PI NUMBER:       137       26986         prizontal Hole       Oil & Gas         WELL LOCATION:       Sec:       21       Twp:       2N       Rge:       4         SPOT LOCATION:       SW       SW       SW       NW         Lease Name:       BRANCH         Operator       NEWFIELD EXPL MIDCONTINEN	OIL & GAS ( F OKLAHOI (I 4W County: STEPHE FEET FROM QUARTER: FROM NO SECTION LINES: 24 Well No: 6	DRTH FROM WEST 110 210 H-16X	SION		01/03/2013 07/03/2013 st unit or lease boundary.
Name:		Telephone: 9188781290		OTC/OCC Number:	20944 0
NEWFIELD EXPL MIDCONTINENT IN 1 WILLIAMS CTR STE 1900 TULSA, OK	NC 74172-0162		RED D. BRANCH BOX 729 ISAY	ОК 7	3052
Formation(s) (Permit Valid for Listed For Name 1 MISSISSIPPIAN 2 SYCAMORE 3 WOODFORD 4 HUNTON	Depth Depth 15161 15323 15467 15717	Nan 6 7 8 9 10	ie	Dept	h
5 Spacing Orders: 592371 602383 605706	Location Exception Or		In	creased Density Orders:	605638 605539
Pending CD Numbers: 201206347 201206346 201206350				pecial Orders:	
Total Depth: 22836 Ground Elevation:	<sup>1189</sup> Surface Ca	ising: 1500	Depth	to base of Treatable Wate	r-Bearing FM: 460
Under Federal Jurisdiction: No	Fresh Water St	upply Well Drilled: No		Surface Water u	used to Drill: Yes
PIT 1 INFORMATION Type of Pit System: CLOSED Closed System Means	s Steel Pits	Approved Meth	od for disposal of Drillin	g Fluids:	
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			D. One time land application (REQUIRES PERMIT) PERMIT NO: 12-22230 H. SEE MEMO		
Within 1 mile of municipal water well?       N         Wellhead Protection Area?       N         Pit       is       located in a Hydrologically Sensitive Area.         Cotocome of Bits       C					
Category of Pit: C Liner not required for Category: C Pit Location is AP/TE DEPOSIT Pit Location Formation: TERRACE					

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: 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 16 Twp 2N Rge 4W Cour	nty STEPHENS			
Spot Location of End Point: NE NW NW NW				
Feet From: NORTH 1/4 Section Line: 165				
Feet From: WEST 1/4 Section Line:	440			
Depth of Deviation: 15166				
Radius of Turn: 551				
Direction: 1				
Total Length: 6804				
Measured Total Depth: 22836				
True Vertical Depth: 15717				
End Point Location from Lease,				
Unit, or Property Line: 165				
Notes:				
Category	Description			
DEEP SURFACE CASING	1/2/2013 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY FOR ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON CONDUCTOR OR SURFACE CASING			
EXCEPTION TO RULE - 605990	1/3/2013 - G75 - (I.O.) 16-2N-4W X165:10-3-28(C)(2)(B) WDFD (BRANCH 6H-16X) <600' FROM EXISTING AND/OR PROPOSED WELL NEWFIELD EXPLOR. MID-CONT., INC. 12-28-2012			
INCREASED DENSITY - 605539	1/3/2013 - G75 - 21-2N-4W X602383 WDFD 5 WELLS NEWFIELD EXPLOR. MID-CONT. INC. 12-17-2012			
INCREASED DENSITY - 605638	1/3/2013 - G75 - 16-2N-4W X592371 WDFD 5 WELLS NEWFIELD EXPLOR. MID-CONT. INC. 12-18-2012			
MEMO	1/2/2013 - 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			

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
PENDING CD - 201206346	1/3/2013 - G75 - (I.O.) 21-2N-4W X602383 MSSP, WDFD, HNTN SHL NCT 1320 FSL, NCT 330 FWL ** COMPL. INT. NCT 0 FNL, NCT 1320 FSL, NCT 330 FWL NO OP. NAMED REC 12-3-2012 (JOHNSON)
	** ITD HAS SHL AS 210' FWL; TO BE CORRECTED AT HEARING FOR FINAL ORDER LOCATION EXCEPTION PER OPERATOR
PENDING CD - 201206347	1/3/2013 - G75 - (I.O.) 16-2N-4W X592371 SCMR, WDFD, HNTN COMPL. INT. NCT 0 FSL, NCT 165 FNL, NCT 330 FWL NO OP. NAMED REC 12-3-2012 (JOHNSON)
PENDING CD - 201206350	1/3/2013 - G75 - (I.O.) 21-2N-4W X165:10-3-28(C)(2)(B) WDFD (BRANCH 6H-16X <600' FROM EXISTING AND/OR PROPOSED WELL NEWFIELD EXPLOR. MID-CONT., INC. REC 12-3-2012 (JOHNSON)
SPACING - 592371	1/3/2013 - G75 - (640) 16-2N-4W EXT OTHER EXT 582855 SCMR, WDFD, HNTN, OTHERS
SPACING - 602383	1/3/2013 - G75 - (640) 21-2N-4W EXT 595488 MSSP EXT 596943 WDFD, HNTN, OTHERS EXT OTHERS
SPACING - 605706	1/3/2013 - G75 - (I.O.) 16 & 21-2N-4W EST MULTIUNIT HORIZONTAL WELL (BRANCH 6H-16X) X592371 SCMR, WDFD, HNTN 16-2N-4W X602383 MSSP, WDFD, HNTN 21-2N-4W 66% 16-2N-4W 34% 21-2N-4W NEWFIELD EXPLOR. MID-CONT. INC. 12-19-2012



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

December 19, 2012

Oklahoma Corporation Commission Oil & Gas Conservation Division P.O. Box 52000-2005 Oklahoma City, Oklahoma 73152-2000

API 137-26986

ATTN: Manager of the Technical Services Department

RE: Liner Variance Request Branch 6H-16X Stephens County, Oklahoma

### 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, 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>su</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;

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Page 2

- 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,

Jan & Burro

Daniele Burris Regulatory Analyst

cc: WF Geoffrey Nielsen



Bob Anthony Commissioner Jeff Cloud Commissioner Dana Murphy Commissioner

# OKLAHOMA Corporation Commission

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 137-26986

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RE: Requests for variances to liner requirements for pits used to contain oil-based cuttings or write 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.

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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

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