

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

WELL API NO. 30-005-62781
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. VA-1952
7. Lease Name or Unit Agreement Name Sunfish State
8. Well Number 1
9. OGRID Number 001092
10. Pool name or Wildcat Foor Ranch; San Andres (Gas)
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3925' KB

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  
Armstrong Energy Corporation

3. Address of Operator  
P.O. Box 1973, Roswell, NM 88202-1973

4. Well Location  
 Unit Letter J : 1980 feet from the South line and 1980 feet from the East line  
 Section 32 Township 9S Range 27E NMPM Chaves County

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   
 OTHER:

SUBSEQUENT REPORT OF:

REMEDIAL WORK  ALTERING CASING   
 COMMENCE DRILLING OPNS.  P AND A   
 CASING/CEMENT JOB   
 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.
- Use tubing to set CIBP @ 1950', test casing to 500psi. If tests good, circulate MLF & spot 25sx plug on top of CIBP. -WOC & TAG
- ~~100'~~ 100' cement plug from 1460' to 1560' across 8 5/8" shoe. WOC 4 hrs, tag plug.
- Perforate 5.5" casing @ 400' and pump 110 sx cement plug into wellbore and 5.5"x8.625" annular space, circulate to surface. WOC 4 hrs and tag.
- Spot 60' surface plug, 60' - 0'
- 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.

PERF  
 OR  
 WOC  
 & TAG

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.cemnr.state.nm.us/oed.

NM OIL CONSERVATION  
 ARTESIA DISTRICT  
 JAN 25 2017

Spud Date:

Rig Release Date:

RECEIVED

WELL MUST BE PLUGGED BY 1/26/17

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 1/23/2017  
 Type or print name Kyle S. Alpers E-mail address: kalpers@aecnm.com PHONE: (575) 625-2222

For State Use Only

APPROVED BY: [Signature] TITLE COMPLIANCE OFFICER DATE 1/26/17  
 Conditions of Approval (if any):

SEE ATTACHED POA-5

**CURRENT WELLBORE DIAGRAM**

LAST UPDATED  
1/16/2017

12 1/4" hole

San Andres - 1,427'

7 7/8" hole

Glorietta - 2,662'

Tubb - 4,072'

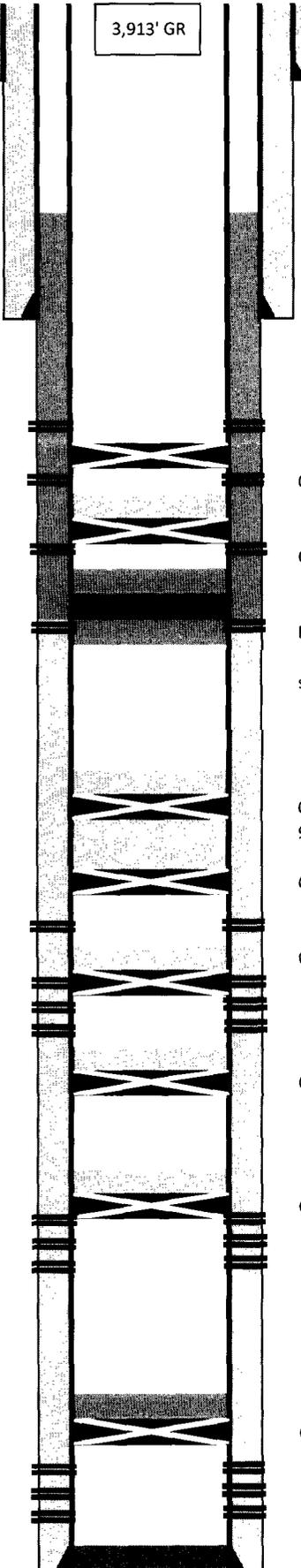
Abo - 4,822'

Wolfcamp - 5,490'

Cisco - 6,044'

Miss - 6,302'

Montoya - 6,359'  
CORES - 6,365' - 6,387'



3,913' GR

est. TOC @ 864' (2016 sqz)  
8 5/8" J-55 24#/ft @ 1,510'KB  
800sx Lite/C - 5sx Circ

**San Andres P1 (2016)**  
2007'-2052' 66 shots  
CIBP @ 2075' (2016)  
**San Andres P2 (2016)**  
2080'-2116' 32 shots  
CIBP @ 2210' w/35' cement  
**San Andres P3 (2016)**  
2229'-2257' 27 shots  
Retainer @ 2527' w/74' cem below,  
83' cement above  
sqz perms @ 2600', 335sx C (2016)  
Est. TOC 3,000'

CIBP @ 4,875' w/35'cement (2016)  
9.5# mud (2016)

CIBP @ 5,460' w/35'cement (2016)  
**Wolfcamp (2016)**  
5510'-5526' 51 shots  
CIBP @ 5,775' w/35'cement (2016)  
**Wolfcamp (2016)**  
5853'-5865' 39 shots  
5884'-5890' 21 shots  
5895' 4 shots  
CIBP @ 5,990' w/35'cement (2016)

CIBP @ 6,350' w/40'cement (2016)  
**Fusselman**  
6,384' - 6,396' 24 shots

CIBP @ 6,530' w/35'cement

**Abandoned**  
6,584' - 6,690' 44 shots  
5.5" 15.5# & 17# K-55 LTC @ 6,782'. 600sx Super H.  
TD 6,782'. PA'd in 1990, did not run pipe

Armstrong Energy Corporation

**Sunfish State #1**

UL J, 1,980' FSL & 1,980' FEL  
Section 32, T9S, R27E  
Chaves County, New Mexico

API Number **30-005-62781**  
State O&G Lease No. **VA-1952**  
Spud Date: 5/22/1990  
Re-Entry Date: 3/6/01 (Elk)  
POOL: Foor Ranch Pre-Permian

Downhole Production Equipment  
2.375" w/pkr set @ 6,303'

Surface Production Equipment

Gas Production Unit  
Tank Battery

Notes

PA'd in 1990 w/out running pipe. Re-entered by Elk in March 2001, completed in Fusselman.

**300 PPM H2S**

Stimulation  
2000 gallons 15% NEFE HCL

Stimulation  
3000 gallons 20% HCL

Stimulation  
none

PBTD 6,752'

**PROPOSED PLUGGING DIAGRAM**

LAST UPDATED  
1/16/2017

12 1/4" hole

San Andres - 1,427'

7 7/8" hole

Glorietta - 2,662'

Tubb - 4,072'

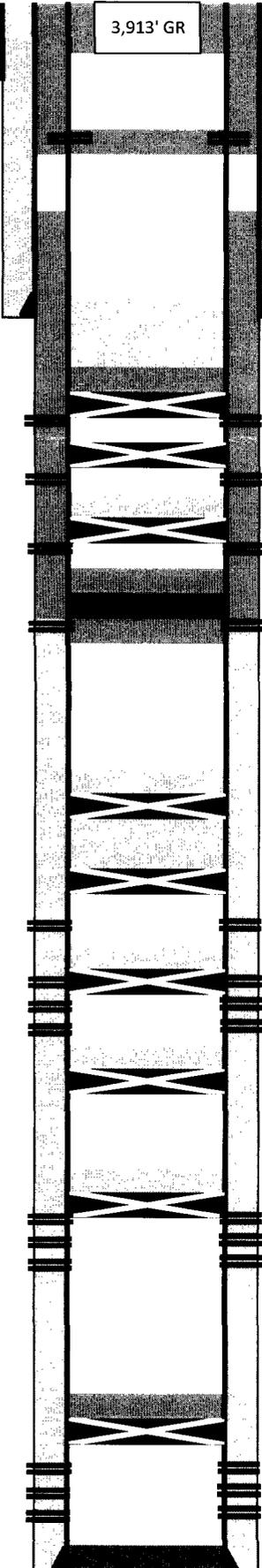
Abo - 4,822'

Wolfcamp - 5,490'

Cisco - 6,044'

Miss - 6,302'

Montoya - 6,359'  
CORES - 6,365' - 6,387'



Proposed 60' surface plug

Proposed sqz perfs @ 400' w/110 sx squeeze to circ annulus.

est. TOC @ 864' (2016 sqz)

8 5/8" J-55 24#/ft @ 1,510' KB

800sx Lite/C - 5sx Circ

Proposed 100' cement plug from 1460' to 1560' ← PART HERE & SQUEEZE W/ 0.5# MUD

Proposed CIBP @ 1950' w/25' cement San Andres P1 (2016)

2007'-2052' 66 shots

CIBP @ 2075' (2016)

San Andres P2 (2016)

2080'-2116' 32 shots

CIBP @ 2210' w/35' cement

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83' cement above

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POOL: Foor Ranch Pre-Permian

Downhole Production  
Equipment

Surface Production  
Equipment

Gas Production Unit  
Tank Battery

Notes

San Andres attempt in 2016  
by AEC, unproductive.  
Prep to P&A Jan 2017

Stimulation

2000 gallons 15% NEFE HCL

Stimulation

3000 gallons 20% HCL

Stimulation

none

PBTd 6,752'

## 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, ~~THE~~ *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)