| Form 3160-3<br>(March 2012)   |                                   | HO   | BBS OCL   | FORM OMB  | APPROVED<br>10. 1004-0137               |                         |  |
|---|-----------------------------------|--|---|---|---|-------------------------|--|
| UNITED STATES<br>DEPARTMENT OF THE I<br>BUREAU OF LAND, MAN   | 5. Lease Serial No.               | )  |   |   |   |                         |  |
| APPLICATION FOR PERMIT TO   | DRILL OF                          | REENTER  |   | %6. If Indian, Allotee                              | or Tribe Name                           | *** = ····              |  |
| la. Type of work: DRILL REENTE  | ER                                | 1011-0   | <u> </u>  | 7. If Unit or CA Agre                               | eement, Name and                        | I No.                   |  |
| lb. Type of Well: Oil Well Gas Well Other   | <b>S</b> iu                       | igle Zone 🔲 Multip   | ole Zone  | 8. Lease Name and<br>WEST COPPERLI                  | Well No.                                | <i>7064 /</i><br>/state |  |
| 2. Name of Operator<br>CAZA OPERATING, LLC.   | 2490                              | 1999   |   | 9. API Well No.<br>30-024                           | -41536                                  |                         |  |
| 3a. Address 200 NORTH LORAINE<br>SUITE 1550 MIDLAND, TEXAS 79701  | 3b. Phone No<br>43                | . (include area code)<br>2–682–7424  |   | 10. Field and Pool, or<br>BELL LAKE-BON             | Exploratory                             | 2209)                   |  |
| 4. Location of Well (Report location clearly and in accordance with an  | y State requirem                  | ents.*)  | AA  | 11. Sec., T. R. M. or B                             | lk. and Survey or                       | Area                    |  |
| At surface 150' FNL & 1980' FWL SECTION<br>At proposed prod. zone 330' FSL & 1980' FWL S  | 29 T2<br>SECTION                  | 3S-R34E<br>29 T23S-R34E  |   | SECTION 29  | T235-R34                                | E                       |  |
| 14. Distance in miles and direction from nearest town or post office*<br>Approximately 25 miles Northwest of  | Jal New                           | Mexico   |   | 12. County or Parish                                | 13. St                                  | ate                     |  |
| 15. Distance from proposed*   | 16. No. of a                      | cres in lease  | 17. Spacin                                      | g Unit dedicated to this                            | weļļ                                    |                         |  |
| property or lease line, ft. 150'<br>(Also to nearest drig. unit line, if any)   | 560                               |  | I   | 160   |   |                         |  |
| 18. Distance from proposed location*<br>to nearest well, drilling, completed, 180'<br>applied for, on this lease, ft.   | 19. Proposed<br>MD- 16,           | IDepth NO<br>209' PILOT<br>HOLE  | 20. BLM/I                                       | BIA Bond No. on file                                | ······································  |                         |  |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.)   | 22. Approxi                       | nate date work will sta  | nt*   | 23. Estimated duration                              |   |                         |  |
| 3539' GL  | WHEN AP                           | PROVED   |   | APP. 35 day   | ys                                      | <u> </u>                |  |
| The following, completed in accordance with the requirements of Onshor  | e Oil and Gas                     | Order No.1, must be at   | tached to the                                   | is form:  |   |                         |  |
| <ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office).</li> </ol> | Lands, the                        | <ol> <li>Bond to cover the liter 20 above).</li> <li>Operator certification of the state of the state</li></ol> | the operation<br>the operation<br>specific info | ns unless covered by an<br>ormation and/or plans as | n existing bond on<br>s may be required | ı file (see<br>I by the |  |
| 25. Signature (Jost ) Janie   | Name                              | (Printed/Typed)  |   |   | Date 12/18                              | <br>3/13                |  |
| Title Permit Eng.   |                                   |  |   |   | <u> </u>                                |                         |  |
| Approved by (Signature) /s/George MacDonell   | Name                              | (Printed/Typed)  |   |   | DateEC 23                               | 2013                    |  |
| Title FIELD MANAGER   | itle Office CARLSBAD FIELD OFFICE |  |   |   |   |                         |  |
| Application approval does not warrant or certify that the applicant holds<br>conduct operations thereon.<br>Conditions of approval, if any, are attached.   | s legalorequi                     | table title to those righ  | ts in the sub<br>A                              | pjectlease which would<br>PPROVAL FOF               | entitle the applica<br>R TWO YEA        | nt to                   |  |
| Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a cr<br>States any false, fictitious or fraudulent statements or representations as  | rime for any p<br>to any matter v | erson knowingly and writhin its jurisdiction.  | villfully to n                                  | nake to any department                              | or agency of the                        | United                  |  |
| (Continued on page 2)   |                                   |  | C   | arlsbad Contliv                                     | reutionster f                           |                         |  |
| Approval Subject to General Requirements SE<br>& Special Stipulations Attached CC   | E ATT<br>NDITI                    | ACHED FOI<br>ONS OF AP   | R<br>PROV                                       | VAL 21  | 30/13                                   |                         |  |
|   |                                   |  |   | DEC   | 3 0 2013                                | Ĵ                       |  |

------



### **HOBBS OCD**

December 15, 2013

DEC 30 2013

Bureau of Land Management-Carlsbad Office 620 E Green Street Carlsbad, New Mexico

RECEIVED

Attn: Mr. Wesley Ingram

Re: BLM APD dated November 23, 2013 Caza Petroleum-W. Copperline 29 No. 3H E/2 W/2 Section 29, T23S-R34E Lea County, New Mexico

Gentlemen:

Caza Petroleum is preparing to drill its W. Copperline 29 No. 3H well in the E/2 of the W/2 of Section 29, T23S-R34E, Lea County, New Mexico. This 160 acre project area includes portions of State Lease VB 2228 and BLM Lease NM 092199, respectively. In support of drilling this well, Caza:

(1) has received NMOCD compulsory pooling Order No. R-13723 covering this project area and both of the above referenced leases;

(2) is named Farmee/Operator in that certain Farmout Agreement dated July 1, 2013, between Caza and Devon Energy Production Company covering operating rights in SW/4 of Section 29 under NM 092199; and

(3) Caza is named Operator in that certain Operating Agreement dated May 30, 2013, executed by First Roswell Company and Chevron Energy covering all of Section 29, including the 160 acre project area under NM 091299.

If you have any questions, please call me at 832-381-3854 or email me at jbrown@cazapetro.com.

Very truly yours, Caza Petroleúm, Inc.

Land Manager

#### APPLICATION TO DRILL

CAZA OPERATING, LLC. WEST COPPERLINE 29 STATE COM. #3H UNIT "C" SECTION 29

T23S-R34E LEA CO. NM

In responce to questions asked under Section II of Bulletin NTL-6, the following information on the above well will be provider.

1. LOCATION: SHL: 150' FNL & 1980' FWL SECTION 29 T23S-R34E LEA CO. NM BHL: 330' FSL & 1980' FWL SECTION 29 T23S-R34E LEQ CO. NM 2. ELEVATION ABOVE SEA LEVEL: 3539' GL

3. GEOLOGICAL NAME OF SURFACE FORMATION: Quaternery Aeolian Deposits;

4. DRILLING TOOLS AND ASSOCIATED EQUIPMENT: Conventional rotary drilling rig using drilling mud as a circulating medium for the removal of solids from hole.

| 5. | PROPOSED | DRILLING | DEPTH: | MD-16,209'  |
|----|----------|----------|--------|-------------|
|    |          |          |        | TVD-11,631' |

| 6. | ESTIMATED TOPS OF | GEOLOGICAL FORMATIONS: |
|----|-------------------|------------------------|
|    | Rustler Anhydrite | 1024'                  |
|    | Top of Salt       | 1267'                  |
|    | Castile           | 3199'                  |
|    | Base of Salt      | 4787'                  |
|    | Bell Canyon       | 5212'                  |
|    |                   |                        |

7. POSSIBLE MINERAL BEARING FORMATIONS: Bell Canyon 0il/water/Gas

| •                 |               |
|-------------------|---------------|
| Cherry Canyon     | OI1/Water/Gas |
| Brushy Canyon     | 0il/Water/Gas |
| lst Bone Spring   | Oil/Water/Gas |
| . CASING PROGRAM: |               |

| Cherry Canyon        | 6004          |
|----------------------|---------------|
| Brushy Canyon        | 7301'         |
| Bone Spring          | 8678'         |
| lst Bone Spring      | 9771'         |
| 2nd Bone Spring      | 10,286'       |
| 3rd Bone Spring      | 11,266'       |
| Red Hills Sand       | 11,398'       |
| 2nd Bone Spring      | Oil/Water/Gas |
| 3rd Bone Spring      | Oil/Water/Gas |
| Possible Fresh Water | 250±'         |
|                      |               |

600/1

8. ASING PROGRAM

| HOLE SIZE     | INTERVAL  | CASING OD    | WEIGHT | THREAD | COLLAR | GRADE          | CONDITION |  |
|---------------|-----------|--------------|--------|--------|--------|----------------|-----------|--|
| 26"           | 0-140'    | 20"          | NA     | NA     | NA     | NA             | New       |  |
| 17 <u>1</u> " | 0-1060'   | 13. 3/8"     | 54.5#  | 8-R    | ST&C   | J-55           | New       |  |
| 121"          | 0-5085'   | 9 5/8"       | 40#    | 8-R    | LT&C   | J-55<br>HCK-55 | New       |  |
| 8 3/4"        | 0-16,209' | 5 <u>1</u> " | 20#    | 8-R    | LT&C   | P-110          | New       |  |

CASING SAFETY FACTORS: Collapse 1.125 Burst 1.00 Body Yield 1.5 Joint Strength 8-Round 1.3 Buttress 1.6

CAZA OPERATING, LLC. WEST COPPERLINE 29 FED/STATE COM. #3H UNIT "C" SECTION 29 T23S-R34E LEA CO. NM

In responce to questions asked under Section II of Bulletin NTL-6, the following information on the above well will be provider.

1. LOCATION: SHL: 150' FNL & 1980' FWL SECTION 29 T23S-R34E LEA CO. NM BHL: 330' FSL & 1980' FWL SECTION 29 T23S-R34E LEQ CO. NM 2. ELEVATION ABOVE SEA LEVEL: 3539' GL

- 3. GEOLOGICAL NAME OF SURFACE FORMATION: Quaternery Aeolian Deposits;
- 4. <u>DRILLING TOOLS AND ASSOCIATED EQUIPMENT</u>: Conventional rotary drilling rig using drilling mud as a circulating medium for the removal of solids from hole.
- 5. PROPOSED DRILLING DEPTH: MD-16,209' TVD-11,631'

| 6. | ESTIMATED TOPS OF<br>Rustler Anhydrite          | GEOLOGICAL FORMATIONS:<br>1066'  | Cherry Canyon<br>Brushy Canyon                    | 6004'<br>7301'                 |
|----|---|----------------------------------|---|--------------------------------|
|    | Top of Salt<br>Castile<br>Base of Salt<br>Lamar | 1267'<br>2787'<br>4896'<br>4950' | Bone Spring<br>1st Bone Spring<br>2nd Bone Spring | 8678'<br>9771'<br>10,286'      |
| 7. | Bell Canyon<br>POSSIBLE MINERAL                 | 5177'<br>BEARING FORMATIONS:     | Red Hills Sand                                    | 11,398'                        |
|    | Bell Canyon<br>Cherry Canyon                    | Oil/water/Gas<br>OIl/Water/Gas   | 2nd Bone Spring<br>3rd Bone Spring                | Oil/Water/Gas<br>Oil/Water/Gas |
|    | Brushy Canyon<br>lst Bone Spring                | Oil/Water/Gas<br>Oil/Water/Gas   | Possible Fresh Water                              | 250±'                          |

8. CASING PROGRAM:

| $\sim$          | • • |
|-----------------|-----|
| $\searrow$      | Ľ   |
| $\overline{\ }$ | A   |
| ( 7             | 14  |

| HOLE SIZE      | INTERVAL  | CASING OD    | WEIGHT      | THREAD | COLLAR | GRADE          | CONDITION |   |
|----------------|-----------|--------------|-------------|--------|--------|----------------|-----------|---|
| 26"            | 0-140'    | 20"          | ŇA          | NA     | NA     | NA             | New       | : |
| 17 <u>1</u> '' | 0-1060'   | 13 3/8"      | 54.5#       | 8-R    | ST&C   | J-55           | New       |   |
| 121"           | 0-5085'   | 9 5/8"       | 40 <i>#</i> | 8-R    | LT&C   | J-55<br>HCK-55 | New       |   |
| 8 3/4"         | 0-16,209' | 5 <u>1</u> " | 20#         | 8-R    | LT&C   | P-110          | New       |   |

CASING SAFETY FACTORS: Collapse 1.125 Burst 1.00 Body Yield 1.5 Joint Strength 8-Round 1.8 Buttress 1.6

#### APPLICATION TO DRILL

CAZA OPERATING, LLC. WEST COPPERLINE 29 FED/STATE COM. #3H UNIT "C" SECTION 29 T23S-R34E LEA CO. NM

#### 9. CASING SETTING DRPTHS AND CEMENTING:

Set 140' of 20" conductor pipe and cement to surface 20" Conductor with Redi-mix. Run and set 1060 of 13 3/8" 54.5# J-55 ST&C casing. 13 3/8" Surface Cement with 674 Sx of Class "C" cement + 4% Gel, + 2% Cacl, Yield 1.74, tail in with 200 Sx. of Class "C" cement + 2% CaCl, Yield 1.32. 50% Excess circulate cement to surface. Run and set 5085' of 9 5/8" 40# casing as follows" 9 5/8" Intermediate 3185-1100 of 9 5/8" 40# HCK-55 LT&C casing,0-3985' of 9 5/8" 5085 40# J-55 LT&C casing. Cement with 1053 Sx. of 35/65

Class "C" POZ cement + 5% Salt, + 6% Gel, Yield 2.09, Tail in with 200 Sx. of Class "C" cement + 1% CaCl, Yield 1.32. 75% Excess, circulate cement to surface.

1

5½" Production Run and set 16,209! of 5½" 20# P-110 LT&C casing. Cement with 1429 Sx. of 35/65 Class "H" POZ cement + 1½ / Sx. of KolSeal, + retarder, Yield 1.93, tail in with 621 Sx. of Class "H" SoluCem cement, # fluid.loss control + defoamer, Yield 2.61, 50% Excess top of cement 4500'.

#### 10. PRESSURE CONTROL EQUIPMENT:

Exhibit "E" shows a 5000 PSI working pressure B.O.P. consisting of a packoff an annular bag type preventor, blind rams. and pipe rams. A 13 5/8" B.O.P. will be nippled up on the 13 3/8" surface casing and will remain on the well to TD. The B.O.P. will be tested by a third party testing company to 5000 PSI. The B.O.P. will be operated at least once in each 25 hour period and the blind rams will be operated when the drill pipe is out of the hole on trips. A full opening stabbing valve and an upper kelly cock will be available on the derrick floor at all times and will be compatible with the drill pipe being used to drill this well. Exhobit "E-1" shows a 3" 5000 PSI choke manifold with a manual choke and a hydraulically remote choke. The choke manifold will be regid connection to the B.O.P. No abnormal pressures or abnormal temperatures are expected in this well during drilling operations, other wells drilled in the area did not encounter high temperatures or pressures. CAZA OPERATING, LLC. WEST COPPERLINE 29 FED/STATE COM. #3H UNIT "C" SECTION 29 T23S-R34E LEA CO. NM

|     | 11. PROPOSED M    | UD CIRCULATING | SYSTRM: |            |   |
|-----|-------------------|----------------|---------|------------|---|
| SIL | cost              |                | ~       |            |   |
| 2.  | DEPTH             | MUD WT.        | VISC.   | FLUID LOSS | TYPE MUD SYSTEM   |
|     | 40-1060'          | 8.6-8.9        | 29-32   | NC         | Fresh water spud mud<br>use paper to control<br>seepage, and high vis-<br>cosity to clean hole.                       |
|     | 150<br>1060-5085' | 10.0- 10.2     | 29-36   | NC         | Brine water using paper<br>to control seepage and<br>high viscosity sweeps to<br>clean hole.                          |
|     | 5085-16,209'      | 8.6-9.2        | 29-38   | NC         | Fresh water with the<br>possibility of going to<br>cut brine system, using<br>high viscosity sweeps to<br>clean hole. |

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DST's, open hole logs, cut cores and casing, the viscosity, water loss and other properties may have to be altered to meet these requirements. Pit level will be monitered visually and electronic pit level moniter will be used.

THIS WELL WILL BE DRILLED USING A CLOSED MUD SYSTEM.

## APPLICATION TO DRILL

CAZA OPERATING, LLC. WEST COPPERLINE 29 FED/STATE COM. #3H UNIT "C" SECTION 29 T23S-R34E LEA CO. NM

#### 12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Open hole logs: Run Dual Laterolog, CNL, LDT, Gamma Ray FMI Sonic, from End of verticle hole (11,900±") back to Intermediate casing (5085') Run Gamma Ray, Neutron from intermediate casing shoe back to surface.
- B. Rig up mud logger on hole at 5085' and remain on hole to TD.
- C. No DST's or cores are planned at this time unless Geologist requests one to determine quality of reservoir.

#### 13. POTENTIAL HAZARDS:



No abnormal pressures or temperatures are expected. There is no known presence of  $H^2S$  in this area. If  $H^2S$  is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP <u>Est. 5350</u> PSI, and Estimated BHT <u>Est. 195°</u>. The well 180' South of this location did not encounter any H2S during the drilling operation.

#### 14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operation and drilling is expected to take 35 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flowlines in order to place well on production.

#### 15. OTHER FACETS OF OPERATIONS:

After running casing, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones. The <u>Bone Spring</u> formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialed as a Bone Spring producer.

## Caza Operating, LLC West Copperline Fed/State Com # 3H Hydrogen Sulfide Contingency Plan For Drilling/Workover/Facility

150 FNL & 1980 FWL, SEC 29, T23S, R34E, LEA COUNTY, NEW MEXICO

get 5P

This well and its anticipated facility are not expected to have Hydrogen Sulfide releases. However, there may be Hydrogen Sulfide production in the nearby area. There are no occupied dwellings in the area but a contingency plan has been orchestrated. Caza Operating,LLC will have a Company Representative living on location through out the drilling and completion of this well. If Hydrogen Sulfide is detected or suspected, monitoring equipment will be available for monitoring and/or testing. An un-man H2S safety trailer and monitoring equipment will also be station on location during the drilling operation below the Surface Casing depth of  $\pm$  1060 ft. to total drilling depth of 16,060 ft. MD & TVD of ± 11.470 ft.

1

## West Copperline 29 Fed/State Com # 3H 5000 PSI BOP Schematic Minimum requirement 11 inch







. .

٠.

#### Note: The Rig and Closed System Company for this well have not been selected thus the set up shown is simply generic.

.

,



# West Copperline 29 State Com # 3H Closed Loop Drilling System

## **Operations and Maintenance Plan**

Closed Loop equipment will be inspected and monitored closely on a daily basis by each drilling rig Tour and by those hired specifically to operate the equipment. Any leak or release detected will be repaired immediately and the proper NMOCD official will be notified within the 48 hr requirement. A large release will require Caza Operating, LLC representatives to contact BLM immediately at the Carlsbad office "575 234 5972" Hobbs "575 393 3612" as well as the NMOCD @ 575 393 6161 as stated by NMOCD rule 116.

## **Closure Plan**

During and after drilling operations, liquids (which apply), all drill cuttings and drilling fluids will be hauled and disposed of at the R-360 disposal (permit number NM 01-0006) located about 30 miles East of Carlsbad, New Mexico. An alternate approved disposal site has been selected Parabo disposal "Sundance" which is 4 miles East of Eunice (permit number NM 01-0003). The Second site would be used in the event of economics or physical problems with R-360 disposal.







¥ 1



1.

Preplaining reasonable spacing accommodations for a useable "Closed Loop" drillsite layout is thallenging. Particular site specific conflicts need to be resolved. This generic APD plat was prepared to demonstrate several necessary elements. The plat should include: a north arrow, prevailing wind threation, spacing access for truck removal of cutting bins, flare pit location, and piping provision to the flare pit. Include the choke manifold and mud-gas separation location routing.

### EXHIBIT "D" RIG LAYOUT PLAT

CAZA OPERATING, LLC. WEST COPPERLINE 29 STATE COM. #3H UNIT "C" SECTION 29 T23S-R34E LEA CO. NM



EXPANDED VIEW OF FLOW LINESTO MUD-GAS SEPERATOR & BLOW DOWN LINES TO FLARE PIT

## Caza Operating, LLC West Copperline 29 State Com # 3H Hydrogen Sulfide Contingency Plan For Drilling/Workover/Facility

150 FNL & 1980 FWL, SEC 29, T23S, R34E, LEA COUNTY, NEW MEXICO

This well and its anticipated facility are not expected to have Hydrogen Sulfide releases. However, there may be Hydrogen Sulfide production in the nearby area. There are no occupied dwellings in the area but a contingency plan has been orchestrated. Caza Operating,LLC will have a Company Representative living on location through out the drilling and completion of this well. If Hydrogen Sulfide is detected or suspected, monitoring equipment will be available for monitoring and/or testing. An un-man H2S safety trailer and monitoring equipment will also be station on location during the drilling operation below the Surface Casing depth of ± 800 ft. to total drilling depth of 15,880 ft.

1