

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

API NUMBER: 073 25663

Approval Date: 06/07/2017

Expiration Date: 12/07/2017

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 36 Twp: 15N Rge: 9W

County: KINGFISHER

SPOT LOCATION:

FEET FROM QUARTER: FROM NORTH FROM WEST

SECTION LINES: 375 390

Lease Name: KATIE

Well No: 1509 1H-36

Well will be 375 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

ANNE K. COFFEY TRUST AGREEMENT 10/13/1997
PO BOX 337
OKARCHE OK 73762

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

Name	Depth	Name	Depth
1 MISSISSIPPI SOLID	8905	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 164538

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201702632
201703285

Special Orders:

Total Depth: 15124

Ground Elevation: 1220

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 410

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 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: CHICKASHA

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 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: CHICKASHA

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 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: CHICKASHA

HORIZONTAL HOLE 1

Sec 36 Twp 15N Rge 9W County KINGFISHER

Spot Location of End Point: SE SW SW SW

Feet From: SOUTH 1/4 Section Line: 50

Feet From: WEST 1/4 Section Line: 380

Depth of Deviation: 8930

Radius of Turn: 715

Direction: 181

Total Length: 5070

Measured Total Depth: 15124

True Vertical Depth: 9846

End Point Location from Lease,

Unit, or Property Line: 50

Additional Surface Owner	Address	City, State, Zip
WILLIAM J. WITTROCK FAMILY TRU	3500 N. FLAMINGO	BETHANY, OK 73008
MARY W. RUEB FAMILY TRUST 5/22/	3033 NW 63RD, SUITE 150	OKLAHOMA CITY, OK 73116

Notes:

Category

DEEP SURFACE CASING

Description

5/19/2017 - 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

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

073 25663 KATIE 1509 1H-36

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
HYDRAULIC FRACTURING	5/19/2017 - 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 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 MILE
MEMO	5/19/2017 - 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
PENDING CD - 201702632	5/23/2017 - G60 - (I.O.) 36-15N-9W X201702631 MSSP ** POE TO BHL NCT 165' FNL, NCT 165' FSL, NCT 330' FWL NO OP. NAMED REC. 5/15/17 (JOHNSON)
PENDING CD - 201703285	**CHANGED TO MSSSD AT MERIT HEARING PER ATTORNEY FOR OPERATOR 5/25/2017 - G60 - (I.O.) 36-15N-9W X164538 MSSP ** 1 WELL NO OP. NAMED REC. 6/5/17 (MCKEOWN)
SPACING - 164538	**CHANGED TO MSSSD AT MERIT HEARING PER ATTORNEY FOR OPERATOR 5/23/2017 - G60 - (640) 36-15N-9W EXT OTHERS EXT 76186 MSSSD, OTHER

3507325663



Newfield Exploration Mid-Continent, Inc.

24 Waterway, Suite 900
The Woodlands, TX 77380

Regulatory Dept.
PHONE: 281-674-2521
FAX: 346-224-7026

May 18, 2017

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

RE: Katie 1509 1H-36
Sec 36-15N-09W
Kingfisher 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, 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.

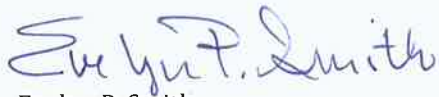
The permeability value specified in item 2(a) is the same as that required for a standard soil liner, so that in effect the DuroSM processed material becomes its own liner but is even more effective, because the low permeability extends throughout the bulk of the DuroSM material.

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.

Respectfully,

Newfield Exploration, Mid Continent, Inc.

A handwritten signature in blue ink that reads "Evelyn P. Smith". The signature is written in a cursive style with a large, stylized "E" and "S".

Evelyn P. Smith
Sr. Regulatory Specialist

Bob Anthony
Commissioner

3507325663

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.

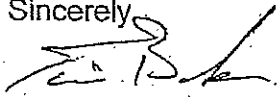
If the processes employed by your company and any other entity demonstrate through the submission of laboratory analyses, chain of custody forms and any other documentation required by the TSD Manager that the solidified OBC for which a variance from the pit liner requirements is sought meet acceptable 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 Wrotenberg, Ron Dunkin, Wayne Wright, Grant Ellis, Tony Cupp, Terry Grooms,
Gayland Darity, Sally Shipley, Keith Thomas, Susan Conrad, Jim Hamilton, Connie Moore

3507325663

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: **KATIE 1509 1H-36**

Section 36 Township 15 N Range 9 W, I.B.M., County of Kingfisher, State of Oklahoma

Elevation 1220' Ground Good Location?

Original Location: 375'FNL - 390'FWL

Distance & Direction From Nearest Town: 8.0 miles WNW of Okarche



SCALE 1" = 1000'

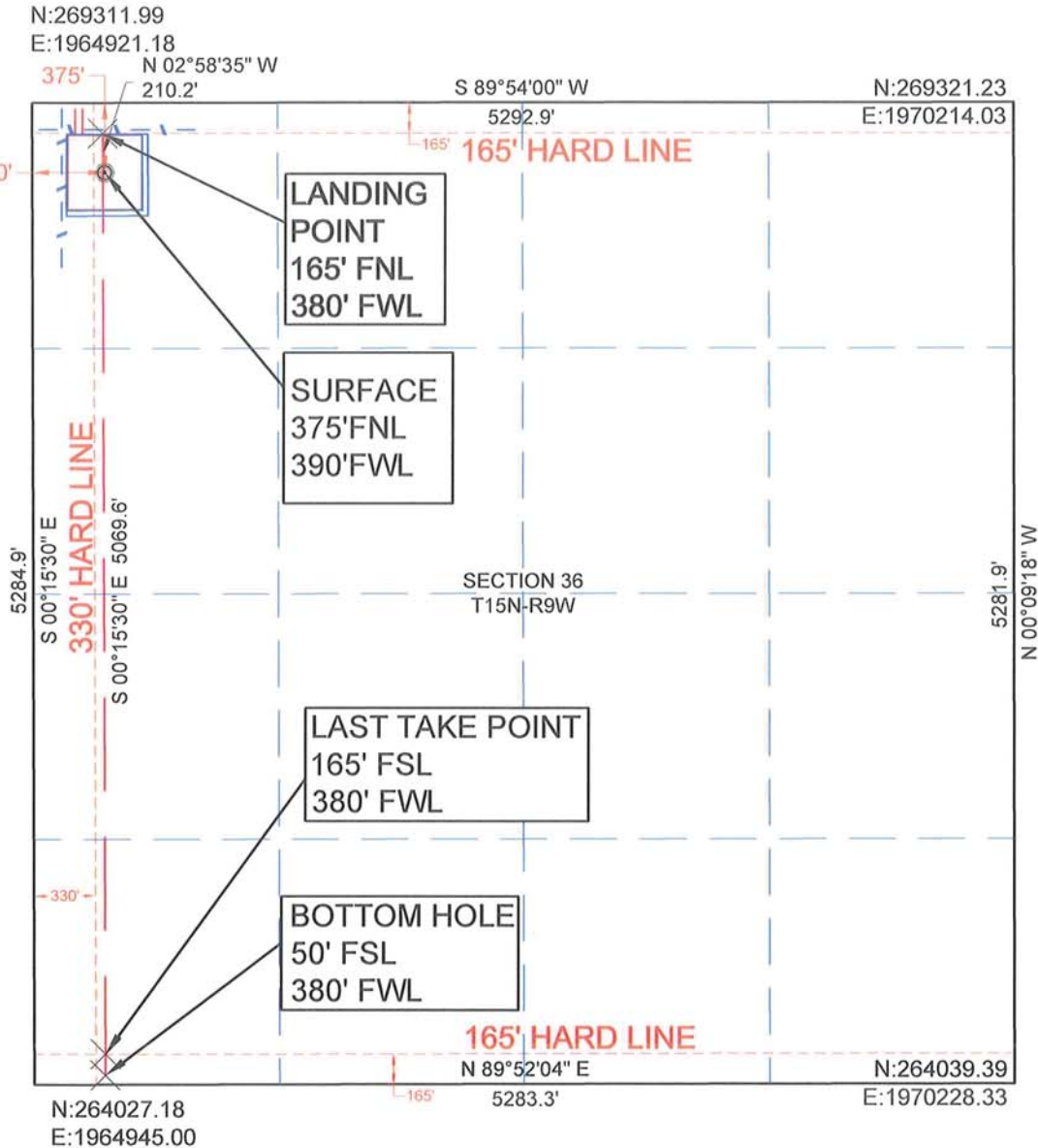


SURFACE LOCATION
 DATUM: NAD27
 LAT: 35° 44' 19.56"N
 LONG: 98° 07' 00.76"W
 LAT: 35.738767°N
 LONG: 98.116877°W
 STATE PLANE
 COORDINATES: (US SURVEY FEET)
 ZONE: NORTH ZONE
 Y (N): 268937.72
 X (E): 1965312.89

DATUM: NAD83
 LAT: 35° 44' 19.72"N
 LONG: 98° 07' 01.96"W
 LAT: 35.738812°N
 LONG: 98.117212°W
 STATE PLANE
 COORDINATES: (US SURVEY FEET)
 ZONE: NORTH ZONE
 Y (N): 268961.454
 X (E): 1933714.171

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 5/13/17
 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: 17155	SITE VISIT: (Explanation and Date)
	STAKING DATE: 04/11/2017
SHEET: 6 OF 10	DRAWING DATE: 05/10/2017