

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

API NUMBER: 011 23631

Approval Date: 07/22/2016
Expiration Date: 01/22/2017

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 05 Twp: 15N Rge: 10W County: BLAINE
SPOT LOCATION: SW NW NE FEET FROM QUARTER: FROM NORTH FROM EAST
SECTION LINES: 630 2560

Lease Name: DOROTHY Well No: 2H-32LM Well will be 630 feet from nearest unit or lease boundary.
Operator Name: NEWFIELD EXPLORATION MID-CON INC Telephone: 9188781290; 9188781 OTC/OCC Number: 20944 0

NEWFIELD EXPLORATION MID-CON INC
1 WILLIAMS CTR STE 1900
TULSA, OK 74172-0162

LOOSEN FAMILY LTD & OKLAHOMA LTD PARTNERSHIP
8069 CHATEAU CT.
KINGFISHER OK 73750

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

	Name	Depth	Name	Depth
1	MISS'AN (EX CHESTER)	10380	6	
2	WOODFORD	11010	7	
3			8	
4			9	
5			10	

Spacing Orders: 644506 Location Exception Orders: 653348 Increased Density Orders: 653822

Pending CD Numbers:

Special Orders:

Total Depth: 15907 Ground Elevation: 1450 **Surface Casing: 1500** Depth to base of Treatable Water-Bearing FM: 60

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 not located in a Hydrologically Sensitive Area.

Category of Pit: 4

Liner not required for Category: 4

Pit Location is NON HSA

Pit Location Formation: BLAINE

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 not located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is NON HSA

Pit Location Formation: BLAINE

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 not located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is NON HSA

Pit Location Formation: BLAINE

HORIZONTAL HOLE 1

Sec 32 Twp 16N Rge 10W County BLAINE

Spot Location of End Point: NE NE NW NE

Feet From: NORTH 1/4 Section Line: 50

Feet From: EAST 1/4 Section Line: 1523

Depth of Deviation: 10455

Radius of Turn: 750

Direction: 10

Total Length: 4274

Measured Total Depth: 15907

True Vertical Depth: 11010

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

Notes:

Category	Description
DEEP SURFACE CASING	7/21/2016 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY FOR ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON CONDUCTOR OR SURFACE CASING
HYDRAULIC FRACTURING	7/21/2016 - 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 HTTP://FRACFOCUS.ORG/ 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 MI.

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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
INCREASED DENSITY - 653822	7/21/2016 - G75 - 32-16N-10W X644506 MSNLC 4 WELLS NEWFIELD EXPLOR. MID-CONT. INC. 6-28-2016
INTERMEDIATE CASING	7/21/2016 - G71 - DUE TO THE KNOWN POTENTIAL RISK OF ENCOUNTERING AN OVER-PRESSURED ZONE IN THE MORROW SERIES IN THIS AREA, THE TECHNICAL MANAGER RECOMMENDS SETTING AN INTERMEDIATE STRING OF CASING IMMEDIATELY ABOVE THE MORROW SERIES
LOCATION EXCEPTION - 653348	7/21/2016 - G75 - (I.O.) X644506 MSNLC, WDFD SHL (5-15N-10W) NCT 150 FNL, NCT 2640 FEL ** COMPL. INT. (32-16N-10W) NCT 165 FSL, NCT 165 FNL, NCT 1320 FEL NEWFIELD EXPLOR. MID-CONT. INC. 6-9-2015 ++ ** ITD HAS SHL AS 2560 FEL 5-15N-10W; TO BE CORRECTED AT HEARING FOR FINAL ORDER LOCATION EXCEPTION PER ATTORNEY FOR OPERATOR ++ S/B 6-9-2016; WILL BE CORRECTED BY NUNC PRO TUNC PER ATTORNEY FOR OPERATOR
MEMO	7/21/2016 - G71 - PIT 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 - 644506	7/21/2016 - G75 - (640)(HOR) 32-16N-10W EST MSNLC EXT 640263 WDFD COMPL. INT. (MSNLC) NLT 660' FB COMPL. INT. (WDFD) NLT 165' FNL & FSL, NLT 330' FEL & FWL

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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

July 21, 2016

API 011-23631

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

ATTN: Manager of the Technical Services Department

RE: Newfield Exploration Mid Continent, Inc.
Dorothy 2H-32LM
Sec 05-15N-10W Blaine 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, DuroSM. 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 DuroSM 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 DuroSM material is at least 70 pounds per square inch (psi), or
2. No liner is required if the DuroSM material meets all of the following conditions:
 - a. A permeability of not more than 1×10^{-6} cm/sec;
 - b. A UCS of at least 35 psi; and
 - c. Concentrations in a leachate of the DuroSM 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 DuroSM processed material becomes its own liner but is even more effective, because the low permeability extends throughout the bulk of the DuroSM material.

Conformance with the specified criteria is determined on laboratory samples made with a representative sample of the waste to be subjected to the DuroSM 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,



Connie Hubbard
Sr. Regulatory Specialist

cc: WF

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

API 011-23631

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.

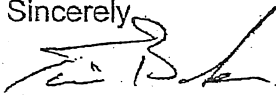
The TSD Manager will require operators to submit documentation in support of requests for variances. Variances to liner requirements for pits containing OBC are not effective until granted by the TSD Manager. If operators requesting variances to liner requirements for pits containing OBC fail to submit 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.

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

Permit Plat

M & M Land Surveying, Inc.

API 011-23631

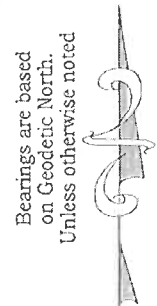
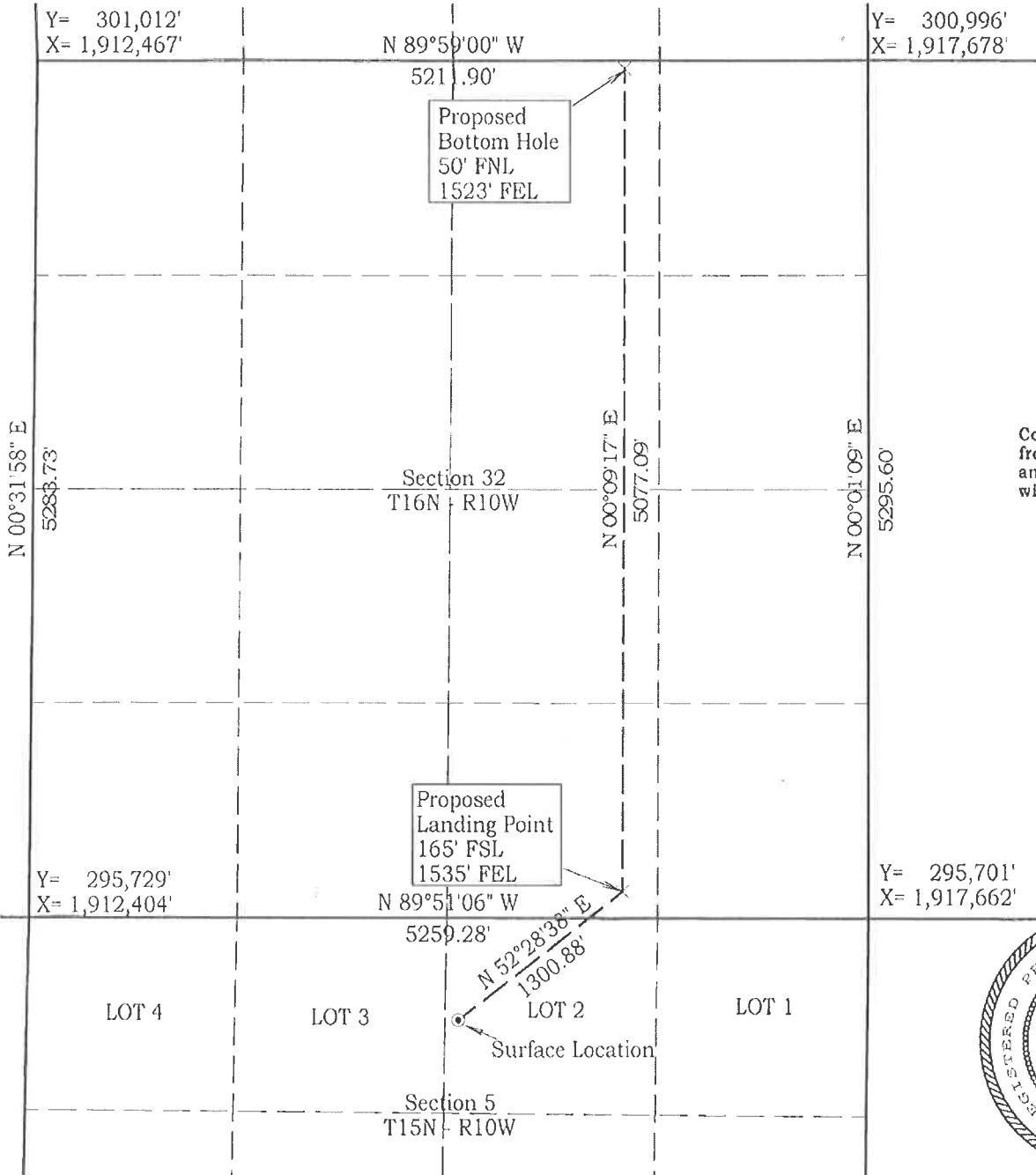
520 "E" Street NW. Ardmore, OK. 73401

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

Company Name: Newfield Exploration Mid-Continent, Inc. Lease Name: Dorothy #2H-32 Lm
 Section 5 Township 15 North Range 10 West County Blaine Oklahoma

Surface Location 630' FNL - 2560' FEL Elevation 1450'

ALL SECTION CORNER COORDINATES ARE NAD 27

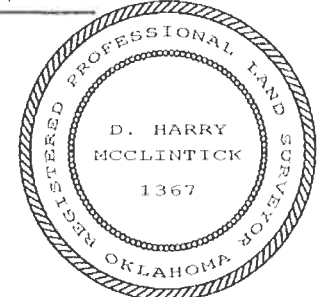


Scale: 1" = 1000'
 Invoice #16129
 Date 4/16/16

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

Location GPS NAD 27
 Oklahoma North
 Surface Location
 Latitude: 35.81031°
 Longitude: 98.28635°
 Y= 295,085'
 X = 1,915,094'

Location NAD 83
 Surface Location
 Latitude: 35.81036°
 Longitude: 98.28669°
 Y= 295,109'
 X = 1,883,494'



D. Harry McClintick 5/18/16
 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.