

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

API NUMBER: 087 22019

Approval Date: 01/13/2015

Expiration Date: 07/13/2015

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 06 Twp: 6N Rge: 4W

County: MCCLAIN

SPOT LOCATION: SW SW SW SW

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 315 225

Lease Name: HARMON

Well No: 1H-31X

Well will be 225 feet from nearest unit or lease boundary.

Operator Name: NEWFIELD EXPLORATION MID-CON INC

Telephone: 9188781290

OTC/OCC Number: 20944 0

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

MAE F. HARMON
10588 220TH STREET
BLANCHARD OK 73010

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN	11028	6	
2	WOODFORD	11214	7	
3	HUNTON	11361	8	
4			9	
5			10	

Spacing Orders: 633223

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201407519
201407517

Special Orders:

Total Depth: 21687

Ground Elevation: 1173

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 280

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: Yes

PIT 1 INFORMATION

Approved Method for disposal of Drilling Fluids:

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

D. One time land application -- (REQUIRES PERMIT)

PERMIT NO: 14-29184

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: 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 31 Twp 7N Rge 4W County MCCLAIN

Spot Location of End Point: NE NW NW NW

Feet From: NORTH 1/4 Section Line: 50

Feet From: WEST 1/4 Section Line: 528

Depth of Deviation: 10621

Radius of Turn: 740

Direction: 2

Total Length: 9903

Measured Total Depth: 21687

True Vertical Depth: 11361

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

Notes:

Category

Description

DEEP SURFACE CASING

12/10/2014 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY FOR ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON CONDUCTOR OR SURFACE CASING

MEMO

12/10/2014 - G71 - PIT 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, WBM & OBM CUTTINGS CAPTURED IN CONCRETE-LINED PIT, SOLIDIFIED, AND BURIED ON SITE; PIT 2 - OBM TO VENDOR

PENDING CD - 201407517

1/13/2015 - G75 - (I.O.) 31-7N-4W & 6-6N-4W
EST MULTIUNIT HORIZONTAL WELL
X633223 MSSP, WDFD, HNTN
(MSSP, HNTN ASSOCIATED COMMON SOURCES OF SUPPLY TO WDFD)
50% 31-7N-4W
50% 6-6N-4W
NO OP. NAMED
REC 11-10-2014 (MCKEOWN)

PENDING CD - 201407519

1/13/2015 - G75 - (I.O.) 31-7N-4W & 6-6N-4W
X633223 MSSP, WDFD, HNTN
SHL NCT 150 FSL, NCT 330 FWL 6-6N-4W **
COMPL. INT (6-6N-4W) NCT 165 FSL, NCT 0 FNL, NCT 330 FWL
COMPL. INT. (31-7N-4W) NCT 0 FSL, NCT 165 FNL, NCT 330 FWL
NO OP. NAMED
REC 11-10-2014 (MCKEOWN)

** ITD HAS SHL AS 315 FSL, 225 FWL 6-6N-4W; TO BE CORRECTED AT HEARING FOR FINAL ORDER LOCATION EXCEPTION PER OPERATOR

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
SPACING - 633223	1/13/2015 - G75 - (640)(HOR) 31-7N-4W & 6-6N-4W EXT 629241 MSSP, WDFD, HNTN COMPL. INT. (MSSP, HNTN) NLT 660' FB COMPL. INT. (WDFD) NLT 330' FB (COEXIST SP. ORDER # 110312/110671/112492 MSRH 31-7N-4W; ORDER # 175592 MSSLM S2 31-7N-4W & 6-6N-4W; ORDER # 287585 MSRH 6-6N-4W; ORDER # 287585 MSSLM N2 31-7N-4W)
WATERSHED STRUCTURE	12/10/2014 - G71 - WELL WITHIN 1/2 MILE OF AN OKLAHOMA CONSERVATION COMMISSION WATERSHED STRUCTURE. CONTACT THE LOCAL CONSERVATION DISTRICT OFFICE AT (405) 527-3452 PRIOR TO DRILLING

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

December 8, 2014

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

API 087-22019

ATTN: Manager of the Technical Services Department

RE: Liner Variance Request
Harmon 1H-31X
Sec 06-06N-04W, McClain County

Dear Sir:

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.

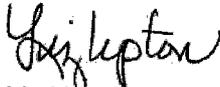
API 087-22019

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,



Liz Upton
Regulatory Technician

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 087-22019

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.

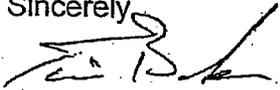
The TSD Manager will require operators to submit documentation in support of requests for variances. Variances to liner requirements for pits containing OBC are not effective until granted by the TSD Manager. If operators requesting variances to liner requirements for pits containing OBC fail to submit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

API 087-22019

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

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EXCELLENCE IS OUR STANDARD

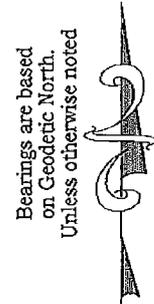
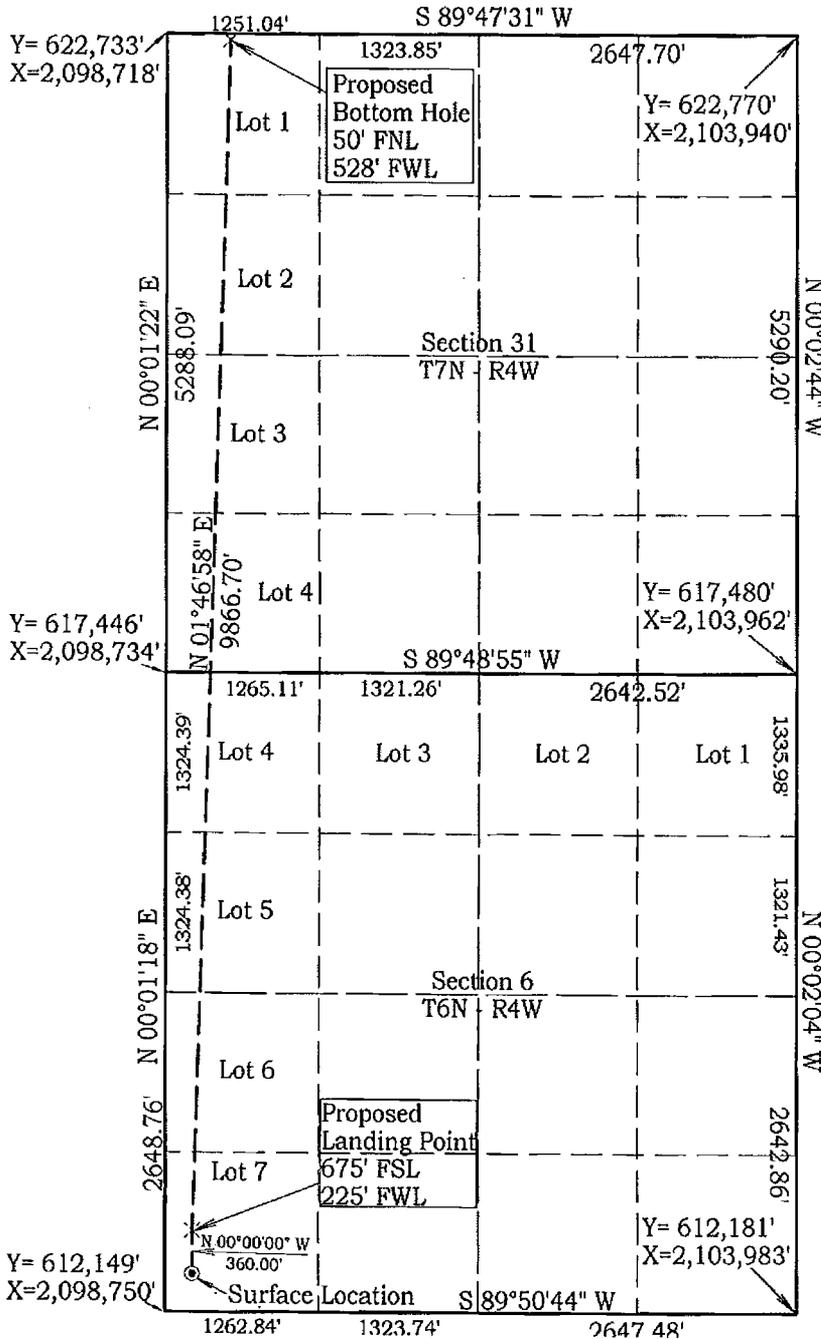
API 087-22019

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: Harmon #1H-31X
Section 6 Township 6 North Range 4 West County McClain Oklahoma
Surface Location 315' FSL - 225' FWL



Scale: 1" = 1500'
Invoice # 14392
Date 9/23/14

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

Location NAD 27
Oklahoma South

Surface Location
Latitude: 35.01587°
Longitude: 97.66947°
Y= 612,465'
X = 2,098,974'

D. Harry McClintick 12/9/14

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.

