

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

API NUMBER: 087 22079

Approval Date: 07/03/2017  
Expiration Date: 01/03/2018

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 33 Twp: 7N Rge: 4W County: MCCLAIN  
SPOT LOCATION: SW NE NE NW FEET FROM QUARTER: FROM NORTH FROM WEST  
SECTION LINES: 600 2220

Lease Name: ROATH Well No: 1H-33X Well will be 600 feet from nearest unit or lease boundary.

Operator Name: NEWFIELD EXPLORATION MID-CON INC Telephone: 2816742521; 9188781 OTC/OCC Number: 20944 0

NEWFIELD EXPLORATION MID-CON INC  
24 WATERWAY AVE STE 900  
SPRING, TX 77380-2764

CAROLE SCALES BROWN  
23003 DIBBLE RD  
BLANCHARD OK 73010

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	10172	6	
2 WOODFORD	10378	7	
3		8	
4		9	
5		10	

Spacing Orders: 665200 Location Exception Orders: 652903 Increased Density Orders:  
652240 665201  
652902

Pending CD Numbers: Special Orders:

Total Depth: 21142 Ground Elevation: 1230 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 360

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: AIR

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: 4

Liner not required for Category: 4

Pit Location is BED AQUIFER

Pit Location Formation: DUNCAN

Mud System Change to Water-Based or Oil-Based Mud Requires an Amended Intent (Form 1000).

Approved Method for disposal of Drilling Fluids:

- A. Evaporation/dewater and backfilling of reserve pit.
- B. Solidification of pit contents.

F. Haul to Commercial soil farming facility: Sec. 6 Twn. 2N Rng. 4W Cnty. 137 Order No: 617361

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: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED

Chlorides Max: 8000 Average: 5000

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: C

Liner not required for Category: C

Pit Location is BED AQUIFER

Pit Location Formation: DUNCAN

PIT 3 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

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: C

Liner not required for Category: C

Pit Location is BED AQUIFER

Pit Location Formation: DUNCAN

HORIZONTAL HOLE 1

Sec 04 Twp 6N Rge 4W County MCCLAIN

Spot Location of End Point: SW SE SW SE

Feet From: SOUTH 1/4 Section Line: 50

Feet From: EAST 1/4 Section Line: 1877

Depth of Deviation: 9653

Radius of Turn: 715

Direction: 175

Total Length: 10366

Measured Total Depth: 21142

True Vertical Depth: 10378

End Point Location from Lease,  
Unit, or Property Line: 50

Additional Surface Owner	Address	City, State, Zip
TERRY D. ROATH	159 ACADEMY DRIVE	SPRINGHILL, LA 71075

Notes:

Category	Description
DEEP SURFACE CASING	6/28/2017 - 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

Category	Description
HYDRAULIC FRACTURING	6/28/2017 - G71 - OCC 165:10-3-10 REQUIRES: 1) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS BE REPORTED TO FRACFOCUS USING THE FOLLOWING LINK <a href="http://fracfocus.org/">HTTP://FRACFOCUS.ORG/</a> WITH NOTICE GIVEN 48 HOURS IN ADVANCE OF FRACTURING TO THE LOCAL OCC DISTRICT OFFICE; AND, 2) PRIOR TO COMMENCEMENT OF FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE ALSO GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE
LOCATION EXCEPTION - 652903	7/3/2017 - G60 - 33-7N-4W & 4-6N-4W X652240 MSSP, WDFD SHL NCT 150' FNL, NCT 330' FEL 33-7N-4W COMPL. INT. (33-7N-4W) NCT 165' FNL, NCT 0' FSL, NCT 330' FEL COMPL. INT. (4-6N-4W) NCT 0' FNL, NCT 165' FSL, NCT 330' FEL NEWFIELD EXPLORATION MID-CONTINENT, INC. 6/24/17
LOCATION EXCEPTION - 665201	7/3/2017 - G60 - (I.O.) 3-7N-4W & 4-6N-4W EXT 652903 TO MAY 24TH, 2018
MEMO	6/28/2017 - G71 - PITS 2 & 3 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, WBM & OBM CUTTINGS CAPTURED IN CONCRETE-LINED PIT, SOLIDIFIED, AND BURIED ON SITE; PIT 3 - OBM TO VENDOR
SPACING - 652240	7/3/2017 - G60 - (640)(HOR) 33-7N-4W & 4-6N-4W EXT 648816 MSSP, WDFD COMPL. INT. (MSSP) NLT 660' FB COMPL. INT. (WDFD) NLT 165' FNL/FSL, NCT 330' FEL/FWL
SPACING - 652902	7/3/2017 - G60 - (I.O.) 33-7N-4W & 4-6N-4W EST MULTIUNIT HORIZONTAL WELL X652240 MSSP, WDFD 50% 33-7N-4W 50% 4-6N-4W (WDFD IS AN ASSOCIATED COMMON SOURCE OF SUPPLY TO MSSP) NEWFIELD EXPLORATION MID-CONTINENT INC. 5/24/16
SPACING - 665200	7/3/2017 - G60 - (I.O.) 33-7N-4W & 4-6N-4W EXT 652902 TO MAY 24TH, 2018

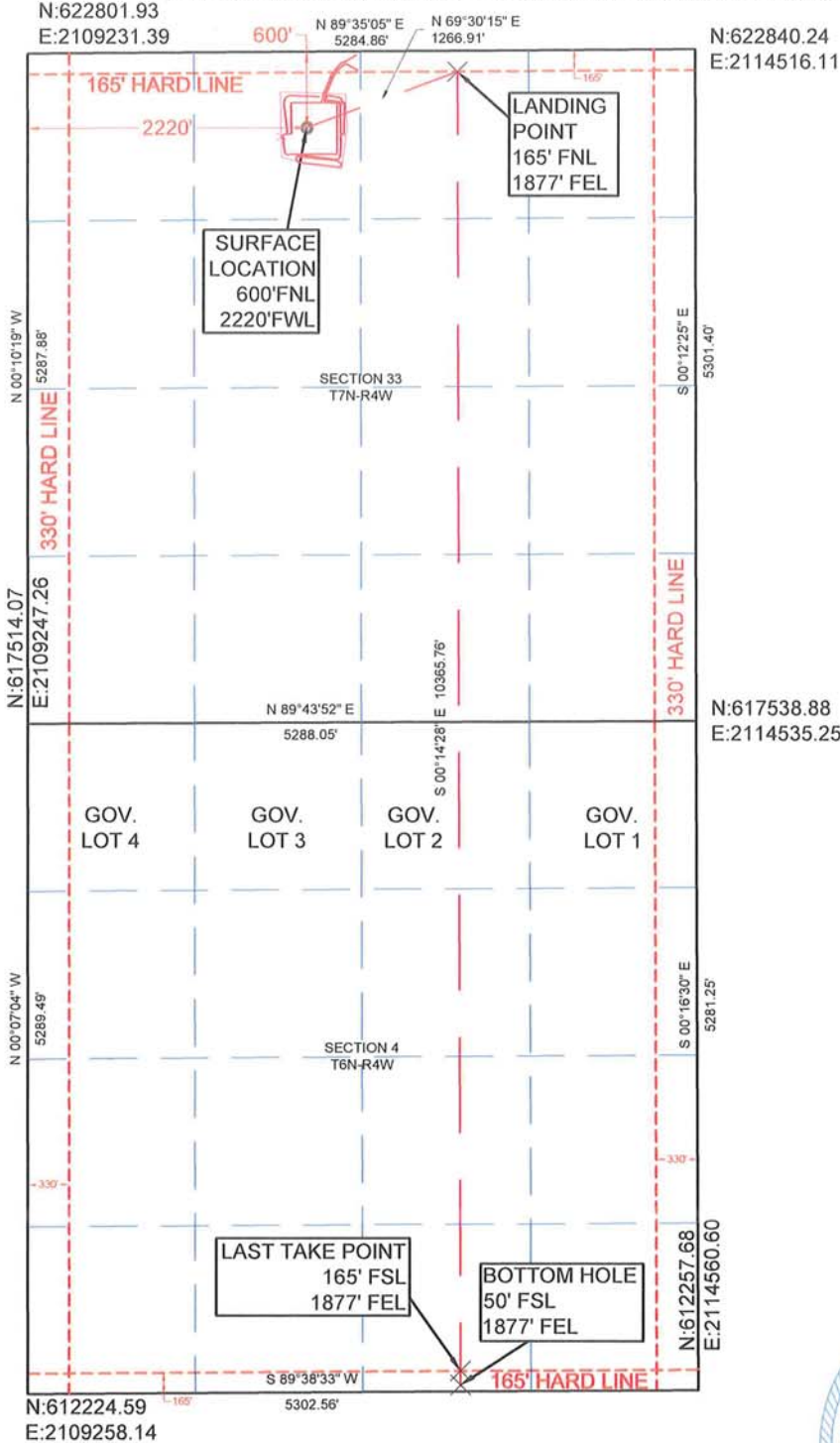
This permit does not address the right of entry or settlement of surface damages.  
The duration of this permit is SIX MONTHS, except as otherwise provided by Rule 165: 10-3-1.  
Rule 165: 10-3-4 (c) (7) (e) - The Operator shall give 24 Hours notice by telephone to the appropriate District Office of the Conservation Division as to when Surface Casing will be run.

3508722079

# PERMIT PLAT

M & M Land Surveying, Inc.  
 Phone (580) 226-0446  
 520 E Street N.W.  
 Ardmore, OK 73401

Company Name: **NEWFIELD EXPLORATION MID-CONTINENT INC.**  
 Lease Name: ROATH 1H-33X  
 Section 33 Township 7 N Range 4 W , I.B.M, County of McClain, State of Oklahoma  
 Elevation Good Location?  
 Original Location: 600'FNL - 2220'FWL 1230' GROUND YES  
 Distance & Direction From Nearest Town: 6.8 miles South of Blanchard.

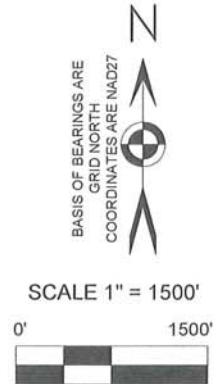


### SURFACE LOCATION

DATUM: NAD27  
 LAT: 35° 02' 33.17"N  
 LONG: 97° 37' 39.63"W  
 LAT: 35.042547°N  
 LONG: 97.627674°W  
 STATE PLANE  
 COORDINATES: (US SURVEY FEET)  
 ZONE: SOUTH ZONE  
 Y (N): 622217.98  
 X (E): 2111453.07

DATUM: NAD83  
 LAT: 35° 02' 33.41"N  
 LONG: 97° 37' 40.76"W  
 LAT: 35.042615°N  
 LONG: 97.627988°W  
 STATE PLANE  
 COORDINATES: (US SURVEY FEET)  
 ZONE: SOUTH ZONE  
 Y (N): 622260.323  
 X (E): 2079856.553

DATA DERIVED FROM  
 G.P.S. WITH O.P.U.S.  
 DATA.



This location has been staked according to the best official survey records available to us. The metrical data shown hereon is for permitting the well location and the section location may or may not be field verified. Please review this plat and notify us immediately of any discrepancy.

### CERTIFICATE:

I D. Harry McClintick a Registered Land Surveyor in the State Of Oklahoma, do hereby certify that the above described Well Location was surveyed and staked on the ground as shown and that said plat meets or exceeds the Oklahoma Minimum Technical Standards for the practice of land surveying as adopted by the Oklahoma State Board of Licensure for Professional Engineers and Land Surveyors.



*D. Harry McClintick*  
 D. Harry McClintick  
 PLS. No.1367 CFEDS

SURVEY BY: M & M Land Surveying, Inc. ~ C.A. No. 3093 (LS)	
DRAWING BY: Bennett-Morris And Associates Land Surveying, P.C.	
© COPYRIGHT 2017	C.A. No. 5975 (LS) ~ Aaron L. Morris, RPLS
PROJECT NUMBER: 17241	SITE VISIT: (Explanation and Date)
SHEET: 6 OF 10	STAKING DATE: 06/15/2017
	DRAWING DATE: 06/20/2017

3508722079

**NEWFIELD**



**Newfield Exploration Mid-Continent, Inc.**

24 Waterway, Suite 900  
The Woodlands, TX 77380

Regulatory Dept.

PHONE: 281-674-2521

FAX: 346-224-7026

June 27, 2017

Oklahoma Corporation Commission  
Oil & Gas Conservation Division  
P.O. Box 52000-2000  
Oklahoma City, Oklahoma 73152-2000

RE: Roath 1H-33X  
Sec 33-07N-04W  
McClain County, OK

Dear Sir/Madam:

We are requesting a variance to the liner requirements for the burial of oil-based cuttings (OBC) as stated in rules of the Oklahoma Corporation Commission (OCC). We intend to bury the OBC from the above mentioned well using Scott Environmental Services Inc.'s (SESI) stabilization and solidification process, Duro<sup>SM</sup>. Specifically, the request for a variance is because the chosen process cannot be practically carried out under current Oklahoma rules due to the rules stating that OBC burial requires a geomembrane liner but the rules do not allow stirring within geomembrane lined pits.

In a letter dated November 15, 2010, Mr. Tim Baker confirmed that use of a Duro<sup>SM</sup> process had met the requirements of the Commission. It is requested that a variance be approved for this well site, provided that the following conditions are met:

1. A soil liner may be used instead of a geomembrane liner if the unconfined compressive strength (UCS) of the Duro<sup>SM</sup> material is at least 70 pounds per square inch (psi), or
2. No liner is required if the Duro<sup>SM</sup> material meets all of the following conditions:
  - a. A permeability of not more than  $1 \times 10^{-6}$  cm/sec;
  - b. A UCS of at least 35 psi; and
  - c. Concentrations in a leachate of the Duro<sup>SM</sup> material according to EPA's SPLP procedure do not exceed the following values for the constituents named:
    - i. Total Petroleum Hydrocarbons, 100 mg/l;
    - ii. pH, 12.49 SU, plus a lower limit no less than 6;
    - iii. Arsenic, 5.00 mg/l;
    - iv. Barium, 100 mg/l;
    - v. Cadmium, 1.00 mg/l;
    - vi. Chromium, 5.00 mg/l;
    - vii. Lead, 5.00 mg/l;
    - viii. Mercury, 0.20 mg/l;
    - ix. Selenium, 1.00 mg/l;
    - x. Silver, 5.00 mg/l;
    - xi. Zinc, 5.00 mg/l; and
    - xii. Benzene, 0.5 mg/l.

The permeability value specified in item 2(a) is the same as that required for a standard soil liner, so that in effect the Duro<sup>SM</sup> processed material becomes its own liner but is even more effective, because the low permeability extends throughout the bulk of the Duro<sup>SM</sup> material.

Conformance with the specified criteria is determined on laboratory samples made with a representative sample of the waste to be subjected to the Duro<sup>SM</sup> process. The results of the testing will be provided to the Pollution Abatement Department of the OCC.

Your prompt attention to this matter is appreciated.

Respectfully,

Newfield Exploration, Mid Continent, Inc.



Evelyn P. Smith  
Sr. Regulatory Specialist

Bob Anthony  
Commissioner

3508722079

Jeff Cloud  
Commissioner

Dana Murphy  
Commissioner

OKLAHOMA

# Corporation Commission

P.O. BOX 52000  
OKLAHOMA CITY OKLAHOMA 73152-2000

255 Jim Thorpe Building  
Telephone: (405)521-2302  
FAX: (405)521-3099

OIL & GAS CONSERVATION DIVISION



Lori Wrotenbery, Director

November 15, 2010

J. Blake Scott  
Scott Environmental Services, Inc.  
P.O. Box 6215  
Longview, Texas 75608

RE: Requests for variances to liner requirements for pits used to contain oil-based cuttings.

Dear Mr. Scott:

This is in response to your inquiry concerning the procedure by which operators of wells in the State of Oklahoma regulated by the Commission's Oil and Gas Conservation Division may request variances to liner requirements for pits used to contain oil-based cuttings (OBC). OAC 165:10-7-16(b)(1)(B)(iv) provides that any pit used to contain oil-based drilling fluids, cuttings and/or completion/fracture/workover fluids shall be required to have a geomembrane liner. OAC 165:10-7-16(b)(5) states that any variance from the liner requirements of OAC 165:10-7-16 may be granted by the Manager of the Technical Services Department after receipt of a written request and supporting documentation required by the Department. Operators must submit written requests for variances to liner requirements for pits used to contain OBC to the Commission's Technical Services Department (TSD) Manager as attachments to initial or amended OCC Form 1000 Applications to Drill, Recomplete or Reenter.

The TSD Manager will require operators to submit documentation in support of requests for variances. Variances to liner requirements for pits containing OBC are not effective until granted by the TSD Manager. If operators requesting variances to liner requirements for pits containing OBC fail to submit acceptable documentation to the TSD Manager, or if such variance requests are denied, then operators are required to deposit the solidified OBC in pits containing geomembrane liners and close the pits as required by OAC 165:10-7-16, or otherwise dispose of the solidified OBC in accordance with Commission rules.

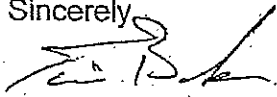
If the processes employed by your company and any other entity demonstrate through the submission of laboratory analyses, chain of custody forms and any other documentation required by the TSD Manager that the solidified OBC for which a variance from the pit liner requirements is sought meet acceptable criteria, then the TSD Manager could approve such variance requests submitted by operators.

Your company has demonstrated in three separate trials to date that solidified OBC for which variances were sought by operators have met the criteria of the Technical Services Department for burying such materials in pits with no geomembrane liners.

SERVICE • ASSISTANCE • COMPLIANCE  
EXCELLENCE IS OUR STANDARD

If you have any questions concerning the foregoing, please contact me at (405) 522-2763.

Sincerely,



Tim Baker  
Manager, Pollution Abatement Department  
Oklahoma Corporation Commission

Cc: Lori Wrotenbery, Ron Dunkin, Wayne Wright, Grant Ellis, Tony Cupp, Terry Grooms,  
Gayland Darity, Sally Shipley, Keith Thomas, Susan Conrad, Jim Hamilton, Connie Moore