API NUMBER: 051 24324

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: 04/10/2018
Expiration Date: 10/10/2018

## PERMIT TO DRILL

FROM

EAST

WELL LOCATION:	Sec:	13	Twp:	9N	Rge:	6W	County:	GRA	DY
SPOT LOCATION:	NE	NW	NE		NE		FEET FROM QUARTER:	FROM	NORTH

SECTION LINES: 249 740

Lease Name: LANGSTON 12-1-9-6 Well No: 4XH Well will be 249 feet from nearest unit or lease boundary.

 Operator Name:
 LINN OPERATING LLC
 Telephone:
 2818404010; 4052412
 OTC/OCC Number:
 22182
 0

LINN OPERATING LLC 600 TRAVIS ST STE 1400

HOUSTON, TX 77002-3005

JOSEPH HARTIN LANGSTON 207 PRIMROSE LANE

FLUSHING MI 48433

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

	Name	Depth	Name	Depth
1	WOODFORD	10350	6	
2			7	
3			8	
4			9	
5			10	
Spacing Orders:	655070	Location Exception Orders:		Increased Density Orders:
	649154			

Pending CD Numbers: 201802578

201802572 201802577 201802576

Total Depth: 21175 Ground Elevation: 1381 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 450

Under Federal Jurisdiction: No Fresh Water Supply Well Drilled: Yes 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 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: 18-34244

Special Orders:

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**

Rge 6W Sec 01 Twp 9N County **GRADY** Spot Location of End Point: NW NE ΝE NF Feet From: NORTH 1/4 Section Line: 65 EAST Feet From: 1/4 Section Line: 400

Depth of Deviation: 10231 Radius of Turn: 382

Direction: 15

Total Length: 10343

Measured Total Depth: 21175

True Vertical Depth: 10350

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

 Additional Surface Owner
 Address
 City, State, Zip

 ANNE H. & JOE HARTIN LANGSTON
 207 PRIMROSE LANE
 FLUSHING, MI 48433

 NATHAN ORLAND LANGSTON
 #1 BLACKJACK LANE
 COPPER CANYON, TX 75077

Notes:

MEMO

Category Description

DEEP SURFACE CASING 4/3/2018 - 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 4/3/2018 - 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 4/3/2018 - G71 - PITS 1 & 2 - CONCRETE LINED PIT PER OPERATOR REQUEST, PIT 2 - OBM

RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

Category Description

PENDING CD - 201802572 4/9/2018 - G57 - (E.O.) 1-9N-6W

X649154 WDFD

2 WELLS

ROAN RESOURCES, LLC. \*\*
REC 4-6-2018 (P.PORTER)

\*\*S/B LINN OPERATING; WILL BE CORRECTED AT THE MERIT HEARING PER ATTORNEY FOR

**OPERATOR** 

PENDING CD - 201802576 4/9/2018 - G57 - (E.O.) 12 & 1-9N-6W

EST MULTIUNIT HORIZONTAL WELL

X649154 WDFD 1-9N-6W X655070 WDFD 12-9N-6W

50% 12-9N-6W

50% 1-9N-6W

ROAN RESOURCES, LLC. \*\* REC 4-6-2018 (P.PORTER)

\*\*S/B LINN OPERATING: WILL BE CORRECTED AT THE MERIT HEARING PER ATTORNEY FOR

**OPERATOR** 

PENDING CD - 201802577 4/9/2018 - G57 - (E.O.) 12 & 1-9N-6W

X649154 WDFD 1-9N-6W X655070 WDFD 12-9N-6W SHL (13-9N-6W) 249 FNL, 740' FEL

COMPL. INT. (12-9N-6W) NCT 165' FSL, NCT 0' FNL, NCT 330' FEL COMPL. INT. (1-9N-6W) NCT 0' FSL, NCT 165' FNL, NCT 330' FEL

ROAN RESOURCES, LLC. \* REC 4-6-2018 (P.PORTER)

\*\*S/B LINN OPERATING; WILL BE CORRECTED AT THE MERIT HEARING PER ATTORNEY FOR

**OPERATOR** 

PENDING CD - 201802578 4/9/2018 - G57 - (E.O.) 12-9N-6W

X655070 WDFD

1 WELL

ROAN RESOURCES, LLC. \*\* REC 4-6-2018 (P.PORTER)

\*\*S/B LINN OPERATING; WILL BE CORRECTED AT THE MERIT HEARING PER ATTORNEY FOR

**OPERATOR** 

SPACING - 649154 4/4/2018 - G57 - (640)(HOR) 1-9N-6W

**EST WDFD** 

POE TO BHL NCT 165' FNL & FSL, NCT 330' FEL & FWL

SPACING - 655070 4/4/2018 - G57 - (640)(HOR) 12-9N-6W

EST WDFD

POE TO BHL NCT 165' FNL & FSL, NCT 330' FEL & FWL

