| PI NUMBER: 087 22248<br>izontal Hole Oil & Gas  | OIL & GAS (<br>F<br>OKLAHON | ORPORATION COMMISS<br>CONSERVATION DIVISIO<br>P.O. BOX 52000<br>MA CITY, OK 73152-2000<br>Rule 165:10-3-1) |                                    | Approval Date:<br>Expiration Date: | 06/05/2019<br>12/05/2020  |  |
|---|-----------------------------|--|------------------------------------|------------------------------------|---------------------------|--|
|   | Р                           | ERMIT TO DRILL   |                                    |                                    |                           |  |
|   |                             |  |                                    |                                    |                           |  |
| WELL LOCATION: Sec: 06 Twp: 5N Rge: 4   | W County: MCCLAI            | N  |                                    |                                    |                           |  |
|   | FEET FROM QUARTER: FROM     | ORTH FROM WEST   |                                    |                                    |                           |  |
|   | SECTION LINES: 23           | 85 815   |                                    |                                    |                           |  |
| Lease Name: KILKENNY  | Well No: 1-                 | -6MH   | Well will be                       | 235 feet from neares               | t unit or lease boundary. |  |
| Operator CASILLAS OPERATING LLC<br>Name:  |                             | Telephone: 9185825310  | C                                  | TC/OCC Number:                     | 23838 0                   |  |
| CASILLAS OPERATING LLC  |                             |  |                                    |                                    |                           |  |
| 401 S BOSTON AVE STE 2400   |                             |  | J.E. RANCH FOUNDATION, ANNE RICHEY |                                    |                           |  |
| TULSA, OK   | 74103-4060                  | 901 N. V/  | AN BUREN AV                        | E.                                 |                           |  |
|   |                             | BLANCH   | ARD                                | OK 73                              | 3010                      |  |
| 3<br>4<br>5<br>Spacing Orders:  | Location Exception Or       | 8<br>9<br>10   | Incr                               | eased Density Orders:              |                           |  |
| No Spacing  |                             |  |                                    | eased Density Orders.              |                           |  |
| Pending CD Numbers: 201902418   |                             |  | Spec                               | cial Orders:                       |                           |  |
| 201902624   |                             |  |                                    |                                    |                           |  |
| 201902624<br>Total Depth: 17000 Ground Elevation: 1   | 172 Surface Ca              | asing: 1500  | Depth to I                         | base of Treatable Water            | Bearing FM: 360           |  |
|   |                             | asing: 1500<br>upply Well Drilled: No  | Depth to I                         |                                    | Bearing FM: 360           |  |
| Total Depth: 17000 Ground Elevation: 1  |                             | -  | ·                                  | Surface Water us                   | -                         |  |
| Total Depth: 17000 Ground Elevation: 1<br>Under Federal Jurisdiction: No  | Fresh Water St              | upply Well Drilled: No   | disposal of Drilling F             | Surface Water u:<br>Fluids:        | -                         |  |
| Total Depth: 17000 Ground Elevation: 1<br>Under Federal Jurisdiction: No<br>PIT 1 INFORMATION<br>Type of Pit System: CLOSED Closed System Means   | Fresh Water St              | upply Well Drilled: No<br>Approved Method for  | disposal of Drilling F             | Surface Water u:<br>Fluids:        | sed to Drill: Yes         |  |
| Total Depth: 17000       Ground Elevation: 1         Under Federal Jurisdiction:       No         PIT 1 INFORMATION       Type of Pit System:       CLOSED Closed System Means         Type of Mud System:       WATER BASED         Chlorides Max: 5000 Average: 3000       Is depth to top of ground water greater than 10ft below b  | Fresh Water St              | upply Well Drilled: No<br>Approved Method for<br>D. One time land ap                                       | disposal of Drilling F             | Surface Water u:<br>Fluids:        | sed to Drill: Yes         |  |
| Total Depth: 17000       Ground Elevation: 1         Under Federal Jurisdiction:       No         PIT 1 INFORMATION       Type of Pit System:       CLOSED Closed System Means         Type of Mud System:       WATER BASED         Chlorides Max: 5000 Average: 3000       Is depth to top of ground water greater than 10ft below b         Within 1 mile of municipal water well?       N   | Fresh Water St              | upply Well Drilled: No<br>Approved Method for<br>D. One time land ap                                       | disposal of Drilling F             | Surface Water u:<br>Fluids:        | sed to Drill: Yes         |  |
| Total Depth: 17000       Ground Elevation: 1         Under Federal Jurisdiction:       No         PIT 1 INFORMATION       Type of Pit System:       CLOSED Closed System Means         Type of Mud System:       WATER BASED         Chlorides Max: 5000 Average: 3000       Is depth to top of ground water greater than 10ft below b         Within 1 mile of municipal water well?       N         Wellhead Protection Area?       N   | Fresh Water St              | upply Well Drilled: No<br>Approved Method for<br>D. One time land ap                                       | disposal of Drilling F             | Surface Water u:<br>Fluids:        | sed to Drill: Yes         |  |
| Total Depth: 17000       Ground Elevation: 1         Under Federal Jurisdiction:       No         PIT 1 INFORMATION       Type of Pit System:       CLOSED Closed System Means         Type of Mud System:       WATER BASED         Chlorides Max: 5000 Average: 3000       Is depth to top of ground water greater than 10ft below b         Within 1 mile of municipal water well?       N         Wellhead Protection Area?       N         Pit       is       located in a Hydrologically Sensitive Area.                            | Fresh Water St              | upply Well Drilled: No<br>Approved Method for<br>D. One time land ap                                       | disposal of Drilling F             | Surface Water u:<br>Fluids:        | sed to Drill: Yes         |  |
| Total Depth: 17000       Ground Elevation: 1         Under Federal Jurisdiction:       No         PIT 1 INFORMATION       Type of Pit System:       CLOSED Closed System Means         Type of Mud System:       WATER BASED         Chlorides Max: 5000 Average: 3000       Is depth to top of ground water greater than 10ft below b         Within 1 mile of municipal water well?       N         Wellhead Protection Area?       N         Pit       is located in a Hydrologically Sensitive Area.         Category of Pit:       C | Fresh Water St              | upply Well Drilled: No<br>Approved Method for<br>D. One time land ap                                       | disposal of Drilling F             | Surface Water u:<br>Fluids:        | sed to Drill: Yes         |  |
| Total Depth: 17000       Ground Elevation: 1         Under Federal Jurisdiction:       No         PIT 1 INFORMATION       Type of Pit System:       CLOSED Closed System Means         Type of Mud System:       WATER BASED         Chlorides Max: 5000 Average: 3000       Is depth to top of ground water greater than 10ft below b         Within 1 mile of municipal water well?       N         Wellhead Protection Area?       N         Pit       is       located in a Hydrologically Sensitive Area.                            | Fresh Water St              | upply Well Drilled: No<br>Approved Method for<br>D. One time land ap                                       | disposal of Drilling F             | Surface Water u:<br>Fluids:        | sed to Drill: Yes         |  |

 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
 C

Pit Location is BED AQUIFER Pit Location Formation: DUNCAN

## HORIZONTAL HOLE 1

| Sec                                     | 06    | Twp | 5N  | Rge    | 4W    | /      | County | MCCLAIN |
|---|-------|-----|-----|--------|-------|--------|--------|---------|
| Spot Location of End Point: SW SW SE SW |       |     |     |        |       |        | SW     |         |
| Feet                                    | From: | SOL | JTH | 1/4 Se | ction | l Line | : 50   | )       |
| Feet                                    | From: | WE  | ST  | 1/4 Se | ctior | n Line | e: 15  | 500     |
| Depth of Deviation: 11188               |       |     |     |        |       |        |        |         |
| Radius of Turn: 465                     |       |     |     |        |       |        |        |         |
| Direction: 175                          |       |     |     |        |       |        |        |         |
| Total Length: 5082                      |       |     |     |        |       |        |        |         |
| Measured Total Depth: 17000             |       |     |     |        |       |        |        |         |
| True Vertical Depth: 12088              |       |     |     |        |       |        |        |         |
| End Point Location from Lease,          |       |     |     |        |       |        |        |         |
| Unit, or Property Line: 50              |       |     |     |        |       |        |        |         |
|   |       |     |     |        |       |        |        |         |

| Notes:                 |   |
|------------------------|---|
| Category               | Description   |
| DEEP SURFACE CASING    | 5/28/2019 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS OF<br>CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR<br>SURFACE CASING  |
| HYDRAULIC FRACTURING   | 5/28/2019 - G71 - OCC 165:10-3-10 REQUIRES:   |
|                        | 1) PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS FOR HORIZONTAL<br>WELLS, NOTICE GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFFSET OPERATORS WITH<br>WELLS COMPLETED IN THE SAME COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE;                |
|                        | 2) WITH NOTICE ALSO GIVEN 48 HOURS IN ADVANCE OF HYDRAULIC FRACTURING ALL<br>WELLS TO BOTH THE OCC CENTRAL OFFICE AND LOCAL DISTRICT OFFICES, USING THE<br>"FRAC NOTICE FORM" FOUND AT THE FOLLOWING LINK:<br>OCCEWEB.COM/OG/OGFORMS.HTML; AND, |
|                        | 3) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS<br>TO BE REPORTED TO FRACFOCUS WITHIN 60 DAYS AFTER THE CONCLUSION THE<br>HYDRAULIC FRACTURING OPERATIONS, USING THE FOLLOWING LINK: FRACFOCUS.ORG                 |
| МЕМО                   | 5/28/2019 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT   |
| PENDING CD - 201902418 | 6/5/2019 - G58 - (640)(HOR) 6-5N-4W<br>VAC OTHERS<br>VAC 266474 SCMR<br>EXT 664259 MSSP<br>POE TO BHL NLT 660' FB<br>REC 5/21/2019 (MOORE)  |

PENDING CD - 201902624

Description

6/5/2019 - G58 - (I.O.) 6-5N-4W X201902418 MSSP COMPL. INT. NCT 165' FNL, NCT 165' FSL, NCT 1350' FWL NO OP. NAMED REC 5/28/2019 (JOHNSON)

