API NUMBER: 087 22077 Iorizontal Hole Oil & Gas	OIL & GAS CO P.C OKLAHOMA	RPORATION COMMISSION DNSERVATION DIVISION D. BOX 52000 A CITY, OK 73152-2000 Ile 165:10-3-1)	Approval Date: 06/16/2017 Expiration Date: 12/16/2017
WELL LOCATION: Sec: 27 Twp: 8N Rge: 4W SPOT LOCATION: SW NE SW SE Lease Name: LARRY Operator NEWFIELD EXPLORATION MID-CO Name:	/ County: MCCLAIN FEET FROM QUARTER: FROM SOU SECTION LINES: 765 Well No: 1H-2	1770	I will be 765 feet from nearest unit or lease boundary. OTC/OCC Number: 20944 0
NEWFIELD EXPLORATION MID-CON I 24 WATERWAY AVE STE 900 SPRING, TX	NC 77380-2764	MCCLAIN COU P.O. BOX 538 BLANCHARD	JNTY LAND CO., LLC OK 73010
Formation(s) (Permit Valid for Listed Form Name 1 MISSISSIPPIAN 2 WOODFORD 3 4 5	mations Only): Depth 9518 9702	Name 6 7 8 9 10	Depth
Spacing Orders: No Spacing Pending CD Numbers: 201703354 201703358 201703360	Location Exception Order	'S:	Increased Density Orders: Special Orders:
Total Depth: 20540 Ground Elevation: 12	26 Surface Casi	ing: 1500	Depth to base of Treatable Water-Bearing FM: 340
Under Federal Jurisdiction: No PIT 1 INFORMATION Type of Pit System: ON SITE	Fresh Water Supp	bly Well Drilled: No Approved Method for dispos	Surface Water used to Drill: No al of Drilling Fluids:
Type of Mud System: AIR Is depth to top of ground water greater than 10ft below ba Within 1 mile of municipal water well? N Wellhead Protection Area? N Pit <b>is</b> located in a Hydrologically Sensitive Area.	se of pit? Y	F. Haul to Commercial soil 617361 H. SEE MEMO	arming facility: Sec. 6 Twn. 2N Rng. 4W Cnty. 137 Order No:
Category of Pit: 4 Liner not required for Category: 4 Pit Location is AP/TE DEPOSIT Pit Location Formation: TERRACE Mud System Change to Water-Based or Oil-Based Mud R	equires an Amended Intent (Form )	1000)	

 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

 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
 C

Pit Location is AP/TE DEPOSIT Pit Location Formation: TERRACE

#### 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 AP/TE DEPOSIT Pit Location Formation: TERRACE

### HORIZONTAL HOLE 1

Sec 22 Twp 8N Rge 4W County MCCLAIN Spot Location of End Point: NW NF NW NE Feet From: SOUTH 1/4 Section Line: 50 Feet From: EAST 1/4 Section Line: 1877 Depth of Deviation: 9008 Radius of Turn: 750 Direction: 358 Total Length: 10354 Measured Total Depth: 20540 True Vertical Depth: 9702 End Point Location from Lease. Unit, or Property Line: 50 Notes: Category Description 6/12/2017 - G71 - APPROVED: NOTIFY OCC FIELD INSPECTOR IMMEDIATELY FOR ANY LOSS DEEP SURFACE CASING OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON CONDUCTOR OR SURFACE CASING HYDRAULIC FRACTURING 6/12/2017 - 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

Category	Description
МЕМО	6/12/2017 - 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
PENDING CD - 201703354	6/16/2017 - G75 - (640)(HOR) 27 & 22-8N-4W EXT 663347 MSSP, WDFD, OTHER COMPL. INT. (MSSP) NLT 660' FB COMPL. INT. (WDFD) NLT 165' FNL & FSL, NLT 330' FEL & FWL REC 6-12-2017 (MCKEOWN)
PENDING CD - 201703358	6/16/2017 - G75 - (I.O.) 27 & 22-8N-4W EST MULTIUNIT HORIZONTAL WELL X201703354 MSSP, WDFD, OTHER (MSSP ASSOCIATED COMMON SOURCE OF SUPPLY TO WDFD) 50% 27-8N-4W 50% 22-8N-4W NO OP. NAMED REC 6-12-2017 (MCKEOWN)
PENDING CD - 201703360	6/16/2017 - G75 - (I.O.) 27 & 22-8N-4W X201703354 MSSP, WDFD, OTHER COMPL. INT. (27-8N-4W) NCT 165' FSL, NCT 0' FNL, NCT 1800' FEL COMPL. INT. (22-8N-4W) NCT 0' FSL, NCT 165' FNL, NCT 1800' FEL NO OP. NAMED REC 6-12-2017 (MCKEOWN)



Newfield Exploration Mid-Continent, Inc. 24 Water Way, Suite 900 The Woodlands, TX 77380 Phone: 281-674-2521 Fax: 346-224-7026

June 12, 2017

API 087-22077

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

RE: Request for Liner Variance Waiver. Larry 1H-22X Sec 27-08N-04W McClain County

## 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>™</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 x 10<sup>-6</sup> 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.

lto whit F

Evelyn P. Šmith Sr. Regulatory Specialist

Bob Anthony Commissioner

# OKLAHOMA Corporation Commission

OKLAHOMA CITY OKLAHOMA 73152-2000

OIL & GAS CONSERVATION DIVISION



Jeff Cloud

Commissioner

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

Dana Murphy

Commissioner

Lori Wrotenbery, Director

API 087-22077

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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 in reduce and

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(b)(5) states that any variance from the liner requirements of 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

. . . . .

المحاجيج الهراب أحمد الأجاري والمعاملات والمحاجبة

. . . . . . . . . . . . .

. موجع تحمط في المراجع . . . .

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

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SERVICE • ASSISTANCE • COMPLIANCE EXCELLENCE IS OUR STANDARD

# PERMIT PLAT

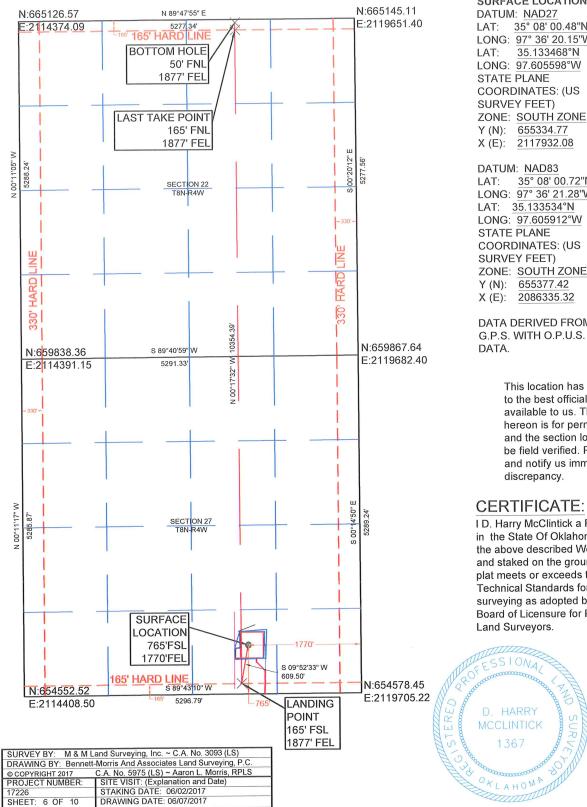
M & M Land Surveying, Inc. Phone (580) 226-0446 520 E Street N.W. Ardmore, OK 73401

Company Name: NEWFIELD EXPLORATION MID-CONTINENT INC.

Lease Name: LARRY 1H-22X



Distance & Direction From Nearest Town: 3.0 miles East of Blanchard



SURFACE LOCATION 35° 08' 00.48"N LONG: 97° 36' 20.15"W 35.133468°N

35° 08' 00.72"N LONG: 97° 36' 21.28"W LONG: 97.605912°W COORDINATES: (US ZONE: SOUTH ZONE

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

> 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

## 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

D. Harry McClintick

PLS. No.1367 CFEDS



SCALE 1" = 1500' 0' 1500