| API NUMBER: Horizontal Hole | 083 24255 Oil & Gas | A | OIL & GAS | CORPORATION S CONSERVATIO P.O. BOX 52000 OMA CITY, OK 73 (Rule 165:10-3-1 | ON DIVISION) 3152-2000 | Approval Date: Expiration Date: | 02/04/2014 08/04/2014 | |
|--|---|---------------------|---|---|---|---|-----------------------------|--|
| Amend reason: BHL (| CHANGED | | AMI | END PERMIT TO | DRILL | | | |
| WELL LOCATIO | N: Soc: 23 Tw | p: 19N Rge: 3 | W County: LOG | | | | | |
| SPOT LOCATION | | SE SW | FEET FROM QUARTER: FROM | | EST | | | |
| | | | SECTION LINES: | | 206 | | | |
| Lease Name: | ROTHERMEL 23-19 | 9N-3W | Well No: | зwн | | will be 340 feet from neare | est unit or lease boundary. | |
| Operator Name: | | Y PRODUCTION (| | Telephone: 4052 | | OTC/OCC Number: | 20751 0 | |
| 333 W S | ENERGY PROE HERIDAN AVE DMA CITY, | | _P 73102-5010 | | | N AND CHRISTINE KLINGAMAN INDEPENDENCE | | |
| One and | , on the second s | ÖN | 10102 0010 | | PERRY | OK 7 | 3077 | |
| 1 2 3 4 5 Spacing Orders: | Name MISSISSIPPIAN WOODFORD MISENER-HUNTON | I | Depth 5520 5830 5875 Location Exception | 6 7 8 9 10 Orders: | Name | Depr | h | |
| Pending CD Nur | nbers: 201308559 | | | | | Special Orders: | | |
| Total Depth: | 201308567 10870 G | round Elevation: 1 | 131 Surface (| Casing: 570 | | Depth to base of Treatable Wate | or-Bearing FM: 450 | |
| Under Federa | al Jurisdiction: No | | Fresh Water | Supply Well Drilled: | No | Surface Water | used to Drill: Yes | |
| PIT 1 INFORM | ATION | | | Appro | ved Method for disposal | of Drilling Fluids: | | |
| Type of Mud Sy Chlorides Max: | tem: CLOSED Clos ystem: WATER BAS 5000 Average: 3000 | ED | | | D. One time land application (REQUIRES PERMIT) PERMIT NO: 14-26315 H. SEE MEMO | | | |
| | of ground water greate municipal water well? | | ase of pit? Y | | | | | |
| Wellhead Prote | | | | | | | | |
| Pit is loo Category of Pi | cated in a Hydrologica | Ily Sensitive Area. | | | | | | |
| | t: C ired for Category: C | | | | | | | |
| | BED AQUIFER | | | | | | | |
| Pit Location Fo | rmation: GARBER | 1 | | | | | | |

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: GARBER

HORIZONTAL HOLE 1

| Sec | 23 | Twp | 19N | Rge | 3W | С | ounty | LOGAN | |
|--|----------|---------|--------|-------|----|------|-------|---|--|
| Spot | Location | n of En | d Poin | t: N\ | N | ١E | NE | NW | |
| Feet From: NORTH 1/4 Section Line: 50 | | | | | | | 50 | | |
| Feet From: WEST 1/4 Section Line: 2270 | | | | | | 2270 | | | |
| Depth of Deviation: 5742 | | | | | | | | | |
| Radius of Turn: 358 | | | | | | | | | |
| Direction: 1 | | | | | | | | | |
| Total Length: 4566 | | | | | | | | | |
| Measured Total Depth: 10870 | | | | | | | | | |
| True Vertical Depth: 6000 | | | | | | | | | |
| End Point Location from Lease, | | | | | | | | | |
| Unit, or Property Line: 50 | | | | | | | | | |
| | | | | | | | | | |
| Note | es: | | | | | | | | |
| Cate | egory | | | | | | I | Description | |
| MEN | NO | | | | | | | 2/3/2014 - G71 - PITS 1 & 2 - CONCRETE LINED PIT FOR | |

PENDING CD - 201308559

PENDING CD - 201308567

SPACING - 605895

2/3/2014 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR OPTION, CONCRETE LINED PIT FOR SOIL FARMING PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

2/3/2014 - G30 - 23-19N-3W X605895 MSSP, WDFD, MSRH, OTHER POE NCT 0 FSL, NCT 1500 FWL 1ST PERF NCT 150 FSL, NCT 1500 FWL LAST PERF NCT 150 FNL, NCT 1500 FWL BHL NCT 0 FNL, NCT 1500 FWL NO OP. NAMED REC 1/27/14 (LEAVITT)

2/3/2014 - G30 - 23-19N-3W X605895 MSSP, WDFD, MSRH 3 WELLS NO OP. NAMED REC 1/27/14 (LEAVITT)

2/3/2014 - G30 - (640 HOR) 23-19N-3W EXT 601235 MSSP, WDFD, MSRH, OTHER POE TO BHL (MSSP, MSRH) NLT 660' FB, NCT 600' FWB POE TO BHL (WDFD) NLT 330' FB, NCT 600' FWB (SUPERSEDE NON-PRODUCING NON-HORIZONTAL SPACING UNITS; COEXIST WITH PRODUCING NON-HORIZONTAL SPACING UNITS)