API NUMBER: 129 23754 A

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

Approval Date: 12/04/2012
Expiration Date: 06/04/2013

Horizontal Hole Oil & Gas

Amend reason: CHANGE OPERATOR

Lease Name: BLACK MOON

## AMEND PERMIT TO DRILL

WELL LOCATION:	Sec:	05	Twp:	12N	Rge:	25\	V County:	ROG	ER MILLS			
SPOT LOCATION:	SW	SE	SE		SE		FEET FROM QUARTER:	FROM	SOUTH	FROM	EAST	
							SECTION LINES:		265		500	

Well will be 265 feet from nearest unit or lease boundary.

 Operator Name:
 ENERVEST OPERATING LLC
 Telephone:
 7134956530
 OTC/OCC Number:
 19848
 0

Well No: 1H-5

ENERVEST OPERATING LLC 1001 FANNIN ST STE 800

HOUSTON, TX 77002-6708

MICHAEL LYNN OWEN 17437 E 930 ROAD

REYDON OK 73660

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

	Name	Depth		Name	Depth
1	BROWN DOLOMITE	5197	6	CHECKERBOARD	11595
2	DOUGLAS	9073	7	CLEVELAND	11722
3	TONKAWA	9938	8	MARMATON GRANITE WASH	12740
4	COTTAGE GROVE	10552	9		
5	HOGSHOOTER	11252	10		
Spacing Orders:	591673	Location Exception Orders:	592799	Increased Density Orders:	
	184224		604731		

Pending CD Numbers: Special Orders:

Total Depth: 18031 Ground Elevation: 2460 Surface Casing: 970 Depth to base of Treatable Water-Bearing FM: 790

Under Federal Jurisdiction: No Fresh Water Supply Well Drilled: No Surface Water used to Drill: No

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 D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 12-22037

Chlorides Max: 8000 Average: 5000 H. SEE MEMO

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: OGALLALA

## 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 BED AQUIFER
Pit Location Formation: OGALLALA

## **HORIZONTAL HOLE 1**

Sec 05 Twp 12N Rge 25W County ROGER MILLS

Spot Location of End Point: NW NE NE NE Feet From: NORTH 1/4 Section Line: 165
Feet From: EAST 1/4 Section Line: 500

Depth of Deviation: 12561 Radius of Turn: 1000

Direction: 360
Total Length: 4050

Measured Total Depth: 18031

True Vertical Depth: 13112

End Point Location from Lease,
Unit, or Property Line: 165

Notes:

Category Description

LOCATION EXCEPTION - 592799 12/4/2012 - G30 - (I.O.) 5-12N-25W

X184224 BRWDO, DGLS, TNKW, CGGV, HGSR, CCKB, CLVD, MRMGW

SHL NCT 265 FSL, NCT 500 FEL POE NCT 780 FSL, NCT 500 FEL 1ST PERF NCT 780 FSL, NCT 500 FEL LAST PERF NCT 330 FNL, NCT 500 FEL BHL NCT 165 FNL, NCT 500 FEL

NO OP. NAMED

1/9/12

LOCATION EXCEPTION - 604731 12/4/2012 - G30 - EXTENDS LOCATION EXCEPTION ORDER #592799 UNTIL 7-7-13

MEMO 11/30/2012 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR OPTION,

CONCRETE LINED PIT FOR SOIL FARMING, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS

PERMITTED PER DISTRICT

SPACING - 184224 12/4/2012 - G30 - (640) 5-12N-25W

EXT 122038/162189 DGLS, TNKW, CLVD, OTHERS

EXT 154788 BRWDO, CGGV, MRMGW

SPACING - 591673 12/4/2012 - G30 - (640) 5-12N-25W

EXT 586353 HGSR, CCKB