

Submit 1 Copy To Appropriate District Office  
 District I - (575) 393-6161  
 1625 N. French Dr., Hobbs, NM 88240  
 District II - (575) 748-1283  
 811 S. First St., Artesia, NM 88210  
 District III - (505) 334-6178  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 District IV - (505) 476-3460  
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
 Energy, Minerals and Natural Resources

EMNRD-OCD ARTESIA Form C-103  
 REC'D: 6/1/2020 Revised July 18, 2013

OIL CONSERVATION DIVISION  
 1220 South St. Francis Dr.  
 Santa Fe, NM 87505

WELL API NO. <b>30-015-40045</b>
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name <b>Quail State Com</b>
8. Well Number <b>003H</b>
9. OGRID Number <b>15363</b>
10. Pool name or Wildcat <b>Empire; Glorieta-Yeso</b>

**SUNDRY NOTICES AND REPORTS ON WELLS**  
 (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well  Gas Well  Other

2. Name of Operator  
**Murchison Oil and Gas, LLC**

3. Address of Operator  
**7250 Dallas Parkway, Suite 1400, Plano, TX 75024**

4. Well Location  
 Unit Letter **P** : **840** feet from the **S** line and **170** feet from the **E** line  
 Section **8** Township **17S** Range **28E** NMPM County **Eddy**

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
**3554' GR**

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

<b>NOTICE OF INTENTION TO:</b>		<b>SUBSEQUENT REPORT OF:</b>	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input checked="" type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
DOWNHOLE COMMINGLE <input type="checkbox"/>			
CLOSED-LOOP SYSTEM <input type="checkbox"/>			
OTHER: <input type="checkbox"/>		OTHER: <input type="checkbox"/>	

Notify OCD 24 hrs. prior to any work done

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Set CIBP @ 3309'

- Spot 30 sx cmt @ 3309' - 3160'. WOC & tag.
- Spot 70 sx cmt @ 1960' - 1573'. (San Andres & csg patch).
- Spot 55 sx cmt @ 1200' - 900'. WOC & tag (Queen & B/Salt).
- Spot 50 sx cmt @ 573' - 327'. WOC & tag (T/Salt & 9 5/8" shoe). Perf @ 4027' & attempt to circ cmt to surf
- Spot 25 sx cmt @ 100' to surface. Perf @ 100' and attempt to circ cmt to surf.
- Cut off well head, verify cmt to surface, weld on Dry Hole Marker.

Spud Date:  Rig Release Date:

\*\*\*\*SEE ATTACHED COA"s\*\*\*\* MUST BE PLUGGED BY 12/2/2020

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE  TITLE Vice President Operations DATE 5/29/20

Type or print name Gary R. Cooper E-mail address: rcooper@jdmii.com PHONE: 972-931-0700  
**For State Use Only**

APPROVED BY:  TITLE Staff MGR DATE 6/2/2020  
 Conditions of Approval (if any):

**PROPOSED P&A WELLBORE DIAGRAM**

Murchison Oil and Gas, LLC  
 Quail State Com #3H  
 Empire Field  
 Eddy County, NM

5/23/2014

GL = 3553.5 ft  
 KB = 3567.1 ft

API# 30-015-40045

**TD - 7924 ft MD / 3406 ft TVD**

**Surface Casing**

9 5/8" 36 lb/ft J-55 LTC  
 Setting Depth - 377 ft  
 Float Shoe - 375 ft  
 Float Collar - 332 ft

**Cement**

150 sx Class C  
**Cement to surface- 5bbls**

**Intermediate Casing**

7" 26 lb/ft N-80 LTC  
 Setting Depth - 3441 ft  
 Float Shoe - 3440 ft  
 Float Collar - 3355 ft

**Cement**

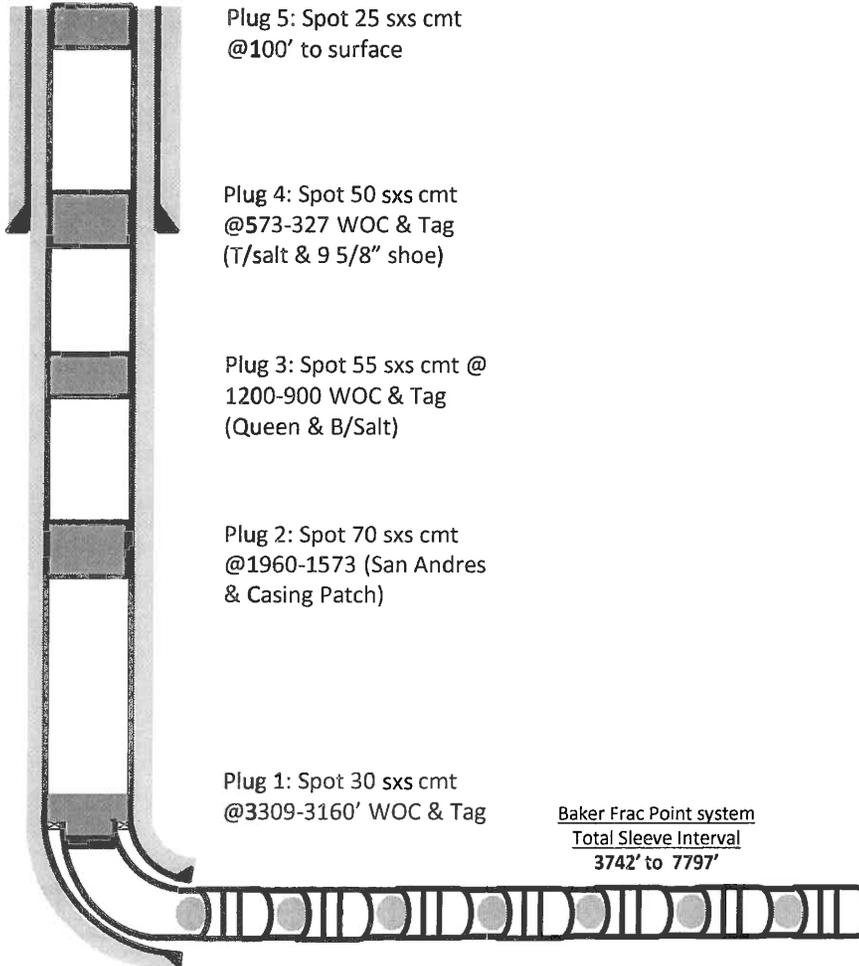
Lead - 100 sx Class C  
 Middle - 585 sx Class C  
 Tail - 211 sx Class C  
**Cement to surface- 130 bbls**

**Production Liner**

**Baker Frac Point System**

4 1/2" 11.6 lb/ft N-80 BTC  
 Baker Hughes Frac Point  
 Liner Hanger - 3259 ft  
 Setting Depth - 7891 ft  
 Float Shoe - 7889 ft  
 2% KCl completion fluid

**PBTD - 7884 ft MD / 3407 ft TVD**



Plug 5: Spot 25 sxs cmt @100' to surface

Plug 4: Spot 50 sxs cmt @573-327 WOC & Tag (T/salt & 9 5/8" shoe)

Plug 3: Spot 55 sxs cmt @ 1200-900 WOC & Tag (Queen & B/Salt)

Plug 2: Spot 70 sxs cmt @1960-1573 (San Andres & Casing Patch)

Plug 1: Spot 30 sxs cmt @3309-3160' WOC & Tag

Baker Frac Point system  
Total Sleeve Interval  
 3742' to 7797'

Found hole in inter. casing @ 1623'.  
 Casing patch set @ 1613'-1634 but was not tested.  
 Casing patch ID: 5.5"

## **CONDITIONS FOR PLUGGING AND ABANDONMENT**

### **OCD - Southern District**

The following is a guide or checklist in preparation of a plugging program, this is not all inclusive and care must be exercised in establishing special plugging programs in unique and unusual cases, **Notify NMOCD District Office II at (575)-748-1283 at least 24 hours before beginning work. After MIRU rig will remain on well until it is plugged to surface. OCD is to be notified before rig down. Company representative will be on location during plugging procedures.**

- 1. A notice of intent to plug and abandon a wellbore is required to be approved before plugging operations are conducted. A cement evaluation tool is required in order to ensure isolation of producing formations, protection of water and correlative rights. A cement bond log or other accepted cement evaluation tool is to be provided to the division for evaluation if one has not been previously run or if the well did not have cement circulated to surface during the original casing cementing job or subsequent cementing jobs. Insure all bradenheads have been exposed, identified and valves are operational prior to rig up.**
- 2. Closed loop system is to be used for entire plugging operation. Upon completion, contents of steel pits are to be hauled to a permitted disposal location.**
- 3. Trucking companies being used to haul oilfield waste fluids to a disposal – commercial or private – shall have an approved NMOCD C-133 permit. A copy of this permit shall be available in each truck used to haul waste products. It is the responsibility of the operator as well as the contractor, to verify that this permit is in place prior to performing work. Drivers shall be able to produce a copy upon request of an NMOCD Field inspector.**
- 4. Filing a subsequent C-103 will serve as notification that the well has been plugged.**
- 5. A final C-103 shall be filed (and a site inspection by NMOCD Inspector to determine if the location is satisfactorily cleaned, all equipment, electric poles and trash has been removed to Meet NMOCD standards) before bonding can be released.**
- 6. If work has not begun within 1 Year of the approval of this procedure, an extension request must be file stating the reason the well has not been plugged.**
- 7. Squeeze pressures are not to exceed 500 psi, unless approval is given by NMOCD.**
- 8. Produced water will not be used during any part of the plugging operation.**
- 9. Mud laden fluids must be placed between all cement plugs mixed at 25 sacks per 100 bbls of water.**
- 10. All cement plugs will be a minimum of 100' in length or a minimum of 25 sacks of cement, whichever is greater. 50' of calculated cement excess required for inside casing plugs and 100% calculated cement excess required on outside casing plugs.**
- 11. Class 'C' cement will be used above 7500 feet.**
- 12. Class 'H' cement will be used below 7500 feet.**
- 13. A cement plug is required to be set 50' above and 50' below, casing stubs, DV tools, attempted casing cut offs, cement tops outside casing, salt sections and anywhere the casing is perforated, these plugs require a 4 hour WOC and then will be tagged**
- 14. All Casing Shoes Will Be Perforated 50' below shoe depth and Attempted to be Squeezed, cement needs to be 50' above and 50' Below Casing Shoe inside the Production Casing.**

16. When setting the top out cement plug in production, intermediate and surface casing, wellbores should remain full at least 30 minutes after plugs are set
17. A CIBP is to be set within 100' of production perforations, capped with 100' of cement, WOC 4 hours and tag.
18. A CIBP with 35' of cement may be used in lieu of the 100' plug if set with a bailer. This plug will be placed within 100' of the top perforation, (WOC 4 hrs and tag).
19. No more than 3000' is allowed between cement plugs in cased hole and 2000' in open hole.
20. Some of the Formations to be isolated with cement plugs are: These plugs to be set to isolate formation tops
  - A) Fusselman
  - B) Devonian
  - C) Morrow
  - D) Wolfcamp
  - E) Bone Springs
  - F) Delaware
  - G) Any salt sections
  - H) Abo
  - I) Glorieta
  - J) Yates.
  - K) **Potash---** (In the R-111-P Area (Potash Mine Area), a solid cement plug must be set across the salt section. Fluid used to mix the cement shall be saturated with the salts that are common to the section penetrated and in suitable proportions, not more than 3% calcium chloride (by weight of cement) will be considered the desired mixture whenever possible, WOC 4 hours and tag, this plug will be 50' below the bottom and 50' above the top of the Formation.
21. If cement does not exist behind casing strings at recommended formation depths, the casing can be cut and pulled with plugs set at recommended depths. If casing is not pulled, perforations will be shot and cement squeezed behind casing, WOC and tagged. These plugs will be set 50' below formation bottom to 50' above formation top inside the casing

#### **DRY HOLE MARKER REQUIREMENTS**

The operator shall mark the exact location of the plugged and abandoned well with a steel marker not less than four inches in diameter, 3' below ground level with a plate of at least ¼" welded to the top of the casing and the dry hole marker welded on the plate with the following information welded on the dry hole marker:

**1. Operator name 2. Lease and Well Number 3. API Number 4. Unit Letter 5. Quarter Section (feet from the North, South, East or West) 6. Section, Township and Range 7. Plugging Date 8. County (SPECIAL CASES)-----AGRICULTURE OR PRARIE CHICKEN BREEDING AREAS**

In these areas, a below ground marker is required with all pertinent information mentioned above on a plate, set 3' below ground level, a picture of the plate will be supplied to NMOCD for record, the exact location of the marker (longitude and latitude by GPS) will be provided to NMOCD (We typically require a current survey to verify the GPS)

#### **SITE REMEDIATION DUE WITHIN ONE YEAR OF WELL PLUGGING COMPLETION**