

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

API NUMBER: 017 25261 A

Approval Date: 08/28/2018
Expiration Date: 02/28/2020

Horizontal Hole Oil & Gas

Amend reason: CORRECT WELL NAME AND BHL

AMEND PERMIT TO DRILL

WELL LOCATION: Sec: 05 Twp: 11N Rge: 5W

County: CANADIAN

SPOT LOCATION: ☐ NE ☐ NE ☐ NW ☐ NW

FEET FROM QUARTER: FROM NORTH FROM WEST

SECTION LINES: 275 1045

Lease Name: SWITZER 5-8-11-5

Well No: 4MXH

Well will be 275 feet from nearest unit or lease boundary.

Operator Name: ROAN RESOURCES LLC

Telephone: 4052412150

OTC/OCC Number: 24127 0

ROAN RESOURCES LLC
14701 HERTZ QUAIL SPRINGS PKWY
OKLAHOMA CITY, OK 73134-2641

DWAIN SWITZER LIVING TRUST ETAL
1200 SYCAMORE
WEATHERFORD OK 73096

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	8450	6	
2			7	
3			8	
4			9	
5			10	

Spacing Orders: No Spacing

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201805959
201805960
201805961
201805962
201806672
201807889

Special Orders:

Total Depth: 18986

Ground Elevation: 1331

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 1160

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: 18-35155

H. SEE MEMO

This permit does not address the right of entry or settlement of surface damages.

The duration of this permit is SIX MONTHS, except as otherwise provided by Rule 165: 10-3-1.

Rule 165: 10-3-4 (c) (7) (e) - The Operator shall give 24 Hours notice by telephone to the appropriate District Office of the Conservation Division as to when Surface Casing will be run.

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: 1A

Liner required for Category: 1A

Pit Location is BED AQUIFER

Pit Location Formation: DUNCAN

HORIZONTAL HOLE 1

Sec 08 Twp 11N Rge 5W County CANADIAN

Spot Location of End Point: SW SE SW SW

Feet From: SOUTH 1/4 Section Line: 65

Feet From: WEST 1/4 Section Line: 1600

Depth of Deviation: 7757

Radius of Turn: 573

Direction: 181

Total Length: 10329

Measured Total Depth: 18986

True Vertical Depth: 8450

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

Notes:

Category

Description

DEEP SURFACE CASING

8/9/2018 - 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

8/9/2018 - 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

8/9/2018 - G71 - PITS 1 & 2 - CONCRETE LINED PIT PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201805959

8/14/2018 - G57 - (E.O.)(640)(HOR) 5-11N-5W
VAC 152508/152860 MSSLM NE4 & S2 SW4
EXT 676879 MSSP, OTHER
POE TO BHL NLT 660' FB
(COEXIST WITH SP. 152508/152860 MSSLM NW4, SE4, N2 SW4)
REC 8-7-2018 (JACKSON)

This permit does not address the right of entry or settlement of surface damages.

The duration of this permit is SIX MONTHS, except as otherwise provided by Rule 165: 10-3-1.

Rule 165: 10-3-4 (c) (7) (e) - The Operator shall give 24 Hours notice by telephone to the appropriate District Office of the Conservation Division as to when Surface Casing will be run.

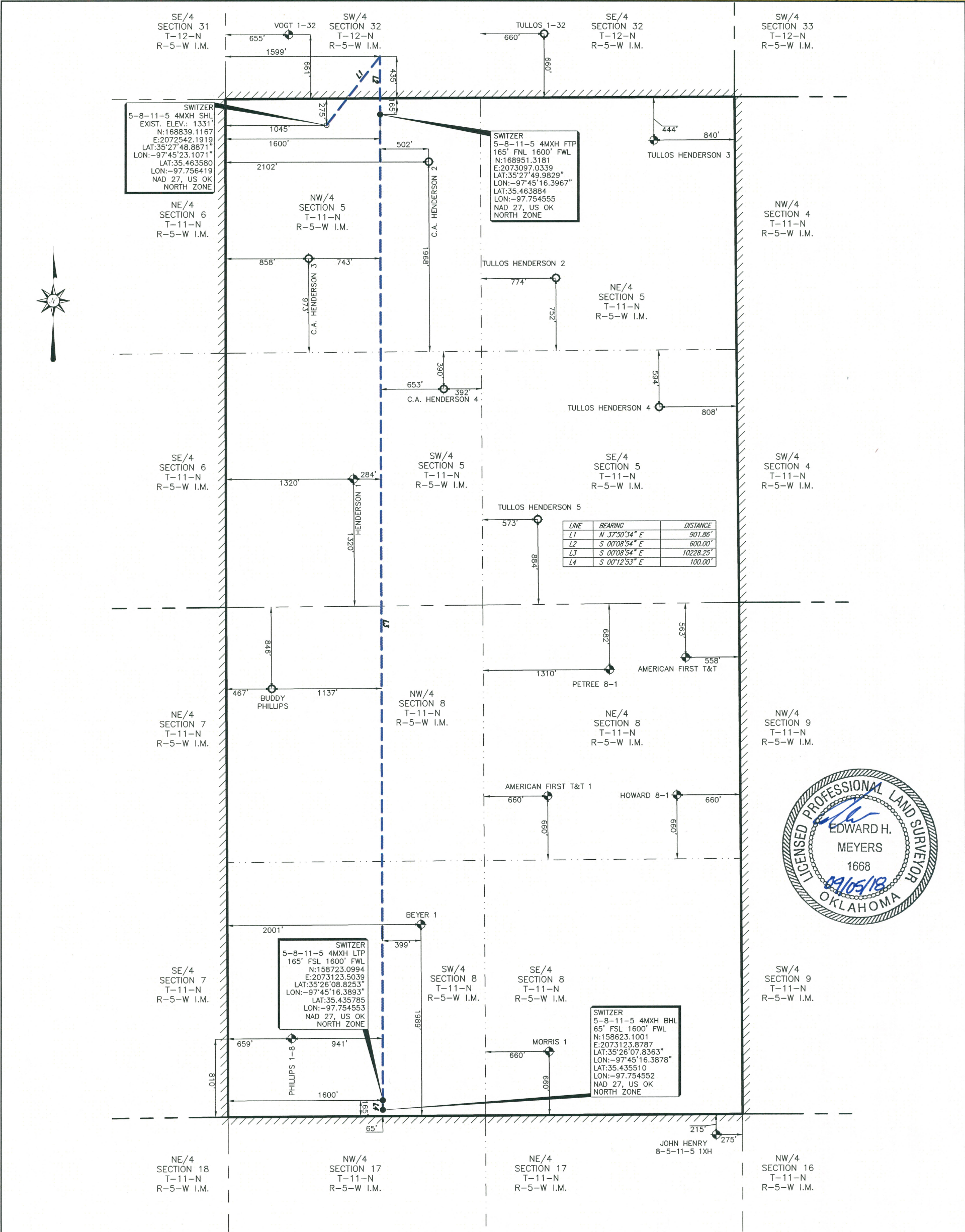
017 25261 SWITZER 5-8-11-5 4MXH

Category	Description
PENDING CD - 201805960	8/14/2018 - G57 - (E.O.)(640)(HOR) 8-11N-5W VAC 164529/167828 MSSLM N2 NE4 VAC 169323 MSSLM S2 NE4 VAC 151845 MSSLM S2 EXT 676879 MSSP, OTHER POE TO BHL NLT 660' FB (COEXIST W/ SP. ORDER 151845 NW4) REC 8-7-2018 (JACKSON)
PENDING CD - 201805961	8/14/2018 - G57 - (E.O.) 5 & 8-11N-5W EST MULTIUNIT HORIZONTAL WELL X201805959 MSSP 5-11N-5W X201805960 MSSP 8-11N-5W 50% 5-11N-5W 50% 8-11N-5W ROAN RESOURCES, LLC. REC 8-7-2018 (JACKSON)
PENDING CD - 201805962	8/14/2018 - G57 - (E.O.) 5 & 8-11N-5W X201805959 MSSP 5-11N-5W X201805960 MSSP 8-11N-5W COMPL. INT. (5-11N-5W) NCT 165' FNL, NCT 0' FSL, NCT 330' FWL COMPL. INT. (8-11N-5W) NCT 0' FNL, NCT 165' FSL, NCT 330' FWL NO OP. NAMED REC 8-7-2018 (JACKSON)
PENDING CD - 201806672	8/17/2018 - G57 - (E.O.) 5 & 8-11N-5W X165:10-3-28(C)(2)(B) MSSP (SWITZER 5-8-11-5 1MXH) MAY BE CLOSER THAN 600' TO THE C A HENDERSON 3 & BUDDY PHILLIPS 1 ROAN RESOURCES, LLC. REC 8-27-2018 (P. PORTER)
PENDING CD - 201807889	10/4/2018 - G57 - (I.O.) 5 & 8-11N-5W X165:10-3-28(C)(2)(B) MSSP & WDFD (SWITZER 5-8-11-5 4MXH) MAY BE CLOSER THAN 600' TO THE C A HENERSON #2 ROAN RESOURCES, LLC. REC. 10-23-2018 (DENTON)

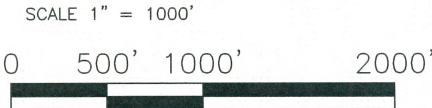
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PERMIT PLAT OF
ROAN RESOURCES, LLC.
SWITZER 5-8-11-5 4MXH
275' FNL 1045' FWL OF SECTION 5
MINCO FIELD
SECTION 5, TOWNSHIP 11 NORTH, RANGE 5 WEST I.M. &
SECTION 8, TOWNSHIP 11 NORTH, RANGE 5 WEST I.M.
LEASE LINES
SHL: 275' FNL & 1045' FWL
CANADIAN COUNTY, OKLAHOMA



- NOTE:
1. COMBINED SCALE FACTOR: 0.99998264
 2. SHL IS APPROXIMATELY 5.28 MILES N 20°15'00" W OF MUSTANG OKLAHOMA.

LEGEND

- POINT
- EXISTING WELLHEAD
- PROPOSED WELL LOCATION SET
- SURFACE LOCATION OBTAINED FROM OCC
- AS-DRILLED LATERAL
- SUBJECT PROPOSED LATERAL
- PROPOSED LATERAL
- LEASE LINE
- SURVEY LINE

John F. Watson & Company
LAND & DEVELOPMENT SERVICES
PROFESSIONAL LAND SURVEYORS
200 N. LORAIN, STE. 220
MIDLAND, TEXAS 79701
TEL: (432) 520-2400
FAX: (432) 520-2404

CA#5957 EXPIRATION 6-30-2019
200 N LORAIN #220
MIDLAND, TX 79701
(432) 520-2400

STAKED WELLS: 08/30/18
ADDED LATERAL: 09/05/18

REV: — AFE NO.: — JOB NO.: 18-0258
FIELD BOOK: SERVER VER: 1 DRAWN BY: LLF

- NOTE:
1. BEARINGS, DISTANCES & ACREAGE ARE GRID, NAD 27 US OK NORTH ZONE AND ARE OBTAINED BY NORMAL GPS TECHNIQUES.
 2. ELEVATIONS ARE BASED ON NAVD 88 COMPUTED USING GEOID 12B.
 3. THIS SURVEY IS FOR AN OIL & GAS SUB-SURFACE LEASE AND IS NOT A BOUNDARY SURVEY.
 4. LOCATION OF ADJOINING WELLS OUTSIDE LEASE BOUNDARY ARE APPROXIMATED FROM OKLAHOMA CORPORATION COMMISSION DATA.
 5. DOWNHOLE INFORMATION PROVIDED BY THE CLIENT.
 6. THIS SURVEY COMPLES WITH THE US PUBLIC LAND SURVEY SYSTEM AND MEETS THE OKLAHOMA MINIMUM STANDARDS FOR THE PRACTICE OF LAND SURVEYING AS ADOPTED BY THE OKLAHOMA STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS, EFFECTIVE JULY 25, 2013.
 7. THIS IS NOT A BOUNDARY SURVEY.
 8. THIS PERMIT PLAT HAS BEEN PREPARED FROM A SURVEY PLAT ON FILE IN THE OFFICE OF JOHN F. WATSON & COMPANY, MIDLAND TEXAS.
- I, THE UNDERSIGNED, DO HEREBY CERTIFY THAT THE SURVEY INFORMATION FOUND ON THIS PLAT WAS DERIVED FROM ACTUAL FIELD NOTES OF ON-THE-GROUND SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

PROFESSIONAL LAND SURVEYOR

09/05/18

SHEET 1 OF 1