

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-101
Revised July 18, 2013

OCD - HOBBS
09/10/2020
RECEIVED

AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

| | | |
|--|---------------------------------------|--|
| ¹ Operator Name and Address Armstrong Energy Corporation PO Box 1973 Roswell, NM 88202 | | ² OGRID Number 1078 1092 |
| | | ³ API Number 30-025-36866 |
| ⁴ Property Code 320118 | ⁵ Property Name Ruth 20 | ⁶ Well No. 2 |

7. Surface Location

| UL - Lot | Section | Township | Range | Lot Idn | Feet from | N/S Line | Feet From | E/W Line | County |
|----------|---------|----------|-------|---------|-----------|----------|-----------|----------|--------|
| D | 20 | 16S | 36E | D | 523 | N | 841 | W | Lea |

*** Proposed Bottom Hole Location**

| UL - Lot | Section | Township | Range | Lot Idn | Feet from | N/S Line | Feet From | E/W Line | County |
|----------|---------|----------|-------|---------|-----------|----------|-----------|----------|--------|
| D | 20 | 16S | 36E | D | 523 | N | 841 | W | Lea |

*** Pool Information**

| | | |
|------------------------------------|------------------------|--|
| LOVINGTON; UPPER PENN, WEST | ⁷ Pool Name | ⁸ Pool Code 40750 |
|------------------------------------|------------------------|--|

Additional Well Information

| | | | | |
|------------------------------|--|-------------------------------------|---|---|
| ¹¹ Work Type P | ¹² Well Type O | ¹³ Cable/Rotary R | ¹⁴ Lease Type S | ¹⁵ Ground Level Elevation 3940 GR |
| ¹⁶ Multiple N | ¹⁷ Proposed Depth 11,430' | ¹⁸ Formation Wolfcamp | ¹⁹ Contractor | ²⁰ Spud Date |
| Depth to Ground water 70 | Distance from nearest fresh water well 1000'+ | | Distance to nearest surface water 1000'+ | |

We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program


| Type | Hole Size | Casing Size | Casing Weight/ft | Setting Depth | Sacks of Cement | Estimated TOC |
|---------|-----------|-------------|------------------|---------------|-----------------|---------------|
| Surface | 17.5" | 13.375" | 48 | 448' | 450 | 0' |
| Int | 11" | 8.625" | 32 | 4,350' | 1600 | 0' |
| Prod | 7.875" | 5.5" | 17 | 11,700' | 1600 | 6,000' |

Casing/Cement Program: Additional Comments

| |
|-----------------|
| Existing Casing |
|-----------------|

22. Proposed Blowout Prevention Program

| Type | Working Pressure | Test Pressure | Manufacturer |
|------------------------|------------------|---------------|--------------|
| Annular and Double Ram | 5000 | 5000 | |

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
I further certify that I have complied with 19.15.14.9 (A) NMAC and/or 19.15.14.9 (B) NMAC , if applicable.
Signature: 

Printed name: Kyle Alpers

Title: VP Engineering

E-mail Address: kalpers@aecnm.com

Date: 9/10/20

Phone: 575-625-2222 ext. 305

OIL CONSERVATION DIVISION

Approved By:



Title:

Approved Date: **10/29/2020**

Expiration Date: **10/29/2022**

Conditions of Approval Attached



Ruth 20 #2
 API 30-025-36866
 Section 20 T16S R36E
 523' FNL & 841' FWL
 Lea County, NM

Anticipated Plugback and Stimulation Procedure, with planned start date of 9/20/20

1. Install 10k frac tree/test day prior to frac fleet arrival
2. MIRU tanks, water transfer, frac, and wireline
3. Perform perforations and fracturing procedure as per design on the following intervals:

| Top Perf | Bottom Perf | No. of Holes |
|----------|-------------|--------------|
| 11,307' | 11,415' | 36 |
| 11,118' | 11,294' | 36 |
| 11,100' | 11,183' | 36 |
| 10,950' | 11,096' | 36 |
| 10,523' | 10,667' | 30 |

4. RDMO frac equipment, WL, and unnecessary tanks for drillout
5. RD crown valve and goat head
6. MIRU and test 2 3/8" CT w/mechanical connection
7. RU mechanical coil connector, dual BP valve, hydraulic disconnect, motor, 4 3/4" bit
8. Drill out frac plugs (circulating), tag TOC above strawn plug @~11,430', circulate bottoms up, TOOH
9. RDMO CT unit
10. MIRU WL, set Arrowset packer with burst disc and on/off tool @ 10,700'
11. RDMO WL, frac tree
12. MIRU BOP and WO rig, test BOP and accumulator
13. RIH w/tubing/SN, sting into packer
14. Space out tubing, ND BOP, NU wellhead/production tree
15. RDMO pulling unit, clean location
16. MIRU flowback equipment (choke manifold, sand knockout, etc.), capable of RDMO w/out SI
17. Proceed with natural flowback, assess production for economics and install of artificial lift.

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State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

OCD - HOBBS
09/10/2020
RECEIVED

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | | | | |
|---|--|--|--|---|---------------------------------|
| ¹ API Number 30-025-36866 | | ² Pool Code 40750 | | ³ Pool Name LOVINGTON; UPPER PENN, WEST | |
| ⁴ Property Code 320118 | | ⁵ Property Name Ruth 20 | | | ⁶ Well Number 002 |
| ⁷ OGRID No. 1092 | | ⁸ Operator Name Armstrong Energy Corporation | | | ⁹ Elevation 3940' |

Surface Location

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| D | 20 | 16S | 36E | | 523' | N | 341' | W | Lea |

Bottom Hole Location If Different From Surface

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| | | | | | | | | | |

| | | | |
|-------------------------------------|-------------------------------|----------------------------------|-------------------------|
| ¹² Dedicated Acres 40 | ¹³ Joint or Infill | ¹⁴ Consolidation Code | ¹⁵ Order No. |
|-------------------------------------|-------------------------------|----------------------------------|-------------------------|

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

| | | | |
|--|--|--|--------------|
| ¹⁶ <p>Lat.: N32°54'48.1" Long.: W103°22'58.4"</p> | ¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. | | |
| | Signature: | | Date: 9/3/20 |
| | Printed Name: Kyle Ahers | | |
| | E-mail Address: kalpers@acnm.com | | |
| | ¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. | | |
| | Date of Survey: 8/18/04 by Gary L Jones | | |
| | Signature and Seal of Professional Surveyor: | | |
| | Certificate Number | | |