT. (9-13N-6W) NCT 150' FSL, NCT 0' FNL, NCT 1320' FWL

COMPL. INT. (4-13N-6W) NCT 0' FSL, NCT 150' FNL, NCT 1320' FWL ROAN RESOURCES LLC

REC. 12/21/2018 (DENTON)

SPACING - 687128 1/7/2019 - GB1 - (640)(HOR) 4-13N-6W

EXT 684666 MSSP, OTHER COMPL. INT. NLT 660' FB

(COEXIST WITH SP. ORDER # 112949 MISS)

SPACING - 687130 1/7/2019 - GB1 - (640)(HOR) 9-13N-6W

EXT 684666 MSSP, OTHER COMPL. INT. NLT 660' FB

(COEXIST WITH SP. ORDER 112949 MISS)

