

Submit 1 Copy To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
October 13, 2009

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

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.)		WELL API NO. 30-005-63679
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other		5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator Armstrong Energy Corporation		6. State Oil & Gas Lease No. V-09896
3. Address of Operator P.O. Box 1973, Roswell, NM 88202-1973		7. Lease Name or Unit Agreement Name Barracuda ABV State
4. Well Location Unit Letter <u>H</u> : <u>1680</u> feet from the <u>North</u> line and <u>800</u> feet from the <u>East</u> line Section <u>5</u> Township <u>10S</u> Range <u>27E</u> NMPM Chaves County		8. Well Number 1
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3934' GR		9. OGRID Number 001092
		10. Pool name or Wildcat Foor Ranch; San Andres (Gas)

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

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☒
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
DOWNHOLE COMMINGLE ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: ☐

OTHER: ☐

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.

Armstrong Energy Corporation intends to permanently plug and abandon the captioned wellbore as follows:

- Notify NMOCD at least 24 hrs before beginning work. 1950'
- Use tubing to set set CIBP @ 2000', test casing to 500 psi. If tests good, circulate MLF & spot 25sx plug on top of CIBP. - WOC & TAG
- PERF & SOURCE ~~100'~~ 100' cement plug from 1284' to 1384' across 8 5/8" shoe. WOC 4 hrs tag plug
- ~~50sx~~ 50sx cement plug from 450' across 11 3/4" shoe to surface. - WOC & TAG
- Cut off wellhead and install dry hole marker.
- Cut off anchors and clean location.
- Remove caliche and reseed road and location.
- Notify OCD for final inspection.

Approved for plugging of well bore only.
Liability under bond is retained pending receipt
of C-103 (Subsequent Report of Well Plugging)
which may be found at OCD Web Page under
Forms: www.emnrd.state.nm.us/oed.

NM OIL CONSERVATION
ARTESIA DISTRICT

JAN 25 2017

RECEIVED

Spud Date:

Rig Release Date:

WELL MUST BE PLUGGED BY 11/26/18

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

SIGNATURE [Signature] TITLE Operations Manager DATE 01/23/2017
Type or print name Kyle S. Alpers E-mail address: kelpers@aecnm.com PHONE: (575) 625-2222

For State Use Only

APPROVED BY: [Signature] TITLE COMPLIANCE OFFICER DATE 11/26/17
Conditions of Approval (if any):

SEE ATTACHED COA-5



CURRENT WELLBORE DIAGRAM

LAST UPDATED
1/12/2017

3,934' GR

14 3/4" hole

Yates - 332'

7 Rivers - 422'

Queen - 926'

Penrose - 1,020'

Grayburg - 1,202'

11" hole

San Andres - 1,436'

Glorietta - 2,636'

Yeso - 2,732'

Tubb - 4,130'

Abo - 4,892'

Wolfcamp - 5,569'

Wolfcamp "B" - 5,666'

Spear - 5,910'

Cisco - 6,108'

Strawn - 6,226'

Mississippian - 6,376'

Siluro-Devonian - 6,416'

TD 6,590'

22" hole

20" @ 40'

redi-mix

11 3/4" 42#/ft H-40 ST&C @ 430'

400sx "C" circ.

← PERF @ 480' ± 5' SQUARE
WUC & TAG

← PERF @ 1384' ± 5' SQ
WUC & TAG

8 5/8" 24# J-55 ST&C @ 1,334' WUC

700sx, circ

2014'-2026' 26 shots(2016)

CIBP @ 2029'

2031'-2054' 51 shots(2016)

CIBP @ 2057'

2059'-2078' 33 shots (2016)

CIBP @ 2080'

Perforations - 12/2005

2,082'-2,139'

Retainer @ 2,450'

Squeeze perfs @ 2,470' w/300sx

25sx plug "C" 2,600'-2,700'

25 sx plug 4,800'-4,900' across Abo

CIBP @ 5,524' w/35' cement

Wolfcamp

Perforations - 8/2005

5,574'-5,592'

5,668'-5,674'

5,944'-5,958'

CIBP @ 6,366' w/35' cement

Silurian

Perforations - 11/2004

6,416'-6,422' (initial completion)

6,446'-6,456' (secondary completion)

7 7/8" hole

5 1/2" 15.5#/ft J-55 LTC @ 6,590'

900sx Litecrete + 600sx PVL - circ.

Armstrong Energy Corporation

Barracuda ABV

State #1

Unit H 1680' FNL & 800' FEL

Section 5, T10S, R27E

Chaves County, New Mexico

API Number 30-005-63679

State O&G Lease No. LG-2750

Spud Date: 7/7/2004

Lat 33.4771° Long -104.20968°

Downhole Production

Equipment

None at this time

Surface Production

Equipment

Notes

Proposed Re-Entry by Armstrong
Energy Corporation 2016

Silurian and Wolfcamp
unproductive. San Andres
produced 1,092 BO cumulative
and 20,108MCF cumulative

STIMULATION

1800g 20% IC acid and 57 balls

600g 20% IC acid with 21 balls

1500g 20% IC acid with 45 balls

STIMULATION

250g 20% IC acid

250g 20% IC acid



PROPOSED PLUGGING DIAGRAM

LAST UPDATED
1/12/2017

14 3/4" hole

Yates - 332'

7 Rivers - 422'

Queen - 926'

Penrose - 1,020'

Grayburg - 1,202'

11" hole

San Andres - 1,436'

Glorietta - 2,636'

Yeso - 2,732'

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Spear - 5,910'

Cisco - 6,108'

Strawn - 6,226'

Mississippian - 6,376'

Siluro-Devonian - 6,416'

TD 6,590'

22" hole

20" @ 40'
redi-mix

11 3/4" 42#/ft H-40 ST&C @ 430'
400sx "C" circ.

Proposed 50sx cement plug 450' - surface

PERF @ 480' & SQ
WOC & TAG

Proposed 100' cement plug 1284'-1384'

8 5/8" 24# J-55 ST&C @ 1,334'
700sx, circ

Mud Laden Fluid

WOC & TAG
Proposed CIBP @ 2000' w/35' cement

2014'-2026' 26 shots(2016)

CIBP @ 2029'

2031'-2054' 51 shots(2016)

CIBP @ 2057'

2059'-2078' 33 shots (2016)

CIBP @ 2080'

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Armstrong Energy Corporation

Barracuda ABV

State #1

Unit H 1680' FNL & 800' FEL
Section 5, T10S, R27E
Chaves County, New Mexico

API Number 30-005-63679
State O&G Lease No. LG-2750
Spud Date: 7/7/2004
Lat 33.4771° Long -104.20968°

Downhole Production Equipment

Surface Production Equipment

Notes

Re-entered by Armstrong Dec
'16 - Jan '17. San Andres
unproductive.

STIMULATION

1800g 20% IC acid and 57 balls
600g 20% IC acid with 21 balls
1500g 20% IC acid with 45 balls

STIMULATION

250g 20% IC acid
250g 20% IC acid

CONDITIONS FOR PLUGGING AND ABANDONMENT

District II / Artesia N.M.

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.**

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.
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. **Squeeze pressures are not to exceed 500 psi, unless approval is given by NMOCD.**
7. Produced water **will not** be used during any part of the plugging operation.
8. Mud laden fluids must be placed between all cement plugs mixed at 25 sacks per 100 bbls of water.
9. 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.
10. **Class 'C' cement will be used above 7500 feet.**
11. **Class 'H' cement will be used below 7500 feet.**
12. **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**
13. **All Casing Shoes Will Be Perforated and Attempted to be Squeezed, cement needs to be 50' above and 50' Below Casing Shoe inside the Production Casing**
50' BELOW SHOE DEPTH
14. 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
15. **A CIBP is to be set within 100' of production perforations, capped with 100' of cement, WOC 4 hours and tag.**
16. 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).**

17. No more than 3000' is allowed between cement plugs in cased hole and 2000' in open hole.

18. Formations to be isolated with cement plugs ~~SOME~~ *SOME ARE:*

- A) Fusselman
- B) Devonian
- C) Morrow
- D) Wolfcamp
- E) Bone Springs
- F) Delaware
- G) Any salt sections
- H) Abo
- I) Glorieta
- J) Yates.

THESE PLUGS TO BE SET TO ISOLATE FORMATION TOPS

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.**

19. 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)