

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

API NUMBER: 137 27480

Approval Date: 11/22/2016  
Expiration Date: 05/22/2017

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 16 Twp: 2N Rge: 4W County: STEPHENS  
SPOT LOCATION:  S2  N2  NW  NW FEET FROM QUARTER: FROM NORTH FROM WEST  
SECTION LINES: 513 660

Lease Name: VIRGINIA Well No: 2H-9 Well will be 513 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  
THE WOODLANDS, TX 77380-3197

KIETH WRIGHT AND TINA KELLY  
162749 M. 3020 RD.  
FOSTER OK 73434

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

Name	Depth	Name	Depth
1 SPRINGER	11929	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 131585

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201604036  
201604035

Special Orders:

Total Depth: 19027

Ground Elevation: 1203

**Surface Casing: 1500**

Depth to base of Treatable Water-Bearing FM: 450

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: Yes

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.

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: 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: 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: 150000

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 09 Twp 2N Rge 4W County STEPHENS

Spot Location of End Point: N2 N2 NW NW

Feet From: NORTH 1/4 Section Line: 50

Feet From: WEST 1/4 Section Line: 660

Depth of Deviation: 13385

Radius of Turn: 361

Direction: 360

Total Length: 5074

Measured Total Depth: 19027

True Vertical Depth: 13557

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

Notes:

Category	Description
DEEP SURFACE CASING	11/21/2016 - 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	11/21/2016 - 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.

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.

Category	Description
MEMO	11/21/2016 - 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
PENDING CD - 201604035	11/21/2016 - G60 - 9-2N-4W X131585 SPRG 1 WELL NO OP NAMED REC. 10/25/16 (JOHNSON)
PENDING CD - 201604036	11/21/2016 - G60 - (I.O.) 9-2N-4W X131585 SPRG SHL NCT 150' FSL, NCT 330' FWL ** COMPL. INT. NCT 165' FNL, NCT 165' FSL, NCT 330' FWL NO OP. NAMED REC. 10/25/16 (JOHNSON)
	**WILL BE CORRECTED AT HEARING FOR FINAL ORDER LOCATION EXCEPTION PER OPERATOR (513' FNL ON INTENT)
SPACING - 131585	11/21/2016 - G60 - (640) 9-2N-4W EST SPRG, OTHERS

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.

**NEWFIELD**



Newfield Exploration Mid-Continent, Inc.  
One Williams Center; Suite 1900  
Tulsa, OK 741729  
918-582-2690  
Fax: 918-732-1787

November 18, 2016

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

ATTN: Manager of the Technical Services Department

RE: Newfield Exploration Mid Continent, Inc.  
Virginia 2H-9  
Sec 16-02N-04W Stephens County  
Liner Variance Request

Dear Madam/Sirs:

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;

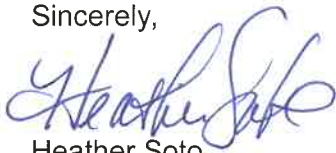
- vi. Chromium, 5.00 mg/l;
- vii. Lead, 5.00 mg/l;
- viii. Mercury, 0.20 mg/l;
- ix. Selenium, 1.00 mg/l;
- x. Silver, 5.00 mg/l;
- xi. Zinc, 5.00 mg/l; and
- xii. Benzene, 0.5 mg/l.

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.

Sincerely,



Heather Soto  
Regulatory Specialist

cc: WF

3513727480

Bob Anthony  
Commissioner

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.

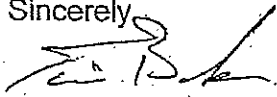
If the processes employed by your company and any other entity demonstrate through the submission of laboratory analyses, chain of custody forms and any other documentation required by the TSD Manager that the solidified OBC for which a variance from the pit liner requirements is sought meet acceptable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

3513727480

# Permit Plat

## M & M Land Surveying, Inc.

520 "E" Street NW. Ardmore, OK. 73401

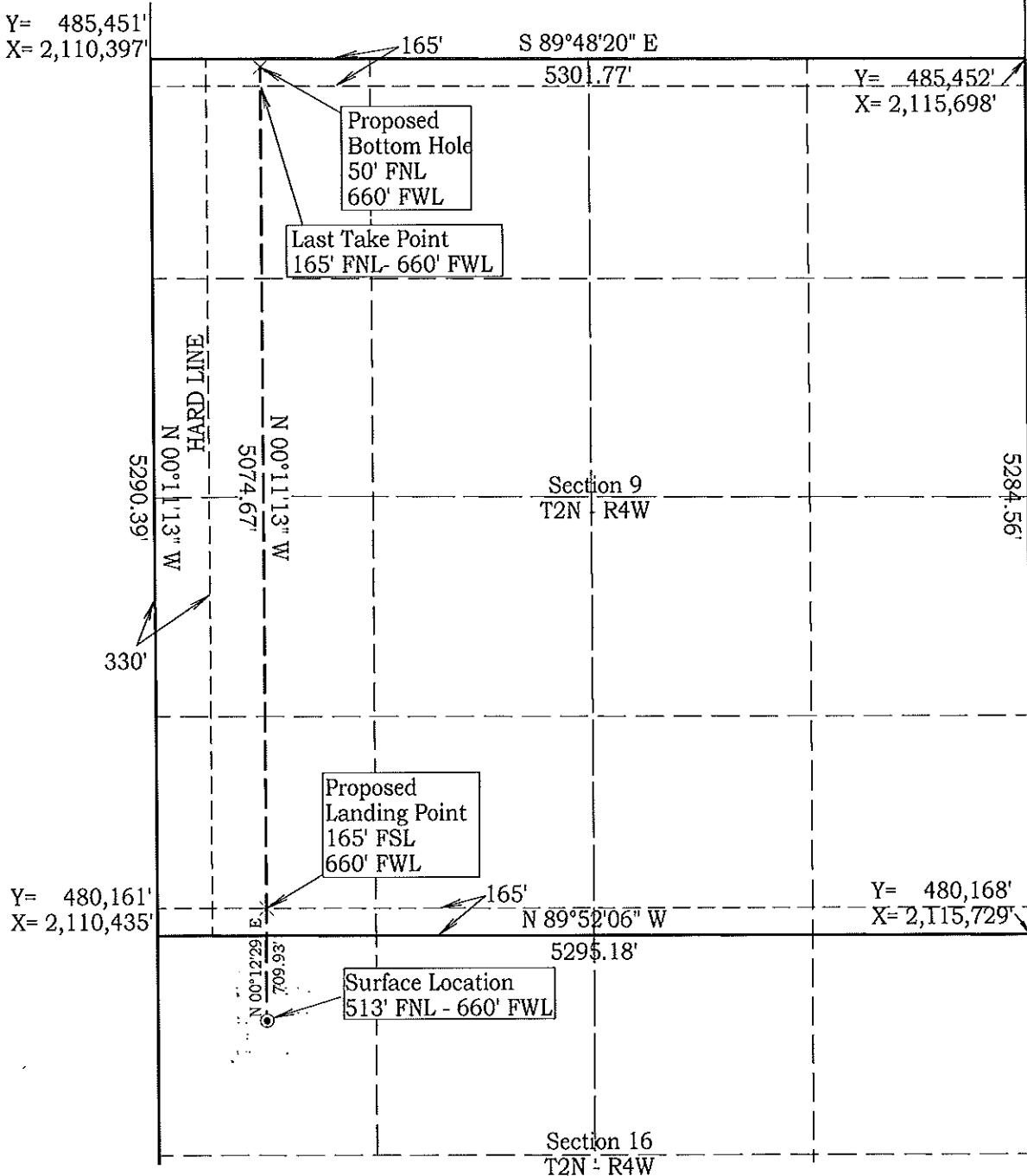
Office 580-226-0446 Mobile 580-221-4999 Fax 580-226-7158

Company Name: Newfield Exploration Mid-Continent, Inc. Lease Name: Virginia #2H-9

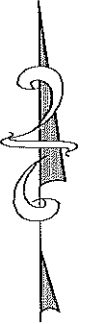
Section 16 Township 2 North Range 4 West County Stephens Oklahoma

Surface Location 513' FNL - 660' FWL Elevation 1203'

**ALL SECTION CORNER COORDINATES ARE NAD 27**



Bearings are based on Geodetic North. Unless otherwise noted



Scale: 1" = 1000'  
Invoice # 16171  
Date 4/28/2016

Coordinates were derived from GPS RTK methods and are only accurate within ±10 feet

**Location NAD 27**  
Oklahoma North  
Surface Location  
Latitude: 34.65081°  
Longitude: 97.63061°  
Y= 479,649'  
X = 2,111,097'

**Location NAD 83**  
Surface Location  
Latitude: 34.65089°  
Longitude: 97.63092°  
Y= 479,691'  
X = 2,079,501'

*D. Harry McClintick* 10/5/16  
D. Harry McClintick, R.P.L.S. # 1367, CA # 3093

This location has been staked according to the best official survey records available to us, but its accuracy is not guaranteed. Please review this plat and notify us immediately of any discrepancy.

